

Designing the Next Auto Plant 38 Japan's Metabolism 66
Soft Mergers 35 Check in With Lot-ek 74 The Healthy High-Rise 52

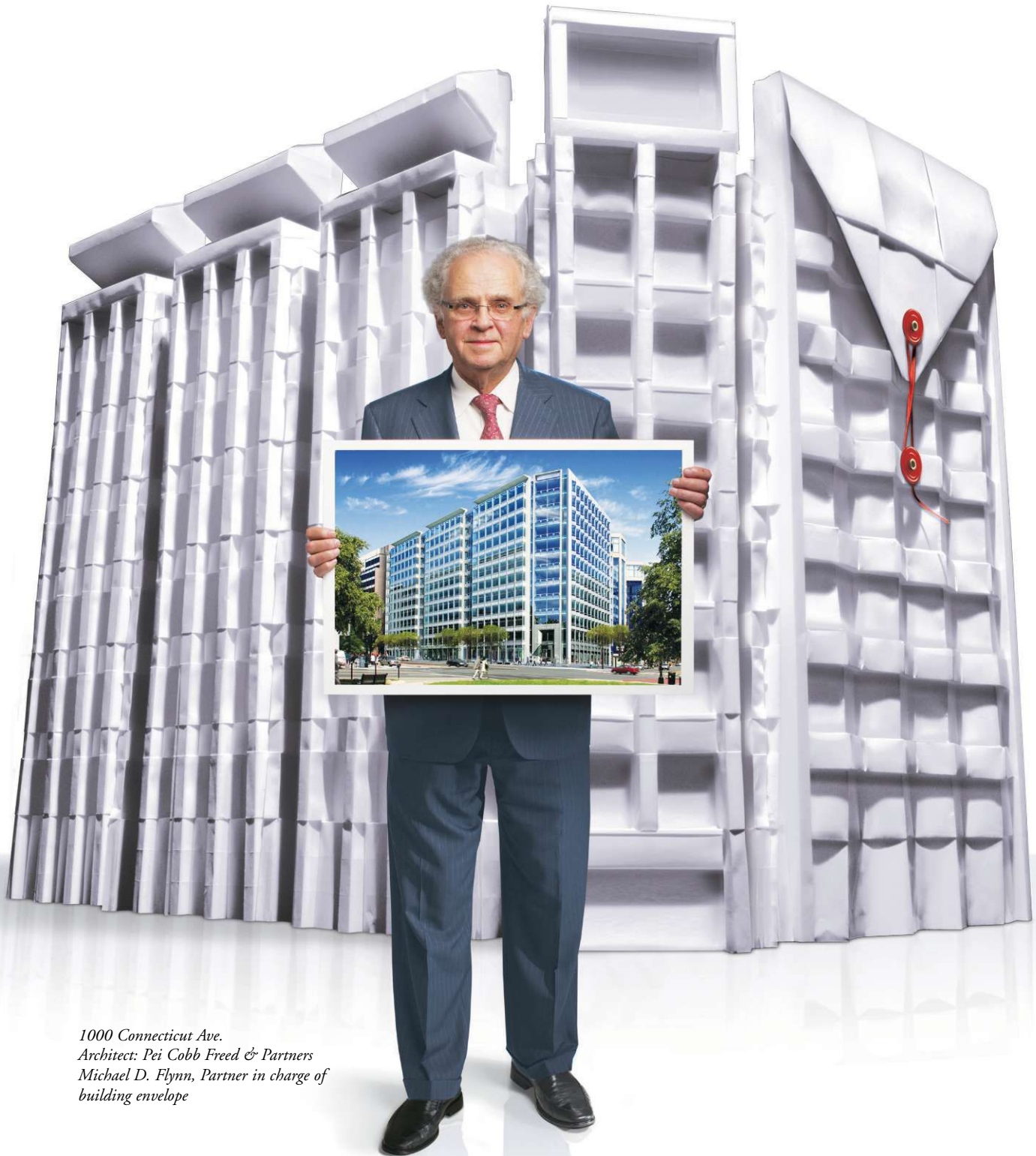
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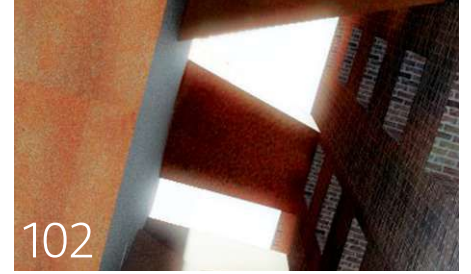
 skylights

 glass

CONTENT



98



102



86



82

80

The Progressive Architecture Awards

In its 59th year, the Progressive Architecture Awards honor projects that push the envelope of progressive design, regardless of building type. **KATIE GERFEN**, WITH **JOHN MORRIS DIXON**, **THOMAS FISHER**, **JOHN GENDALL**, **SARA HART**, **EDWARD KEEGAN**, **VERNON MAYS**

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More images from all of this year's Progressive Architecture Award winners.

Blaine Brownell's Mind & Matter blog looks at products and materials in development and on the market.

Aaron Betsky's Beyond Buildings blog comments on how design affects our society and culture.

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CONTENT



FRONT

10 **Dialogue** My Generation ... plus Letters and Contributors

16 **News** ... plus Numbers and On the Boards

110 **Contact Us**

AIARCHITECT

23 **Voices** Reforming Prisons
Now Across the Institute
Collaboration Center Stage
Knowledge Reverse Brain Drain
Feature Booster Seats
Perspective Civil Discourse

BUSINESS

35 **Best Practices** Soft Mergers
 Building a strategic alliance is a way to expand without exposing your firm to liability. ERNEST BECK

38 **Typology** Plans, Trains, and Automobiles
 The design of the next generation of automobiles begins with the plants.
 WILLIAM UNDERHILL

42 **Local Market** Trenton, N.J.

TECHNOLOGY

45 **Products** Roof Insulation

48 **IT** Training Day
 Three leaders in design-software training discuss architecture's changing relationship with its tools. BRIAN LIBBY

52 **Continuing Education** A Natural Stance
 Beyond energizing the skyline in Calgary, Alberta, Canada, the Bow seeks to redefine the role of sustainability in human wellness and a happier workplace. IAN VOLNER

58 **Products** Editor's Choice

60 **Mind & Matter** Skinjobs
 Scientists are making progress toward manufacturing a crucial organ: skin.
 BLAINE BROWNELL

CULTURE

63 **Books, Objects, Exhibits & Internet**

66 **Crit** Back to the Future
 With Metabolism, postwar Japanese architects looked beyond the end of the century to the future of architecture, predicting trends that are still emerging.
 THOMAS DE MONCHAUX

74 **Studio Visit** Lot-ek
 Lot-ek's New York design workshop is a fixture in the city's rapidly transforming Meatpacking District—and a reminder of the role of art in informing architecture.
 KRISTON CAPPS AND JASON FULFORD

78 **Beyond Buildings** Invisible Men
 U.S. memorials fail to honor blacks.
 AARON BETSKY

PAST PROGRESSIVES

112 **1983** The Little Tower That Could
 In this small tower in downtown San Francisco, Skidmore, Owings & Merrill showed how to make a good mixed-use building on a hard-to-use triangular site.
 THOMAS FISHER

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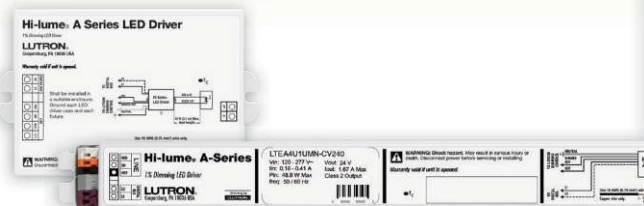
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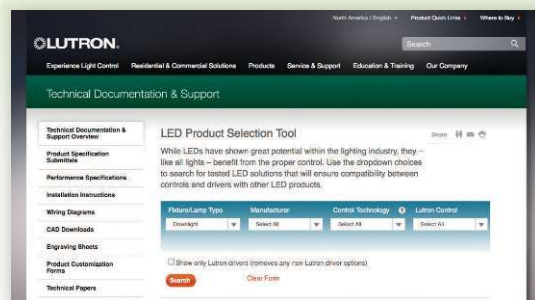
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GEN-XERS ARE STUCK BETWEEN TWO FAR-LARGER AND MORE SOCIALLY AND PROFESSIONALLY DOMINANT GROUPS.

MY GENERATION

SOMETIMES IT'S HARD to read a person over the phone. Case in point: While prepping for a recent trip to Cincinnati for a continuing education program, I couldn't get a handle on the personality of my host, Doug Richards, AIA. Doug and I had never met face to face. Judging from our planning calls, he seemed smart and professional, but also reserved. By the end of my stay, not only had I come to admire him personally, I realized that I had met someone with a compelling vision for the future well-being of the profession—a vision that was well worth sharing.

On the day I arrived, Doug picked me up at my hotel, and as he drove us to the first event, we traded the usual getting-to-know-you questions. We didn't have any school friends in common (I went to Rice, and Doug is a University of Cincinnati alum) or work associates (he's a project manager at the local office of Burgess & Niple, a firm with which I have had minimal interaction). He didn't know my Cincinnati cousins, who are roughly his age. And my love of the local ice cream brand, Graeter's, wasn't bound to take us far, conversationally.

We finally struck small-talk gold when I asked Doug where he lived. He said that he and his wife have a large property outside of the city, where they run their own dog-rescue nonprofit. I'm pretty dog-crazy myself. (Regular readers of this column may have noted that my Shiba Inu, Mortimer, comes up with some frequency.) So learning that Doug and his wife dedicate their spare time and money to caring for the four-legged, tail-wagging homeless put him right onto my A-list.

Then we got to the event, and I was wowed once more. Doug is a former AIA Cincinnati president and still an active component member. On top of his day-job responsibilities and his animal-rescue work, he has launched a program called AIA Cincinnati: Vision, which is now in its second year. Working in concert with the local chapter and colleagues Marcene Kinney, AIA, and Miranda Mote, Assoc. AIA, and with the support of local firms, Doug has created a 10-month leadership program for architects who have had their licenses for less than a decade. He's the kind of crusader that every architecture community and firm needs to thrive, and I sincerely wonder how much he gets to sleep.

My first night in town, I gave a talk to the 12 participants in the Vision program's 2012 class (the audience also included AIA members who had come earlier to see the swearing-in ceremony of the chapter's new leadership). The next day, in a closed seminar at the offices of Hixon, a prominent, locally based A/E firm, four of the Vision program participants made presentations about the current state and future potential of architectural practice. I was supposed to follow up on their presentations by offering my take on architectural practice, from the "10,000-foot view" of a national-design-magazine editor.

I needn't have bothered. The four presentations before mine were diverse in topic, ranging from sustainable design to workplace communication. Together they hit on pretty much every key practice issue that hits my radar as ARCHITECT's editor-in-chief. I was equally impressed by the participants' sophisticated exchange with the speakers who followed me: two architecture-firm principals and the CFO of a national branding firm.

Admission to the Vision program isn't automatic, and participation isn't a cakewalk. You have to apply, pay tuition, and be willing to devote serious time to the program—time outside of your normal work routine. You also have to be confident enough to have abstract, philosophical, and sometimes-heated debates with your peers. To top it off, there's homework.

Doug and most of the participants in the program are my age, which is to say they are members of Generation X (roughly ages 32 to 47). I happened to take a non-traditional route after architecture school, but for the majority of my peers, those who followed a more-or-less conventional path into practice, this has been a difficult time. And not just because of the economy. Gen-Xers are stuck between two far-larger and more socially and professionally dominant groups: the baby boomers, who run most firms, and the Millennials, who (when they are lucky enough to find a job) have all kinds of exciting new skills to show off. Coding party, anyone?

For most Gen-X architects, the structured mentor relationships of the Intern Development Program are a thing of the past, and executive positions are an uncertain future prospect. It's lonely in the middle.

The Vision program provides leadership training for architects who are at a point in their careers when cultivation is rare—and invaluable. When you get right down to it, architecture needs more Dougs. If I could clone him and send the resulting doubles to every AIA component in the country to support the launch of Omaha Vision, Seattle Vision, Albuquerque Vision, and so forth, I absolutely would. (I would be delighted if the Dougelgängers also started more animal-rescue programs, but I won't push my luck.)

Unfortunately, I'm not trained in genomics. But I would like to encourage individual architects and AIA components to reach out and tell me about their own efforts to promote leadership among emerging architects. We'll highlight the best stories and best practices in a future issue. And by doing this, hopefully you can help to inspire many more such programs in communities across the nation.

Neil Crane

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LETTERS

BURN NOTICE, December 2011

Not all architects are aware that fire-rated assemblies must be constructed as listed in UL test assemblies. Too often, to affect cost savings, changes are made to materials that negate the UL ratings. In 1977, there was significant damage to the Teamsters Mall in Anchorage, Alaska. Changes approved by the architect were made to the

roof-ceiling assembly, and a fire test of the built assembly confirmed that the construction was not of the required fire resistance. There are probably many projects where changes negate fire ratings, but fortunately, no fires have occurred. *Vernon C. Bryant Jr., AIA, Mercer Island, Wash.*

I was utterly astounded to read Aaron Seward's comment, "small-time architects working on minor buildings." I wondered who these small-time, by definition insignificant, unimportant, petty, no-account, piddling architects might be, because during my service on the AIA National Small Firm Round Table, as president of my state chapter, and as chair of my state licensing board, I never encountered one. A majority of firms are single discipline, with one office, and 79 percent of AIA firms are fewer than 10 people. Hopefully, it was sloppy editing. We should all agree that there is not one small-time, insignificant, or unimportant architect. *Jane Frederick, AIA, 2012 chairman, AIA National Small Firm Round Table, Beaufort, S.C.*

Below is a comment from our website:

Jan. 6, 2012. I am a sole proprietor and I bet my license that I know more about building codes than most large-firm architects working in the ivory towers. I deal with small (I guess petty) projects that are riddled with code issues and deal with complex life-safety and accessibility issues while attempting to bring about beauty and great design. So if it was sloppy editing, then apologize and move on. I hope this doesn't reflect the beliefs of ARCHITECT or the AIA. *Lee Calisti, AIA, Greensburg, Pa.*

From editor-in-chief Ned Cramer: In Aaron Seward's article, "Burn Notice," the choice of words was poor, and we should have changed it. I understood it to mean "small firms working on projects with tight budgets," but I see how the printed phrase leaves a negative impression. Small firms constitute the greater part of our readership and of AIA's membership, and meeting their needs has been central to the mission of ARCHITECT since the publication's launch in 2006. We are great believers in small firms' tremendous value to the profession and of their exceptional contributions to the built environment. So I am mortified to find myself having inadvertently offended that community. Please accept my heartfelt apology.

THE MAGAZINE

Regarding the phenomenon of the 99% and the 1%: "I say The Time Has Come. ... We the people can no longer afford to take ... (this matter of granting a special privilege to create money out of nothing at little or no cost) for granted. ... [We] must get these fundamentals straight ... so that the Nation may be forever stopped from creating a special class living as Money." *Frank Lloyd Wright, from Frank Lloyd Wright: An Autobiography (Longman's Green and Co., 1932), in a letter to us from Michael Mostoller, FAIA, Princeton, N.J.*

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Contributors



Alex Hoyt

Alex Hoyt is an assistant editor at ARCHITECT. He compiles and produces the magazine's ARCHITECT NEWSWIRE, a daily digital aggregation of breaking industry news. In addition, he edits the Beyond Buildings blog by Aaron Betsky and the Mind & Matter blog by Blaine Brownell for ARCHITECT's website. Hoyt writes online news for ARCHITECT and for its sister publications *Eco-Structure*, *Metalmag*, and *Architectural Lighting*. For the website, he also curates the Esto galleries, a recurring series of images from the New York-based architectural photography agency, with a focus on design and architectural history.

Prior to joining ARCHITECT, he worked as an editorial fellow at *The Atlantic*. Before that, he taught English and coached cross-country at Woodberry Forest School, near Orange, Va. A native of Salem, Va., he graduated from Davidson College with a degree in English, and now lives in the Adams Morgan neighborhood in Washington, D.C.

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NEWSWIRE

EDITED BY KRISTON CAPPS



ATLANTIC CITIES

Hotel boom in Doha ahead of 2022 World Cup
Qatar has launched a \$100 billion infrastructure program in hopes of accommodating a growing tourism sector, one whose test will come in 2022, when the nation hosts the World Cup.



THE NEW YORK TIMES

Frank Gehry to design Mozart opera set
Frank Gehry, FAIA, will take the stage by designing the set for the Los Angeles Philharmonic's production of *Don Giovanni* for the Gehry-designed Walt Disney Concert Hall.



BLOOMBERG

Worst single-family housing year on record
Although total housing starts bottomed out in 2009, new single-family housing construction hit its low point in 2011, with construction down about 11 percent from levels in 2010.

U.S. PAVILION LAUNCHES NEW PROJECT WEBSITE

The U.S. Pavilion at the 13th Venice Architecture Biennale has launched a new website, Spontaneous Interventions (spontaneousinterventions.org), and issued a call for projects to be considered for inclusion. Organized by the Institute for Urban Design, the exhibition is entitled "Spontaneous Interventions: Design Actions for the Common Good," and will explore a burgeoning movement of architectural projects that are changing our urban environment through unorthodox, open-sourced, and often improvisational means. ARCHITECT editor-in-chief Ned Cramer is a co-curator of the U.S. Pavilion.

Steedman Fellowship Chair Named

Finnish architect Craig Dykers, AIA, co-founder of the Oslo-based firm Snøhetta, will chair the jury for Washington University in St. Louis's 2012 Steedman Fellowship in Architecture International Design Competition. The biennial prize awards \$50,000 to a promising young architect for a nine-month period of travel and research. Sponsored by the university's Sam Fox School of Design & Visual Arts, the competition is open to any graduate of an accredited architecture school who is currently employed by a practicing firm—or has been employed for at least one year—and who received his or her professional degree within the past eight years. Registration will begin on Jan. 16, 2012, with competition entries due on April 2.

Michael Graves Wins Driehaus Prize

WHEN ASKED whether he ever expected to receive the Richard H. Driehaus Prize, which honors a living architect whose work embodies the principles of Classical architecture, Michael Graves, FAIA, replied, "Not in a thousand years." As the 2012 winner, he will receive a \$200,000 check and a bronze miniature of the Choregic Monument of Lysikrates in Athens, Greece, during ceremonies in Chicago in March.

The prize "honors lifetime contributions to traditional, classical, and sustainable architecture and urbanism in the modern world," according to the release from the University of Notre Dame School of Architecture, which administers the award. "My work is based on Classical ideas, but I don't work in a Classical style," Graves says.

Graves studied Classical architecture during his time at the American Academy in Rome during 1960, first garnering professional attention with the 1972 publication of *Five Architects*

(Wittenborn), which featured two of his neo-Corbusian projects. Widespread public attention came with the 1980 unveiling of the postmodern Portland Building, which has recently been added to the National Register of Historic Places.

His work includes Walt Disney World's Dolphin and Swan Hotels, the Denver Public Library, and the U.S. Department of Transportation Headquarters in Washington, D.C. His domestic objects include the now-iconic teakettle for Alessi and a seemingly never-ending line of products for Target, making Graves's designs ubiquitous.

Graves and the 2011 Driehaus Prize winner, Robert A.M. Stern, FAIA, see their back-to-back selections as an opportunity for the award to evolve. "They don't have to give it to someone who uses Corinthian columns anymore," Graves says. Stern adds: "It can go to someone whose work embodies and incorporates Classical principles." EDWARD KEEGAN



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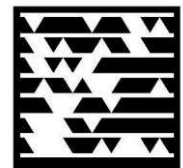
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TEXT BY KRISTON CAPPS
ILLUSTRATION BY JAMESON SIMPSON



13.9%

UNEMPLOYMENT RATE FOR RECENT ARCHITECTURE COLLEGE GRADUATE AGES 22-26

9.2%

UNEMPLOYMENT RATE FOR EXPERIENCED ARCHITECTURE COLLEGE GRADUATE (AGES 30-54)

7.7%

UNEMPLOYMENT RATE FOR ARCHITECTURE GRADUATE DEGREE HOLDER (AGES 30-54)

\$36,000

AVERAGE EARNINGS FOR RECENT ARCHITECTURE COLLEGE GRADUATE (AGES 22-26)

\$64,000

AVERAGE EARNINGS FOR EXPERIENCED ARCHITECTURE COLLEGE GRADUATE (AGES 30-54)

\$71,000

AVERAGE EARNINGS FOR ARCHITECTURE GRADUATE DEGREE HOLDER (AGES 30-54)

SOURCE: AMERICAN COMMUNITY SURVEY

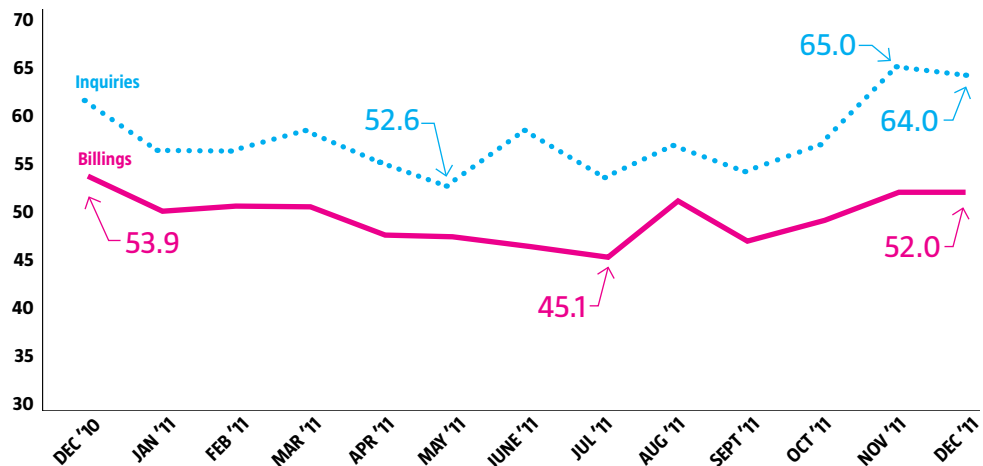
THE NEWS IS GRIM FOR STUDENTS graduating into dire economic times. But no graduates have it worse than recent architecture graduates, who face an unemployment rate of 13.9 percent.

At the same time—and in a trend that’s pervasive across higher education—an education in architecture is growing more expensive. According to a study performed by Design Intelligence, average in-state tuition and fees for programs offering bachelor’s degrees in architecture rose from \$19,454 to \$20,115 between the 2010–11 and 2011–12 academic years: an increase of 3.4 percent.

At the graduate-degree level, tuition and fees rose over the same time period for both in-state degree-seekers (2.1 percent) and out-of-state degree-seekers (1.6 percent). Only out-of-state students pursuing bachelor’s degrees got a break: for these students, tuition and fees declined 1.2 percent. Students enrolled at in-state Bachelor of Architecture programs at public universities got hit the hardest: Tuition and fees rose a whopping 6.2 percent for this group between academic years 2010–11 and 2011–12.

Still, it could be worse. According to Georgetown University’s Center on Education and the Workforce, job seekers with only a recent high school diploma face an unemployment rate of 22.9 percent. And recent high school dropouts face a jobs environment that is very nearly hopeless, with an unemployment rate of 31.5 percent. □

BILLINGS AND INQUIRIES INDEXES



DECEMBER 2011 ARCHITECTURE BILLINGS INDEX

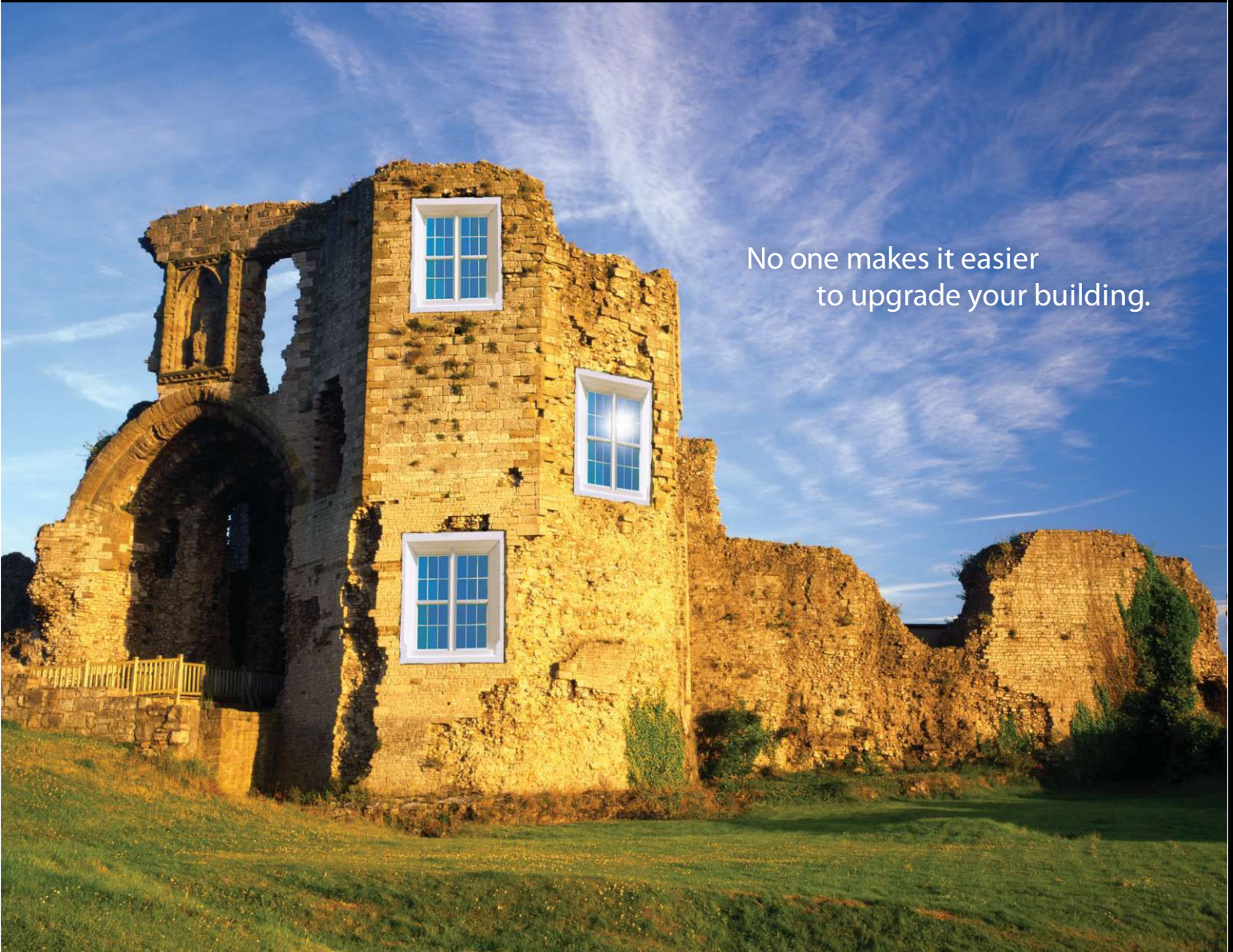
52.0

- ↑ 54.1 commercial
- ↑ 51.3 institutional
- ↑ 44.5 mixed practice
- ↓ 54.3 multifamily residential

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On the Boards



Applied Sciences Campus

SKIDMORE, OWINGS & MERRILL

An 11-acre site on Roosevelt Island, in New York's East River, will soon host a 2 million-square-foot applied-science and engineering campus for up to 2,500 students. A joint venture between Cornell University and Technion-Israel Institute of Technology, the scheme was designed by New York-based Skidmore, Owings & Merrill to holistically integrate landscape and architecture. Composed of 10 buildings, the campus is organized around three learning hubs, includes a 150,000-square-foot photovoltaic array, and proposes more than 500,000 square feet of public gardens, some of which are integrated into the open-plan structures. "It's pretty unique in New York," says design partner Roger Duffy, FAIA. Phase one, to be completed in 2017, comprises 300,000 square feet of housing and 300,000 square feet of research and development space, including a 150,000-square-foot, net-zero academic building. "It's taking goals that campuses have set for 20 to 30 years from now and trying to achieve it in 2017," says senior designer Colin Koop, AIA. KATIE GERFEN



Project Haiti

HOK

Project Haiti, a 6,000-square-foot orphanage and children's center for Fondation Enfant Jesus, is the first rebuilding effort led by the U.S. Green Building Council from conception to construction. Designed on a pro-bono basis by St. Louis-based HOK, the three-story, L-shaped facility will house 30 children and 10 adults and feature balconies that look over a courtyard flanked by kitchen, dining, and training spaces. The building references the local Kapok tree: The balconies' structural system follows the distribution of branches, and an exterior boundary layer acts like bark to block direct sunlight while allowing for natural ventilation. The project is about "finding a way forward through simplicity," says Thomas Knittel, AIA, HOK's senior design leader. Targeting LEED Platinum, the solar-powered, net-zero water and waste building uses local materials, and will help "teach Haitians how to build in an environmentally conscious and safe way," says Roger Limoges, USGBC's staff project manager. The project targets a 2013 completion. WANDA LAU



Derek, 32 years old

Profession: Project Manager

Hobby: Triathlete

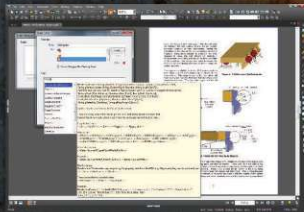
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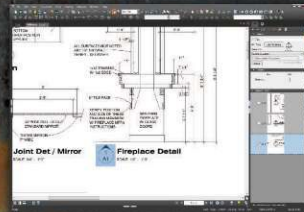
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PHOTO: LEON AND GORDANA GERSHOVIC

AIA VOICES

REFORMING PRISONS | RETURNING SOME RIGHTS TO THE RIGHTLESS

Kenneth Ricci, FAIA, is president and founder of RicciGreeneAssociates, a 35-person New York City-based planning and design firm specializing in justice facilities at the federal, state, and local levels. A proponent of “normative design,” Ricci wants to humanize the often inhuman experience of incarceration. Considering that more than 1 percent of the U.S. population is currently locked up, and the number of federal prisons alone has more than tripled in the last 60 years, that’s a tall order.

When I went to school in the '60s, we always believed that architecture should have a social dimension. So I found the area of corrections and detention to be fascinating from several points of view—social, technical, design, environmental, and behavioral. In our thesis year, I decided to do a youth correctional center on Rikers Island [in New York]. I determined then and there that I wanted to have my own business specializing in justice facilities, and that’s what I did. I opened up my own firm when I was 27 years old.

The inmate needs are fascinating to me, as well as the needs of the staff. If you haven’t been convicted, you still have the basic rights of a person in the free world: the right to a safe environment, the right to see visitors, and the right to see an attorney. You also have the right to be able to secure your own personal belongings—the few that you have, like your toothbrush and your magazines. So, yes, the person may have to be detained in a jail prior to trial, but let’s do so in the least-restrictive setting where the expectation of

normal behavior is created.

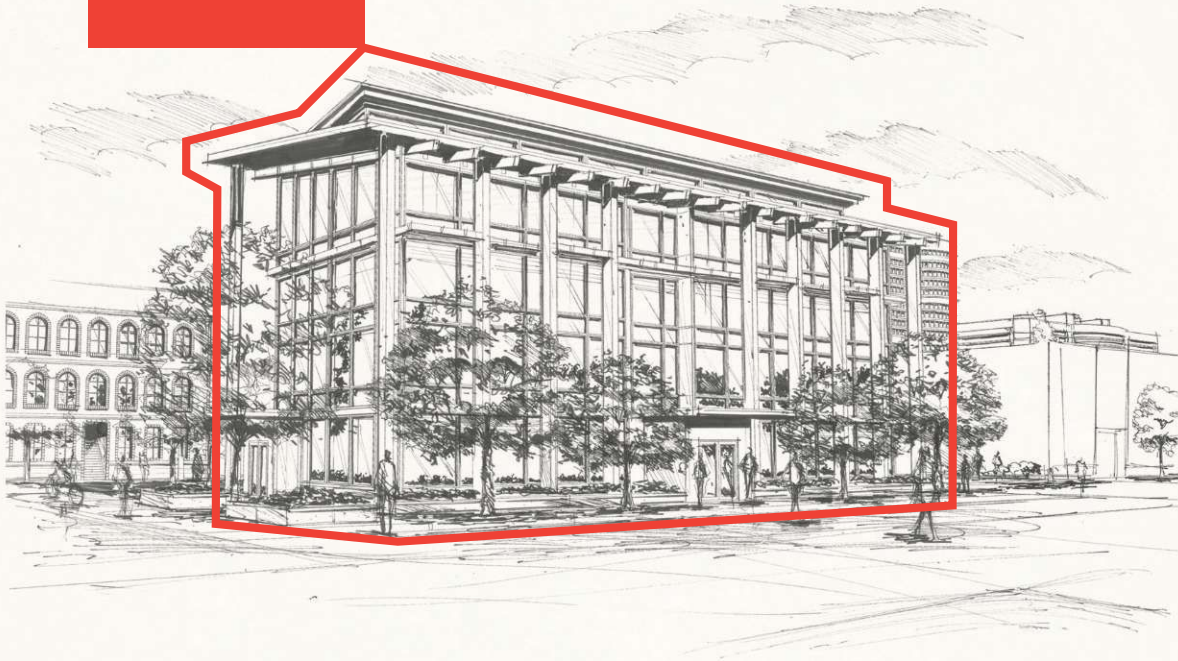
We follow the philosophy of direct supervision, where there is no separation between the officer and the inmates. Inmates can approach the officers and speak to them, and the inmates feel safer because they have an officer present. They feel less need to join gangs or make weapons. Direct supervision actually lowers the amount of assaults, inmate-on-inmate or inmate-on-officer.

There is a baseline of needs, and an inmate’s are not that different from anyone else’s. The question is how you reconcile those needs with the needs for security. We don’t use bars. We don’t use razor ribbon. We design the building so that the exterior envelope of the building is the secure perimeter. The least-restrictive setting—where sunlight is coming in and hitting the floor, where you have reduced noise, where you have temperature controls—makes a very calm environment. Rehabilitation services—such as counseling, high-school-equivalency-degree programs, literacy help, and skills for daily living are available—and our design philosophy simply makes it easier to run those programs.

We believe that environment cues behavior, and there has been a tremendous movement in improving correctional facilities. Our work has a vision, a mission, and an operational plan. There is a rigor to what we do, and it’s founded on humanizing these environments.—As told to Leigh Franke **AIA**

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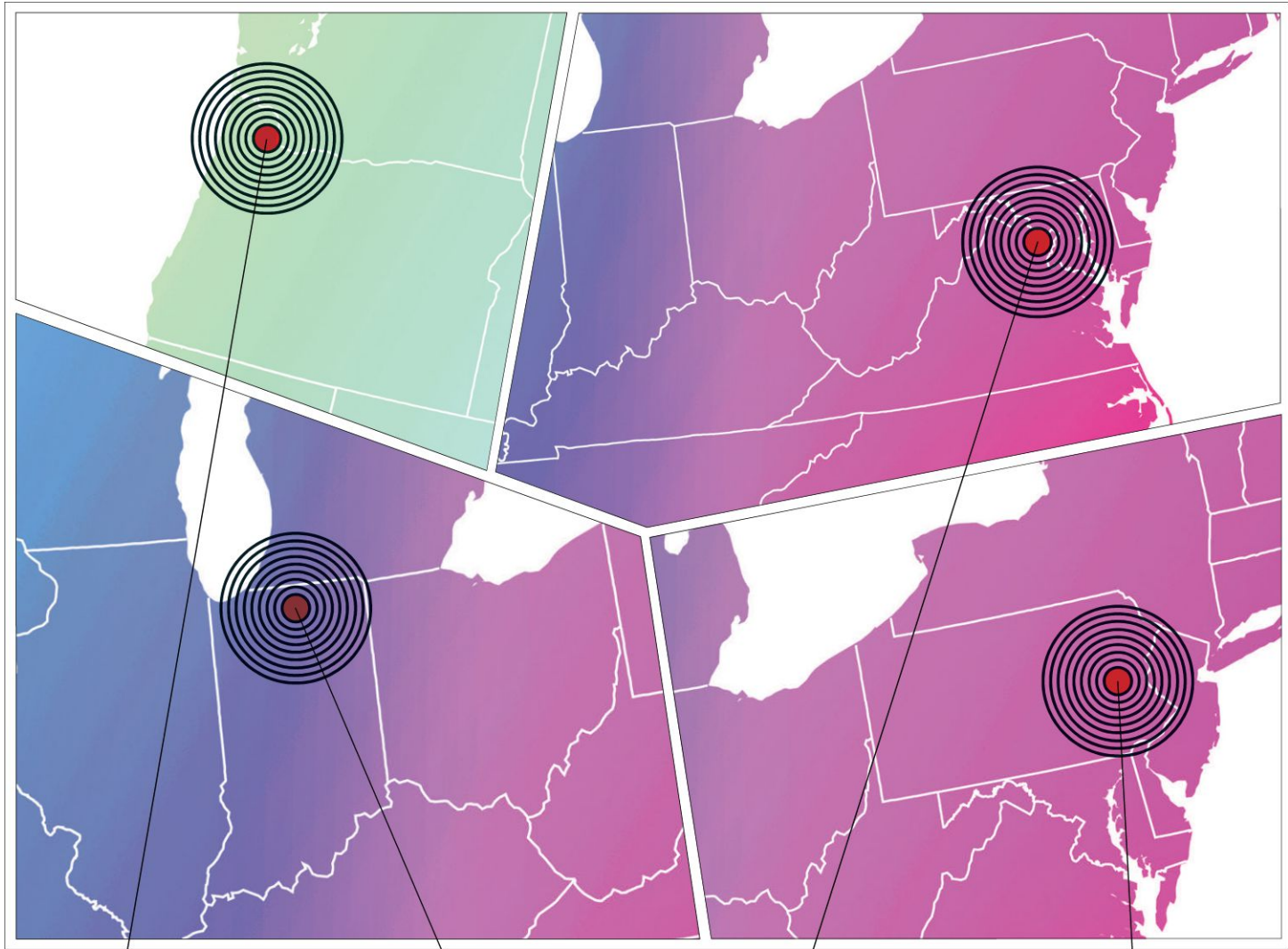
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PORTLAND, OR.

Directed Energy

Energy may be “eternal delight,” as William Blake observed, but it is also an urgent matter for architects. AIA Portland, BetterBricks, AIA Seattle, and Architecture 2030, launched the AIA+2030 Professional Series this month, a yearlong continuing education course that will cover climate-responsive design, passive systems, thermal envelopes, and renewable-energy sources (among other topics). A new installment will be offered on the second Friday of each month (skipping August) at Portland’s Center for Architecture throughout 2012.

➔ Learn more at aiaportland.org.

SOUTH BEND, IN.

All Together Now

One out of every seven people around the world (more than 977 million and counting) live in substandard and unsafe urban housing. Since the laconic phrase “21st-century city” has prompted the hope and ire of soothsayer pundits lately, the University of Notre Dame is holding an innovative competition centered on raising the standard of urban living. Funded by a National Science Foundation grant, Shelters for All organizers seek entries that are disaster-resistant, scalable, and sustainable—but with a twist: The proposals must incorporate crowdsourcing.

➔ Learn more and view the winners at sheltersforall.org.

WASHINGTON, D.C.

Twelve Is the New Eight

Big changes are happening in continuing education. Beginning this year, and in line with most state licensing requirements, AIA members are required to complete 12 hours of health, safety, and welfare (HSW) education—up from eight hours last year—as part of the total 18 hours of continuing education for the calendar year. AIA members will no longer be able to self-report HSW courses for credit; registered CES providers will do all of the reporting instead. In 2012, the AIA Board will also reevaluate the sustainable-design (SD) requirements.

➔ Learn more at aia.org/education.

ALLENTOWN, PA.

21 Club

City 21: Multiple Perspectives on Urban Futures is a film series about moving forward. But it’s also a series that asks if we can apply the lessons of biospheric design, successful city plans, and a “green” economy (among other things) to make a difference. Directed by Allentown, Pa.-based Christopher Zelov and sponsored by the AIA, *City 21* debuted nationally on PBS last month.

➔ Learn more at pbs.org or city21.info.



AIACOLLABORATION

CENTER STAGE



PHOTO: TOM POWELL, COURTESY THE NEW YORK CENTER FOR ARCHITECTURE

Architecture centers fill the gap between design matters and the public interest.

ARCHITECTS CONSTANTLY EVANGELIZE ABOUT THE POWER OF PLACE

and, in particular, those places where people can gather to learn and share experiences with each other. During the last decade, AIA chapters in over a dozen cities have played a major part in turning that strength of place to their advantage by creating “centers for architecture.” In addition to giving AIA members, planners, engineers, landscape architects, and designers a physical place to gather, centers are drawing thousands of visitors, potential clients, and members of the media.

“These centers allow a community to meet, and we define our community as ‘members of the AIA, architects who are not yet members, and anyone curious about architecture and design,’” says Margie O’Driscoll, Hon. AIACC, Executive Director of AIA San Francisco. “Our programming is diverse; we host programs with landscape architects, multimedia artists, futurists, writers, and politicians. If there’s a connection with the architecture and design community, we have a place for you to engage the design community and the general public.”

“We don’t ever think of the New York Center for Architecture as a ‘headquarters,’ or a space where architects only talk to architects,” adds Rick Bell, FAIA, executive director of AIA New York. “You have to create a buzz that goes beyond the membership.”

The Fine Print

While the impetus for the development of these centers has come from local AIA chapters, legally, the centers are neither owned nor governed by those chapters. Some chapters may rent office space from the centers they backed, but the centers are nonprofit entities organized as charitable organizations under a different section of the IRS tax code from the one that governs AIA chapters. Centers have their own bylaws and boards of directors. Chapters, on the other hand, are organized as “business leagues” whose purpose is to promote the profession of architecture.

Another very important distinction involves how money is raised. Charitable organizations can often get public-project funding for which AIA chapters are not eligible. And private donors may receive tax deductions for gifts given to architecture centers that they would not receive had they made a similar donation to a local AIA chapter.

Donors and tax advantages aside, programming is what makes these centers succeed. Most centers present a mixture of lectures, professional meetings, and continuing education programs that can include groups other than architects. These are almost always anchored by rotating exhibitions.

“If you were to look at successful programs from center to center,” says Michael Wood, executive director of the Association of Architecture Organizations, “they are drastically different. They are responding to the norms and the cultural programming in each city.”

This diversity of ideas is often enabled by the fact that, in addition to architects, the centers’ boards of directors may include builders, developers, landscape architects, engineers, and graphic designers. Partnering with these groups is appropriate at a time when integrated

AIACOLLABORATION

project delivery has architects, consultants, and builders working together earlier than ever.

“When the centers are able to hit on some strong partnerships, those probably have the greatest impact on showing how the educational center can advance important causes for architecture,” Wood says. “To a great degree, success also depends on the talents and the interests of the staffs and directors running those centers, as well as the volunteers.”

Location, location, location

Of course, even the most imaginative programming won’t draw a crowd if it is difficult for people to get to a center. And grabbing people off the street who never intended to visit an architecture center is one of the major attractions of a storefront. But that has put the centers in some cities in direct competition with retailers also vying for the best space in well-trafficked areas.

In Philadelphia, an architecture bookstore and collection of period neon signs draws pedestrians to the Center for Architecture. AIA Philadelphia Executive Director John Claypool, AIA, estimates that the center’s “Constructing Play” exhibition, a history of construction toys, attracted 10,000 people over a two-month period in 2010. Of course, the center also boasts an enviable location near Reading Terminal Market and across the street from the Philadelphia Convention Center.

According to San Francisco’s O’Driscoll, the Center for Architecture + Design could not afford to rent a storefront. “Instead, we renovated a space in a historic building a half-block from one of the busiest transit hubs in the Bay Area. Our strategy was to create compelling programming and exhibitions. And we discovered that people will take an elevator to the sixth floor of an office building if there is something they want at the end.” She says that about 2,000 people attend the center’s programs each month.

And in New York City, while foot traffic at the Center for Architecture on LaGuardia Place in Greenwich Village doesn’t compare to the mobs on Fifth Avenue, at night the center comes to life. “The real reasons we moved here were the proximity of our members’ offices and the building’s cheap price,” Bell says. “The unintended benefit of being just off Bleeker Street is that at night, the restaurants are lively. Being located in a neighborhood that has a history as an entertainment district is so important.”

PHOTO: JEFFREY TOTARO, COURTESY THE PHILADELPHIA CENTER FOR ARCHITECTURE



Gwen Berlekamp, executive director of the AIA Columbus chapter in Ohio, applauds the board of directors of the Columbus Center for Architecture + Design for its decision to go ahead and open in 2010 despite the onset of a recession. The right location was vital to succeeding, however. “We are located on Broad Street, in part of an old car showroom that was donated to the Columbus College of Art & Design in the Discovery District, which we hope will be Columbus’s next hot neighborhood.”

What worries her are growing pains associated with running a center in a city whose resources can’t match those of a city such as San Francisco or Philadelphia. “There are only two of us on staff,” Berlekamp says, “so we rely on our great volunteers to pull this off.”

Though these centers aren’t branded as part of the AIA, Philadelphia’s Claypool says, “in the end, if 10,000 people come to the exhibit they know is about kids and creativity, and they know architects are leading that, the AIA is going to be stronger and more deeply embedded into people’s minds here than any other organization.” —By Charles Linn, FAIA **AIA**

RIGHT: TIM GRIFFITH, COURTESY THE SAN FRANCISCO CENTER FOR ARCHITECTURE
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ILLUSTRATION: ALEX WILLIAMSON

Keeping architecture relevant is about keeping it real.

MELISSA DANIEL, ASSOC. AIA, GOT JAZZED ABOUT THE architecture profession during a summer high school enrichment program. But once she started studying architecture in college, she felt disconnected from what she was learning and how it was taught. “I struggled with being culturally different,” Daniel wrote in a blog for the National Organization of Minority Architects. “I was confronted with unforeseen obstacles, such as stereotypic attitudes and stigmas, unfamiliar values in the studio culture, and ineffective teaching methods, especially during crits.”

In the end, Daniel transferred schools and earned her architecture degree at a historically black university. Daniel now serves on an AIA committee on promoting diversity in the architecture profession. Despite widespread intellectual support for the idea of diversity, studies show that minority groups—based on gender, race, physical ability, or sexual orientation—are still grossly underrepresented in the field. Only about 3 percent of executives in major American corporations—including architecture firms—are women (according to McKinsey & Co.), and only about 2 percent of registered architects are black (according to the *Directory of African American Architects*).

This represents a vacuum of talent and perspective that could benefit the profession, diversity advocates say. The AIA is devoting several sessions to diversity at the upcoming National Convention (May 17–19 in Washington, D.C.). These sessions are designed to showcase successful local and corporate programs, and also demonstrate the business benefits of embracing diversity practices.

“I like to put a business spin on the programming,” says AIA Diversity Director Sherry Snipes, “so there’s relevancy beyond hiring practices. These sessions are for business owners.”

One session, “Leveraging Diversity to Build Connections,” will focus on creating inclusive opportunities for employees, associates, suppliers, or subcontractors. Speakers include Phil Giorgianni, manager for supplier diversity and outreach for the National Gay & Lesbian Chamber of Commerce (NGLCC); Sam McClure, director of affiliate and external relations for NGLCC; and Ernesto Santalla, a Cuban-born architect now based in Washington, D.C.

Another session, “Connecting Diversity and Design: Award-Winning Diversity Strategies and How You Can Implement Them,” will feature Mortimer Marshall Jr., FAIA, recipient of the 2012 AIA Whitney M. Young Jr. Award, which honors an architect who demonstrates a commitment to social issues; and the AIA Diversity Recognition Program, which acknowledges those engaging underrepresented groups. A one-day “Shadow an Architect” workshop at the convention will allow area youths, including some from inner-city schools, to spend a day with architects and learn about the field.

The absence of women architects in executive positions is the focus of another session, “Labyrinth to the Top: Women in Design Firm Leadership.” Session organizer Rena Klein, FAIA, executive editor of the *AIA Architect’s Handbook of Professional Practice, 15th edition*, says that studies have shown that fully half of women in science and technology fields leave their profession between the ages of 35 and 40, a statistic that anecdotal evidence suggests is comparable in architecture.

“There’s a real brain drain going on,” Klein says, whose workshop will focus on techniques that firms can use to retain women who demonstrate leadership potential. “We all have the same goal of trying to improve our practices.” —By Kim A. O’Connell **AIA**

➔ To learn more about the 2012 AIA National Convention, visit convention.aia.org.





*Raymond Dehn,
Minneapolis, Minnesota*



*Cheri Gerou,
Denver, Colorado*



*Bill Roschen
Los Angeles, California*



*Bruce Tyler
Richmond, Virginia*

ILLUSTRATION: JAMES TAYLOR

Booster Seats

Beyond the business of bricks and mortar, public service is more than an elective for some architects.

BY JENNIFER PULLINGER

ARCHITECTS KNOW THAT SUCCESSFUL DESIGN IS NOT ALWAYS achieved by just making the client happy. Successful design often means engaging with, and getting the approval of, a variety of stakeholders—residents, business owners, municipal officials—to ensure consensus, or at least mutual respect. It's an important skill set that architects bring to the job for their clients. It also makes them well-suited to function as elected officials or civic activists—a fact that the AIA's Citizen Architect program recognizes in the work of about 1,300 of its 80,000 members.

The AIA's Citizen Architect program was conceived in 2007 to generate programming ideas and networking opportunities for architects who wanted to become civically engaged and give back to their communities. Through the program, architects are encouraged to take part in public service as community leaders or in appointed or elected positions, working to shape design and public policy while elevating the importance of creating sustainable, well-designed communities.

Activist architects at the grassroots level sometimes find that a path can later open to higher public office. "That would definitely be our goal—and something we've seen with quite a few members who might start in a more limited role in their community and move up the ladder," says Brooks Rainwater, Director of Local Relations at AIA.

Cheri Gerou, FAIA, Principal and co-founder of Gerou & Associates and a Colorado state representative, followed this trajectory, starting out as president of the Denver and Colorado AIA chapters before winning a seat in the state legislature. "Architects bring to the table an ability to understand complex systems and the way society functions," Gerou says. "They also bring to the table a certain level of



understanding of regulatory agencies, because we deal with that in our jobs every day.” Gerou likens citizen architects to quarterbacks, who are “whole-brained” in their approach to problem-solving. Like quarterbacks, architects have long-range vision—to see how a community is more than just a collection of individual parts.

“That’s what we do best. Our goal is to solve the problem, protect the public, and, hopefully, improve the quality of life for the public. If you look at those three criteria, it’s a natural fit for involvement as a citizen architect,” Gerou says.

Seeing the world simultaneously on both a micro site-specific scale and macro citywide scale is a unique ability that architects offer the civic-engagement process, says Minneapolis architect and activist Raymond Dehn, Assoc. AIA. Architects are able to “look at systems and how systems overlap, maybe work in harmony or work in contradiction relative to a particular issue,” he says.

Dehn, who is currently running for the Minnesota House of Representatives, points to urban issues (such as congestion), land-use issues, building-code issues, and social-service issues as fair game for an architect’s skill set.

“It’s about thinking about issues in a way that you’re not just looking down the street to the next intersection,” Dehn says, “but you’re also beginning to think about what happens if you turn the corner and go another mile.”

“I think we need to look at it as a participatory democracy, and what we are really looking for as architects is to be leaders within that participatory democracy framework within their own communities,” says Bill Roschen, FAIA, President of the Los Angeles City Planning Commission and co-founder of Roschen Van Cleve Architects. Architects are natural facilitators in the community-design process, but to be truly effective, he argues, communities would be well-served by architects working behind the scenes to set policy.

After years of working as an architect, Roschen made the leap to public service as a way to set the terms of a land-use debate, for instance, rather than to react. “I had enough work experience that I really wanted to not always sit behind my client at the discussion table,” he says, “and I really wanted to be a participant sitting next to my client representing the public interest.”

For Roschen and others, the public-policy process is an eye-opener, offering a broader perspective of what “community” entails than a one-off charrette or Saturday cleanup effort. Still, it’s the spectrum of public-service opportunities available to architects that matters most. “Getting to know people from different walks of life really does make a difference in the community, whether you are doing it in a nonprofit or you’re serving on a planning commission or another board,” says Bruce Tyler, AIA, a principal at Richmond, Va.-based Baskervill and a Richmond city councilman since 2007.

“Once you step out of that back room of an architect’s office,” Tyler adds, “you find yourself beginning to learn a lot about what it really does take to create a building—not only from a physical standpoint but from the conceptual side.”

In governmental or legislative positions, whether an architect is appointed to a board position or higher office, he or she has an extra responsibility to help both community members and their non-architect colleagues to understand the small details and the big picture of how the built environment affects society, from zoning issues to master plans.

“People in government are tasked with quite a few different responsibilities, many of which they may have no formal training in,” says Eric Siwy, Assoc. AIA, a recent graduate of the School of Architecture at the University of Hawaii at Manoa. “It’s important that the people involved are educated in what it is they are actually voting on, both those who are proposing it and also the general population who are voting on it.”

Siwy knows full well the need to educate the community about government decision making: He recently worked to help the public understand the impact of Honolulu’s proposed multibillion-dollar elevated-rail system—which some thought was poorly planned, too big, and too costly. Siwy first learned about the role of the citizen architect through his university’s Citizen Architect class, which was taught by Pat Onishi, AIA, past chair of the AIA’s Board Advocacy Committee Member Outreach Subcommittee and former planning director for the City and County of Honolulu.

While there are countless citizen architects such as Siwy participating on the grassroots level, there are few participants on the regional and national level. “I think that architects do have, in a way, a civic responsibility to be involved in their communities at the local level, to help shape the built environment and to enhance the quality of life,” says Jack Matthews, AIA, former mayor and current city council member of San Mateo, Calif. “We all believe that the architectural form and the urban design of our cities has a lot to do with the quality of life in our communities.”

In Los Angeles, many of those local opportunities can be found in the city’s Neighborhood Councils, which are elected bodies of citizens who weigh in on an array of issues, including planning and community development. “If we had just 3 percent of architects involved in local leadership, it would change the way we plan and design our cities,” Bill Roschen says.

AIA Los Angeles, AIA Baltimore, and other chapters are creating slates of interested architects who want to participate on various boards, councils, and commissions to ensure that the profession is represented in the public-policy decision-making process.

“Some of these positions require the professional knowledge of an architect as a prerequisite, but others don’t—like city council where you typically see more lawyers than architects,” says Klaus Philipson, FAIA, President of ArchPlan Inc. in Baltimore. “So chapters can proactively work on this: Have a checklist to make sure when elections are held or appointments are made that they have a supply of [architects’] names that they can provide for any position that comes up.”

No matter the level of civic engagement in which one chooses to participate—volunteer activist, appointee, or elected official—the voice of the citizen architect carries influence.

“I think architects are well respected as a profession,” says Matthews, “and we need to get out there and use some of that credibility to help form our urban environment.” **AIA**

➔ To read extended biographies of these Citizen Architects, visit aia.org/citizenarchitect.

➔ To learn more about the Citizen Architect program, visit aia.org/advocacy/local.

AIAPERSPECTIVE

CIVIL DISCOURSE



PHOTO: WILLIAM STEWART

“JUST BECAUSE YOU DO NOT TAKE AN INTEREST IN POLITICS doesn’t mean politics won’t take an interest in you,” Pericles once said. In this presidential election year, the Athenian statesman’s words are a timely reminder that we can’t afford to sit out the political process. We must roll up our sleeves on the way to the ballot box.

I’ll be the first to admit that getting hip deep in politics can be frustrating, unpleasant, and, yes, heartbreaking—whether it’s for the local school board or Congress. I’ve watched people throw up their hands in disgust at what they see as the complete breakdown of civil discourse and all-too-common pandering to the electorate’s worst instincts. Frankly, I’ve had to hold my nose when watching some of the ads on television—and we still have about nine months to go before Election Day.

A little historical perspective may be in order. If you haven’t already done so, read up on the campaign between Thomas Jefferson and John Adams in 1800. The reading is unpleasant and dims the halos associated with both men. But we as a nation have endured political friction because, by and large, we have continued to engage our elected leadership at all levels of government. The dream of a more perfect union lives on because enough decent people continue to care, and their caring has made all the difference. AIA members need to be among that group—and increasingly we are, each in his and her own way fostering more livable communities.

Between 2008 and 2010 (the latest year for which the AIA has accurate figures), there’s been nearly a 50 percent uptick in civic engagement led by AIA members such as Klaus Philipsen, FAIA (Chair of the Baltimore Urban Design Committee); the Honorable Bruce Tyler, AIA (Council Member, First District, Richmond, Va.); Cheri Gerou, AIA (Colorado State House member); Eric Siwy, Assoc. AIA, and member of AIAS (active in Honolulu infrastructure initiatives); Jack Matthews, AIA (former mayor and current Council Member, San Mateo, Calif.); and those who selflessly volunteer for the AIA’s disaster-assistance teams. The list—happily—goes on.

Last November, New York City Mayor Michael Bloomberg stood in a conference room inside New York’s Department of Buildings headquarters on lower Broadway surrounded by his top deputies. They had gathered to unveil a new high-tech system that allows the city’s architects and engineers to interface with plan examiners at the city’s 17 different departments with oversight of their projects. This didn’t just happen because the mayor thought it was a good idea; it’s because AIA New York successfully lobbied to get a seat at the table—in this case, 17 of them—where decisions about the shaping of the city are made. In

South Dakota, 50 first- and second-year architecture students from South Dakota State University traveled to Mobridge to measure, photograph, and examine individual blocks within the town to begin the process of creating a new vision for the community. I don’t know how the vision shapes up, but of this much I’m sure: The experience will be transformational for most of the students who participate—and it will be transformational for that community’s understanding and appreciation of architects.

When the Institute moved its national headquarters from New York to Washington in 1899, it wasn’t for the food or the climate. AIA leadership boarded that southbound train to be part of the process that was literally shaping the country—in the form of new courthouses, post offices, custom houses, and federal office buildings. They also came to advocate for national codes and standards, which would serve public health, safety, and welfare. They even found time as they settled into their new home to revive and restore Pierre-Charles L’Enfant’s design for Washington, D.C.

Next month, AIA leadership from all over the country will gather in Washington for Grassroots, an advocacy and leadership conference. This is a unique opportunity for component staff and volunteer leaders to press the flesh in the halls of Congress and to advocate for a legislative agenda that will put architects back to work doing what they do best: designing and creating buildings and communities that address the challenges of this new century.

I used the word “unique” to describe this annual opportunity. But successful advocacy derives from citizen architects doggedly engaging the political process every day in every community. After all, architecture is a political art.

Of this you can be sure: If architects don’t engage in the process that shapes the built environment, others with different motives and priorities will. **AIA**

Jeff Potter, FAIA, 2012 President

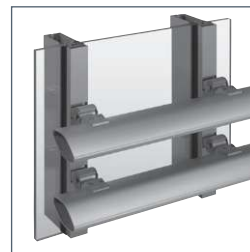




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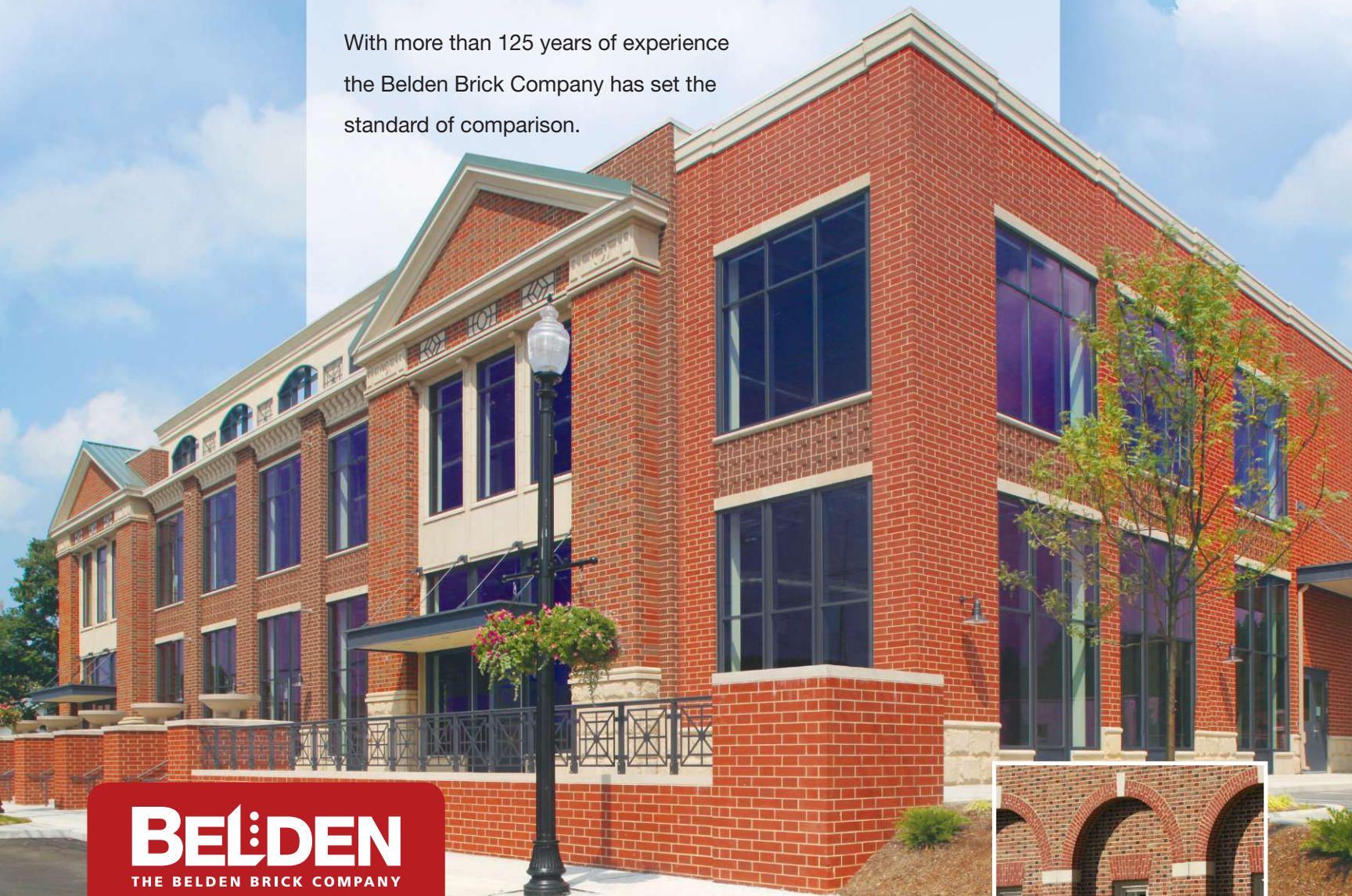
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BUILDING A STRATEGIC ALLIANCE IS A WAY TO EXPAND WITHOUT EXPOSING YOUR FIRM TO LIABILITY. **MICHAEL LEHRER** EXPLAINS HOW IT'S DONE.

INTERVIEW BY ERNEST BECK
PHOTO BY BOOTSY HOLLER





MERGERS AND ACQUISITIONS are on the rise as the architecture industry consolidates to weather a tough economy. Yet there's another way to work together without formally tying the knot: a strategic alliance, one in which no money changes hands and firms maintain their identity and independence. The recently announced alliance between Los Angeles's Co Architects and New York's FXFowle is an example. And in July 2010, a similar deal was struck between Lehrer Architects, a boutique design studio in L.A., and Westlake Reed Leskosky, a larger multioffice, national firm based in Cleveland. With over a year's perspective, Michael B. Lehrer, FAIA, 58, president at Lehrer Architects and partner of the alliance's legal entity, LA WRL Design LLP, speaks to the advantages—and distinct challenges—of building an alliance.

“WE THINK THE ALLIANCE WILL TAKE US TO A WHOLE NEW LEVEL. AND IF IT DOESN'T, AN ALLIANCE MEANS IT IS NOT THE END OF THE WORLD, FINANCIALLY SPEAKING. PERHAPS IT WILL CHANGE INTO ANOTHER KIND OF RELATIONSHIP. THAT MIGHT BE A NATURAL EVOLUTION, BUT WHO KNOWS.”

Call a friend.

If you want to form a strategic alliance, it's important to have a relationship with another person that's based on trust. It doesn't need to be a decades-long relationship, but it has to be one that is built on a foundation of mutual admiration and respect. “I knew Paul [Westlake, FAIA, managing principal at Westlake Reed Leskosky] since our days together at Harvard GSD [Graduate School of Design] more than 30 years ago,” Lehrer says. “We had always wanted to work together in some way, but a chance meeting in 2007 brought us together again and we started thinking about what we could do.”

Look for a good fit.

“You have to share affinities and also have complementary expertise,” Lehrer says. “We are a small, design-driven practice with 16 people, with a strong design culture. We are local and know L.A. I'm not a corporate person. WRL is a national, multidisciplinary firm with a staff of 150, including engineers and performing-arts specialists. Paul understands business and the business of clients, and he sees opportunities in ways that I don't. It seemed the perfect thing to do, to bring together our local expertise and familiarity and their arts-and-culture experiences.”

Make money.

The partnership was forged against the background of the recession, Lehrer recalls. “Our main occupation during this period was to survive, and it forced us to think more creatively,” he says. “Since we both already had a robust body of work in our respective practices, we wanted to leverage that to generate new business and increase revenue. This relationship is about surviving this period and thriving in the next.”

Lawyer up.

Lehrer Architects and Westlake Reed Leskosky decided to form a new entity with its own legal status and identity in order to formalize the alliance without any money changing hands. “This gives us more credibility with clients. It says we are more than a joint venture or a one-off. It was psychological,” Lehrer says. “We felt that to be taken seriously we needed a more serious legal setup. It solidified our new, more-complex, and richer identity without giving up our other identities.”

Stay independent.

An alliance means that allied firms are not merged: Each maintains its autonomy, offices, and name. Yet the new entity also enables an alliance to talk about collective work and to pitch, pursue, produce, and deliver projects on the basis of combined strengths. One firm has access to another firm's expertise and multiple perspectives—whether it's a situation that leads to a job or not. “You are on the same team,” Lehrer says.

Prepare for bumps.

Everyone talks about the benefits of an integrated practice and transdisciplinary design, but it is very hard to pull off, Lehrer says. So even if the romance is there, be ready for tensions and cultural differences. There is a reason you have the unique practice you do. An alliance is bound to lead to tensions, so embrace them.

Go the distance.

The setup between Lehrer Architects and Westlake Reed Leskosky is conventional. “We go their office and they come to ours,” Lehrer says. “I call or text Paul if I hear about something interesting, and so does he.” Thanks to technology, whether the partners are in the same building or in different cities, their ability to communicate is constant, simultaneous, and seamless. Still, like any other relationship, it is a work in progress—and honesty is key. A job might come along that's a better fit for one of the individual firms. “One has to be clearheaded and honest with oneself, because if you feel resentment, it is not going to work,” he says.

Take it higher.

“Both of us have the practices of our dreams and we didn't want to give that up,” Lehrer says. “We think the alliance will take us to a whole new level. And if it doesn't, an alliance means it is not the end of the world, financially speaking. Perhaps it will change into another kind of relationship. That might be a natural evolution, but who knows.” □

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TEXT BY WILLIAM UNDERHILL



National Alabama Corp.
Railcar-Manufacturing Facility • Shoals region, Ala. • *Albert Kahn Associates* • Inside the railcar factory's central construction area (pictured), whose design was driven by the scale of the building's program, workers are capable of producing some 12,000 railcars annually.

WHEN THE GERMAN CARMAKER VOLKSWAGEN decided to build a new plant in the U.S., the company was eager to impress. This was to be Volkswagen's first new assembly facility in the States since its factory near New Stanton, Pa., closed in 1988 after just 10 years in operation. The new plant in Chattanooga, Tenn., designed to build the Passat sedan, would demonstrate a fresh commitment. "Volkswagen doesn't have a tradition of leaving a country or a factory," says Jan Spies, the architect who heads Volkswagen's global factory-planning department in Wolfsburg, Germany.

Such ambitions come with a high price tag. The company wanted a factory that not only incorporated the latest developments in auto-plant design but also considered the well-being of the workforce and met tough green standards. The company's total investment in the project: \$1 billion. But Volkswagen already has its reward. In December, the factory, which opened in May last year, became the first and only automotive plant in the world to receive LEED Platinum certification.

Not that Volkswagen is alone in its aspirations. Other manufacturers in the transportation sector are looking to build plants that are more than functional boxes of steel and concrete. Sure, efficiency and changing technology still determine the building's essential shape—but even in outsize auto factories,

there's still plenty of scope for imaginative detailing and environmental best practices.

The Volkswagen facility's challenging location underscores the nature of the achievement. The 1,400-acre plant, part of the Enterprise South Industrial Park, sits on the uneven floor of a valley. One side of the park faces protected parkland, and two creeks run through the site. "We thought, 'Let's do it really well and get the LEED because we have to deal with these restrictions anyway,'" Spies says.

In practice, that's meant building in a slew of environmental features. Certain roofs, for example, allow the easy collection of rainwater used for cooling the welding machines as well as for flushing the toilets. The rockwool insulation in the walls is 6 inches thick, a white membrane covers the roof to reflect the heat, and LED lighting on the exterior uses 68 percent less energy than older lighting technologies.

Inside, there's an emphasis on proximity to boost efficiency and communication. The main process areas—body shop, assembly, and paint shop—are grouped around a ring of checkpoints. "It's about workers being able to communicate on quality issues," Spies says. "When a mistake is made, it's easy to go back



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to the previous stage and say, 'Guys, we have an issue.'" A steel-and-glass bridge takes arriving staff across the creeks and into the heart of the complex, with spacious views across the interior. "It's more than just a vast space: it's a place to meet and talk with lots of daylight," Spies says.

It's the same aim—efficiency within a clean, accommodating environment—that characterizes the latest extension to the 1994 Bayerische Motoren Werke AG (BMW) plant at Spartanburg, S.C. Completed in 2009 at a total cost of \$750 million, the Assembly Hall building covers 1.2 million square feet, including a hall where workers produce the company's latest generation of sport-utility vehicles. Many of the factory's features are borrowed from the company's greatly admired plant in Leipzig, Germany, a facility centered around a building by Zaha Hadid, FAIA.

As at an airport concourse, "fingers" extend from the side of the Spartanburg plant, enabling trucks to deliver directly to the point of use on the production line. If equipment is needed for new models, the branches can be easily extended; the building's generous 39-foot ceiling height means that there is ample room for overhead conveyors and vertical expansion.

BMW is known for its focus on sustainability; the company has led the automobile supersector of the Dow Jones Sustainability Index, a measure of corporate dedication to sustainability, since 2005. That dedication extends to the company's factory planning. At Assembly Hall, forklifts run on hydrogen fuel-cell power, and half of the energy comes from methane gas provided by a local landfill site. BMW is also known for good labor relations, and there's detail to please workers. The high ceilings can accommodate devices that can lift or turn a vehicle, so that workers need never to crawl underneath. Each finger leads into the central artery of the hall, where workers can mingle with management in refreshment and team areas adjacent to the central offices.

Natural light is crucial. A high band of windows unnecessary under the law surrounds the building. "They [the staff] love the building; it has a very nice feeling about it," says BMW Manufacturing's Sherry McCraw, project manager of the extension. "It makes a brighter, nicer environment, and if people are more comfortable in their workplace they can see the defects in the product much better."

It's not only the motor industry that's changing its approach to its factories. The vast National Alabama Corp. (NAC) Railcar-Manufacturing Facility, designed by Albert Kahn Associates of Detroit, scooped a prize in the large-project category of last year's American Institute of Steel Construction awards for Innovative Design in Engineering and Architecture with Structural Steel. With the capacity to build 12,000 railcars a year, the plant was intended as the largest and most efficient of its kind in the U.S.

Its most striking aspect is sheer scale. Stretching three-quarters of a mile, the plant covers 2.1 million square feet of former cotton fields in the Shoals region of northern Alabama. The fabrication, construction, and finishing departments, as well as administration, are all housed beneath one roof. The nature of the product determines the distinctive linear look. Railcars measuring 90 feet long are tough to turn; they are more easily built on long production lines. At the same time, the weight of the components requires the building to house the necessary array of gantries and cranes.

The architects had few recent models for the design. Acutely vulnerable to economic downturns, railcar manufacturers have been nervous of investing in new plants or technology. The aim of the NAC was to bring railcar production into the 21st century with modern production techniques—from automated welding to state-of-the-art paint shops. But modernity wasn't the client's sole consideration. A huge clerestory and broad expanses of glass curtainwall help to flood the building with light. (That's in keeping with tradition: the firm's founder, Albert Kahn, was a pioneer of the use of natural light in early 20th-century auto plants.) What's more, as at the Volkswagen and BMW plants, the design encourages the breakdown of old corporate hierarchies. The plant's three airy entrance halls are shared by management and shop-floor workers. "The key thing was to avoid segregation," says John Hrovat, AIA, director of architectural design at Kahn and project designer for this project. "There is more fraternity between management and employees."

Aesthetic gestures are not forgotten. At Volkswagen, the height of the tower that rises above the entrance was raised for deliberate effect; at the NAC plant, panels of silver metal and glass encircle the building to give a sense of movement. And the railcar factory's long, sleek lines capture the spirit of the railroad. "It is as if it's racing across the landscape," Hrovat says. "It really begins to take on the characteristics of the product that is being created there." □

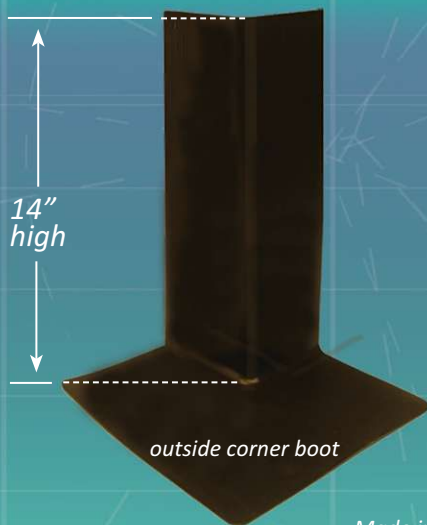


Volkswagen Chattanooga Plant • Chattanooga, Tenn. • Volkswagen AG • A brownfield development, the 1,400-acre plant occupies the uneven valley-floor site that formerly served as the home for a U.S. military munitions factory.

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NEW PROJECTS**1. MASONIC TEMPLE AND CLARKE CATON HINTZ OFFICES**

Architect: Clarke Caton Hintz, Trenton
Total Cost: \$2 million (temple), \$4 million (offices)
Completion: 2010

2. ASSUNPINK CREEK PARK FACILITY

Architect: RLM Architect, Trenton
Total Cost: \$2 million
Completion: 2013

3. NEW JERSEY STATE POLICE MUSEUM & LEARNING CENTER

Architect: Historic Building Architects, Trenton
Total Cost: \$250,000
Completion: 2011

MARKET STATS**2.98****EXPANSION INDEX VALUE, TRENTON**

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

84,913**POPULATION, 2010**

SOURCE: U.S. CENSUS BUREAU

-1.28%**JOB GROWTH, 2010–2011**

SOURCE: SPERLING'S BEST PLACES

7.4%**COUNTYWIDE UNEMPLOYMENT, NOVEMBER 2011**

SOURCE: U.S. BUREAU OF LABOR STATISTICS

5 MILLION S.F.**OFFICE INVENTORY**

SOURCE: SEGAL LABATE COMMERCIAL REAL ESTATE

4%**OFFICE-SPACE VACANCY RATE, JANUARY 2012**

SOURCE: SEGAL LABATE COMMERCIAL REAL ESTATE

\$58,800**ESTIMATED MEDIAN HOME VALUE, JANUARY 2012**

SOURCE: ZILLOW

→ **LOCAL MARKET**

Trenton, N.J.



TEXT BY MARGOT CARMICHAEL LESTER AND CLAIRE PARKER

TRENTON HAS A RICH HISTORY that dates back to the days of the colonies. In 1776, George Washington earned his first significant victory here, crossing the Delaware (and inspiring the now-iconic Emmanuel Leutze painting) to defeat enemy troops. Temporarily our nation's capital in 1784 and 1799, Trenton became the Garden State's government seat in 1790. It grew to prominence through ceramics mills and rubber and wire manufacturing—inspiring the motto, “Trenton Makes, The World Takes,” as seen on the Lower Trenton Bridge.

Since the 1970s, though, Trenton has experienced more take than make. National economic woes beset local manufacturers, shuttering plants and adding to the unemployment rolls. A city-center mall project in the 1970s failed to attract big businesses and drove visitors and employers to the suburbs. The Sun National Bank Center, opened in 1999, hasn't delivered on its promise to spur additional development nearby. City and county government are the largest employers, and both are downsizing due to budget cuts.

Fewer people downtown creates a less-attractive environment for developers. And a lower government head count means slower operations for those who do build. “The city has many challenges due to understaffing of their permits and inspections departments,” says Robin Murray, FAIA, principal of RLM Architect and a native of nearby Princeton. “Permitting is difficult and has been for years.”

There are nevertheless opportunities, thanks in large part to the “beautiful and varied architectural heritage and extensive stock of historic buildings,” says John Hatch, AIA, principal with Clarke Caton Hintz.

In 2010, the firm included its own offices in a renovation of the landmark Masonic Temple. The \$6 million project benefited from Urban Enterprise Zone grants, state economic-development funding, a federal historic tax credit, and private financing. The LEED Silver rehab won the 2011 AIA New Jersey Merit Award for Interior Architecture and other awards.

Another Trenton rehab came in the form of the New Jersey State Police Museum & Learning Center by local firm Historic Building Architects (HBA). The \$250,000 project restored a 1934 log cabin built by the Civilian Works Administration into a museum whose highlights include the ladder used in the Lindbergh kidnapping.

Building on Trenton's industrial past, RLM designed the Assunpink Creek Park Facility, to be completed in 2013. A redeveloped brownfield within a 100-year flood plain, it will become a gateway to a riverside trail and a venue for a farmers market and city events—and a demonstration of Trenton's potential.

“I am always hopeful for Trenton,” says HBA principal Annabelle Radcliffe-Trenner, AIA. “We need some strong leadership in this city that can be creative. This is a sad but beautiful city still asleep but with wonderful potential.” □



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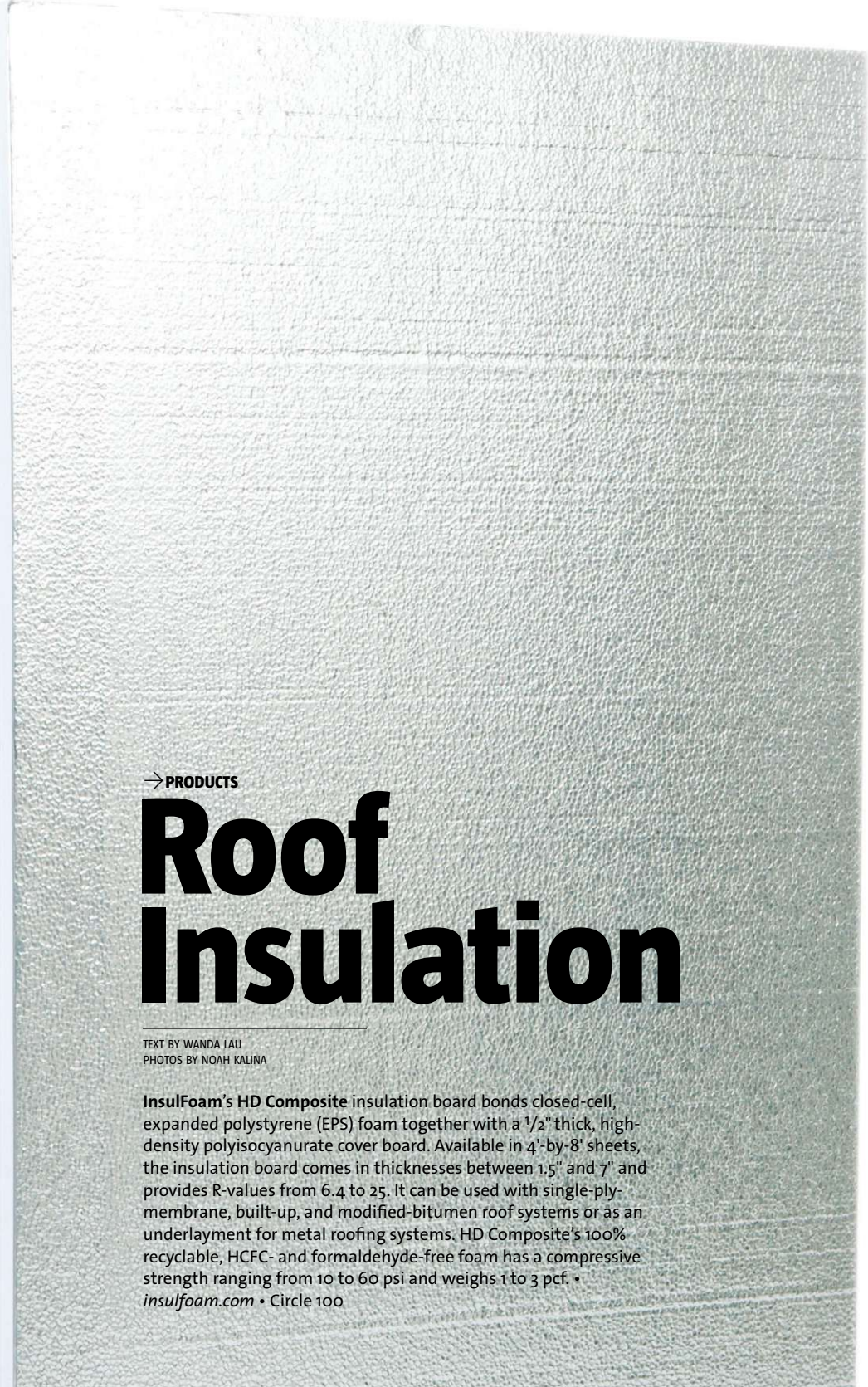


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TECHNOLOGY



→PRODUCTS

Roof Insulation

TEXT BY WANDA LAU
PHOTOS BY NOAH KALINA

InsulFoam's HD Composite insulation board bonds closed-cell, expanded polystyrene (EPS) foam together with a 1/2" thick, high-density polyisocyanurate cover board. Available in 4'-by-8' sheets, the insulation board comes in thicknesses between 1.5" and 7" and provides R-values from 6.4 to 25. It can be used with single-ply-membrane, built-up, and modified-bitumen roof systems or as an underlayment for metal roofing systems. HD Composite's 100% recyclable, HCFC- and formaldehyde-free foam has a compressive strength ranging from 10 to 60 psi and weighs 1 to 3 pcf. • insulfoam.com • Circle 100

The **900 High Rib** insulated metal roof panel by **Kingspan Insulated Panels** may be utilized on commercial, industrial, and controlled-temperature buildings. With a polyisocyanurate core sandwiched between prepainted 26-, 24-, or 22-gauge, galvanized-steel sheets, the recyclable panel features 1 1/2"-high ribs approximately 13" o.c. and an overlapping rib joint for installation. The R12 to R49 panel is 1 1/2" to 6" thick and weighs 2.3 to 2.6 pcf. Available in 39 3/8" and 40" widths, and 10' to 48' lengths, the product may also be used on walls. • kingspanpanels.us • Circle 101

Designed for use on shingle and metal roofs, **Cornell Corp.'s Vent-Top ThermaCal 1** system consists of 7/16" OSB sheathing, 1" wood spacer blocks, and polyisocyanurate insulation board offered in thicknesses between 3" and 8". The fully machined assembly offers R-values between 9 and 40.5 and weighs between 1.9 to 2.9 psf. The edges of the 4'-by-8' panels feature rabbeted wood and a tongue-and-groove pattern in the foam to reduce heat loss. The 12"-o.c. wood spacers allow for 86% up-slope venting and more than 50% cross ventilation. • cornellcorporation.com • Circle 102

Structodek by **Blue Ridge Fiberboard**, a subsidiary of W.R. Meadows, may be used as insulation, cover, or re-roofing board for low-slope applications. Available in 1/2" to 2" thicknesses, Structodek offers an R-value between 1.3 and 5 and weighs 0.7 to 2.75 psf, respectively. The 2'-by-4' to 4'-by-8' panels consist of pre-consumer recycled wood chips and a vegetable-starch-based binding agent with no added formaldehydes. Structodek qualifies as a Class A roofing component by UL. • blueridgefiberboard.com • Circle 103

Atlas Roofing Corp. designed its **ACFoam-HS CoverBoard** for use on built-up, modified-bitumen, and single-ply-membrane roofing systems. With an R-value of 2.5 per 1/2"-thickness, the cover board's closed-cell polyisocyanurate foam provides a compressive strength of 90 psi. Available in 4'-by-4' and 4'-by-8' panels, the product has FM approvals for severe hail and foot-traffic resistance as well as wind uplift resistance from FM 1-60 to 1-210 in fully adhered roof systems. It is Greenguard certified for microbial resistance. • atlasroofing.com • Circle 104

SecurShield HD Composite by **Carlisle SynTech** consists of a 1/2"-thick, high-density polyisocyanurate cover board laminated to rigid polyisocyanurate roof insulation. It can be used on single-ply membrane systems for new and retrofit installations. Available in 4'-by-4' and 4'-by-8' panels, the 2"- to 4"-thick system provides R-values between 11.5 and 27.2. With respective compressive strengths of 100 and 20 psi, the cover board and insulation board achieve an FM 1-90 wind uplift rating. • carlisesyntec.com • Circle 105

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THREE LEADERS IN DESIGN-SOFTWARE TRAINING DISCUSS ARCHITECTURE'S CHANGING RELATIONSHIP WITH TOOLS.

TEXT BY BRIAN LIBBY
ILLUSTRATIONS BY PETER ARKLE

A new generation of software tools gives designers the chance to provide an even wider array of services to clients while also leveling the playing field between small and large firms. For those architects who can keep up, that is. Today, an ever-changing array of digital tools—including BIM software and mobile, Web-based telecommunication applications—gives architects more opportunity than ever to guide every step of a project's design. Keeping up with these new software tools takes more than a half-day class every few years, though. So we gathered a trio of software training and support experts to offer some insights on the ways that the field is adapting its relationship to challenging new software.



Joe Eichenseer, Imaginit Technologies

Taking a single off-site training course is no longer a solution for designers. Instead, says Denver-based Joe Eichenseer, building solutions division manager for the global Imaginit Technologies, small bursts of information instantly constitute an important segment of the training market. "We're seeing more people saying, 'I don't necessarily need to take a class on all of that, so let's take this mini exercise on that one topic I'm looking for,'" Eichenseer explains. "We'll probably see more and more people going for a just-in-time level of training. You learn about how to draw a stair core just before you go in and start creating all your vertical elevations."

Eichenseer also believes that training support is the key for small firms to compete with larger firms. "We've got more than 25 people on my team just focused on building design," he says. "A third party can build up that same level of support for the design teams. Some big firms out there have enough infrastructure in place that they can do it on their own. But in the small-to-midsize firms, that's not there. You've got the small guys working with the big guys, and all of a sudden, a five-person firm is working on a university hospital."



Lonnie Cumpton, BIM9

While working at an architecture firm two years ago, architectural-technology expert Lonnie Cumpton found that the company's servers were continually clogged. "The traditional IT solution for cloud technology and virtualization is designed around small applications that don't require a lot of processing power," he says. "Running a Revit file across the WAN on that technology, it would take 20 minutes just to load."

The solution not only solved the office's problem but evolved into a company in Las Vegas, BIM9, which creates private BIM clouds that allow users to use big programs simultaneously. "It gives people the benefit of cloud computing, but behind a firewall," Cumpton says.

Increasingly, Cumpton sees design initiated in animation, then finished in BIM programs. "You do a three-dimensional model, photorealistic imagery, and animation at the very beginning. As the evolution of architecture is moving toward integrated practice and design, and even design/build, it's becoming more of a reality where you've got all of the players in the room and if we can agree this is what we need it to look like first, it moves a lot quicker."

THE SIXTH-ANNUAL

CALL FOR ENTRIES

R+D AWARDS

New technologies are revolutionizing the process and product of architecture. To celebrate advances in building technology, ARCHITECT magazine announces the sixth-annual R+D Awards. The awards honor innovative materials and systems at every scale—from HVAC and structural systems to curtainwall and ceiling-panel assemblies to discrete building materials such as wood composites and textiles.

CATEGORIES

The awards will be judged in three categories, reflecting different stages of the research and development process:

- **Prototype**—Products, materials, and systems that are in the prototyping and testing phase
- **Production**—Products, materials, and systems that are currently available for use
- **Application**—Products, materials, and systems as used in a single architectural project or group of related architectural projects

The jury will consider new materials, products, and systems as well as unconventional uses of existing materials, products, and systems. Entries will be judged for their potential or documented innovation in fabrication, assembly, installation, and performance. All entries will be judged according to their potential to advance the aesthetic, environmental, social, and technological value of architecture.

ELIGIBILITY

The awards are equally open to architects, designers of all disciplines, engineers, manufacturers, researchers, and students.

PUBLICATION

The winning entries will appear in the July 2012 issue of ARCHITECT, both in print and online.

DEADLINE

Friday, April 13, 2012 regular submission deadline (postmark)

Wednesday, April 18, 2012 late submission deadline (postmark; additional fee is required)

FEES

First entry: \$175 first entry

Additional entries: \$95 each

Late entries: \$50 additional fee per entry by April 18, 2012. Application forms and submission requirements are available at rdawards.com.

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— JOE EICHENSEER



Mike DeLacey, Microdesk

"It's a really unique time in the industry," says Mike DeLacey, New York-based president of BIM consultancy Microdesk. "The changes are happening very rapidly. There is definitely something up for grabs."

He believes that BIM software is no less than redefining the profession. "The challenge now is we get a very accurate design model but it doesn't flow through to post-construction," he says. "We're turning that on its head now and saying, 'We want all that info coordinated before it goes to the contractor.' The design world was historically abdicating that. We'd rather leave that to the construction managers. But today, the pressure is increasing for design to retake that responsibility. I think a big change coming is that all of those tools for shop drawings will be within BIM."

In the future, DeLacey thinks that there may be greater distinction between design-development firms and construction-documentation firms. More than a fractioning of responsibilities between firms, though, he sees a blurring of duties among them. "I'd guess you'll see more architecture-engineering firms, or more construction management living within the design organization," he says. "You'll have construction expertise living within architecture firms and vice versa. You're seeing a bit of that already."

DeLacey says that in recent years, construction-management firms have been more aggressive than architecture firms about seizing project-management roles. "But the design industry is starting to step up and think about it more," he says. "I think the challenge is they still tend to think in the framework of a design task, saying, 'We're not going to propose something that will shrink those margins even further,' rather than thinking from an opportunity standpoint of what is possible. But I liken the opportunity to that of the master builder: When we built cathedrals, it was one guy who envisioned what would be built and oversaw that process. Technology is driving us in a direction where in 15 years that could be possible: one organization designing, constructing, and maintaining."

"Look at road construction," DeLacey says. "The Texas Department of Transportation is contracting major strands of highway to a single entity, including tolls, for 90 years and maintenance. I think that's a concept that will continue." □

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TEXT BY IAN VOLNER

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Learning Objectives

1. Describe the effect of the building's structural design and orientation on construction materials.
2. Describe the role of the atrium in the Bow's ventilation and conditioning system.
3. Describe why the Bow's HVAC system is different from typical systems in North America, and its benefits to occupants.
4. Three indoor gardens are the aesthetic and social centerpieces of the interior; list at least two occupant benefits of these spaces.

→ CONTINUING EDUCATION

A Natural Stance

BEYOND ENERGIZING CALGARY'S SKYLINE, THE BOW SEEKS TO REDEFINE THE ROLE OF SUSTAINABILITY IN HUMAN WELLNESS AND A HAPPIER WORKPLACE.



CALGARY, ALBERTA, CANADA, is the self-proclaimed "Cowntown." The former hub of the country's cattle trade, it has a population that barely grazes the 1 million mark. Relief from its harsh winters comes only in the form of the mild but erratic chinook winds, which are also, unfortunately, notorious for triggering migraines among residents.

In this intersection of the Canadian Rockies and the Canadian Prairies, a skyscraper has been steadily rising in the downtown area for the past five years. Named after the river that curls through the Alberta province and the city center, the Bow, when completed this year, will be among the 75 or so tallest structures in the Western Hemisphere, and Canada's largest skyscraper outside of Toronto. But the 236-meter- (775-foot-) high office building is more than just a sleek showpiece for the city. Rather, London-based architect Foster + Partners (F+P) and its collaborators designed the Bow to become a dynamic, sun-filled village within the often-snowbound city—an exemplar of a new class of skyscrapers that maximizes the well-being of occupants and of the world at large.

It's no coincidence that the Bow is in Calgary. The first city in Canada to adopt a policy mandating that all public developments qualify for LEED certification, Calgary boasts a wind-powered public-transit system

and a comprehensive, 100-year sustainability plan. *ImagineCalgary*, launched in 2005, combines energy-efficiency goals with proposed improvements to the city's human-services infrastructure such as reducing energy consumption by 30 percent, eliminating indoor-air contaminants, and providing an environmentally friendly city for all Calgarians by 2036.

The plan's emphasis on the connection between sustainable issues and the health and happiness of the citizenry is timely given the recent questions that have been raised about green building and its effect on occupants. As the pace of eco-building has picked up, its design standards continue to be challenged and redefined. Architects and engineers have been racing to grasp not only the latest building technologies—green roofs, passive ventilation, and rainwater harvesting—but also the technologies' roles in a holistic system that connects the occupants physically and psychologically with the environment in which they live and work.

The U.S. Green Building Council (USGBC) has begun to research the relationship of LEED certification with the effects on human health for assessing a building's environmental bona fides. The current LEED rating systems underscore this prospective link; a 2010 report



Pioneering New Ideas in Sustainability



Pioneer Courage Park in Omaha anchors a five city block array of street sculpture, green space, and water features. Hayton White Dolomite limestone was chosen to address sustainability goals including durability, low maintenance, and controlling storm water runoff as the walls, paving, and statue bases were installed over a permeable base. The highly reflective stone allows “moonlit” lighting that saves energy and reduces light pollution at night and, in combination with native plantings, minimizes the heat island effect during the day. Additionally, fabrication waste from each product was used for other parts of the project. Attention to the details of processing resulted in water and energy savings, and no waste. MIA member Architectural Granite & Marble of Austin, Texas was the stone subcontractor on this project.

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The Bow's crescent shape was designed to be aerodynamic, reducing wind loads, the amount of required structural bracing, and the creation of urban wind tunnels. Pedestrians and building tenants crossing the south-facing plaza at the tower's base will be protected from downdrafts.



“THE [BOW’S]
OVERALL
MASSING
WAS SOLELY
DESIGNED
AROUND THE
END USER.”

—JIM BARNES,
FOSTER + PARTNERS

by the USGBC Research Program estimates that up to half of the available LEED credits are related to the experience of building occupants.

Greener workplaces that produce a healthier workforce certainly seem possible. An additional up-front construction expenditure of 2 percent on sustainable features can lead to 20 percent in savings over time, part of which comes from increased employee productivity, according to a 2003 report from California's Sustainable Buildings Task Force. Several studies have also linked daylighting to increased worker productivity and enhanced circadian rhythms.

The Bow is at the forefront of this push for eco- and health-conscious buildings. Rising from the center of Calgary, the curved structure is a soaring sculpture of glass and steel. Comprising 58 stories, including three floors for indoor gardens and two for retail, the 188,000-square-meter (2-million-square-foot) building occupies an entire city block.

The firm behind the Bow is known for designing environmentally sensitive buildings that also *feel* more sensitive for the people within. “We’ve learned a lot from ... [London’s] Swiss Re and from Commerzbank ... [in Frankfurt],” says Jim Barnes, F+P’s project architect, who worked with senior partner Nigel Dancey on the Bow. Building residents value the importance of interior greenery, views outdoors, and informal social spaces, all of which are included in the project.

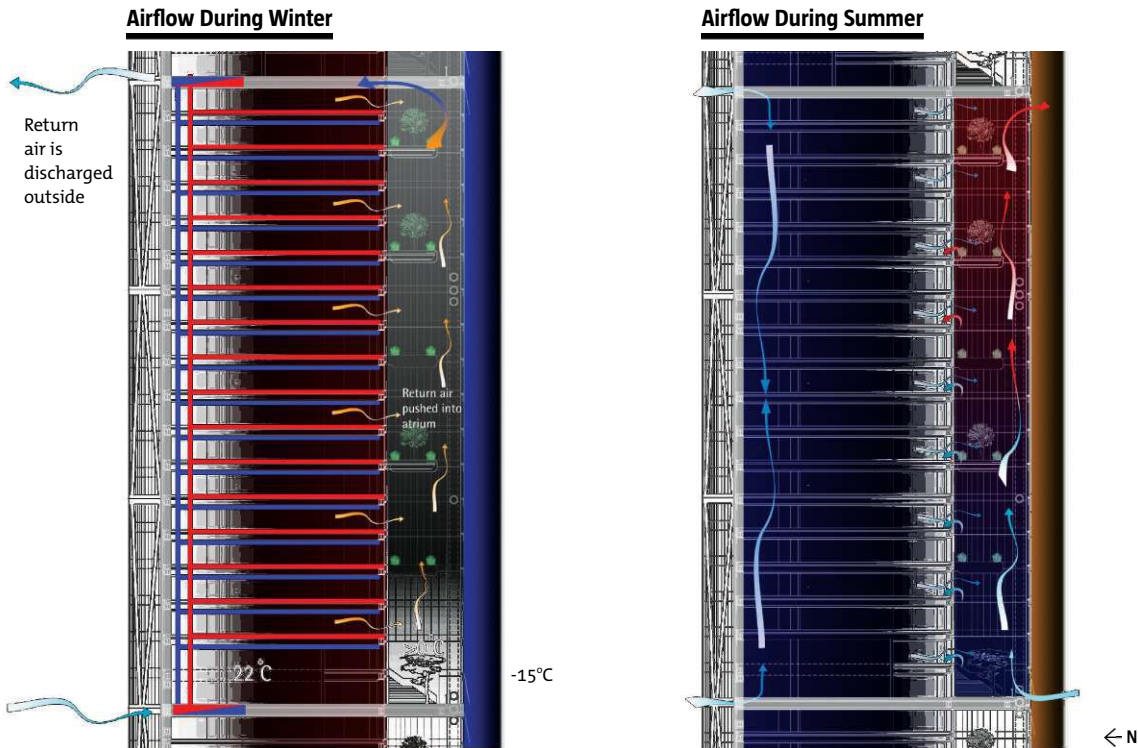
The Bow is the first curved skyscraper in North America to use a triangular diagonal grid structure. The diagrid structural system, similar to the systems used in F+P’s Swiss Re building and the Hearst Building in New York, has become another characteristic of F+P’s high-rise projects, and with good reason. The technique improves the efficiency of the building’s support system, thereby reducing material resources and costs.

The minimalist exoskeleton also allows for expansive windows, which translate to more natural light inside and views outside.

Expectations for the Bow were high from the start. The project had to fit in the urban context of Calgary, routinely ranked among *The Economist’s* top-five most-livable cities. Developed by H&R REIT, based in Downsview, Ontario, Canada, for tenants EnCana Corp., one of the largest natural-gas companies in North America, and spin-off company Cenovus, the Bow also needed to become an environment that occupants would perceive as comfortable and inviting.

F+P gathered a team of specialists to help them design a livable and dynamic office environment. The collaboration includes local design firm Zeidler Partnership as architect of record, Gensler’s Dallas office for the interior fit-out (with the exception of public spaces, which F+P designed), and New York-based M/E/P engineer Cosentini Associates, a Tetra Tech Co.

The designers’ sensitivity to the creation of an environment that fostered human wellness began with the building’s signature crescent shape. Beyond the skyscraper status, Barnes says, “the overall massing was, frankly, solely designed around the end user.” The tower, an arch in plan that opens out to the south-southwest, pitches northward, pointing it “in the direction of the prevailing winds so it becomes more aerodynamic” and further reduces the material needed for structural bracing. More importantly, Barnes adds, “the aerodynamic shape also produces less downdraft, producing less turbulent winds at the base of the tower.” Building tenants hurrying across the southern entrance plaza to work won’t be buffeted by wintry gusts due to the protection offered by the tower, heavy landscaping, and entrance canopies.



The architects were also keen to capitalize on Mother Nature. Despite its northern setting, Calgary has the distinction of being Canada's brightest major city—receiving 2,405 hours of sunshine per year. As a result, the Bow's form provides many benefits to workers inside, says Paul Manno, AIA, Gensler's design director. "You look at the shape of the building and it doesn't seem obvious," he notes, "but we maximized [the number of] perimeter offices. That inherently lets in more daylight due to the configuration."

The structure's parabolic envelope increases its surface area over that of a rectangular building with a comparably-sized footprint. As a result, more than 70 percent of employees in the Bow will have a window view. "The interior partitions of the office also have glass in them," says Zeidler principal Katherine Robinson, "so light penetrates the center of the office floor plates," which are 32,000 square feet in area.

Natural light is only one of many advantages to the building's extensive glazing and orientation. Workers will also be able to take in views of the breathtaking landscape even at some distance from the windows, notes Steve Carruthers, Zeidler's project architect. "When we say in Calgary 'facing south,' that means facing towards the mountains," he says.

Whereas "in England," Barnes notes, "a south-facing building would be a greenhouse." Due to Calgary's higher latitude, F+P—with guidance from its partners—was able to use the sun's energy to integrate another system that is expected to reduce the Bow's energy consumption by 23 percent from that of a baseline building: passive ventilation.

Inside the concave curtainwall on the Bow's southern façade, a series of vertical atriums runs up the building's full height, separating the offices from the exterior. The void acts as a natural solar-heat collector,

creating a buffer of sun-warmed air that helps keep occupants cozy. In the winter, heated return air escapes from the adjacent offices into the atrium and rises upwards. "As the air goes up," explains Cosentini's senior vice president Scott Ceasar, "it warms up [further] from the sun. Then we capture it at the top." The captured exhaust, prior to its discharge, is run with intake air from outside through a heat exchanger and heat recovery unit, "preconditioning" the fresh air that is then pumped down a series of risers into air towers on each floor and back into the offices. As a result, less mechanical energy is required to warm the airflow.

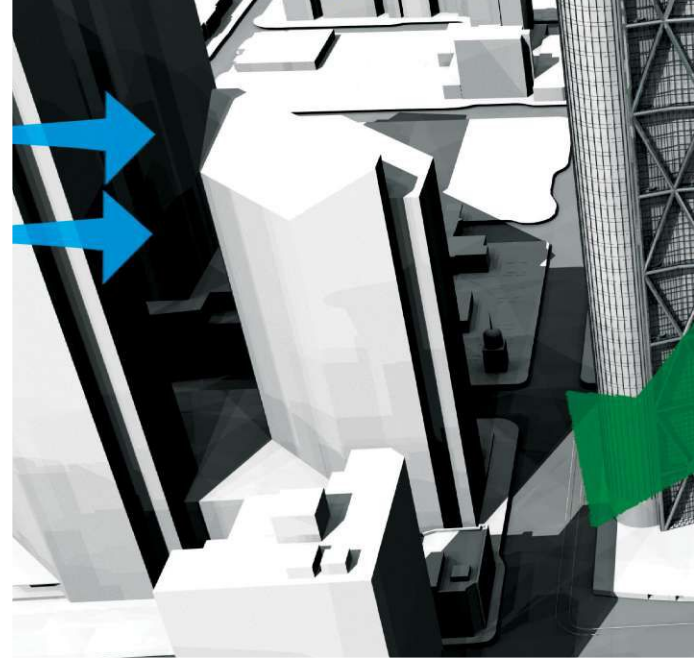
In the summer, Ceasar says, "It's just the opposite." The atrium acts as a spill area to draw in the cool, used office air, which is then warmed by solar radiation. The heated air stratifies upward to the top of the building where it runs through the heat recovery unit and partially pre-dehumidifies the incoming air. As the return air exits the building, the intake air is pumped into the air towers, cooled, and distributed into the offices, creating a continually refreshed stream of consistently comfortable air on every floor. The process of natural convection, combined with the preconditioning system, reduces the energy needed to intake and regulate the temperature of air by mechanical means alone.

At the individual office level, the conditioned air reaches building tenants by way of displacement ventilation through a subfloor installation that helps guarantee clean, high-quality air and a controlled temperature. F+P had used a similar raised-floor plenum approach in its Commerzbank project, channeling warm or cool air into the offices under





The Bow's south-southwest orientation and curvature help deflect prevailing winds from the northwest. Atrium windows offer views out to the Canadian Rocky Mountains. More than 70 percent of office workers in the Bow will have a window view.



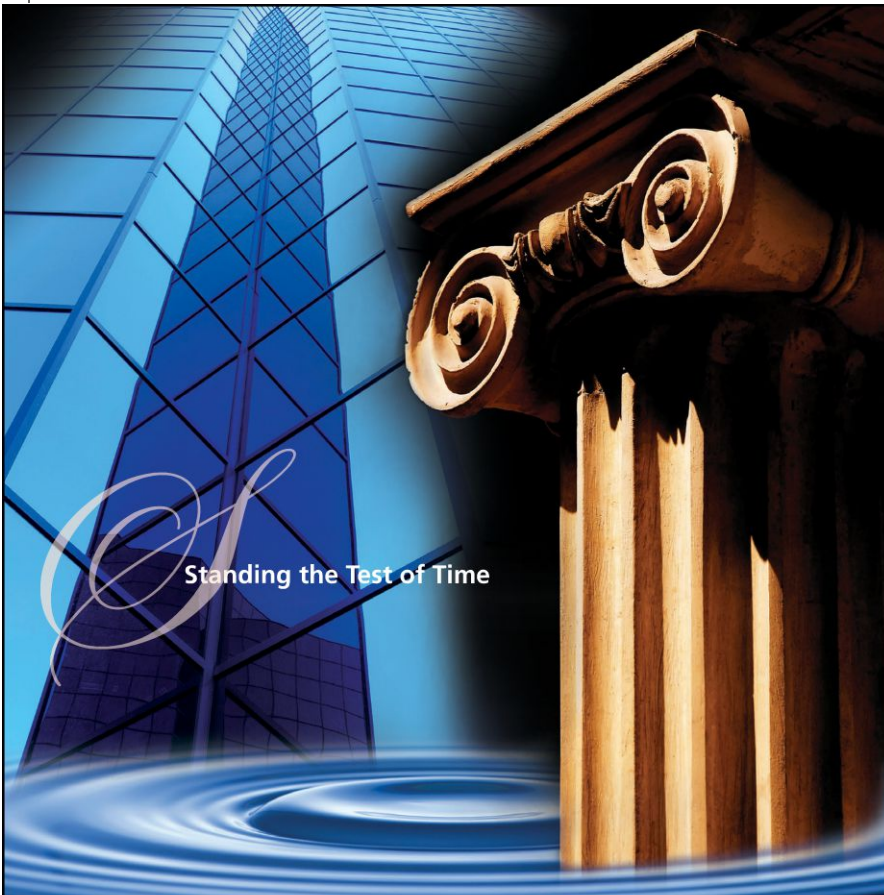
the feet of occupants. "The underfloor system is not unusual for Europe," Barnes says.

Indeed, the system's relative scarcity on these shores is strange, given its inherent advantages over ceiling-mounted vents: Rather than pressing down against the warmed air's tendency to rise upwards, floor-supplied ventilation moves it in a natural current that provides more air to more interior space. At the same time, airborne contaminants that cling to the ceiling aren't constantly pushed back into circulation. The raised-floor plenum also provides more local control within each office to suit the preferences of individual workers. The practice of enabling users to create a comfortable work environment extends to the windows and window shades facing the atrium, which can be opened and closed at will.

Giving a human touch to the Bow's technical achievements was another significant focus of the design collaboration. The entire organizing principle of the tower is geared towards humanizing it, breaking down its massive size to people scale. Envisioned as 10, six-story stacks—with the exception of the top and bottom stacks, which comprise five stories each—the Bow functions as a series of what Carruthers terms "neighborhoods ... a very strong metaphor that plays out in a very real way in this building."

Express elevators stop at select floors, from which workers transfer to local elevators just as they might switch buses or trains in an urban context. Each "block" is distinguished by a color-coded wayfinding system that takes its cue from the Alberta landscape and incorporates the particular hues and textures of the natural features visible from the windows of each respective floor. The intended effect of these buildings-within-a-building is that each component will act as a community of its own, with intrafloor mingling encouraging co-workers to exchange names, words, and ideas.

Perhaps the most important feature of the user-centric approach is the sequence of indoor gardens—landscaped sky lobbies—that create the aesthetic and social centerpieces of the interior arrangement. This, too, has become a hallmark of F+P's work of late—similar gardens appear in its Frankfurt project as well as in an upcoming tower in Huangzhou, China. Jutting into the atrium on the 24th, 42nd, and 54th floors, the Bow's



Standing the Test of Time

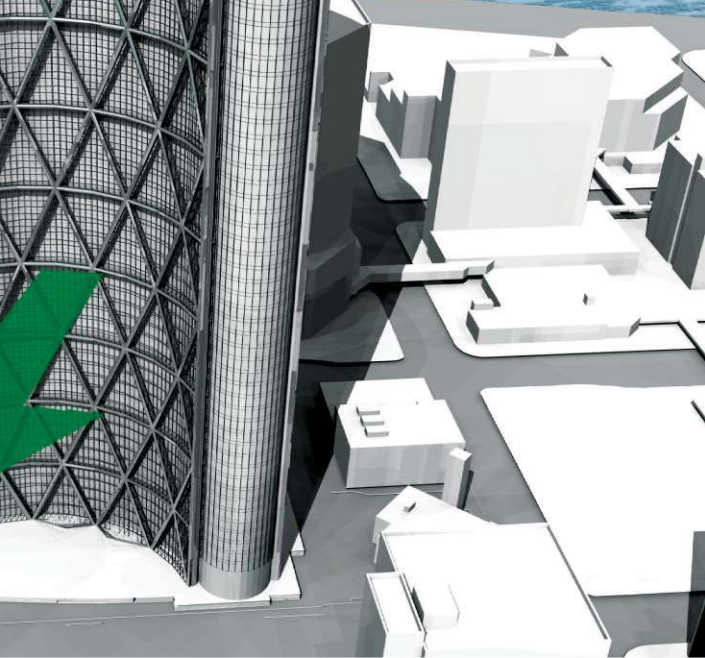
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sky gardens will offer some relief during the gloomier winter months and provide a dose of greenery that may help stave off seasonal depression in an area where many people are accustomed to starting and ending their workday when the sky is dark. Large planters filled with indigenous flora, an array of sustainably sourced furniture, and amenities such as coffee shops and eateries create a series of village greens within the building's community-centered scheme.

The close-knit-neighborhood feel connects the Bow to the rest of Calgary, integrating the structure into a broader urban network organically. Linked to the city's 10-mile-long +15 Skywalk system of enclosed, above-ground walkways, the tower can be entered and exited without ever having to set foot outside, encouraging visitor activity between the downtown's developments throughout the months of single-digit temperatures. A light-rail transit stop is located just one block to the south of the building, and bicycle racks—more than 200 of them—allow workers to commute using nearby routes along the scenic Bow riverfront.

Projections of just how effective a building such as the Bow will be are still a matter of conjecture. The field of occupant wellness and its complex points of contact with overall sustainability is still a relatively new one. "The question is: How do you make people more productive?" Manno says. "We're just now starting ... to get more metrics. People are measuring things I've never seen them measure before." Gensler has implemented a Workplace Performance Index to assess the effect of the various efficiency-improving initiatives on many of its other projects, but a host of unknowns still exists industrywide.

However, the Bow does represent a clear expression of the design profession's emerging language of health and welfare, drawing on a growing vocabulary of sustainability that has become more mainstream in the past decade. The years to come will reveal how well architects learn to speak in this idiom, and whether what they have to say will translate into truly healthier and happier places for the people. □

"THE QUESTION IS: HOW DO YOU MAKE PEOPLE MORE PRODUCTIVE? WE'RE JUST NOW STARTING ... TO GET MORE METRICS."

—PAUL MANNO, AIA, GENSLER



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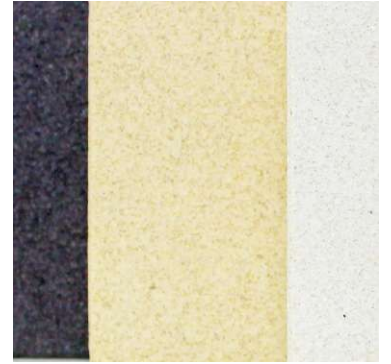
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→ PRODUCTS

Editor's Choice



TEXT BY WANDA LAU

7:1

The current sheep-to-person ratio in New Zealand. In 2011, the world's last country to be inhabited boasted 31.1 million sheep and 4.41 million residents. This ratio peaked at 22:1 in 1982.

SOURCE: STATISTICS NEW ZEALAND

Simple and functional, **Dropit** by Asshoff & Brogård for **Normann Copenhagen** is a wooden, drop-shaped hook that can be used as an anchor for coats and hats or to create an abstract pattern on walls. Made from beech with a lacquered black finish, the hook comes in two sizes: Dropit large is 9.3cm high by 6cm wide and 8.7cm deep; and Dropit small is 7.7cm high by 5cm wide and 8cm deep. When installed properly, Dropit can support up to 10 kg (22 lbs.). • normann-copenhagen.com • Circle 120

The **Wool Fundamentals** carpet collection by **Bentley Prince Street** features face fiber made 100% from New Zealand wool, which is naturally resistant to fire, dirt, and staining. Inspired from Old World tapestries, the broadloom carpet collection includes three textures: Hawkes Bay (shown) and Port Chalmers, which have a woven appearance, and Tasman, a random sheared carpet. Wool Fundamentals comes in 12' widths and 16 color options. • bentleyprincestreet.com • Circle 123

The **Beverly** folding armchair designed by Antonio Citterio for **B&B Italia** features an aluminum alloy frame with a black or bright-brushed-chrome finish. The seat cover comes in many colors and fabrics, including leather, cotton with leather trim, and technical fabric, and has an optional merino-suede slipcover. The 27³/₈"-wide armchair may be ordered with a 30³/₄" or 37³/₈" backrest height; when folded, the armchair collapses from a depth of 29¹/₈" to 11³/₄" or from 32¹/₈" to 13³/₄", respectively. • bebitalia.com • Circle 121

Chouchin by **Foscarini** is a collection of three blown-glass suspension-cable pendants designed by Ionna Vautrin. A glossy varnish coat renders most of the luminaire's body opaque, directing light down onto surfaces below. The 43cm-high, 22cm-diameter green pendant uses a 150W halogen lamp; the 31cm-high, 40cm-diameter orange pendant runs on a 75W halogen lamp; and the 25cm-high, 30cm-diameter gray pendant runs on a 25W CFL. The pendants can suspend a maximum of 2m. • foscarini.com • Circle 124

KnollTextiles' Stateside collection includes four upholstery patterns: Hourglass, Chronicle, Prompt, and Gala (not shown). Each pattern has at least seven colorways, with Hourglass offering 28 options. With the exception of Gala, which is made entirely from nylon, the upholstery patterns contain between 75% and 100% recycled polyester. The collection also includes Quest, a drapery fabric, and Tapis, a wall covering. Manufactured in the U.S., Stateside is Greenguard certified for low chemical emissions. • knolltextiles.com • Circle 122

Developed by **Meld USA**, **Luxe** is a cement-based surfacing material that can be cast into a variety of different products, including countertops, tiles, wall paneling, fixtures, and accessories. Manufactured in Raleigh, N.C., Luxe comprises up to 74% pre-consumer recycled materials. Twelve standard colors, including natural, cement, graphite, and southern mud, are available, but Luxe can also be customized into virtually any color. • meldusa.com • Circle 125



The **Corduroy** glass series by **Bellavita Tile** features a textured-finish surface that mimics the continuous grooves of corduroy. Suitable for interior and exterior applications and in wet or dry environments, Corduroy consists of multiple 1"-by-12" tiles on a 12"-by-12" sheet of fiberglass mesh. Seven color blends—ash, aubergine, cedar, cocoa, ecru, fawn, and stealth—and two solid colors—snow and almond—are offered. • bellavitatile.com • Circle 126

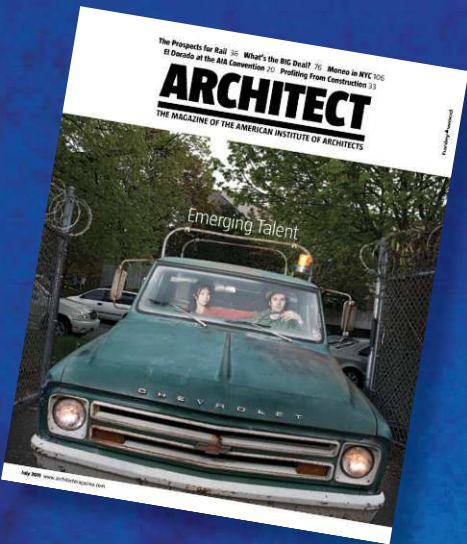
The **Parans solar lighting collection system** transports sunlight to indoor spaces that may not have access to natural light. Mounted outdoors, the system's 114cm-by-27cm-by-57cm receiver tracks the sun and can deliver up to 6,000 lumens—the equivalent of 14 standard 40W lamps—via cables to a luminaire as far as 20m away. One receiver can suitably illuminate a 430-square-foot room. Several light-fixture options are available. • parans.com • Circle 128



Megaweave is an outdoor seating piece by **Dunja Weber**, a design studio based in Milan, Italy. Based on the concept of weaving threads to form a fabric, Megaweave consists of six intertwined horizontal and vertical iron rings that form its sculptural shape. To create the seating surface, Weber hand-hammered the forged, 2cm-square iron bars into 7cm-wide ribbons. The sturdy black piece is 40cm high with a 75cm diameter. • dunjaweber.com • Circle 127

Johnson Controls' York YVAA is a high-performance, variable-speed, air-cooled screw chiller that can deliver up to an 11.6 energy-efficiency ratio (EER) at full load and an integrated part-load value (IPLV) of up to 19.8. Available with a 150- to 350-ton capacity, the chiller uses HFC-134a refrigerant. Sound-attenuation options can reduce its ambient noise by as much as 16 dBA during off-design conditions. • johnsoncontrols.com • Circle 129

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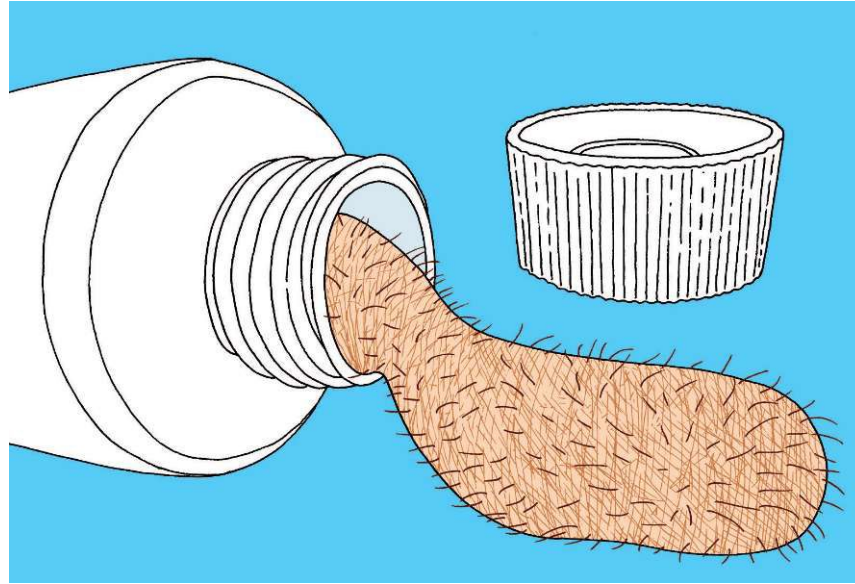


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NUMBER OF SPECIES OF BACTERIA THAT COLONIZE HUMAN SKIN.

SOURCE: NATIONAL HUMAN GENOME RESEARCH INSTITUTE

SKIN IS A MIRACULOUS SUBSTANCE. Not only does this vital organ protect the body against disease and water loss, it also possesses the multiple functions of sensation, insulation, temperature regulation, and self-healing. When skin is badly damaged, however, the healing process is inhibited, resulting in discolored scar tissue.

Recently, scientists from Johns Hopkins University in Baltimore discovered that a new formulation of hydrogel encourages skin growth for burned areas that might otherwise be treated by grafts. The substance—which consists of water and a polymer called dextran—grows new skin in three weeks, complete with integral blood vessels, oil glands, and hair follicles. Moreover, the new growth is not scar tissue, but rather healthy skin that will likely be much less noticeable than traditional skin grafts.

“Our goal was to induce the growth of functional new blood vessels within the hydrogel to treat wounds” and diseases, says Guoming Sun, a postdoctoral fellow at Johns Hopkins. “These tests on burn injuries just proved its potential.”

The researchers believe that the hydrogel will be inexpensive to produce and can be manufactured at large volumes in only a few years. Sharon Gerecht, assistant professor of chemical and biomolecular engineering, predicts that U.S. Food and Drug Administration approval may be expedited since the hydrogel requires no biological components or drugs to function.

In addition to regenerating skin, hydrogel is also a material of choice for repairing cartilage, which, like

skin, is difficult to regrow. The University of Bradford in England and a spin-off company, Advanced Gel Technology, have developed a method to replace damaged cartilage with hydrogel as a way to postpone joint-replacement surgery. Particularly suited to traumatic injuries, the procedure involves insertion of the gel through a small drilled hole in order to curtail pain caused by friction between bones.

“Total joint replacement is very successful, but may not be appropriate for younger, more active people,” says Pete Twigg, lead researcher at the university’s Cartilage Repair Project. “They are often encouraged to put off surgery until the pain is disabling, but a conservative replacement treatment could relieve pain and restore function at a much earlier stage.”

A more far-fetched human-tissue replacement material is “e-skin,” developed by scientists at the University of Tokyo. A kind of conductive elastic film created by adding an ionic solution filled with carbon nanotubes to rubber, the material is heat- and pressure-sensitive. Originally developed as a more humanlike surface material for robots, the electric rubber is being assessed for future incorporation in the human body.

In the meantime, e-skin will likely show up in flexible interfaces, from steering wheels to mattresses. “Objects that come into contact with humans are often not square or flat,” says University of Tokyo research associate Tsuyoshi Sekitani. “We believe interfaces between humans and electronics should be soft.” □

TEXT BY BLAINE BROWNELL
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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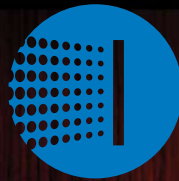
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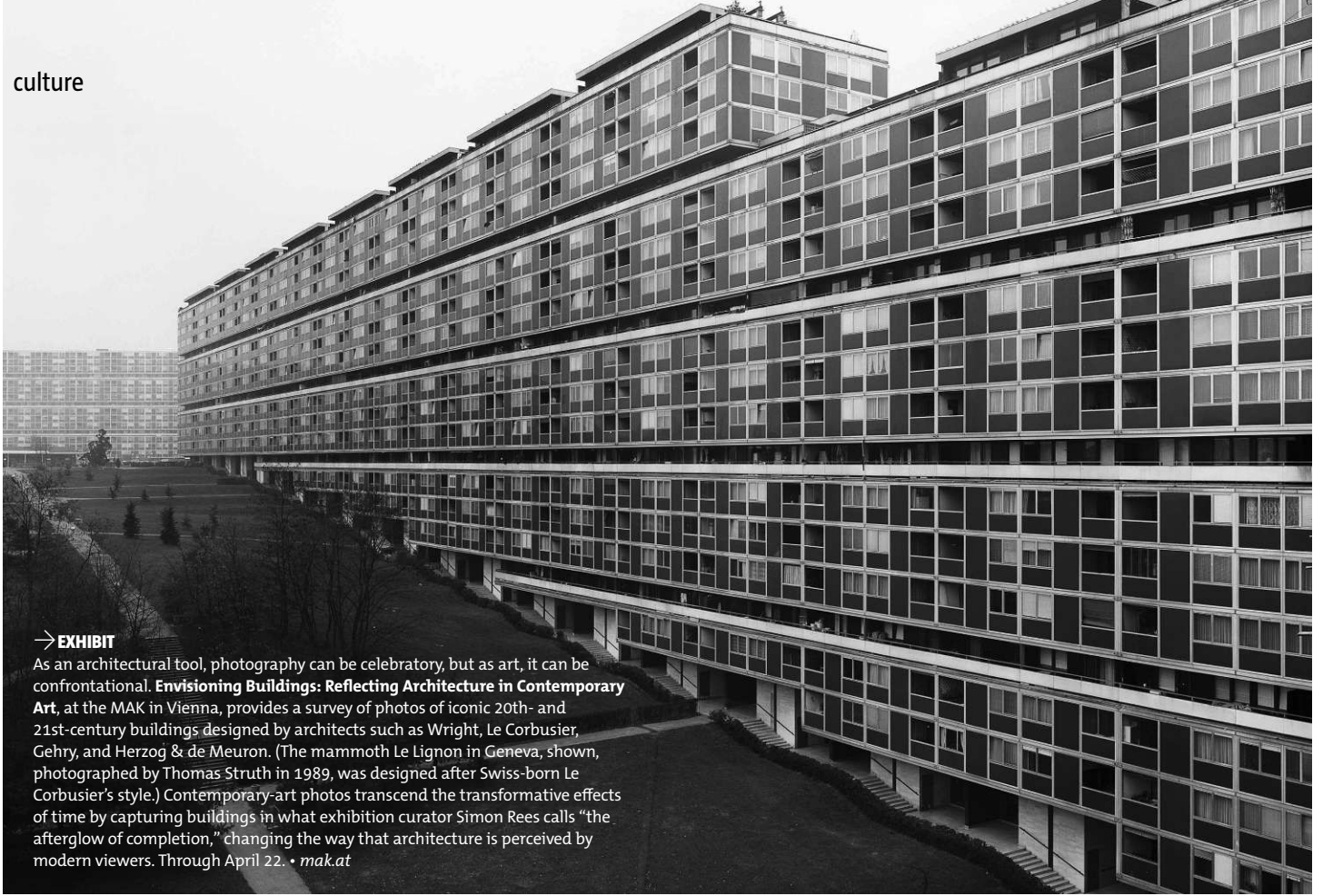
CULTURE



EDITED BY LINDSEY M. ROBERTS

→ OBJECT

In a sign that building enthusiasts are moving on from Legos to other building toys, the Los Angeles County Museum of Art is displaying **Metropolis II**, an almost-10-foot-high and 28-foot-wide kinetic sculpture, made with steel-beam armatures and plastic roadways, that depicts a city in motion. Three electrically powered, magnet-studded conveyor belts move toy cars to the top, then release them to race past buildings down 18 roads, including a six-lane freeway, at 240 scale miles per hour—simulating L.A.'s notorious traffic and congestion. Four years in the making by local artist Chris Burden, the sculpture is now on long-term loan to the museum, running on weekends during scheduled times. Each hour it operates, 1,100 mini autos vroom through the arteries and main drags 91 times each. • lacma.org



→ EXHIBIT

As an architectural tool, photography can be celebratory, but as art, it can be confrontational. **Envisioning Buildings: Reflecting Architecture in Contemporary Art**, at the MAK in Vienna, provides a survey of photos of iconic 20th- and 21st-century buildings designed by architects such as Wright, Le Corbusier, Gehry, and Herzog & de Meuron. (The mammoth Le Lignon in Geneva, shown, photographed by Thomas Struth in 1989, was designed after Swiss-born Le Corbusier's style.) Contemporary-art photos transcend the transformative effects of time by capturing buildings in what exhibition curator Simon Rees calls "the afterglow of completion," changing the way that architecture is perceived by modern viewers. Through April 22. • mak.at

PREVIOUS PAGE: CHRIS BROWN, © MUSEUM ASSOCIATES/LACMA
THIS PAGE CLOCKWISE FROM TOP LEFT: E. KOTAMA, COURTESY GAGOSIAN GALLERY; COURTESY FREDERICH PETZEL GALLERY, NEW YORK; COURTESY OF THE NEW YORK CITY MUNICIPAL ARCHIVES; NONH KALINA; PATRICK BINGHAM



→ EXHIBIT

Renderings of the Singapore hotel Parkroyal on Pickering resemble a scene cut from the History Channel's *Life After People*. Trees, leafy shrubs, and overhanging creepers overtake the building, transforming balconies and common spaces into lush gardens. For Singapore-based WOHA, which designed the hotel (set for completion this year), nature serves not as a conquering force, but as a striking and sustainable design philosophy in which structure generally disappears. **WOHA—Breathing Architecture**, at the Deutsches Architekturmuseum (DAM) in Frankfurt, is the firm's first monographic exhibition, led by directors Wong Mun Summ and Richard Hassell. It displays efforts to merge building and landscape, ranging from open, tropical family homes to green skyscrapers. Singapore's School of the Arts, shown above, is one example. So is the Met, a high-rise apartment building in Bangkok that won DAM's International Highrise Award in 2010, and that allows light and air to penetrate through its slender forms—a quite literal example of a building that breathes. Through April 29. • dam-online.de

→ BOOK

The golden-rod-yellow "bubble house," built in 1953 in Hobe Sound, Fla., was perfect for its locale: the color and shape mimic one of the state's main exports, the orange. More importantly, the house's unconventional form was estimated to withstand seasonal hurricane winds up to 125 miles per hour. Architect Wallace Neff (1895–1982) considered the bubble house and his other pneumatic-type "Airform" buildings to be his most significant contribution to architecture. Of low cost, able to be constructed in 48 hours, and resistant to fire and earthquakes, thousands of such structures were built as schools, houses, and even a gas station during Neff's lifetime, in such places as Africa, Mexico, and South America. Today, only one bubble house remains, in Pasadena, Calif. **No Nails, No Lumber: The Bubble Houses of Wallace Neff** by Jeffrey Head explores the typology that Neff thought would solve the global housing crisis. • \$24.95; Princeton Architectural Press, December 2011

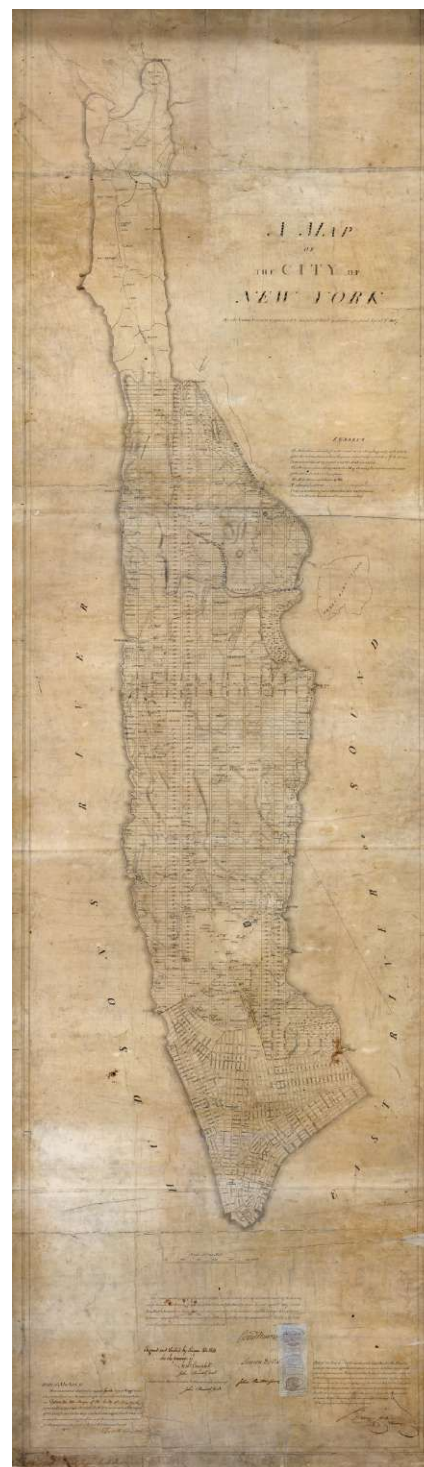


Fig. 75: A Noyes Airform today, Hobe Sound, Florida



→ FILM

The figures of Philip Johnson and Ludwig Mies van der Rohe loom large over 20th-century architecture. In a sense, artist Sarah Morris has set out to flatten them. In her film, **Points on a Line**, which is now playing at the Wexner Center for the Arts in Columbus, Ohio, Morris sets aside questions about either's intent or influence. Instead, she examines the systemic and outside factors that influenced their designs, including the Glass House and the Farnsworth House (above)—and the structures you'll find geographically in between them. Morris, who also produced *Miami* (2002) and *Beijing* (2008), explores the built and natural environments that lend context to these two Modernist giants. Commissioned by the National Trust for Historic Preservation, the film makes the case for the relevance of historic architecture in the evolution of communities. Through April 15. • wexarts.org



→ EXHIBIT

In 1811, when Simeon De Witt, Gouverneur Morris, and John Rutherford were commissioned to create an urban plan for the island of Manhattan, they came up with a fairly soulless solution. Their grid lacked parks and plazas. Streets cut through private property, much of which the government appropriated. Though some streets remained unfinished for decades, the grid ultimately sent property values soaring by lending the city a density and navigability. It also left the flexibility to accommodate Central Park. Celebrating the bicentennial of that feat, **The Greatest Grid: The Master Plan of Manhattan, 1811–2011**, on display at the Museum of the City of New York, offers prints, maps (an 1811 map by John Randel Jr., the original surveyor, shown), and photographs that chart the city's evolution. Through April 15. • mcity.org



→ CRIT

Back to the Future

WITH METABOLISM, POSTWAR JAPANESE ARCHITECTS LOOKED BEYOND THE END OF THE CENTURY TO THE FUTURE OF ARCHITECTURE, PREDICTING TRENDS THAT ARE STILL EMERGING, AS A NEW ORAL HISTORY OF THE MOVEMENT BY REM KOOLHAAS AND HANS ULRICH OBRIST FINDS.

Over the course of some 700 pages, the book compiles interviews, illustrations, documents, recollections, and photographs to chart the history and legacy of a Japanese architecture bookended by World War II and the 2011 earthquake and tsunami.



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

TEXT BY THOMAS DE MONCHAUX
PHOTOS BY NOAH KALINA

“**JAPAN,**” the cyberpunk novelist William Gibson famously observed, “is the global imagination’s default setting for the future.” Gibson’s prophetic 1984 novel *Neuromancer* (Ace Books), in which he coined the term “cyberspace” and predicted today’s digital dystopias, begins in a soulfully sleazy, neon-and-noir neighborhood near Tokyo Bay. The seeming futurity of Japan that Gibson projects, or rather depicts, originates in its rapid industrial modernization in the Meiji era; in its gadgetry and pageantry; and in its animatronic pop culture of dancing robots, kindly monsters, and Harajuku girls. And in 2012, a year trending toward the apocalyptic, Japan grimly fascinates for suffering natural and unnatural disasters, surviving distant nuclear attacks and recent nuclear accidents, and enduring economic miracles and lost decades that may preview our own.

For architects, the Japanese future lies in its glorious 20th-century past: the Metabolists. These were a consortium of designers, including Fumihiko Maki, Hon. FAIA, Kisho Kurokawa, Kenji Ekuu, and fellow-traveler Arata Isozaki, Hon. FAIA, who all orbited architect Kenzo Tange (1913–2005). Their innovation and influence was framed, roughly, by the 1960 World Design Conference in Tokyo and the 1970 World Expo in Osaka. At the former, they announced Metabolism to an audience

including Alison and Peter Smithson, Louis Kahn, and Paul Rudolph. (The deliberately English “-ism” was produced by journalist Noburu Kawazoe from *taisha*, a Japanese term for regeneration that he recalled from a Japanese translation of Friedrich Engels’s *Dialectics of Nature*.) At the latter event, they conjured up a mid-air, space frame “Big Roof” with installations by Hans Hollein, Yona Friedman, Moshe Safdie, Archigram, and others—not to mention actual dancing robots.

The Metabolist architects proposed vast megastructural complexes, such as Tange’s 1960 artificial islands for Tokyo Bay, which would house 7.5 million people. They produced civic and commercial work in brooding concrete, such as Tange’s Yamanashi Press and Broadcasting Center of 1966. And they made miniature monuments of mutability, such as Kurokawa’s celebrated Nagakin Capsule Tower Building of 1972.

Their moment is documented and illustrated in the book *Project Japan: Metabolism Talks ...* (\$59.99; Taschen, Oct. 2011), a remarkable 719-page work of oral history and historiography by Rem Koolhaas and Hans Ulrich Obrist, with spirited graphic design by Irma Boom and editing by Kayoko Ota and James Westcott. The text interweaves exhaustive documentation of projects with intimate interviews of surviving members of the group, supplemented by the intricate timelines, diagrams, and indexes that one has come to expect from Koolhaas.



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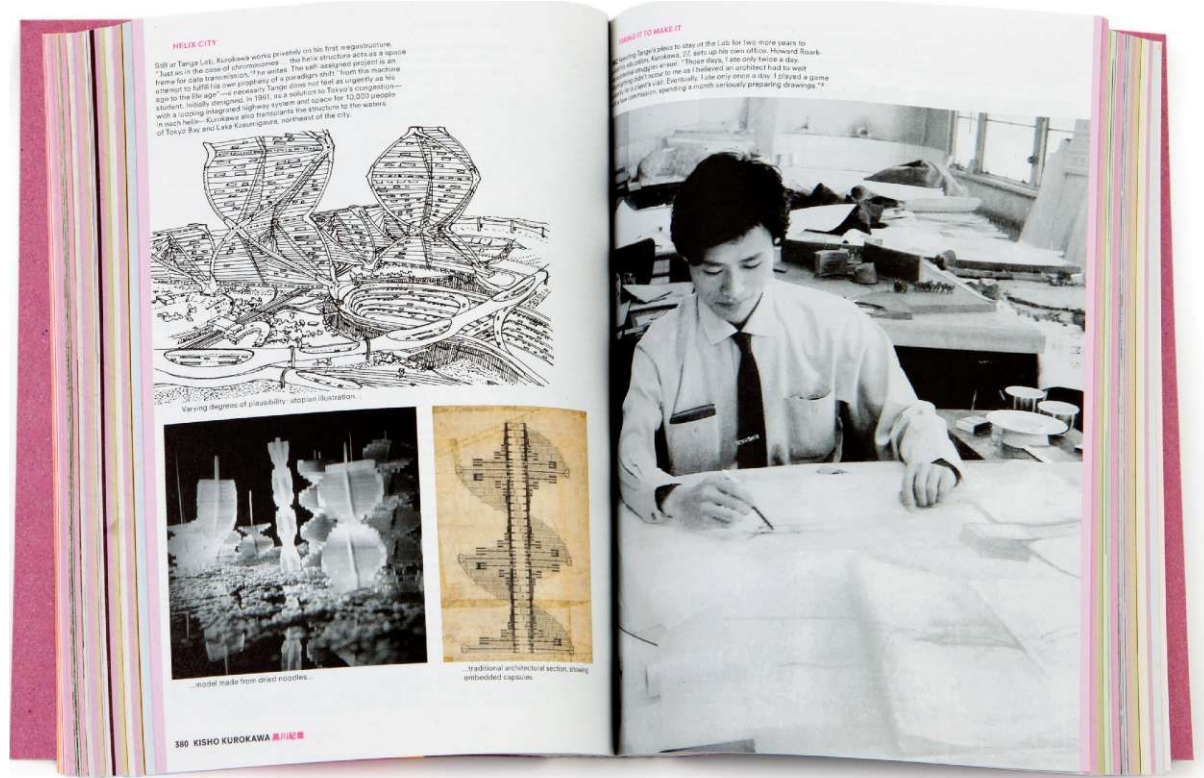
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Project Japan: Metabolism Talks ... couples project drawings, sections, and photographs with archival images and interview excerpts that relate stories about the project's production.



S.L.M. Architects; Photo by Paul Mullins

Two of today's critical architectural issues are illuminated by this particular yesterday. First, there is our current interest in biological processes of constant change: in the biomorphic formal systems that might embody them and in the computational tools that approximate them by simulating evolutionary form-finding and optimization. The Metabolists loved big pictures of tiny organisms and tiny pictures of big cities. They affirmed that, as Kawazoe would later put it, "there is no fixed form in the ever-developing world." The plastic pods of the Capsule Tower were intended to plug in and out as the needs of occupants changed, giving buildings the mutability and mechanical beauty of construction sites. Unsurprisingly, these apartment modules never moved an inch, even as the city changed haphazardly and unbeautifully around them; residents voted recently to demolish their building rather than embark on costly maintenance for a structure that was, ironically, never designed to last as long as it has.

The second issue, current and ancient, is the relationship between architecture and political power. *Project Japan* takes a cool look at the complex legacy of Tange's early work, which included both a 1942 project for a monument to what Imperial Japan called its Greater East Asia Co-Prosperity Sphere as well as the design for a memorial and museum (partially adapted from a proposal by Isamu Noguchi) at ground zero in Hiroshima. Both the undeveloped steppe landscape of Japanese-occupied Manchuria and the bomb-flattened postwar Japanese city provided unsettling

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A rooftop view of the Nitto Food cannery built by Kisho Kurokawa in 1963.

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variations on the Modernist tabula rasa. Much of the group's success owed to Tange's consummate political and academic schmoozing and to Atsushi Shimokobe's long career as a government minister and rainmaker. The remarkable size of many of the group's projects was inspired by an interest in public policy and development at a national scale—and demanded, explicitly or tacitly, the resources of a very big government indeed.

There is, in this examination of scale, some poignancy. Koolhaas in Japan is adjacent to Koolhaas in China. It may not be possible to understand one project without the other. History will decide whether OMA's colossal Beijing headquarters for state media agency CCTV—and similar works by many peers—prove to be fleeting adornments to totalitarianism or promising engagements between a progressively evolving Middle Kingdom and the brightest cultural producers of the free world. One wants the CCTV building, especially, to someday prove itself to have been a vessel for the resistant ironies and urbane liberties so passionately present elsewhere in Koolhaas's work. There is something about the shapeshifting antimonumentality and sublime awkwardness of that particular structure that encourages such hope.

Irony and tyranny are an odd yet enduring couple. Koolhaas's inquiries suggest reflection on the matter.

Of Isozaki, he asks, "Isn't it ironic that avant-gardes only exist when there's a strong government, but fall apart when there's a weak government? There's nothing to react against and nothing that could possibly support the fantasies. I think one great weakness of architecture since the '70s is that we can never find the support we need." Of Kurokawa, Koolhaas asks, "In the 1960s, you focused your intelligence on various government efforts or directives, even helping them to define their policies. You were able to expand while the public sector was very strong, when it had a lot of money and was deciding almost everything. In the last 10 or 15 years, however, the public sector has declined in power and there has been a corresponding shift to the private sector, to private developers who never have that kind of broad perspective." (Isozaki answers: "I think [...] from 1968 until 1989 [...] was a period of suspended animation in which nothing happened." Kurokawa, who later ran for office in Tokyo, answers, "Now I look at you and see you doing things similar to what I did when I was young.")

A condition in which one agent decides almost everything is not exactly the petri dish in which transformative metabolic processes transpire. Hence



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→ THE REMARKABLE SIZE OF MANY OF THE GROUP'S PROJECTS WAS INSPIRED BY AN INTEREST IN PUBLIC POLICY AND DEVELOPMENT AT A NATIONAL SCALE—AND DEMANDED, EXPLICITLY OR TACITLY, THE RESOURCES OF A VERY BIG GOVERNMENT INDEED.

there is something of a divided dream in the Metabolist project, between top-down organization and bottom-up complexity. In the 1970s and '80s, the Metabolists and their followers produced palaces, stadiums, and other XL projects for Saudi Arabia, Libya, Iran, and Singapore—a realization of only half of that dream. "Do you like a highly organized city?" asks Archigram in a poster that was part of the group's installation at the Metabolist-curated Expo 70. "It may be obviously structured or dependent upon social constraints unseen."

One way to be an architect is to believe that the voluntary constraints of good design transform the involuntary imprisonments imposed, unseen, by everything else. Among so much else in *Project Japan*, there is the mortal thrill of seeing a young band (and avuncular producer, in the person of Tange) emerge from wartime childhood and discover the bliss that it was to be alive. And then the sadness of seeing them, and their

works, age and pass away. But it's not just skinny ties and cigarettes. It's a reminder of a kind of engagement with the world that produced, and may have been eclipsed by, the ultimately sclerotic piety of *Congres Internationaux d'Architecture Moderne* and Team 10.

It's a vision of architects who meet, as Koolhaas says to Kurokawa, "very late into the night"; who produce shambolic conferences and audacious pamphlets and short-lived magazines; whose most enduring influence, as with the Metabolists, is through their seemingly most fleeting ephemera. Koolhaas describes the Metabolists as "solid introverts, meditative poets, charismatic wunderkinder, feudalists, provincials, revolutionaries, cosmopolitans, thinkers, doers, fanatics, mystics—a kaleidoscopic inventory of the Japanese psyche." But surely he is describing his own psyche, and the kaleidoscopic soul of the architectural profession, at its once and future best? □



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Cathy Simon, Perkins+Will, San Francisco

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ARCHITECT

→STUDIO VISIT

Lot-ek

LOT-EK'S NEW YORK DESIGN WORKSHOP IS A FIXTURE IN THE CITY'S RAPIDLY TRANSFORMING MEATPACKING DISTRICT—AND A REMINDER OF THE ROLE THAT ART CAN PLAY IN INFORMING ARCHITECTURE.

TEXT BY KRISTON CAPPS
PHOTOS BY JASON FULFORD





Founded in 1995 by partners Giuseppe Lignano, Intl. Assoc. AIA, and Ada Tolla, Intl. Assoc. AIA, Lot-ek has witnessed an incredible transformation in the Meatpacking District. “We’ve seen the world spin around us,” Tolla says. “The Meatpacking District has gone from industrial and rough to today. Now we have the cranes of the Whitney [Museum of American Art] right in front of us. I feel like we’re the pivoting point.”

Lignano and Tolla conceived Lot-ek in 1993 in Naples, Italy, where the firm has a studio. “I’ve started to call it the Wild West,” Tolla says, referring to Naples—which resembles the New York to which Tolla and Lignano moved in the early 1990s in many ways. “People think immediately that you are from this beautiful place, with beautiful food and art. And then I think of that insane city we came from.”

Lot-ek isn’t afraid to deploy color—in their work or in their workshop. Art and artists have had an impact on the design studio’s look and feel, but also on its methods. “Because architecturally, we followed our own path, what is important about art to our studio is being obsessive about your own interest, your own research,” Tolla says.

“To some extent our path is less conventional,” Tolla says. “We opened in this loft as a workshop, and it’s been run as a workshop from the beginning. It was a way to think.”







"We came during the early '90s, when New York was in recession. There were spaces available. Then the economy picked up, and there was a boom in construction," Tolla says. "But a lot of it was so dismal. It was an exciting moment intellectually, with Columbia University leading things and experimental architecture and so on. At the same time, to see all the construction, none of it by the leading architects—it was quite sad."

Despite the studio's renown for progressive design, tradition is crucial to the culture of Lot-ek. At the studio's New York design workshop, designers set aside their work and come together for a common meal every day.

Tolla says that she appreciates working in a neighborhood that has seen recent additions by Frank Gehry, Hon. FAIA, Shigeru Ban, Hon. FAIA, Jean Nouvel, Hon. FAIA, and others. "The fact that some of that is diluting the roughness, the making, the more dirtier functions that used to be in the city is of course a difficult thing to come to terms with."

The founding partners name '80s artist Jean-Michel Basquiat as an influence on their work. "When you layer, you are hiding something and destroying something else," Tolla says. "Basquiat's work is a fantastic example: Multiple layers, erasure, displaying all those things."

"Nine to five, I don't think exists ever," Tolla says. "Not even six or seven. We try to be really good about weekends, unless we have some major deadlines in front of us. There's a life outside of the studio."

→ BEYOND BUILDINGS

Invisible Men

U.S. MEMORIALS FAIL TO HONOR BLACKS.



Company E, 4th United States Colored Infantry Regiment

IN 2004, TO MUCH FANFARE, the National Underground Railroad Freedom Center opened in Cincinnati. In late December, the *Cincinnati Enquirer* confirmed what had been an open secret around town: the Freedom Center is in danger of closing because it does not attract enough visitors and cannot cover its operating expenses.

On hearing the official news, I was reminded of Ta-Nehisi Coates's thoughtful essay in the December issue of *The Atlantic*, "Why Do So Few Blacks Study the Civil War?" Coates recounts his own visits to Civil War battlefields and bemoans the absence of the stories of blacks in many of those memorials. He feels as if his history has been written out of the American story:

"The belief that the Civil War wasn't for us was the result of the country's long search for a narrative that could reconcile white people with each other, one that avoided what professional historians now know to be true: that one group of Americans attempted to raise a country wholly premised on property in Negroes, and that another group of Americans, including many Negroes, stopped them."

Part and parcel of that erasure has been the absence of physical memorials to the role that blacks played in the Civil War. One of the few major monuments is Augustus Saint-Gaudens's beautiful monument to Colonel Robert Gould Shaw and his Negro regiment, in the Boston Commons—and even there, the subject is the white Shaw more than his black troops.

The problems of the Freedom Center are particular to that institution. Envisioned as a national institution

at a time when there were no others devoted to the topic of slavery and its abolition in the U.S. (there are now several), it did not develop sufficient ties to the local community. Its building, designed by Blackburn Architects of Indianapolis with Boora Architects of Portland, Ore., is neither expressive nor efficient.

The larger issue is twofold. First, those in power write history and physically enshrine it; blacks have never had true power in the United States, even given the historic 2008 election. Second, as Coates points out, the Civil War was horrific: "The mass bloodletting shocked the senses." It was, moreover, a war between fellow citizens. Those who later memorialized it could not easily glorify the victors over their neighbors.

I would add another consideration to the lack of monuments to American slavery and its abolition: this form of memorialization in built form is a particular feature of the Western European tradition—white Classical structures continuing a white tradition. If there are going to be black monuments, should they not draw on the traditions of those cultures?

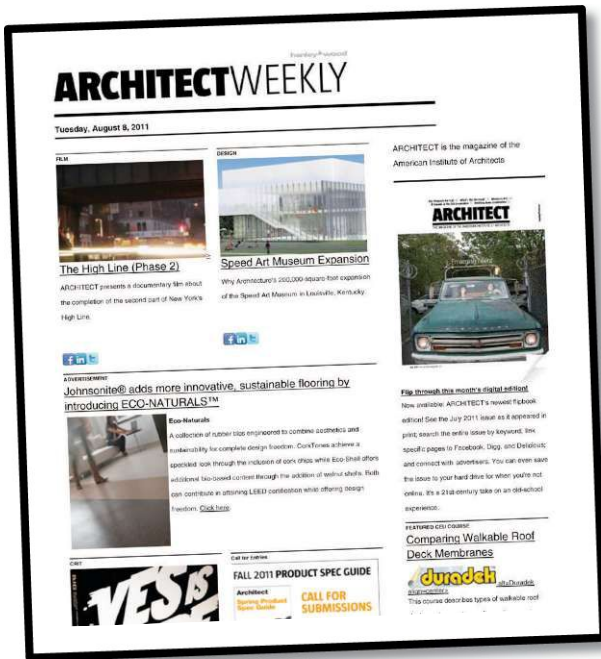
Finally, both black people and any understanding of non-European traditions are largely absent in American architecture today. It starts in the schools, where only a tiny fraction of the students are black, and continues through the profession as well as the theoretical discipline. Until we figure out how to make architecture, from its roots to its practitioners to its built forms, more diverse and open, it will continue to bury black memories. □

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.

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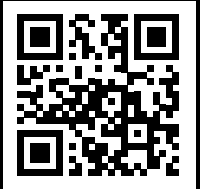
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P/A

TEXT BY KATIE GERFEN

THE 59TH ANNUAL PROGRESSIVE ARCHITECTURE AWARDS RECOGNIZE 10 PROJECTS THAT OFFER THOUGHTFUL INTERVENTIONS INTO THE LANDSCAPE, URBAN OR OTHERWISE.

THE MOST IMPORTANT, and telling, stipulation in the entry form for the Progressive Architecture Awards is that “all projects must be real.” In other words, every submission must have a client who has land, a budget, and intent to build. These days, bona fide clients may seem hard to come by, but we haven’t softened the rules about rewarding real projects, and the quality of submissions hasn’t suffered one bit.

One thing about the P/A Awards that always changes is the working definition of “progressive.” It is up to the jury—which this year comprised Ann Beha, FAIA, Brad Lynch, Mary-Ann Ray, Joseph Rosa, and Cathy Simon, FAIA (see their bios on page 104)—to determine what the term means for architecture at a given moment in time.

Lynch noted his interest in projects “that are creating progress in areas that we haven’t seen before.” Rosa was attracted to “acts of invention, not perfection.” And for Simon, the P/A Awards have a “voice about what design means right now.”

In the end, the jury awarded 10 projects that resolve incredibly diverse programs through incredibly inventive solutions. Be it a house on piers in the middle of a bird sanctuary, or a six-level YMCA that masquerades as a two-story building, this year’s winners tread lightly on the landscape and exemplify what architects do best: They find innovative, and even progressive, approaches to solving real-world problems. And for that, they are to be celebrated.

bond tower

TEXT BY VERNON MAYS

SITE A NARROW, 33-FOOT-WIDE LOT SET AMID MID-RISE BUILDINGS IN DOWNTOWN WINNIPEG, MANITOBA, CANADA, ALONG WILLIAM STEPHENSON WAY.

PROGRAM A 45,500-SQUARE-FOOT OFFICE DEVELOPMENT WITH COMMERCIAL SPACE AT STREET LEVEL.

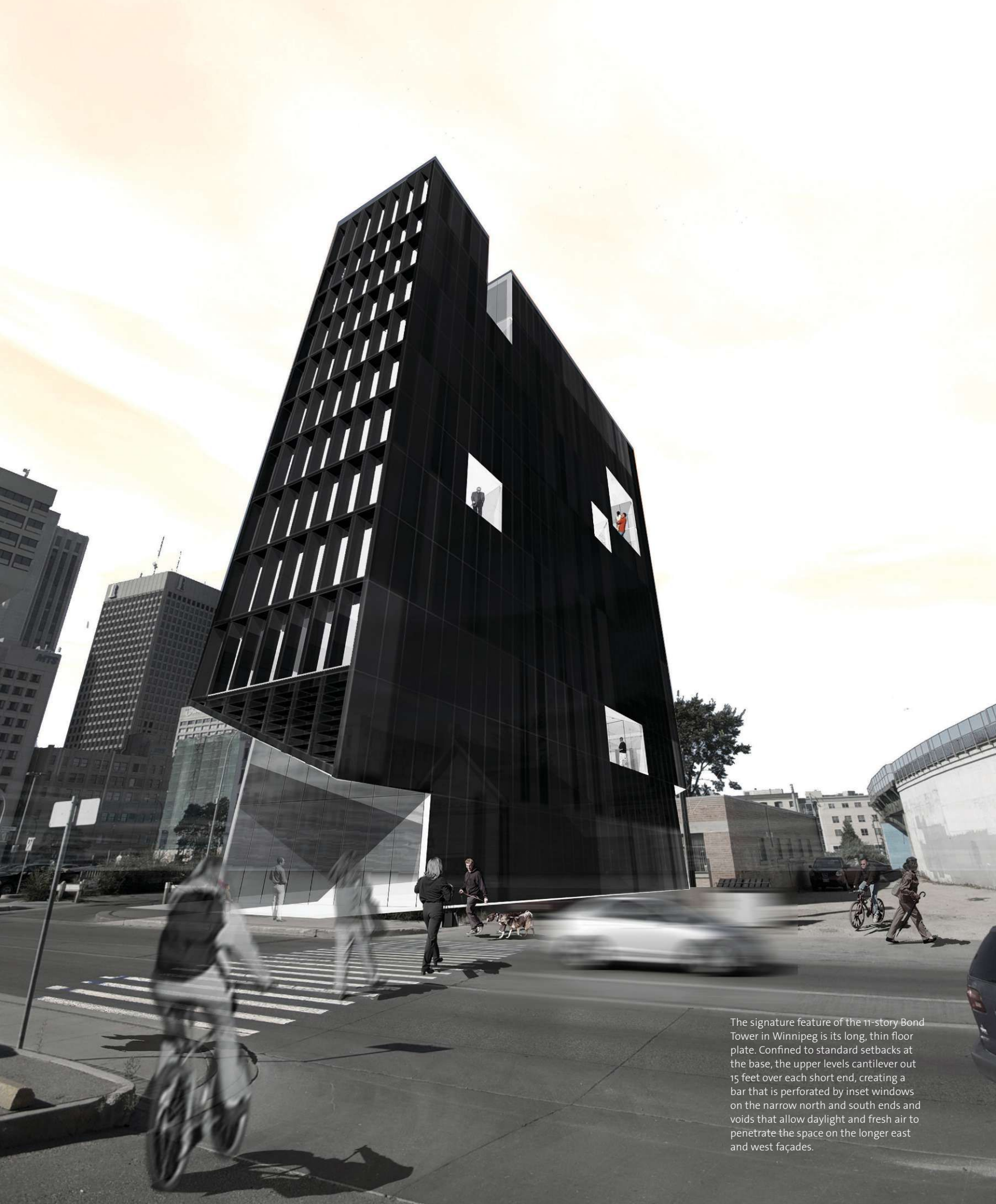
SOLUTION Designed by local firm 5468796 to serve as a landmark on the skyline by day and an illuminated billboard by night, the Bond Tower is an 11-story office building that rises as a thin, black bar between the city center and the Red River. The design addresses a restrictive 33-by-108-foot footprint by stretching skyward with 10 floors of “office condominiums,” commercial spaces close to downtown that can be leased for less than Class A rates. To maximize square footage, the building is flush with the property line. While the main level conforms to setback regulations, the upper stories cantilever 15 feet over the sidewalk on each short end. To introduce light, views, and fresh air, the architects introduced cuts through the structure to create terrace spaces.

The floor plans are rendered unique by the size, orientation, location, and spatial quality of the openings, which incorporate interfloor stairs. While the office interiors will remain each tenant’s private domain, the apertures become occupied spaces for collaboration and interaction, opening up a wealth of possibilities for planned and informal use, which

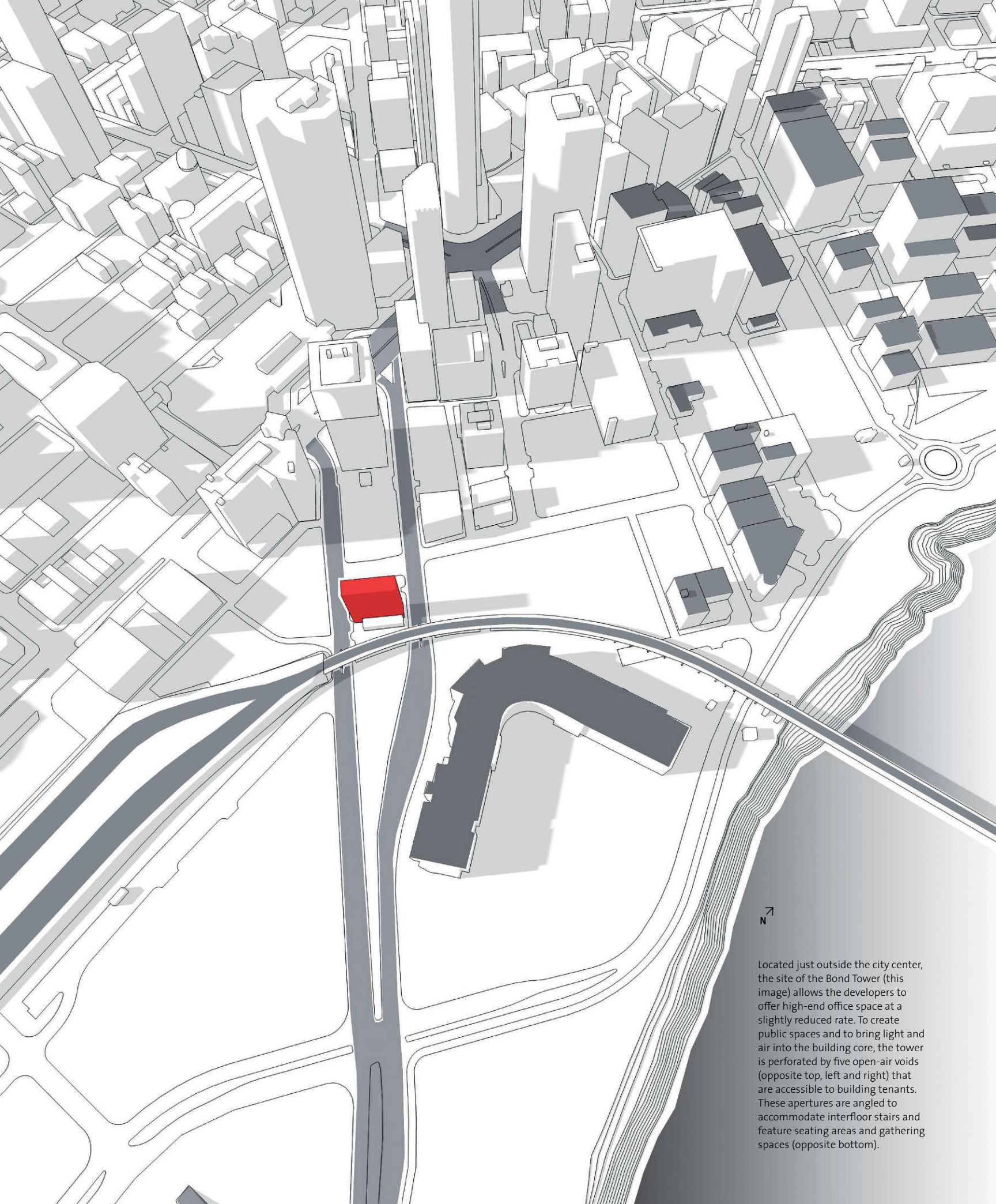
impressed the jury. “The voids are a little derivative of Arquitectonica,” juror Joseph Rosa said, “but in a new, cool way.”

The project’s distinctive narrow shape presents a big structural challenge, by causing a significant wind load on the building and a rotating action on the foundation. The short building width also means that there is inadequate distance to transfer the load reasonably from one side to the other. As a result, a caisson foundation is required.

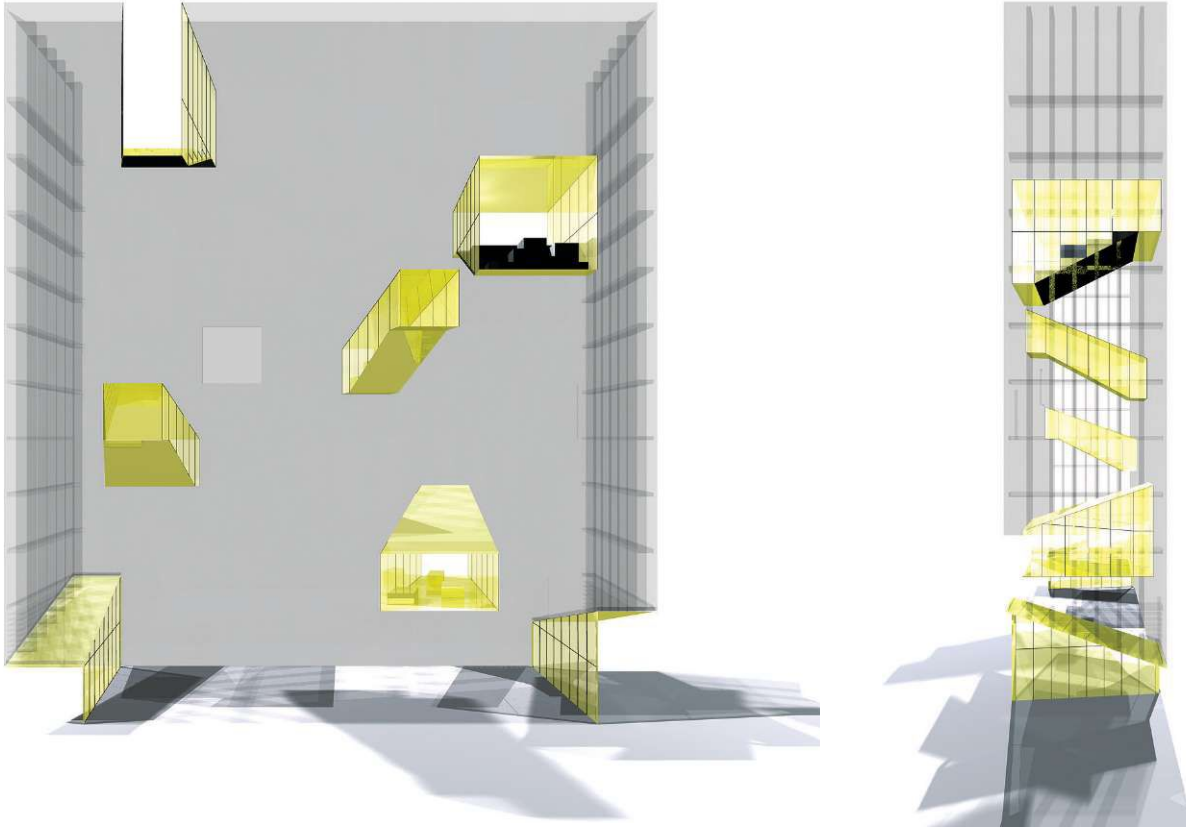
The tower’s exterior rainscreen consists of cold-rolled steel panels that are installed in such a way as to create a cavity where lights can be installed. The designers spaced the panels apart to allow light to filter out into the environment, creating a glowing grid at night. Rosa, in particular, complimented the project’s artful expression of geometry. “This has beautiful proportions, and I like the scalelessness of it,” he said. Others praised the submission’s compelling analysis and its clarity of urban and architectural expression. “The design is really interesting and innovative—aggressive, even,” juror Cathy Simon said.



The signature feature of the 11-story Bond Tower in Winnipeg is its long, thin floor plate. Confined to standard setbacks at the base, the upper levels cantilever out 15 feet over each short end, creating a bar that is perforated by inset windows on the narrow north and south ends and voids that allow daylight and fresh air to penetrate the space on the longer east and west façades.



Located just outside the city center, the site of the Bond Tower (this image) allows the developers to offer high-end office space at a slightly reduced rate. To create public spaces and to bring light and air into the building core, the tower is perforated by five open-air voids (opposite top, left and right) that are accessible to building tenants. These apertures are angled to accommodate interfloor stairs and feature seating areas and gathering spaces (opposite bottom).



chile house

TEXT BY THOMAS FISHER, ASSOC. AIA



SITE THE EDGE OF A FORESTED HILL OVERLOOKING THE PACIFIC OCEAN IN PENCO, A CHILEAN CITY DEVASTATED BY THE FEBRUARY 2010 EARTHQUAKE.

PROGRAM A 4,465-SQUARE-FOOT PAVILION WITH AN ENCLOSED GALLERY, ONE OF 10 PROJECTS BY DIFFERENT FIRMS INTENDED TO HELP THE REGION REBUILD ITS CULTURAL INFRASTRUCTURE.

SOLUTION The poured-concrete, flat-roofed pavilion contains two semielliptical volumes: an open-air courtyard with two entry points at the corners, and an enclosed gallery with a sliding-glass end wall overlooking the ocean. The entrance to the gallery from the courtyard occurs at the point where the two semiellipses touch. Offices, washrooms, and storage occur in the interstitial spaces between the two volumes.

Though identical in plan, the two volumes have divergent characters. The courtyard has concrete walls cast in forms made from tree trunks to give the surface a rough, scalloped texture that recalls

the trees and buildings that were destroyed in the 2010 earthquake.

The gallery's polished, curved wall recalls the ocean—seen beyond the glass end wall—from which a tsunami originated. Juror Joseph Rosa called the pavilion “a viewing device,” and it does carefully modulate the visitor experience: The courtyard focuses attention on the sky, while the gallery's folded ceiling directs the eye toward the horizon.

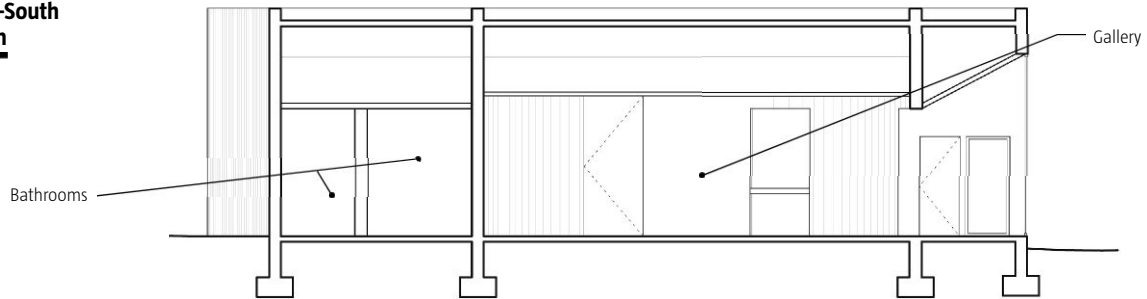
It has “the simplicity of a shed, but ... [with] more building there,” juror Mary-Ann Ray said. And juror Cathy Simon noted that “within this context of heavily built space, the idea of the sanctuary is a positive thing.”



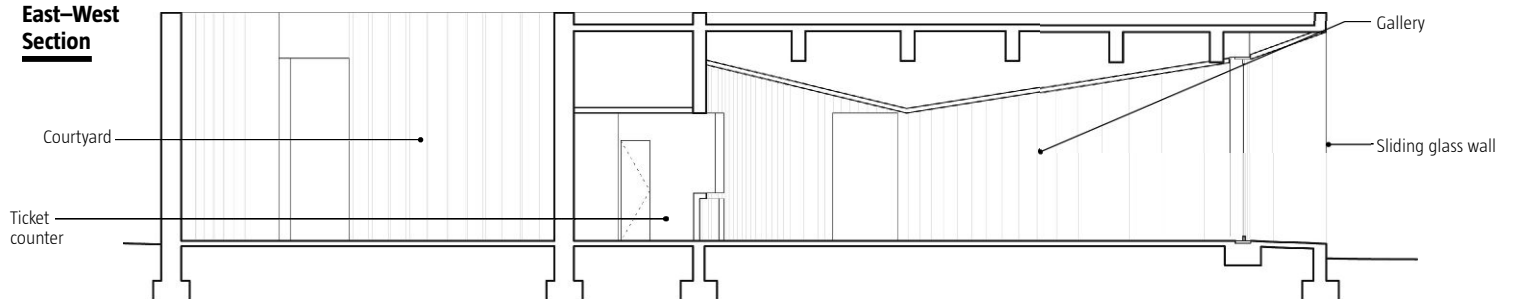


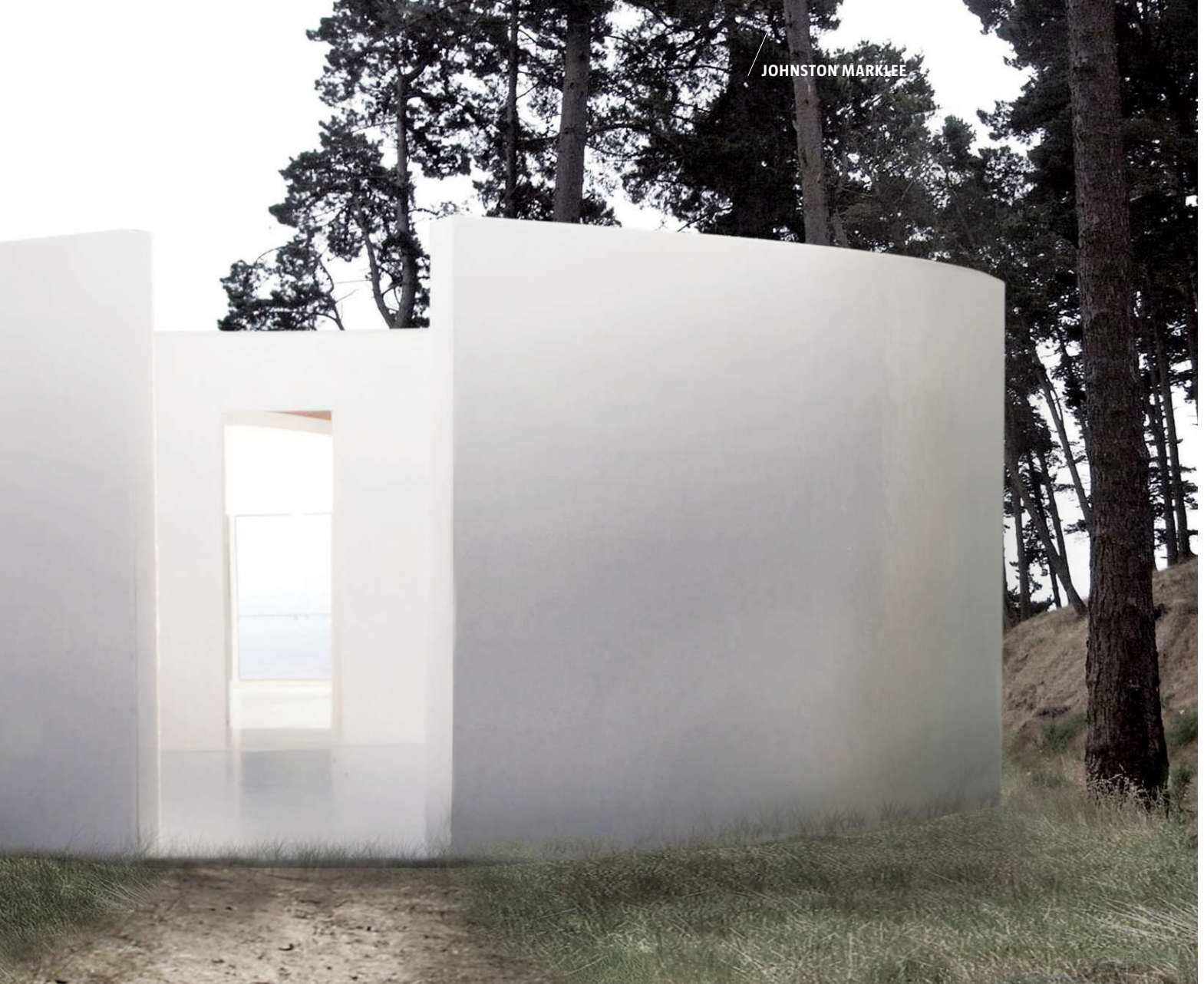
The Chile House is one of 10 projects commissioned by the Chilean government to help rebuild the cultural infrastructure destroyed during the 2010 earthquake. The pavilion's bucolic setting on a hill overlooking the sea and the city offer a vantage point to not only view the art on display, but also to oversee the progress being made on the revitalization of Penco's city center.

North-South Section

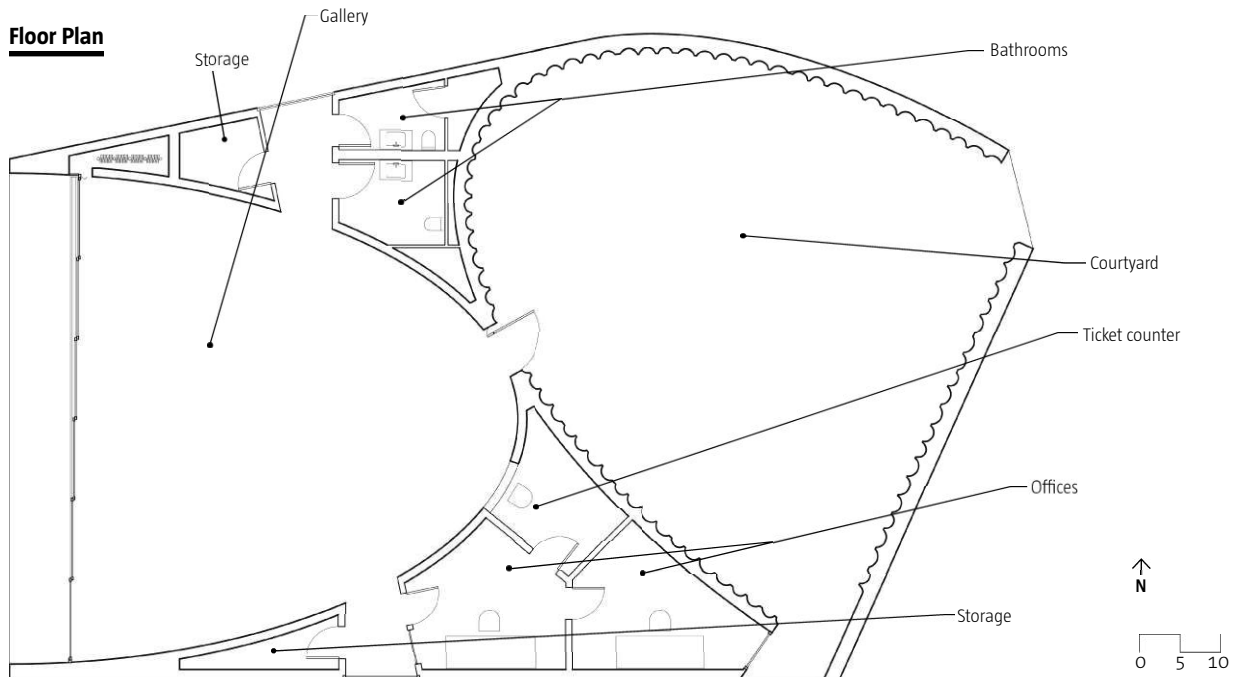


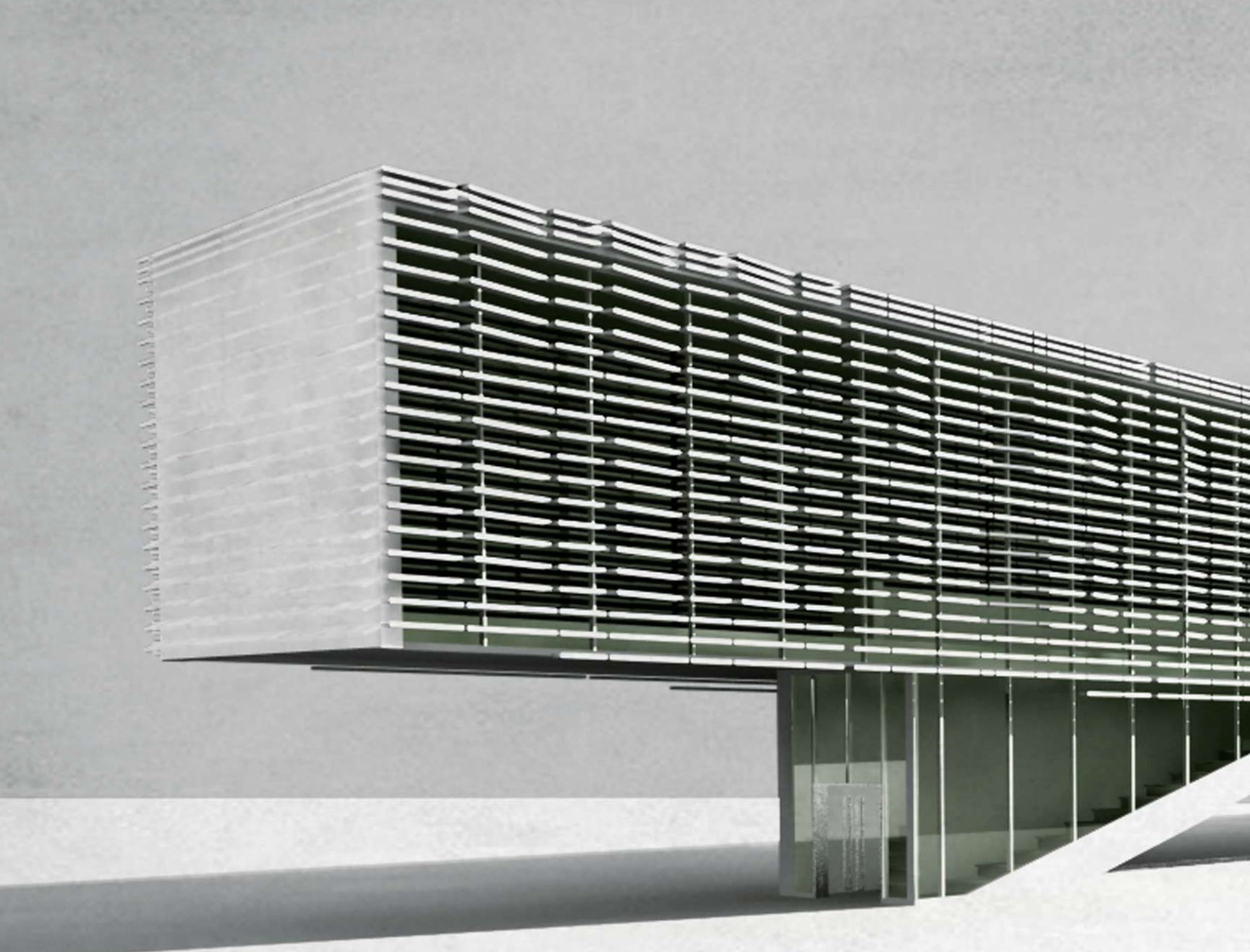
East-West Section





Floor Plan





laurier brantford ymca athletic complex

TEXT BY JOHN MORRIS DIXON, FAIA

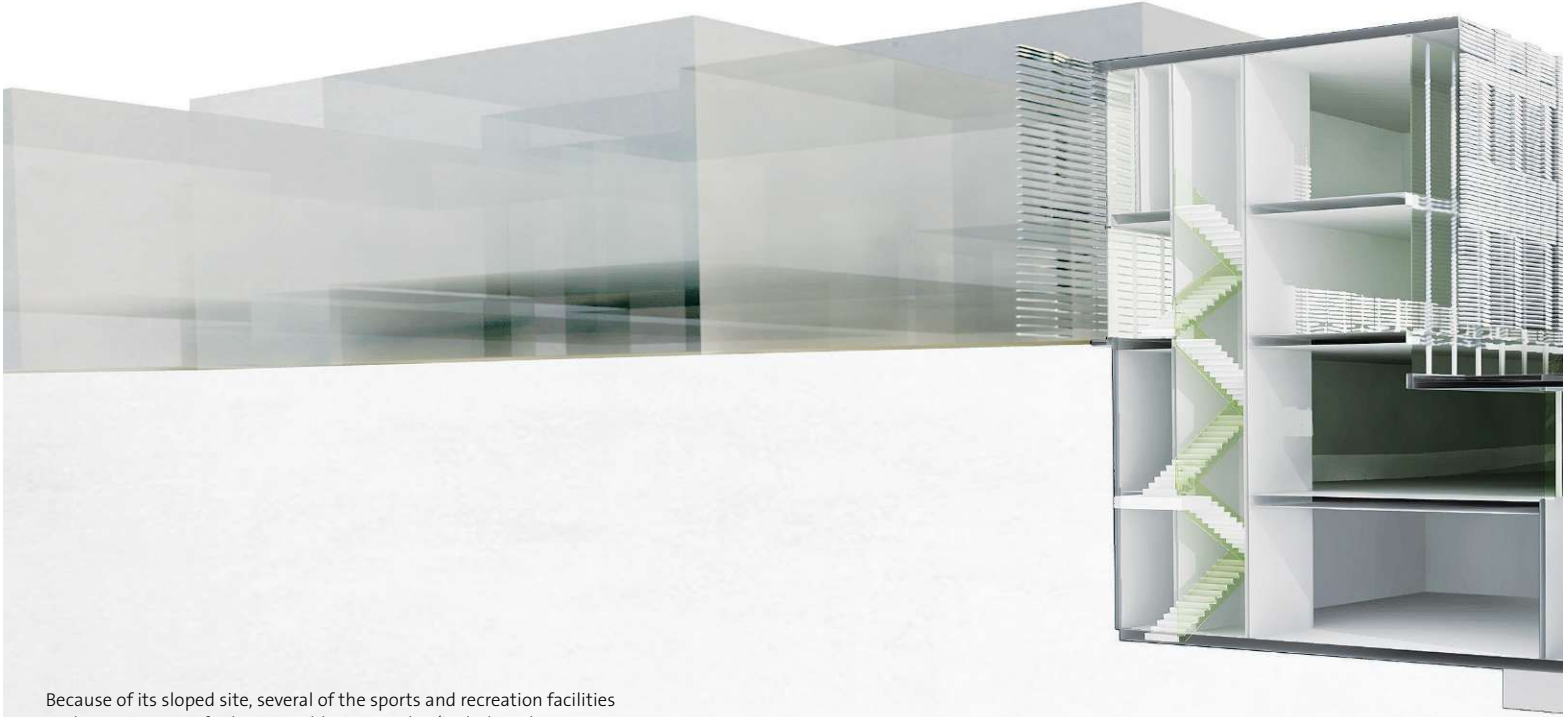


SITE AN EDGE-OF-DOWNTOWN TRACT IN BRANTFORD, ONTARIO, CANADA, WITH A THREE-STORY DROP TOWARD THE GRAND RIVER BASIN TO THE SOUTH.

PROGRAM A COMMUNITY CENTER WITH FACILITIES THAT INCLUDE GYMS, A POOL, A VARIETY OF FITNESS SPACES, CLASSROOMS, OFFICES, A LOUNGE, AND A CAFÉ.

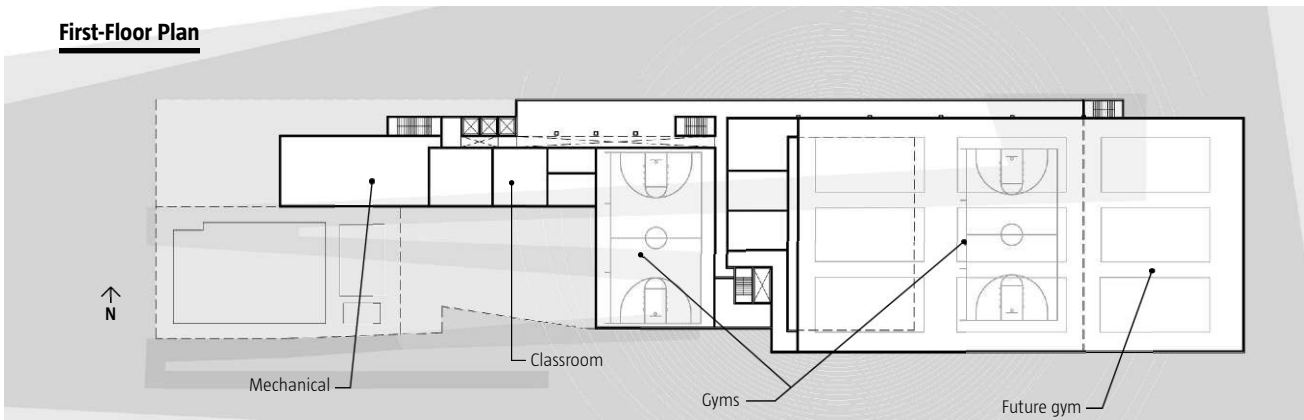
SOLUTION The Laurier Brantford YMCA Athletic Complex, designed by the Vancouver, British Columbia, Canada, office of Cannon Design, is sponsored by community and university organizations, with support from local, provincial, and national governments. The design for the 15,100-square-meter (162,535-square-foot) complex addresses key urban-design objectives: opening vistas over the nearby river basin, developing a new pedestrian route up and down the escarpment, and recalling the line of commercial fronts that previously characterized the site. (The last of these is of particular resonance because the site only became available when the city demolished a row of buildings on an otherwise built-up commercial street.)

The jurors emphasized the project's positive urban contributions, which—predicted juror Ann Beha—“will make a huge difference in this place.” At the street level at the top of the sloped site, the building reads as only a two-story volume, containing a lobby, a retail café, and fitness studios. At this level, the bar structure more than a block long is visually divided in the irregular rhythm of the former storefronts. Gyms, pool, and related facilities are recessed into the slope. Green roofs, which are accessible to the public, cover the volumes embedded in the hillside. Juror Mary-Ann Ray appreciated that all of this was achieved without altering the scale of the neighborhood. “It brings a historical neighborhood into the 21st century in a way. It sort of modernizes the city.”

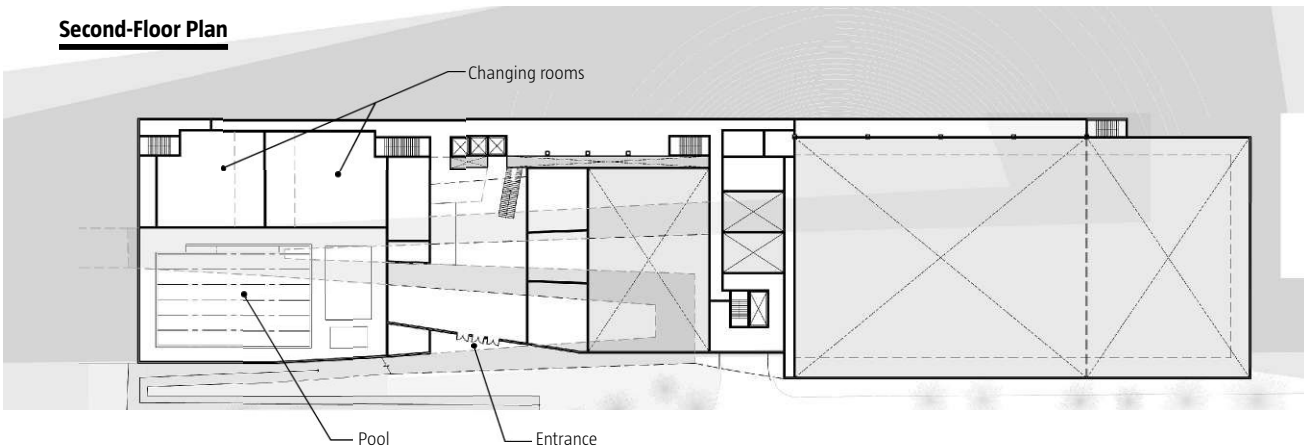


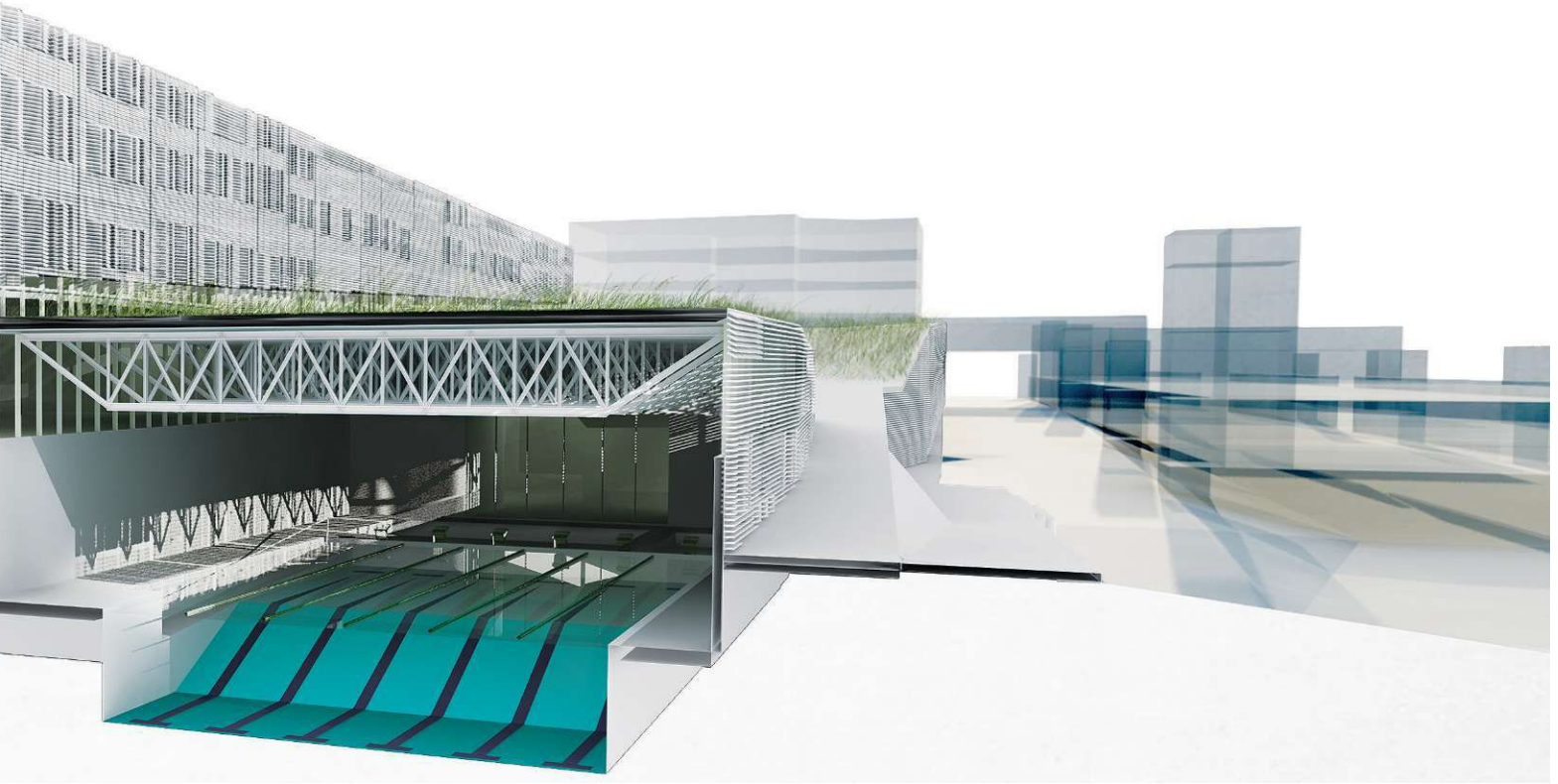
Because of its sloped site, several of the sports and recreation facilities at the Laurier Brantford YMCA Athletic Complex (including the aquatics center, seen at right) are nestled into the hillside. Switchback pathways allow visitors to travel up and over the building to the two-story volume at the top of the site.

First-Floor Plan

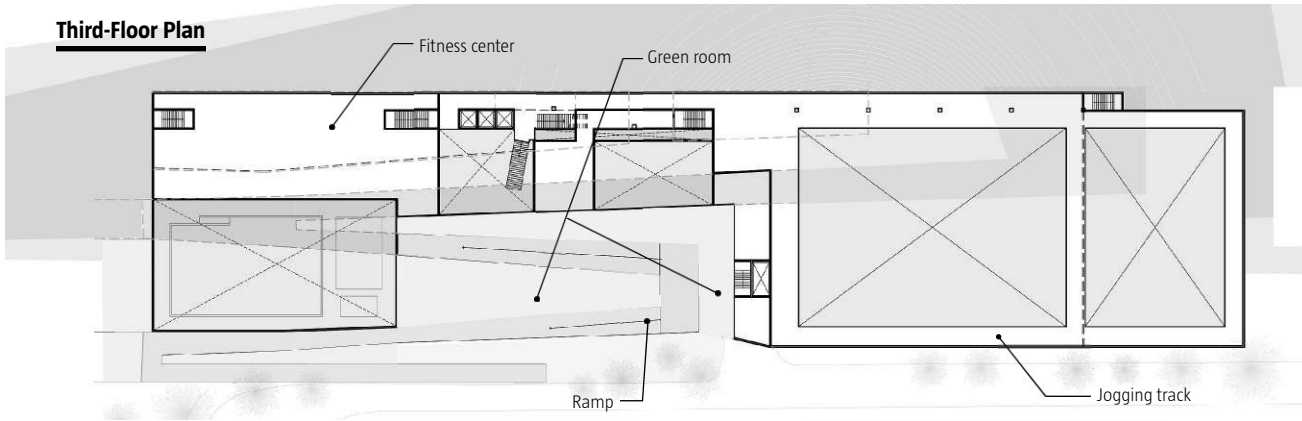


Second-Floor Plan

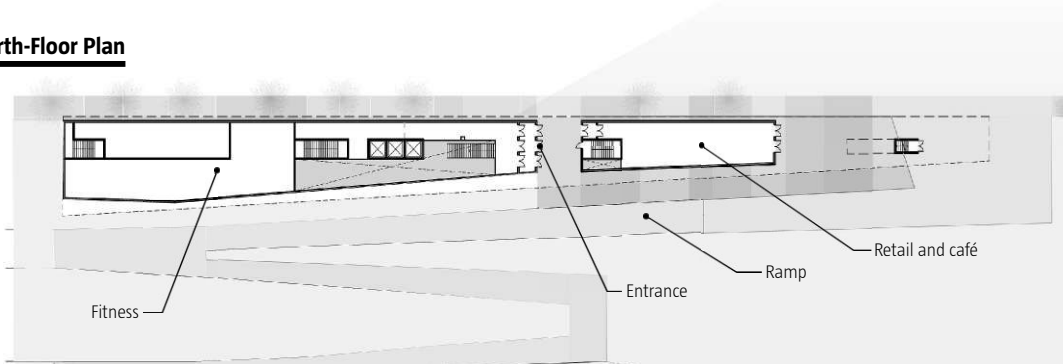




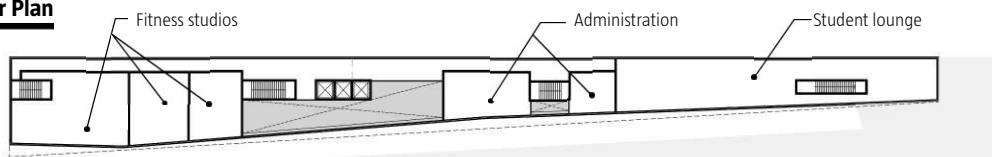
Third-Floor Plan



Fourth-Floor Plan



Fifth-Floor Plan



hawk house

TEXT BY SARA HART



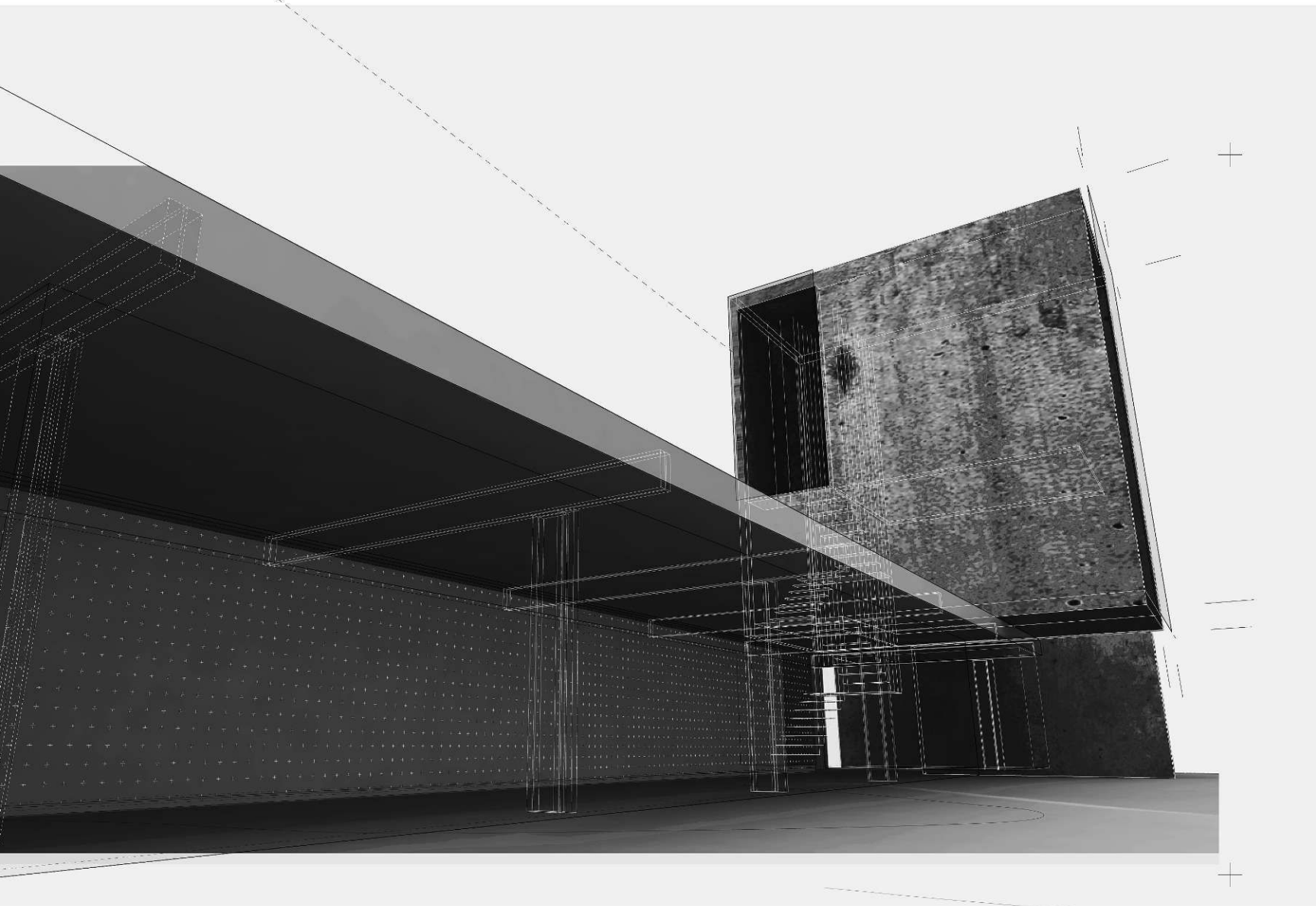
SITE THE SOUTHERNMOST PROPERTY ON THE HAWK, A POINT AT THE FAR TIP OF CAPE SABLE ISLAND IN NOVA SCOTIA, CANADA.

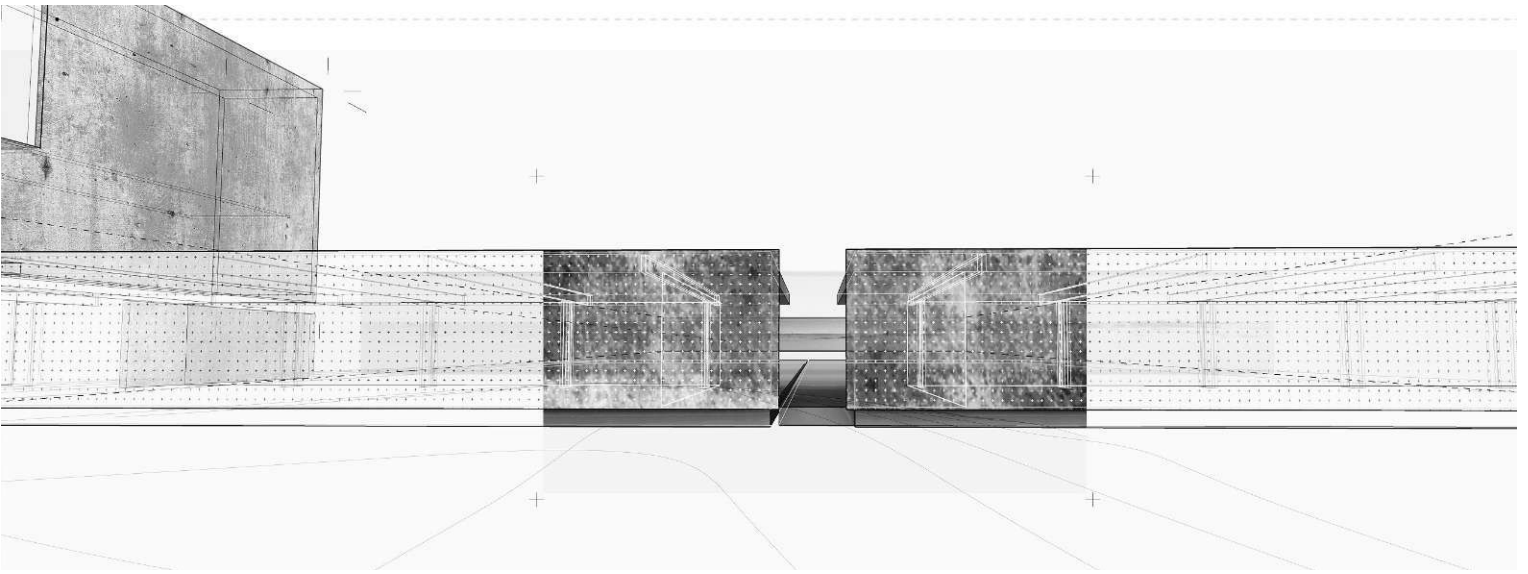
PROGRAM A 1,200-SQUARE-FOOT SINGLE-FAMILY RESIDENCE IN A BIRD SANCTUARY, WHICH HAD TO BE DESIGNED TO TREAD LIGHTLY ON THE LAND.

SOLUTION This single-family house has two distinct formal and spatial components. A 70-foot-long horizontal bar stands 8 feet tall and sits astride raised piers, which were put in place to minimize the footprint on the sensitive site. This bar is anchored at one end by a 24-foot-tall, 10-foot-wide tower that provides the house's vertical element. Westmount, Quebec-based architect Andrew King's goal of focusing these two architectural lenses on the region's archetypal landscape of ocean, ground, sky, and horizon impressed the jurors. "This is a well-conceived, well-articulated idea," juror Brad Lynch said. "In terms of the relationship to the topography of the site and the simplicity

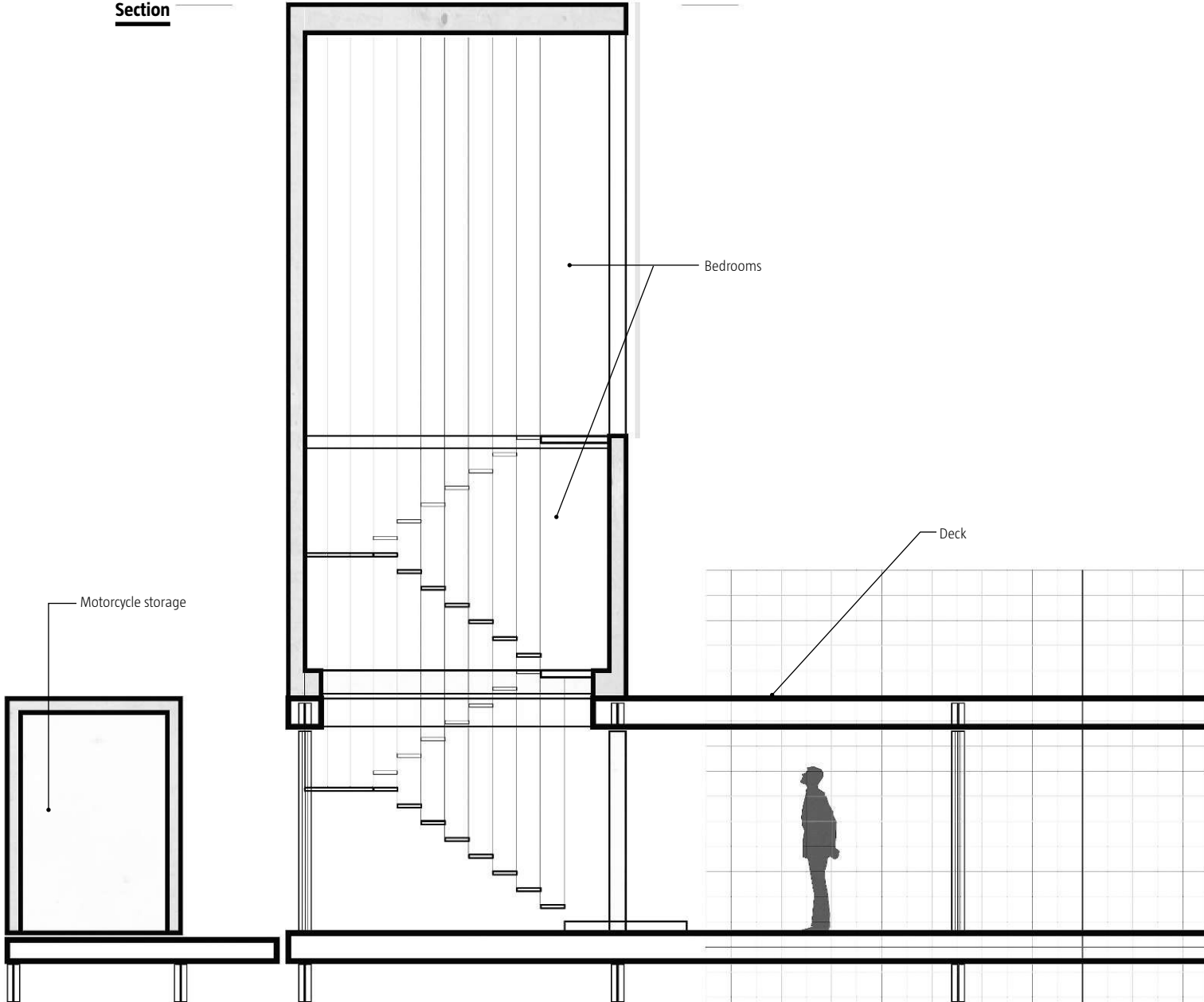
of it and the juxtaposition of it, somebody knows what he's doing."

The timber structure is clad in concrete panels and aluminum grating. A grated-aluminum deck extending from the house toward the horizon is bisected by vertical sheets of glass framed by 2x8 studs. These transparent layers are aligned to create a slotted view to the sea. The jurors admired the embrace of industrial materials and the radical pragmatism of its undefined, multipurpose interior spaces. Juror Joseph Rosa saw its simple typology as an escape from everyday cluttered existence. "It harkens back to the classic houses by [Marcel] Breuer and [Walter] Gropius," he said. "You just turn the key and go in."

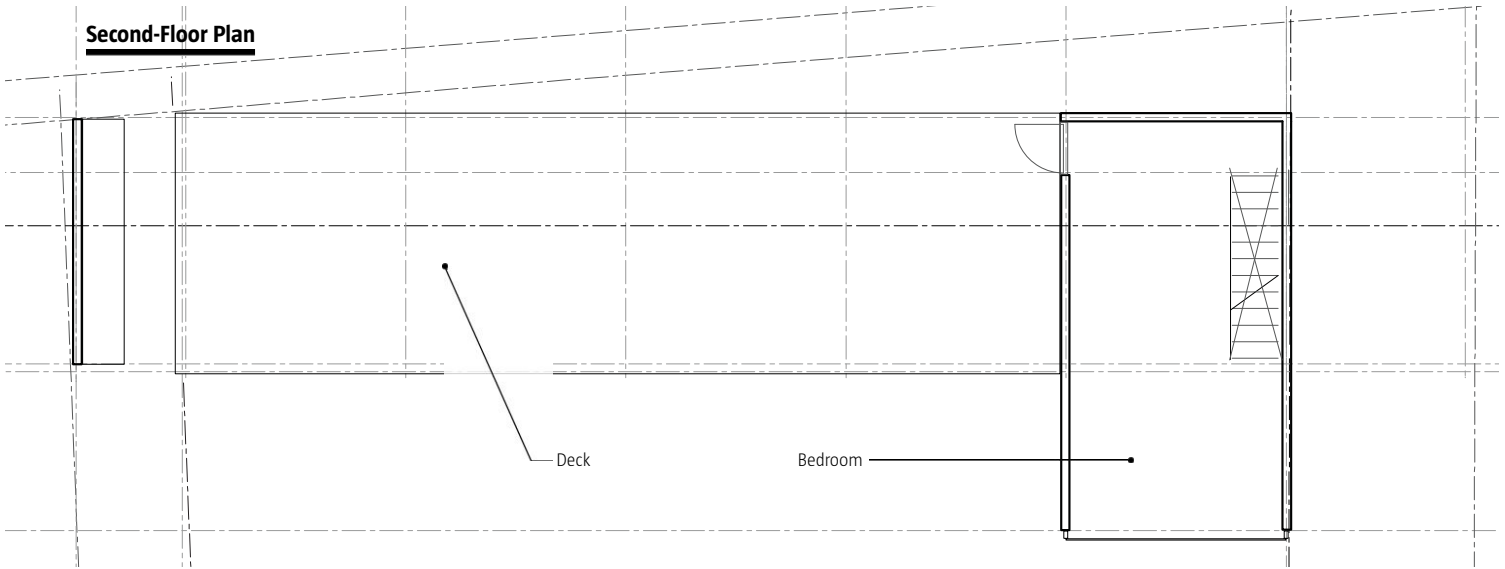




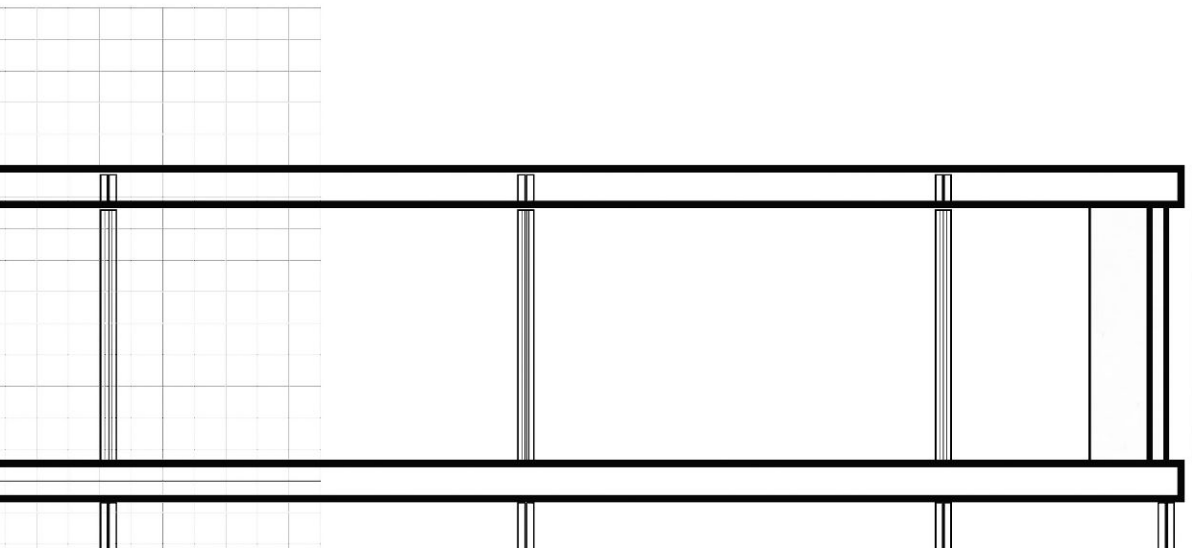
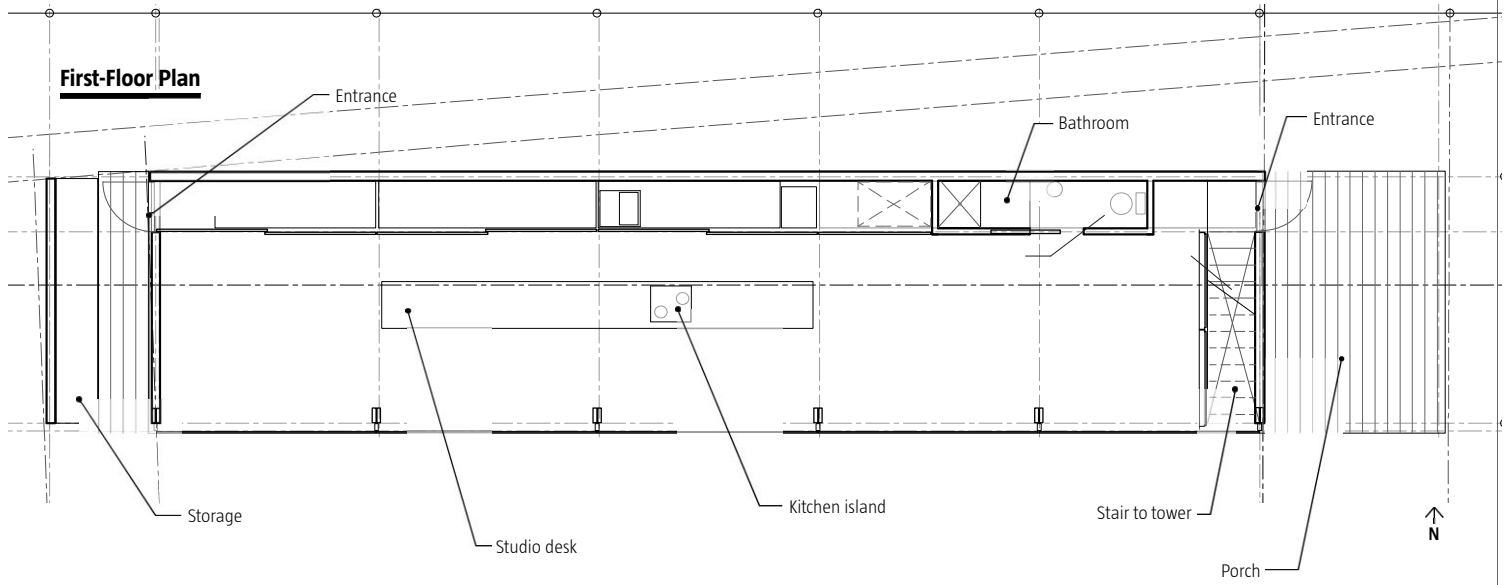
Section



Second-Floor Plan



First-Floor Plan



prairie chapel

TEXT BY VERNON MAYS

SITE A BLUFF IN MINNESOTA OVERLOOKING A BROAD VALLEY AND 40 ACRES OF RESTORED NATIVE PRAIRIE.

PROGRAM A NONDENOMINATIONAL CHAPEL.

SOLUTION On private land, but open to the public, the 588-square-foot Prairie Chapel designed by Venice, Calif.-based Hughesumbanhowar Architects is formed from weathered, corrugated metal panels and wood recycled from an old Quonset hut that served the farm for 60 years. Reclaimed trusses are shaped and connected with metal plates to produce new composite-curved frames separated by a continuous slot that moves down from the roof to ground level to become the entrance. The resulting form is pinched, twisted, and sliced, resulting in a volume that mimics weathered boulders found on the site. Jurors praised the economical use of materials—interior walls are clad in slats of flamed, recycled cedar—and the spiritual qualities of the space. “I appreciated the simplicity and ... [the way] the interiors are developed in conjunction with the exterior,” said juror Ann Beha. “That makes it a more thorough and integrated project.”





/ CITATION

/ THREE OAKS, MICH.

/ PLY ARCHITECTURE

outside in house

TEXT BY EDWARD KEEGAN, AIA

SITE AN ACTIVE MIDWESTERN FARM IN THREE OAKS, MICH.

PROGRAM A SINGLE-FAMILY WEEKEND HOUSE FOR A FAMILY OF FOUR.

SOLUTION The third iteration of an investigative wood-frame house designed by Ann Arbor, Mich.-based Ply Architecture, the 1,318-square-foot Outside In House incorporates undulating walls of vacuum-sealed “storm glass” tubes—an 18th-century weather-prediction device whose transparency varies depending on climactic conditions—to separate the interior rooms from a central courtyard. “It’s a pretty profound piece of research that made its way into space,” said juror Mary-Ann Ray. “It’s a modern glass curtainwall that actually infiltrates the space.” The house opens to the outside through operable 3-foot-wide wood panels around the perimeter. “It’s an interesting new plan within an existing rectangle,” juror Joseph Rosa said, “and I think that’s quite beautiful.”



ephemeral edge

TEXT BY JOHN GENDALL

SITE THE EDGE OF A CONSTRUCTED POND, ON A WOODED SOUTH-SLOPING HILL.

PROGRAM SINGLE-FAMILY WEEKEND RETREAT.

SOLUTION Designed for a family of five, this 1,950-square-foot weekend retreat sits in the outskirts of Austerlitz, a town about a three-hour drive upstate from New York City. The bucolic site lies at the convergence of two diverse conditions: a forested hillside and a constructed pond, both overlooking a panoramic vista in the distance. In order to capture the views, New York-based Dean/Wolf Architects curved the house in plan, allowing the building's steel structure to sit on concrete foundations along the pond's edge, an effect which impressed the jury. "What makes this project attractive is the way the building embraces the pond," juror Joseph Rosa said. Except for a patio that bisects the house, from pond to forest, the forest-side elevation is kept mostly opaque, directing the eye out through the lakeside façade. Glazing on that elevation capitalizes on the site's over-water views; the interior is partitioned such that each room creates a sight line to the center of the pond and beyond.

memorial at cameron

TEXT BY JOHN GENDALL

SITE CAMERON, A SMALL GULF COAST TOWN ALONG THE CREOLE NATURE TRAIL IN WESTERN LOUISIANA.

PROGRAM MEMORIAL FOR THE MORE THAN 500 LIVES LOST, IN 1957, DUE TO HURRICANE AUDREY.

SOLUTION When Hurricane Audrey ripped across Cameron, La., in 1957, it left little in its wake—except the town’s courthouse and some firmly rooted oak trees. Now, over 50 years later, the board of directors for both the National Hurricane Museum and the Creole Nature Trail are proceeding with plans for a \$4 million memorial to commemorate the more than 500 victims. The design for the Memorial at Cameron, National Hurricane Museum & Science Center, carried out by the Detroit office of SmithGroupJJR, calls for a bosque of 550 oak trees measuring a half-mile long and 400 feet wide. Toward the center, a grassy, circular opening will permit visitors to congregate, surrounded by oaks. Broken seashells cover pathways and recall the area’s relationship to the sea, which surged during the storm. “This ... says to architects, you can think differently, you can think outside,” juror Cathy Simon said. With this project, the architects “talk about the weather ... [and] about trees in a landscape. Those are all design to me.”

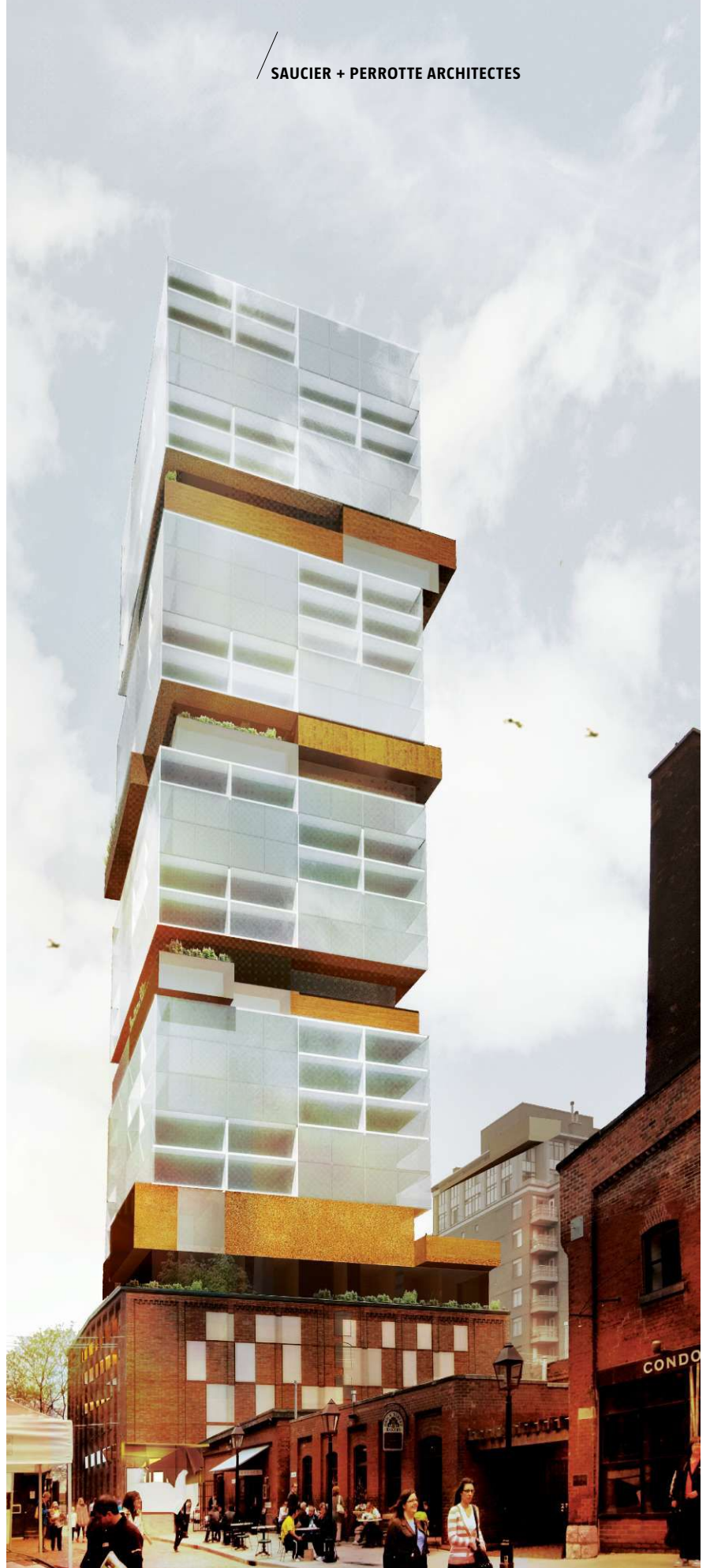
rack house d

TEXT BY EDWARD KEEGAN, AIA

SITE A HISTORIC WINE-STORAGE BUILDING IN TORONTO'S DISTILLERY DISTRICT.

PROGRAM A 248,500-SQUARE-FOOT MIXED-USE TOWER.

SOLUTION Montreal-based Saucier + Perrotte Architectes reused a historic building as the base for a glass-enclosed tower. The existing building's walls are perforated to incorporate a new hotel within its volume. Residential apartments are located in the tower, which is broken up in five-story increments by recessed terraces. The curtainwall increases in reflectivity as it rises to become more ephemeral. "It's a bold engagement with an existing vernacular building," juror Ann Beha said. "I think with a building like that you should feel ... [that] it's a massive, powerful building that was there and you should feel you can make a response that's equally robust." The contrast resonated with several jurors. "What I think is really great about this is it's completely, uncompromisingly different," juror Cathy Simon said. "It's not just different materials, but it's [a] different view of the contemporary."



ain nsissa eco tourism facilities

TEXT BY SARA HART



SITE THE NORTHERN EDGE OF THE SAHARA DESERT, SURROUNDED BY ARID PLAINS AND MOUNTAINS.
PROGRAM MOBILE, SEMIPERMANENT, AND PERMANENT TOURISTIC ACCOMMODATIONS AND NOMADIC DWELLING UPGRADES AT THE AIN NSISSA ECO TOURISM FACILITIES.

SOLUTION A team of Saharan nomads and local officials, with architects and landscape architects at the University of Toronto John H. Daniels Faculty of Architecture, Landscape, and Design—led by studio director Aziza Chaoui—produced a zoning study and a series of housing prototypes for tourists and nomadic people alike. Using systems such as rammed-earth walls and camel-hair fabric, the prototypes strive to create minimal effects on the environment. Jurors were impressed by the unique sensibility with regard to development. “This is a cultural

investigation that results in structures that tie the culture to the land, but in a progressive way,” juror Ann Beha said.

Tourists are housed in camel-hair tents (shown above) designed with protective netting and a ventilation chimney for passive cooling. Flexible solar panels secured to the tent fabric generate electricity. The dwellings intrigued the jurors with their inventiveness. “The depth of thought that went into this is really profound,” juror Cathy Simon said. “Architects ... rarely have the discipline or the modesty to do so little.”

the jury



BRAD LYNCH

BRININSTOOL + LYNCH, CHICAGO

A principal at Chicago-based Brininstool + Lynch (with partner David Brininstool, AIA), Brad Lynch attended the University of Wisconsin for art, engineering, and landscape architecture. Lynch won the honorable mention for the 1995 Burnham Prize for architecture, and is a past program facilitator at Archeworks in Chicago.

ANN BEHA, FAIA

ANN BEHA ARCHITECTS, BOSTON

The founder and president of Ann Beha Architects in Boston, Ann Beha holds a degree from Wellesley College, an M.Arch. from the Massachusetts Institute of Technology, and was a Loeb Fellow at the Harvard University Graduate School of Design. Recent projects include the restoration and expansion of the Cambridge Public

Library in Cambridge, Mass. (with William Rawn Associates), and a new Music Building at the University of Pennsylvania in Philadelphia.

CATHY SIMON, FAIA

PERKINS+WILL, SAN FRANCISCO

A design principal based in the San Francisco office of Perkins+Will, Cathy Simon's work has focused on urbanization and adaptive reuse, such as the conversion of the San Francisco Ferry Building from a disused transit hub to a marketplace for local food purveyors. Simon was a founding partner of the San Francisco-based, female-owned firm SMWM, which merged with Perkins+Will in 2008.

JOSEPH ROSA

UNIVERSITY OF MICHIGAN MUSEUM OF ART, ANN ARBOR, MICH.

Before joining the University of Michigan Museum of Art as director

in 2010, Joseph Rosa served as the John H. Bryan Curatorial Chair of Architecture and Design at the Art Institute of Chicago. Rosa has curated more than 30 exhibitions on contemporary architecture and design, and written 14 books. Rosa has a B.Arch. from the Pratt Institute, and an M.S. from Columbia University's Graduate School of Architecture, Planning and Preservation.

MARY-ANN RAY

STUDIO WORKS, LOS ANGELES

A principal at Studio Works in Los Angeles, Mary-Ann Ray has an M.Arch. from Princeton University, and was a recipient of the 1987–88 Rome Prize. Ray lectures extensively and leads design studios at the Southern California Institute of Architecture. In 2002, Ray and her partner Robert Mangurian won the Chrysler Design Award for Innovation and Excellence.

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Developers Mark Penner [Green Seed Development] and Kori Buhler
Architect 5468796, Winnipeg, Manitoba, Canada—Sharon Ackerman, Mandy Aldcorn, Ken Borton, Jordy Craddock, Aynslee Hurdal, Johanna Hurme, Eva Kiss, Jayne Miles, Colin Neufeld, Zach Pauls, Sasa Radulovic, Shannon Wiebe (project team)
Size 45,500 square feet

CHILE HOUSE, PENCO, CHILE

Client Ilustre Municipalidad de Penco
Architect Johnston Marklee, Los Angeles—Mark Lee, Sharon Johnston, AIA (principals-in-charge); Lindsay Erickson (project designer); Karl Wruck, David Gray (design team)
Organizer Casapoli Foundation
Curator Pezo von Ellrichshausen Architects
Master Plan PRBC (Plan Reconstrucción Borde Costero)
Funding Innova-Chile CORFO Program, Chilean Government
Size 4,465 square feet (total floor area)

LAURIER BRANTFORD YMCA ATHLETIC COMPLEX, BRANTFORD, ONTARIO, CANADA

Client Wilfrid Laurier University and YMCA of Hamilton/Burlington/Brantford
Architect Cannon Design, Vancouver, British Columbia, Canada—Andrew King (design principal); Darryl Johnson (project designer); Helen Pang, Zsofi Schvan-Ritez, Winston Chong, Jeffrey Ma (design team); Ross Carter-Wingrove (project manager)
Architecture/Project Team Robert J. Johnston, AIA (project principal); David Hewko (project programmer)
Cost Consulting BTY Group—Mark Ravelle
Size 15,100 square meters (162,535 square feet)

HAWK HOUSE, CAPE SABLE ISLAND, NOVA SCOTIA, CANADA

Client Angela Silver
Architect Andrew King, Westmount, Quebec, Canada—Andrew King; Nicolay Boyadjiev (project partner); Guy McIntock (models)
Size 1,200 square feet

PRAIRIE CHAPEL, DENNISON, MINN.

Architect Hughesumbanhowar Architects, Venice, Calif.—John Umbanhowar, AIA, Scott Hughes, AIA (principals); Daniel Feig, Kayleigh Carlisle (team members)
Structural Engineer Richmond Hoffmayer Engineering—Joe Hoffmayer
Size 588 square feet

OUTSIDE IN HOUSE, THREE OAKS, MICH.

Client Kathy Berneuter and Michael Downing
Architect Ply Architecture, Ann Arbor, Mich.—Craig Borum, AIA (principal-in-charge); Karl Daubmann, AIA, Alex Timmer (project team)
Storm-Glass Research Craig Borum, AIA (principal-in-charge); Julie Simpson, Wiltrud Simbuerger, Sara Dean, Ross Hoekstra, Alex Timmer, Lizzie Yarina, Natasha Mauskapf, Jessica Mattson, Chris Bennett, Jason Prasad (project team)
Storm-Glass Research and Development Support University of Michigan's A. Alfred Taubman College of Architecture and Urban Planning; Research Through Making Grant and Office of the Vice President for Research Faculty Grant and Awards Program
Size 1,318 square feet

EPHEMERAL EDGE, AUSTERLITZ, NEW YORK

Architect Dean/Wolf Architects, New York—Kathryn Dean, AIA (design partner); Charles Wolf (partner); Christopher Kroner (project designer); Zachary Rousou (designer)
Structural Engineering Hage Engineering—Mark Hage (president); Richard Lee (principal); Ciro Cuono (senior engineer and associate)
Geotechnical Engineering Crawford and Associates—Dan Proper (senior soils scientist)
General Contractor Quadresign—David Haust (president)
Size 1,950 square feet

MEMORIAL AT CAMERON, NATIONAL HURRICANE MUSEUM & SCIENCE CENTER, CAMERON, LA.

Architect SmithGroupJJR, Detroit—Kevin Shultis, AIA, Paul Urbaneck, AIA, Jason Robinson, Carlos Lopes
Size 24 acres

RACK HOUSE D, TORONTO

Architect Saucier + Perrotte Architectes, Montreal—Gilles Saucier (lead design architect); André Perrotte (partner-in-charge); Dominique Dumais (project architect); Charles Alexandre Dubois, Vedanta Balbahadur, Jean-Philippe Beauchamp, Greg Neudorf, Lia Ruccolo (project team)
Heritage Architect ERA Architects
Structural Engineer Jablonsky, Ast
Mechanical Engineer Able Engineering
Electrical Engineer Able Engineering
Interior Designer Saucier + Perrotte Architectes
Landscape Architect Planning Partnership
Size 248,500 square feet

AIN NSISSA ECO TOURISM FACILITIES, BOUARFA, MOROCCO

Architect Designing Ecological Tourism/University of Toronto, John H. Daniels Faculty of Architecture, Landscape, and Design—Aziza Chaouni (lead); Jessey Gresley-Jones, Samar Zarifa (landscape architects); Amanda Chong, Louis Liu, Andres Bautista, Utako Tanabe, Vjosana Shkurti (architects); Fatima Zohra Ouazzani (tourism management)
Ecologists Nina Mary Lister and Chris Johnson
Tourism Younes Kharshaf
Marketing Ali Rachid
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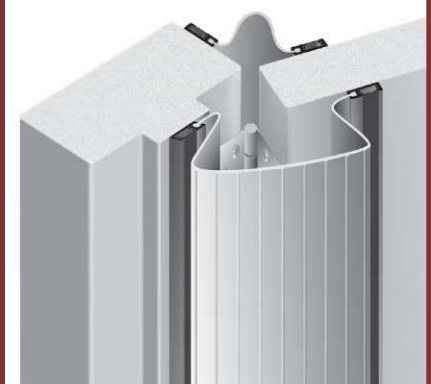
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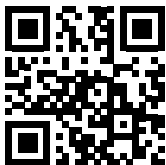
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→1983 P/A AWARD CITATION

THE LITTLE TOWER THAT COULD



IN THIS SMALL TOWER IN DOWNTOWN SAN FRANCISCO, SKIDMORE, OWINGS & MERRILL SHOWED HOW TO MAKE A GOOD MIXED-USE BUILDING ON A HARD-TO-USE TRIANGULAR SITE.

TEXT BY THOMAS FISHER, ASSOC. AIA

1983 P/A Awards Jury

George Baird, Intl. Assoc. AIA
 Alan Chimacoff, AIA
 Stanton Eckstut, FAIA
 Sandra Howell
 Mark Mack
 Marietta Millet
 James Stirling
 John Woodbridge, FAIA

AMIDST THE BEHEMOTH office buildings of downtown San Francisco stands 388 Market Street, a small, elegant tower that won a citation in the 1983 P/A Awards program. Designed by Skidmore, Owings & Merrill, the triangular tower shows how a diversity of functions—commercial, office, and residential—and a density of activity, including a Bay Area Rapid Transit train-station entrance, can enliven the street. That liveliness starts with the two-story retail base that sports subtle details such as chamfered corners at head height that mimic the movement of passersby. Above that base rises the tower, whose form comprises a cylinder and a prism joined together and echoes the circular and angular forms of the surrounding skyscrapers. The tower contains 16 floors of offices, a mechanical floor, and six

floors of residential units above that. Although its red-granite cladding makes it recede into the shadows of the adjacent, lighter-color buildings, the tower also has an expressive, three-dimensional face, with projecting windows in the commercial base, flush windows on the office floors, and recessed balconies for the residences.

The P/A jury greatly enjoyed the building. George Baird liked the way that it “mixes functions in an inventive way,” Mark Mack praised its “differentiation on the exterior,” and James Stirling appreciated its willingness to “sit down a bit and not compete for height.” But what makes this tower really stand out is the simple fact that it doesn’t stand out, as if to remind us that bigger isn’t always better and that sometimes, good things can come in small packages. □

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Project: ARIA Resort & Casino

Location: Las Vegas, NV

Architect: Pelli Clarke Pelli Architects, New Haven, CT



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