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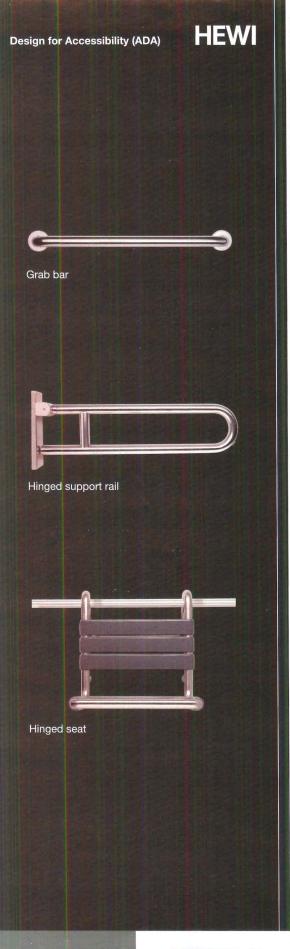
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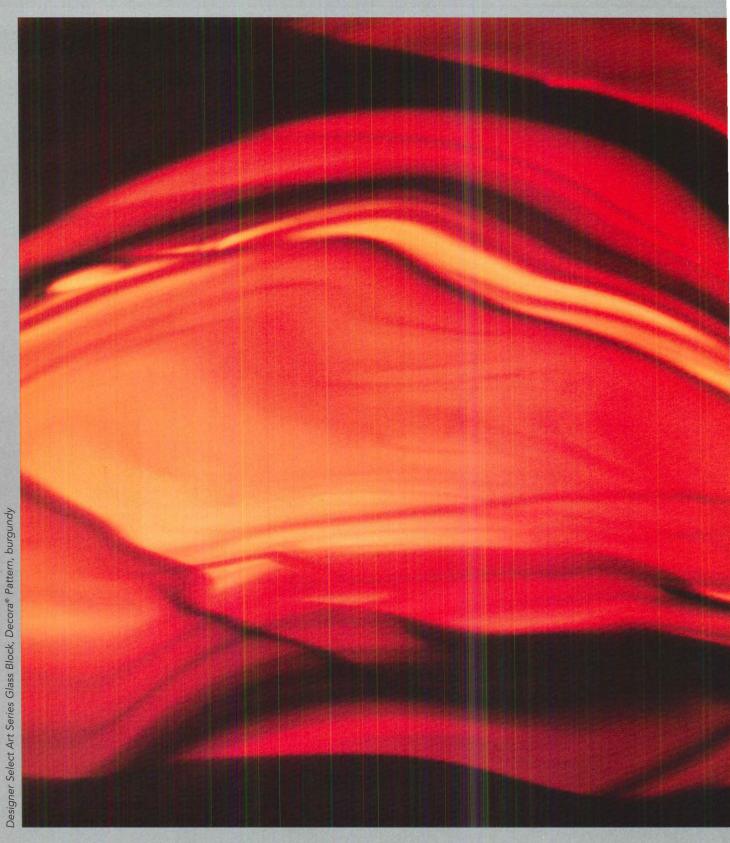


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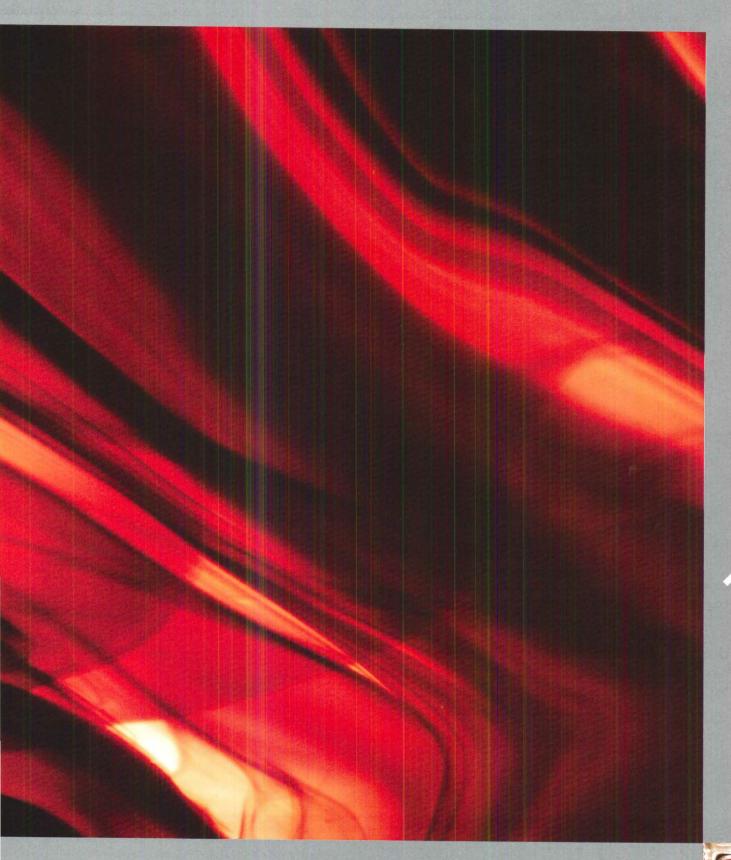


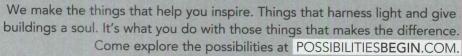
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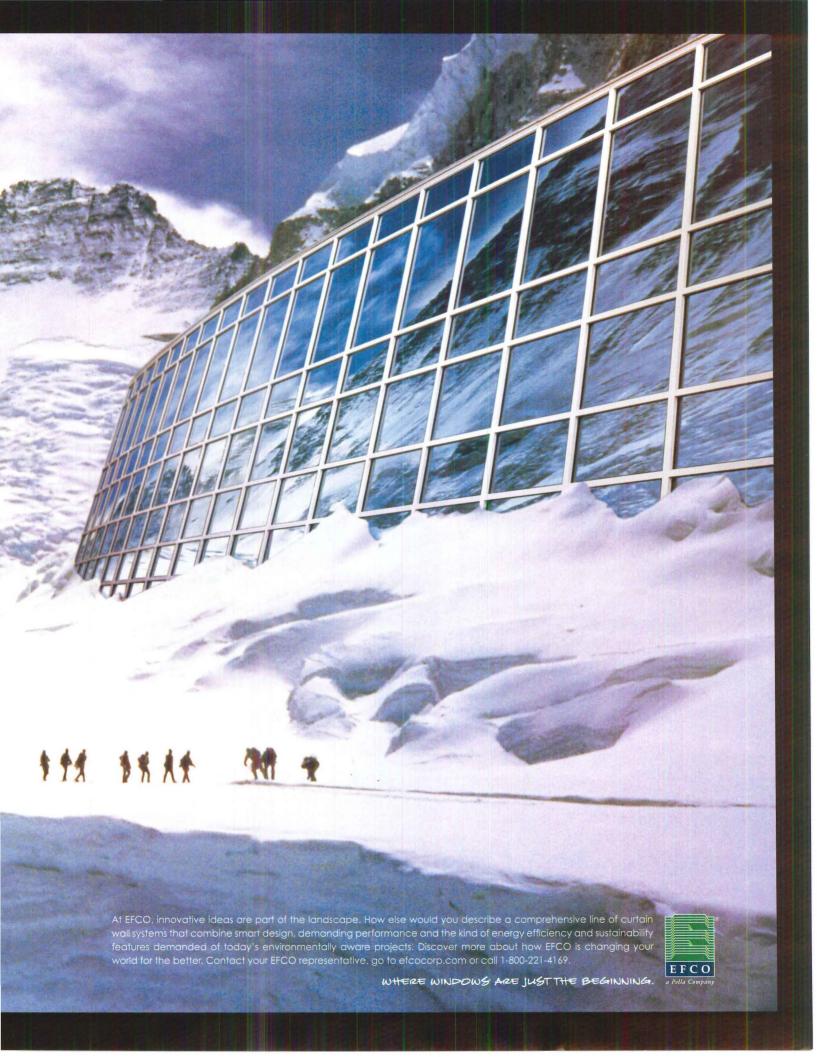


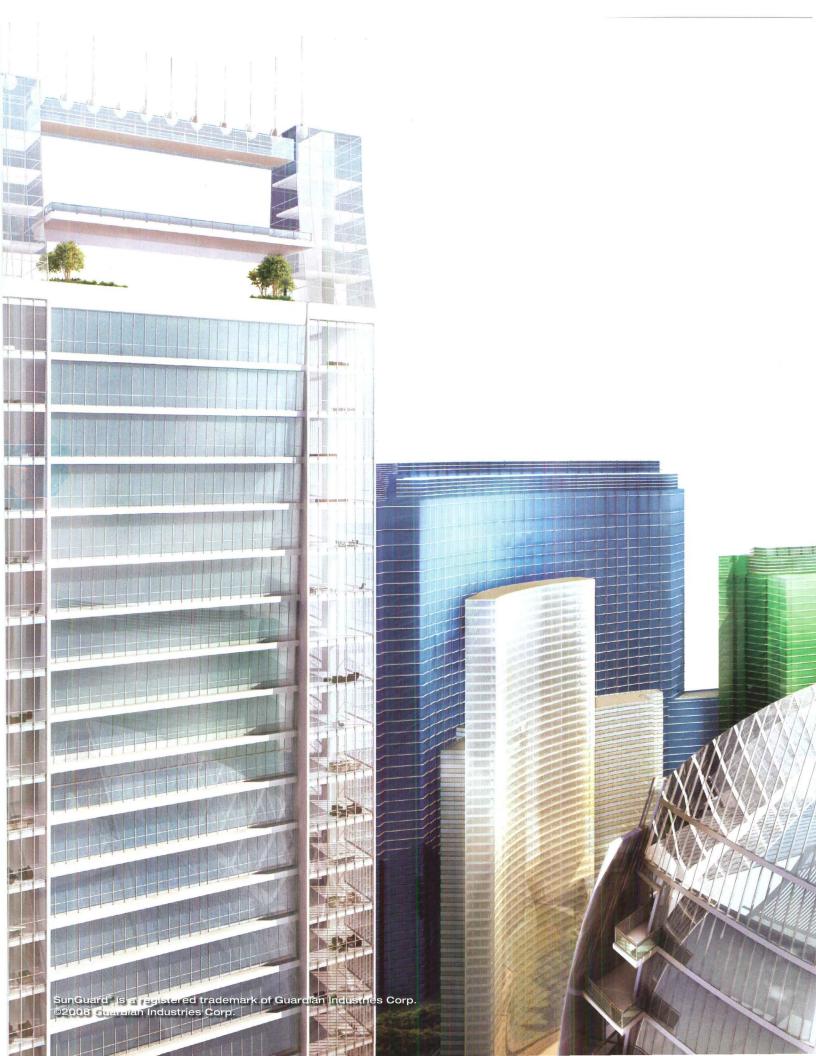
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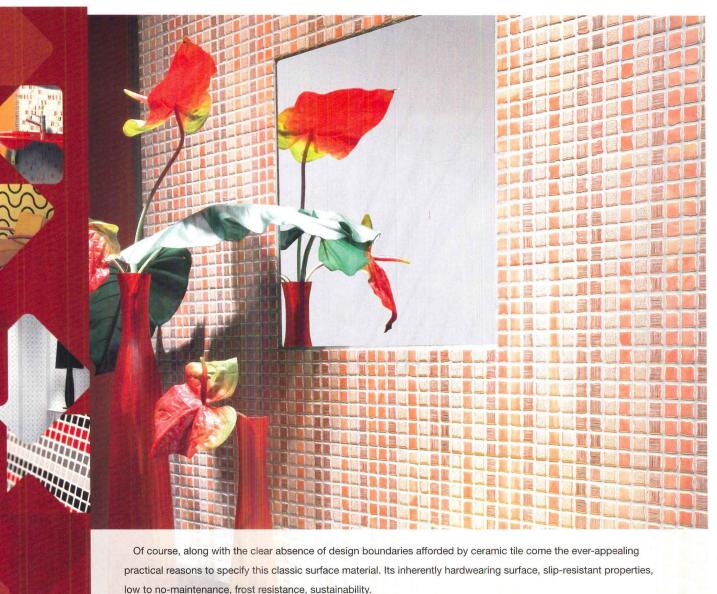
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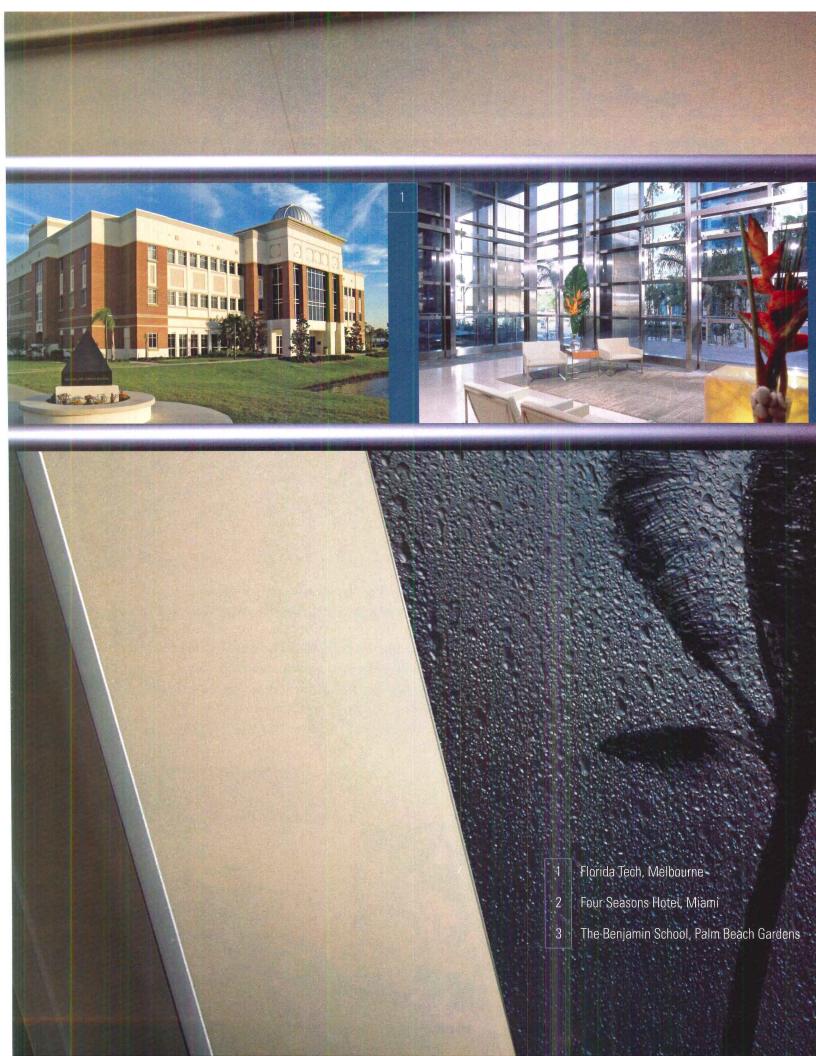


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Architects, designers, builders and owners can revel in the advances that have enabled Tile of Spain branded manufacturers to push ceramic tile to its design and functional edges. But they shouldn't miss out on the many opportunities to push their design thinking and have some real fun with the resurgence of tile for tile's sake. Ceramic tile that looks like tile, with its clean lines and perfect squares and rectangular shapes. And let's not forget the grout lines! For more about tile produced in Spain, contact Tile of Spain, 2655 Le Jeune Road, Suite 1114, Coral Gables, FL 33134. Call 305-446-4387 or email miami@mcx.es.









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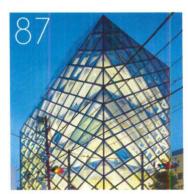
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206 Agora Theater, the Netherlands

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An auditorium complex shocks with crystalline forms cloaked in fiery hues.







Photography: Richard Schulman/Esto (page 59); Christian Richters (page 87); courtesy the architects (page 106).

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aia 2008 convention

We explore Boston, the host city of the 2008 convention for the American Institute of Architects. Read about must-see buildings, recent projects, and the best places to drink and dine. Watch videos, view slide shows, and contribute images to our Boston photo gallery (left). Also, RECORD editors will blog live from the convention, May 15 to 17.



building types study

Architectural efforts applied to parking structures are typically limited to complying with building codes. But there are a few exceptions. View Webonly slide shows of nine parking projects by architects such as Henriquez Partners Architects (Cordova Parkade, left), Emmanuel Combarel Dominique Marrec, Paul de Ruiter by, Shuhei Endo, and Office dA.



lighting: illuminated facades

Illuminated facades do more than increase nighttime visibility of buildings; they lend meaning to the urban fabric. This month, we look at several projects that represent a dramatic melding of architecture and lighting design. Beyond the work featured in print (City on Fire, left), we present additional stories and images online.

photo gallery

View thousands of images submitted by readers from around the globe in 12 categories, such as the AIA Boston/AIA 2008 Convention Showcase (right). You can also send us your own photos at



construction.com/community/gallerylist.aspx.

blogs

Off the Record: This blog is written by the staff of RECORD and the magazine's team of experienced, award-winning editors. Be sure to check out our special blog coverage of the AIA 2008 Convention, hosted in Boston May 15 to 17.

Your voice matters-and we have provided you with the ideal forum to express yourself. Our most recent addition is the Boston/AIA Convention 2008 forum, where you can recommend your favorite restaurants and buildings in Boston and comment on projects such as the Big Dig.

"A beautiful home: gorgeous coloring and excellent interior and exterior sculpting. My favorite Record House by far."

and more ...

Leroy Street Studio's striking 1,400-squarefoot House at Further Lane (below) is one of three structures on a 12-acre compound on Eastern Long Island, New York. View a slide show of the project, and many others, in this popular Web-only section.



View online-exclusive slide shows of work by emerging architects. New this month: Grzywinski Pons (below) takes Manhattan one hotel and multifamily apartment building at a time, while Los Angeles-based F-Lab creates a table for the digital age.



continuing education

Visit our vastly improved Continuing Education Center, where you can take online tests and earn credits at no charge. This month, we explore daylighting in art museums (Broad Contemporary Art Museum, below) and look at two case studies.



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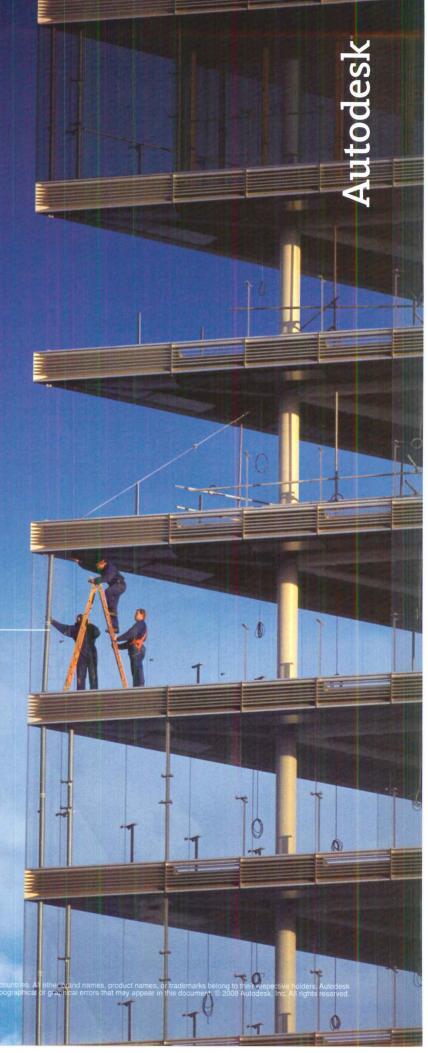




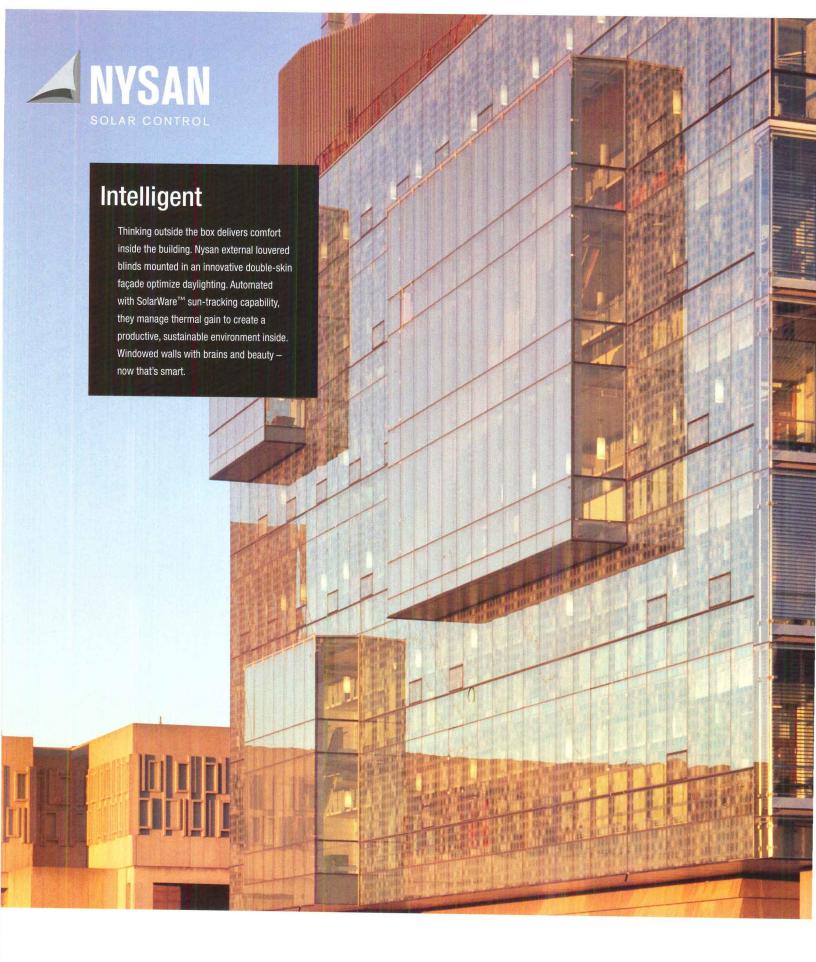
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Page

251-255

Targets for Building Performance: Selecting Windows that Work

Building performance is affected by wind and water pressures — high-performance windows are chosen through the application of best practice calculations

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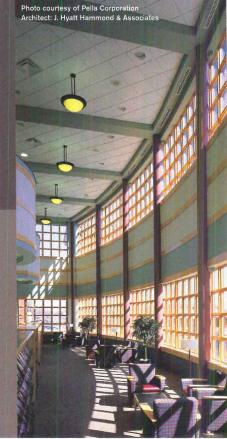


COMMERCIAL

Learning Objectives

After reading this article you should be able to:

- Identify the impacts of wind and water on building performance in different locations in the United States.
- Assess the specification criteria for wind and water performance in buildings and the impact on window performance values.
- Explain performance value information to manufacturers to supply windows for buildings with different design requirements.



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Best Practices in Integrated Project Delivery for Overall Improved Service Delivery Management

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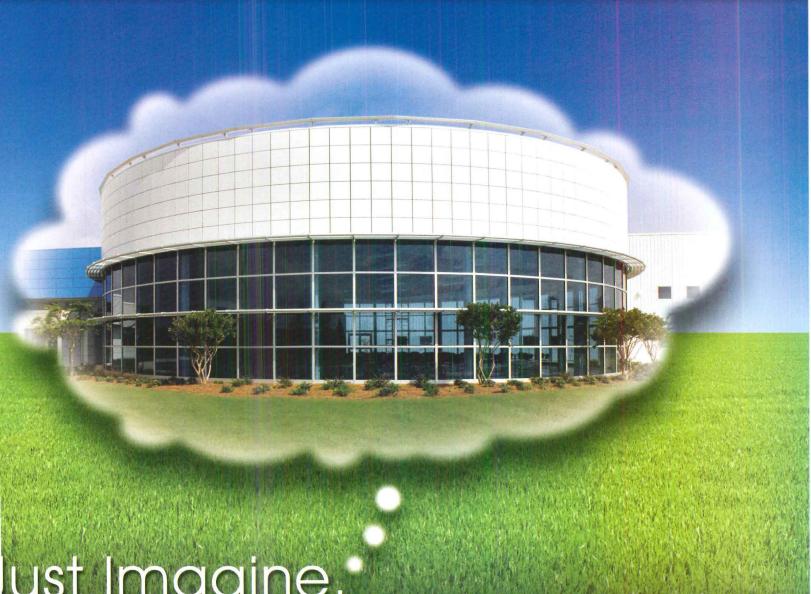
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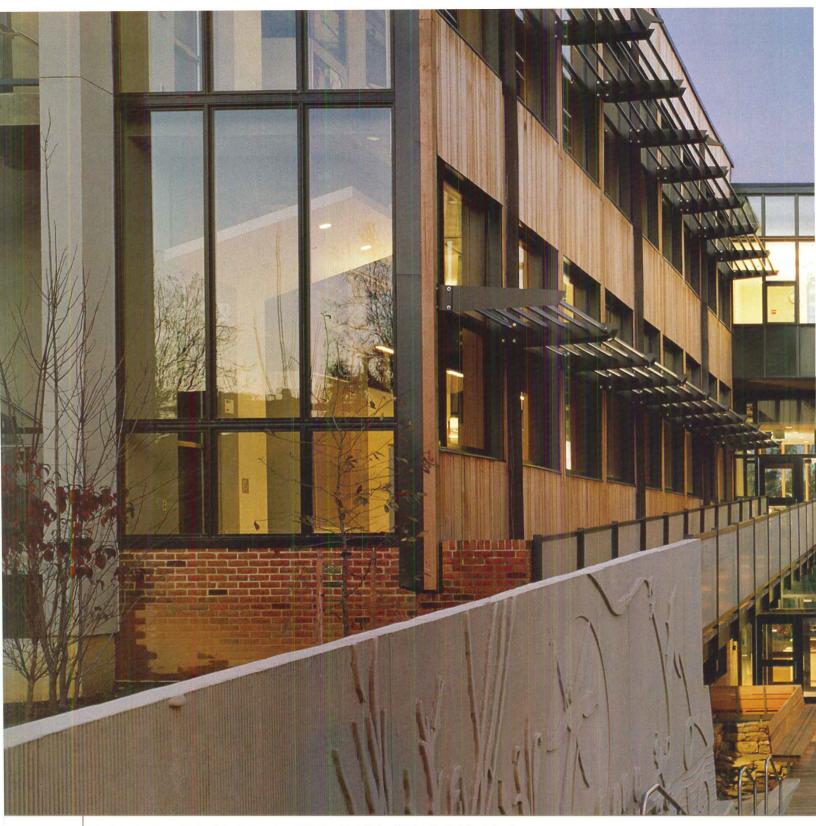
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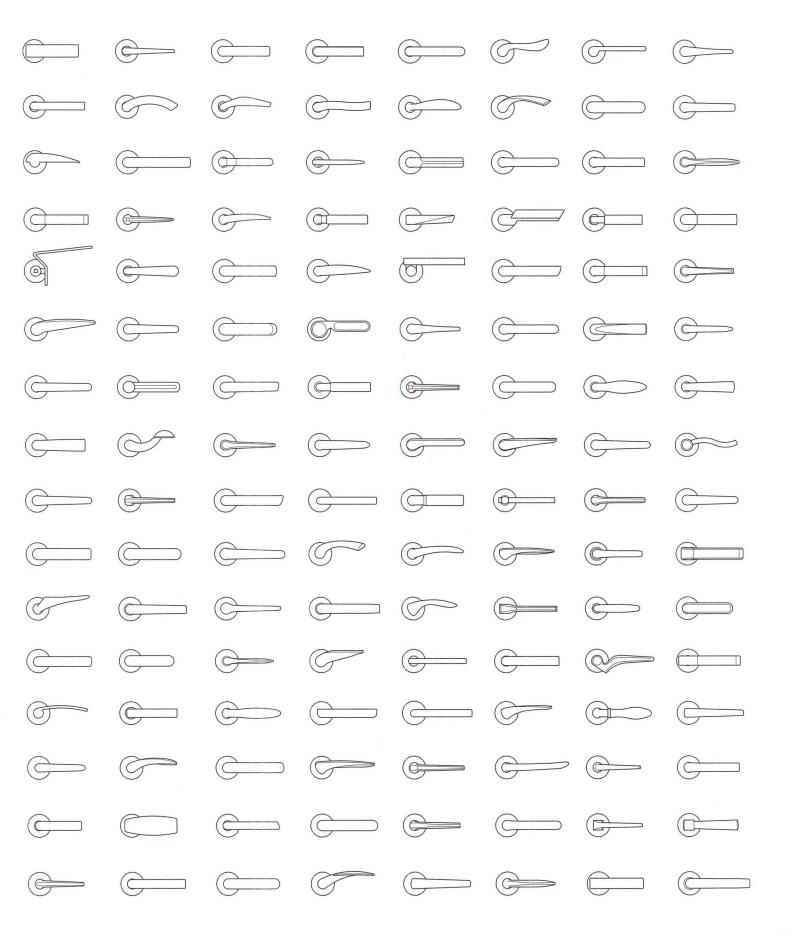
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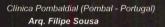


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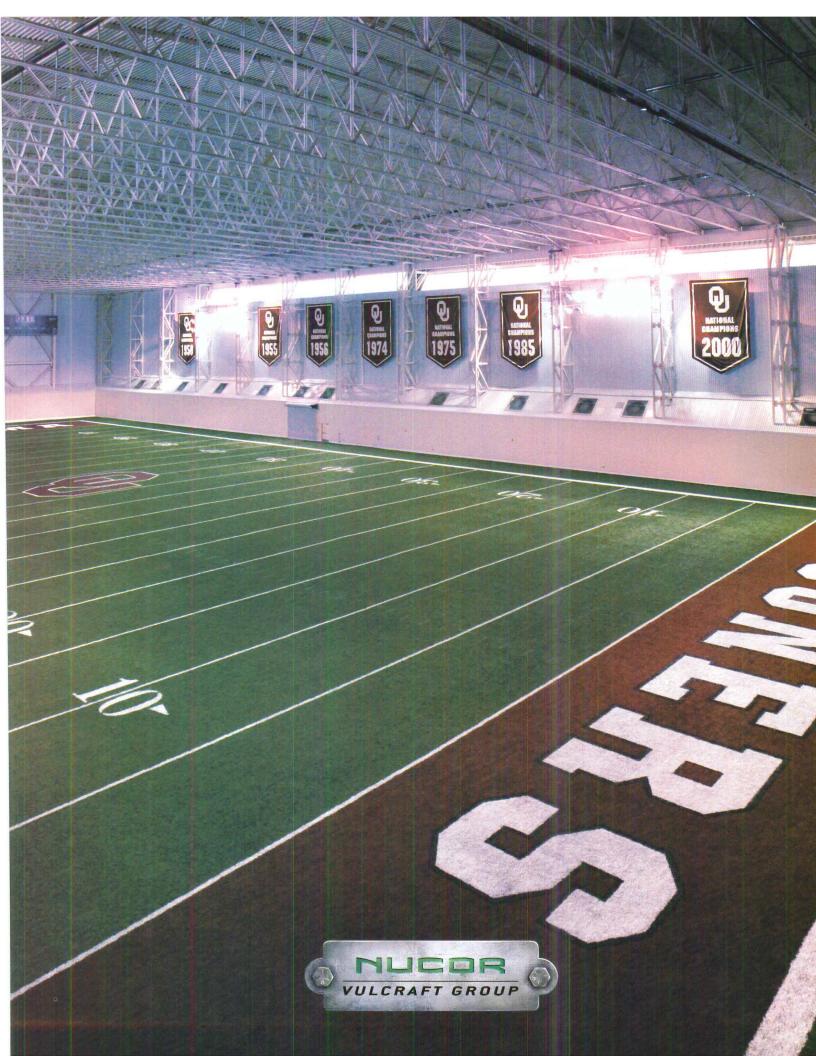
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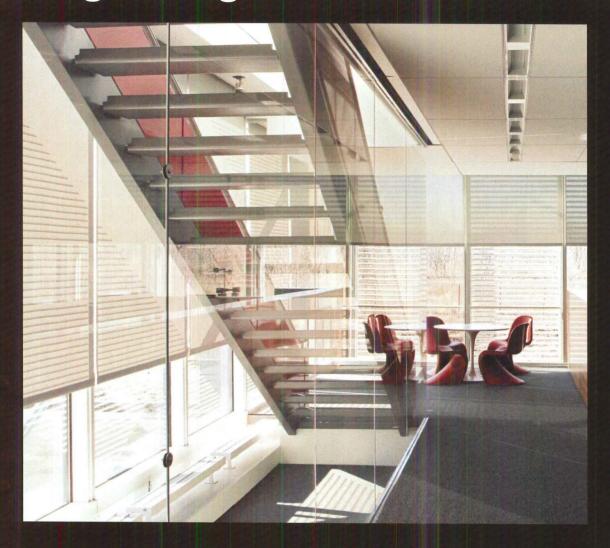
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Room for All Our Talents

Editorial

By Robert Ivy, FAIA

he two leading candidates for the Democratic nomination clearly illustrate that America is changing. Look around the American workplace or the adjacent seat on mass transit. Demographics and personal observation prove that the monolithic culture many of us knew as children has shifted to a polyphonic blend of peoples and cultures. Architecture remains woefully behind the power curve, however.

Theodore Landsmark, the president of Boston Architectural College, recently reiterated a fact that some of us had regrettably become familiar with, because it has not appreciably changed: Only 1.5 percent of America's architects are African-American (at a time when the U.S. Census shows that African-Americans comprise approximately 12 to 13 percent of the total population). Latinos and Asians share low numbers in architecture, too, though not at the 1 percent level. Speaking at a plenary session on diversity in St. Louis called by the AIA in April, Landsmark pointed out that the profession has not kept pace with the demographic changes in our larger society.

Other segments of the population remain poorly represented within the architectural ranks. While women now account for approximately half of the student population in schools of architecture, their numbers among registered architects in the AIA hovers around 13.8 percent, though that number fluctuates. Landsmark described a demographic nadir in which there are only 208 licensed women architects who claim African-American origin. Only 208 in the United States!

Balance those abysmal statistics against our expanding need for talent in the design and construction sector. As architectural firms scramble to attract and keep the best and brightest, the pipeline seems to be clogging up. While architectural programs are growing, the total student population in schools of architecture remains stuck at a constant number—33,000 at last count, or approximately a tenth of the number of

engineers. We need more talent now, for the work already booked and more to come. Outsourcing abroad will not address all our needs.

The recent AIA gathering in St. Louis brought together leadership from across the industry in a unique, ambitious assembly, including representatives from large firms and small; the executive and elected leadership of the institute; academia; and associations and affiliated organizations such as NOMA (the National Organization of Minority Architects), the NAACP, Arquitectos (an organization of Latino architects), AIAS, the International Archive of Women in Architecture, ACSA, NCARB, and others. All recognized the need for sympathetic groups to band together in strategic alliances to promote diversity. Examples of effective collaborations might include lobbying government agencies or participating in shared marketing.

After listening to speakers from representative bodies within and outside of architecture—such as the diversity program manager for a large law firm, in a discipline which hits the problem head-on—the members of the gathering outlined several shortcomings that are endemic to our chosen profession: poor communication with minority youth (few seem to know or care about the design professions); structural incompatibility between schools of architecture (many minority students begin work in community colleges but find transitioning to 5- or 6-year programs difficult); a studio-centered university culture that still places too much emphasis on individual achievement; and incomplete or inadequate mentorship of graduates.

Hand-wringing alone will not solve the problem. Carole Wedge, FAIA, the president of Shepley Bulfinch Richardson & Abbott, one of the oldest practices in the nation, can count 30 countries represented among her employees. She insists that in order to succeed, a company needs to "make its values articulated and clearly stated," and in her own firm's case, the business objectives and the values of the organization engage

Editorial

and involve diversity. As the client base shifts, her own company will more fully reflect the people and organizations that it serves. "If we could become diverse, anyone can become diverse," she states.

How can architects actively reach the talent pools of the future, particularly among minority communities, if the community doesn't know about or appreciate what the design professions can do? Too often, architecture is perceived as an elite club for white men, one that has kept the door shut and locked. One organization making remarkable strides in changing those perceptions by engaging students in the entire design and construction process warrants our attention.

Enter the ACE Mentor Program. Since 1994, when 17 design and construction firms joined together to adopt a group of 90 high school students, 37,000 students have matriculated through the program. From its genesis in New York City, ACE now counts 110 American locations in its roster, with a special focus on the inner city.

While not a panacea for all, ACE is answering many of the questions raised by the AIA forum on diversity. First, consider whom it serves. According to Charles Thornton, the distinguished engineer of Thornton-Tomasetti who helped found the organization, 82 percent of ACE students qualify as minorities within urban centers. Designed to function as an after-hours program, ACE pairs groups of 15 to 25 students with representatives from the design and construction industry, who serve as mentors.

The ACE literature describes the mentors' role: helping students through a design project that simultaneously introduces them to the language, career potential, and individual paths inherent in the field. What better way to learn the value and the possibilities of design and construction? As Thornton says, "You would never be able to get these kids' attention in one 30-minute assembly in school." Time spent during the academic year yields knowledge and relationships.

In addition, ACE has given away more than \$1 million in scholarships, a legacy that continues to involve the alumni beyond graduation day. Mentors and mentees sometimes forge bonds that result in subsequent employment. Through ACE, students benefit from an ongoing link that begins with a volunteer who helps inform young people about planning, design, and construction, expands to tours of offices and sites, and ultimately engages them in a design project that mimics the challenges that set our professions apart.

If your own firm isn't volunteering with ACE, the program has

room for your talents. Not only a student, possibly a minority student, will benefit; you and the future of the design and construction professions will, as well. ACE, however, cannot do it all.

Hidden within the rhetoric about representation of minorities within architectural firms looms another question that complicates the entire discussion. Racial or ethnic diversity only forms one component of the diversity picture. One aspect has thus far eluded us—the general cultural gap that yawns not only between racial groups but also between generations. Older architects sometimes feel that they have earned their positions in their firms by giving up weekends and family life, and you should, too—a lesson that falls on deaf ears within Generation Y. Their lifestyle choices for the here and now and their long-term goals may not be ours, after all, regardless of all our striving.

These are daunting challenges, yet the goal is worth the price. If we are able to listen well to the next generation, to our clients, to our public; if we are committed enough to support and to mentor; if we value education enough to ensure that it reflects our common values; and if we are willing to monitor and evolve our workplaces, the profession of architecture can change to meet the demands of the 21st century. Colloquiums like the plenary session hosted by the AIA are worthwhile touch points, if followed by committed action. Your own actions in your own company, or as individual mentors in programs like ACE, will matter. A diverse world will simply become a richer world, a real world, and a world with room enough for all our talents.

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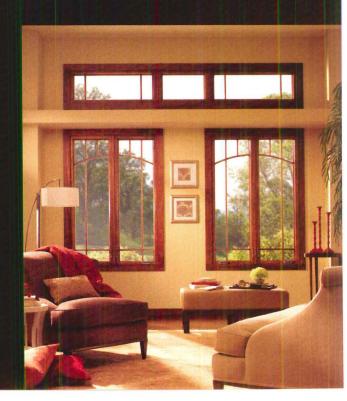
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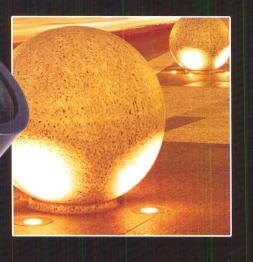


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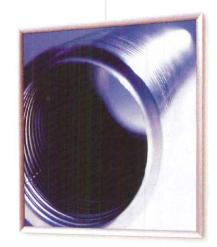


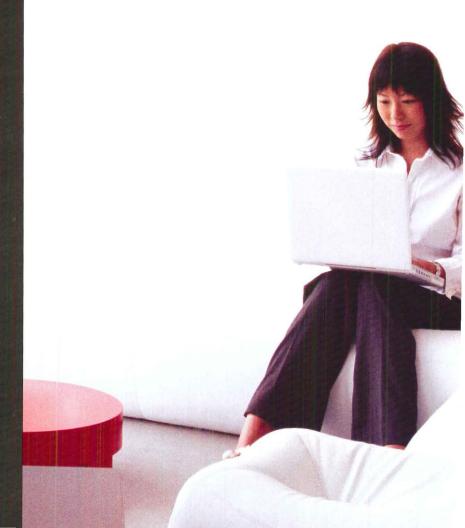
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Letters

Ode to the code

I was enlightened to read the editorial in the March 2008 issue regarding ARCHITECTURAL RECORD's code of ethics ["What is your perception?," page 21]. It was heartening to learn about the effort that is required to maintain ethical standards in journalism for a balanced viewpoint and outlook.

I always look forward to the new month with curiosity and high expectations for stories that ignite my imagination and transport me to projects, works, and thoughts, to which I cannot easily make the journey to experience. I do commend you and your team for the quality you strive for.

—Sarosh Pradhan Kathmandu, Nepal

Living single

I notice most of the houses in your 2008 Record Houses issue make some claim to sustainability. I think this does a disservice to the profession, ruins our credibility, and strains the public's credulity. Single-family homes are inherently unsustainable and even antisustainable. Sustainable single-family housing is an oxymoron, like hybrid SUVs. Even Dwell has begun to admit they probably aren't an optimum approach. When will McGraw-Hill catch on?
—Guy Ayers
Los Altos, Calif.

I was disappointed to see that you were unable to find more than three houses in the United States for this year's issue of Record Houses. As a member of the AIA, I find it appalling that your editors were unable to find suitable residences here. I would call this the "slat wall" issue.

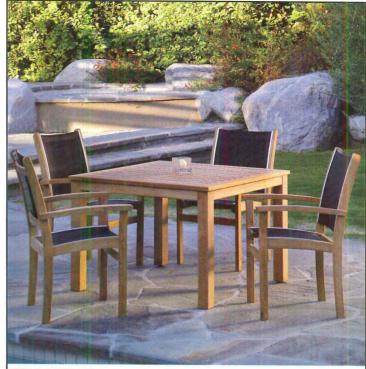
—Bruce Frasier, AIA
Omaha, Nebr.

I enjoyed the coverage of Sean Godsell's Glenburn House in Australia [page 92] in your Record Houses issue—thank you for including more international examples in your fine magazine. However, as an ARCHITECTURAL RECORD subscriber currently residing in the southern hemisphere, I cannot help but point out an example of northern-hemisphere-centric thinking in the issue, which may have impacted the inclusion of this house as it was judged, presumably, on its ecofriendly characteristics. As a result of this myopic thinking, the claim of one such characteristic is invalid.

The photo caption on page 96 states, "The living and dining space faces the landscape on its northern side. The southern side is partially banked in the earth to shield it from the sun." Yet the photo clearly shows sunlight pouring in through the northern windows. Why? Because the house is in the southern hemisphere, of course! The house is hardly shielded from the sun, as the photo proves, and the southern face, given the house's orientation (page 94), would never receive the midday sun an Australian house would need protection from.

All of the architecture design guides I have ever seen are not only northern-hemisphere-centric, they only focus on that part of the earth north of the Tropic of Cancer. Where I reside, about 4 degrees south of the equator, the midday sun shines on both the northern and southern faces of my house over the course of a year, and twice a year the sun is directly overhead. Point is, the sun doesn't shine on the whole world in the same way. ARCHITECTURAL RECORD should know better. Next time you judge a house based on its ecofriendliness, please make sure all claims made are actually valid.

—John Curran Vilcabamba, Ecuador









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Letters

The editors respond:

The Glenburn House is actually oriented slightly west of north. The earth is built up on both the northeast and southwest (i.e., the long sides) of the building. On the southwest side, the earth insulates the building from the hot, late-afternoon summer sun. On the northeast side, the earth also acts as an insulator and filters particularly the early morning sun. In the photograph with the caption, the earth finishes flush with the concrete seat on the lefthand side of the picture.

I design homes for a living, and I have to tell you: The collection of Record Houses you recently featured truly did set a record for being the most jaw-droppingly ugly, wastefully expensive, and totally impractical homes I have ever seen in one place at the same time. I guess that's why non-architect designers like me have plenty of work these days: We design homes as if someone will actually live in them. -John Cooper

Rosman, N.C.

The Nora House by Atelier Bow-Wow featured in Record Houses 2008 [page 110] is a fascinating study in planes, volumes, and craftsmanship. The compact home features interwoven spaces on nine different levels connected by a series of open steps. As a reasonably fit and athletic individual recovering from an ankle fracture, I can also tell you those with disabilities might consider the Nora House a house from hell.

-Ronald Wendle, AIA Spokane, Wash.

Brooding in the coop

The brooding mass of Coop Himmelb[l]au's BMW Welt [March 2008, page 86] needs to be assessed in an appropriate global context, away from the rock-star reputation of its creator. Its structural gymnastics framing a limited brief of vehicle delivery/car showroom cannot justify the deployment of such a vast quantity of resources. Nowhere was the squandering of such an enormous building cost better illustrated than in the juxtaposition of a talk by Wolf Prix with that of Indian architect Anupama Kundoo at the national conference of the Royal Australian Institute of Architects in 2006. Kundoo worked with India's rural poor to help build small houses from site-baked mud bricks, incorporating the kilns as part of the houses. Every brick counted. Prix's BMW Welt consumed resources at a rate sufficient to build scores of whole villages.

I have no objection to the building of major cultural institutions designed to contribute to the life of the community. But surely there is a limit to the amount of money corporations are prepared to spend to enhance branding at the expense of genuine additions to the cultural assets of our urban populations?

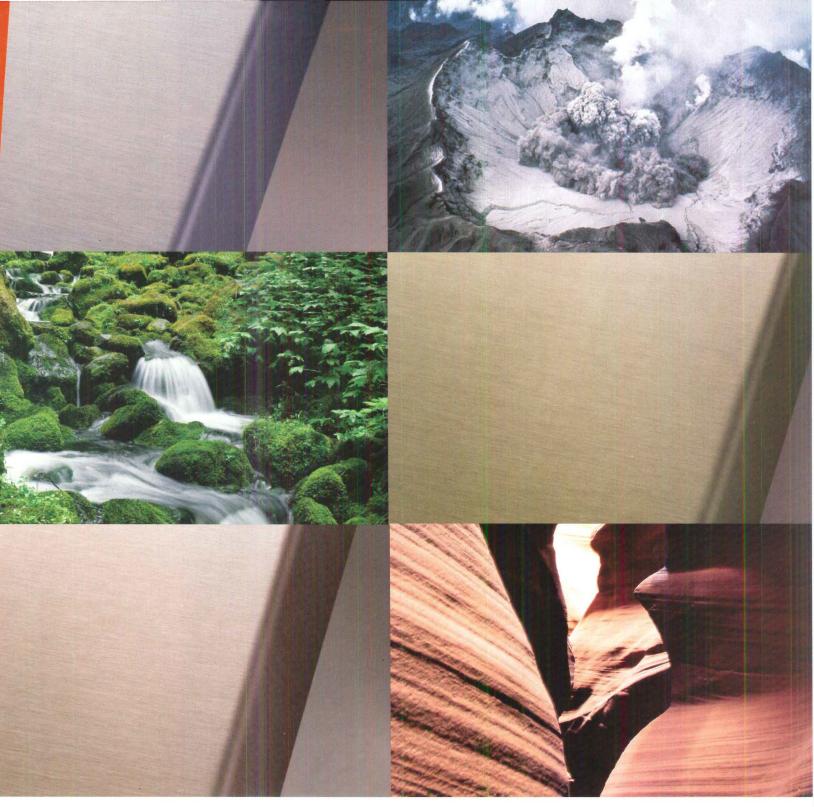
-Michael Neustein Bondi Junction, Australia

Wild west

I enjoyed Michael Sorkin's Critique of the Hudson Yards project ["Making (too) big plans for Manhattan's West Side," February 2008, page 55] and agree with much he had to say, particularly how the MTA—and others—have tricked people (including architecture journalists) into looking at the wrong thing, namely the architecture. What is missing is any real discussion and debate regarding the planning (or rather, lack of planning) for the site. While he hints at this at the end of his article, I wish he had given some attention to what a responsible program for this site might have been.

-G. Mackenzie Gordon, AIA Lakeville, Conn.

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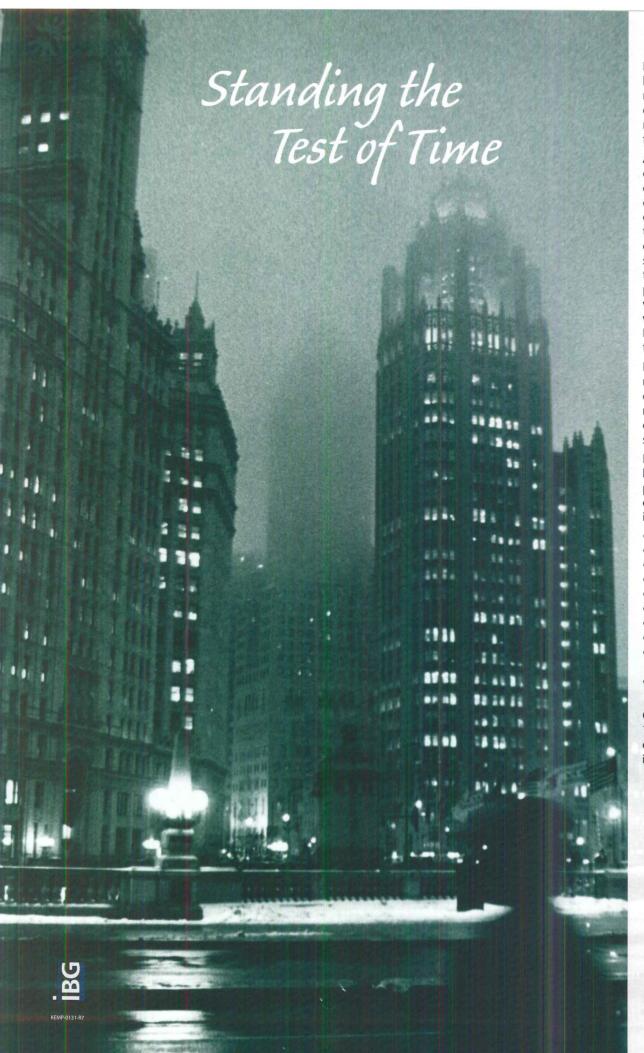
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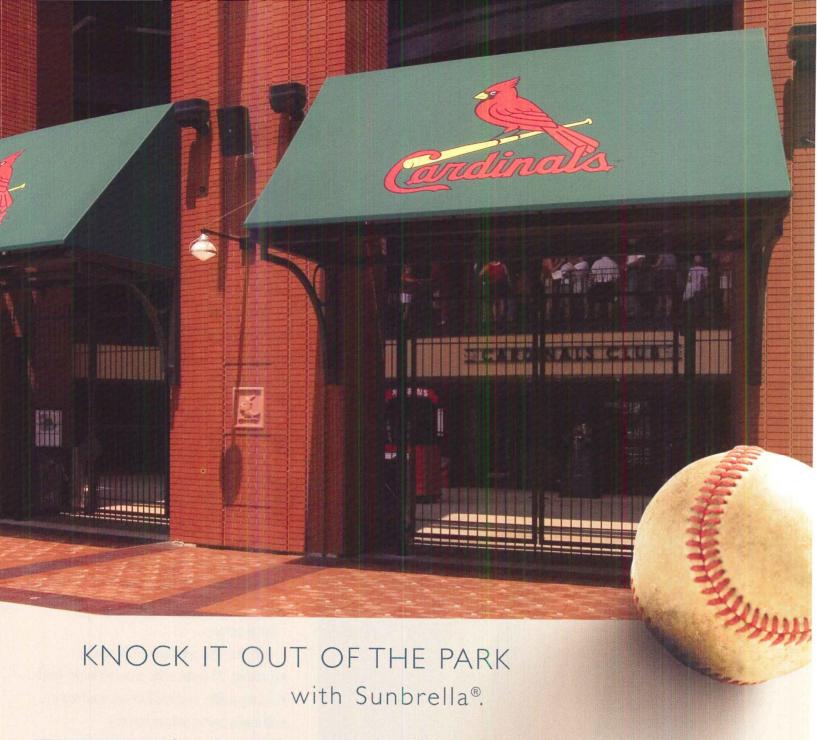
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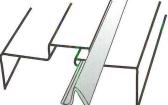
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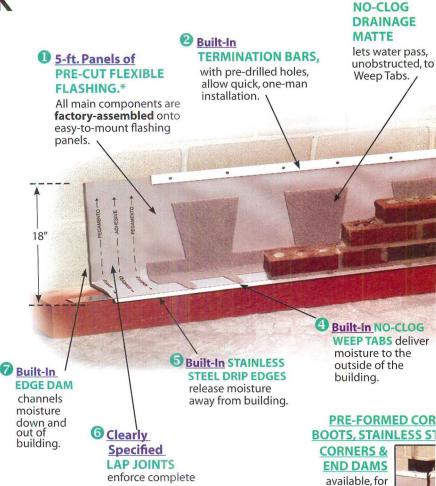
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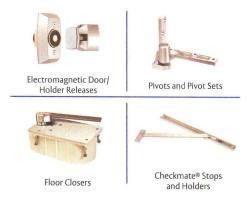


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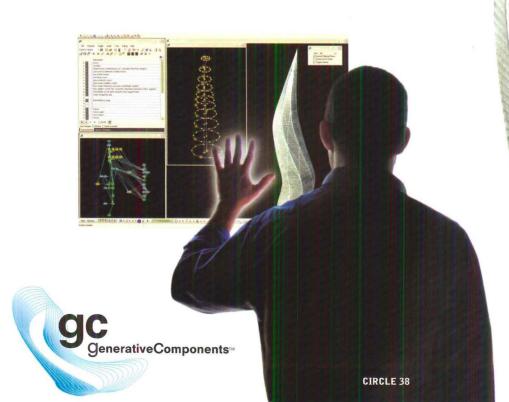
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Jean Nouvel wins 2008 Pritzker Prize

Jean Nouvel has talked of creating buildings that he hopes will disappear into their surroundings, defy easy characterization, and become dated. And yet, with The Hyatt Foundation's announcement on March 31 that this 62-year-old Frenchman is the 30th laureate of the Pritzker Architecture Prize, the profession's highest honor, Nouvel's oeuvre is certain to invite close study by many generations to come. In fact, contrary to the architect's own desire, his buildings already stand out.

Many of Nouvel's more than 200 works are concentrated in France, but increasingly they are being built around the world. They include a branch of the Louvre Museum at the Saadiyat Cultural District, in Abu Dhabi, expected to open in 2012. It will be covered by a dome-shaped, latticework roof whose filigreed pattern expresses Islamic influence—also evident in Nouvel's first widely acclaimed building, the Institut du Monde Arabe, opened in Paris in 1987. But any resemblance between it and the Louvre is fleeting. Each of Nouvel's designs acknowledges a unique context while making use of technologies and materials that are of the moment. If that makes them look dated after a few years, the architect is unconcerned.

"It's impossible to create a timeless building. I cannot imagine doing that," Nouvel says. "I like it when a building clearly has a date, the moment of its construction. If you do a building now and then gain three centuries later, it's not the same building. Knowledge evolves, techniques also. A city is like a museum, and what's interesting is you can find the thinking and feelings of a generation, the preoc-



(1) Jean Nouvel. (2) Institute du Monde Arabe, Paris. (3) Guthrie Theater, Minneapolis. (4) Musée du Quai Branly, Paris. (5) 100 11th Avenue, New York City (right of center, facing river). (6) Louvre Museum, Abu Dhabi.

cupation of an epoch, within the parade of architecture."

Our era, Nouvel believes, is preoccupied with the relationship of light
and matter, and how one renders
the other invisible. "The paradigm of
modern architecture is simplicity and
complexity: The more it seems simple,
the more it's complex," he explains.
"The best engineer a few decades
ago was someone who could create
the most beautiful beam or structure;
today it's to do a structure you cannot see or understand how it's done.
It disappears and you can talk only
about color, symbols, and light. It's
an aesthetic of miracle."

Nouvel hopes that his structures will disappear through a trick of the light, and he likewise creates buildings that evade easy characterization in terms of their typology, such as the Musée du Quai Branly. This Parisian museum, opened in 2006, exhibits non-Western art and artifacts. Resinclad gallery volumes cantilever from the north facade, while the northwest corner is covered in an 8,600-

square-foot vertical garden.

Designing stylistically eclectic buildings, such as Quai Branly, is Nouvel's reaction against his training at the Ecole des Beaux-Arts during the 1960s, when the International Style predominated. "You always had to do the same project with the same recipes, completely independent of the site and program," he says. "I was interested by specificities."

One of Nouvel's current sites in New York City supplies so many specifics that it would almost seem daunting. In the Chelsea district, he has designed 100 11th Avenue, a 72-unit luxury condominium tower adjacent to a women's jail and a state highway, and across the street from Frank Gehry's iconic InterActiveCorp headquarters. Looking beyond this freighted urban context, Nouvel was struck by the site's views of the Hudson River and the light it receives at sunset. "It's clearly a game with the nature of light and how to catch sparkles of light, a little bit like an eye of an

insect," he says of the south- and west-facing facades, composed of 1,750 differently shaped glass panes attached to a steel frame at varied angles. "It's a very special building for exactly this spot."

Nouvel's other U.S. projects are also mainly residential, although he first attracted notice here in 2006 with the Guthrie Theater: a striking composition of pure geometric forms and bold color located on the Mississippi riverfront in Minneapolis. Upcoming buildings include a 75-story, glass-and-steel condo tower in Midtown Manhattan. Rising more than 1,000 feet, it could become the tallest residential building in New York when it opens in 2012—unquestionably a stand out, regardless of what the architect's hopes for it might be.

Nouvel is the second French citizen to receive the Pritzker after Christian de Portzamparc in 1994. The award, which comes with a \$100,000 grant and a bronze medallion, will be bestowed on June 2 in Washington, D.C. James Murdock

Greensburg aims for a platinum shade of green

On May 4, 2007, a tornado tore through Greensburg, Kansas, wreaking almost complete destruction on this 1,574-person town located two hours west of Wichita. Measuring EF-5 in intensity, indicating wind speeds of more than 200 miles per hour, the twister swept up Greensburg's main commercial street, leaving nothing standing in its wake but one corner bank. Reports tallied nine deaths from the storm, as well as property damage in excess of \$150 million.

Early on, municipal authorities determined to rebuild Greensburg using sustainable design principles and techniques. Two milestones in this effort came in December, when the city passed a first-ever resolution

to certify all public buildings larger than 4,000 square feet as LEED Platinum. Just days later, the city council adopted the first phase of a sustainable comprehensive master plan conceived by Kansas City, Missouri–based Berkebile Nelson Immenschuh McDowell Architects (BNIM); Greensburg had retained BNIM and the environmental consultant John Picard in October 2007 to guide the rebuilding process.

BNIM associate Stephen Hardy, who, with colleague Rachel Weden, was largely responsible for the sustainable master plan, says of the LEED Platinum announcement, "While you wouldn't pick western Kansas as a hotbed for sustainability, we've found that [Greensburg



officials and residents] understand natural systems and have absorbed progressive green thinking much more deeply than their urban counterparts." The master plan, which stresses walkability, water conservation, storm-water management, and citywide wind power, may contribute to the goal: Hardy imagines building owners opting for municipal wind power instead of producing their own renewable energy on-site.

With assistance from the U.S. Department of Agriculture, as well as from nonprofits and philanthropists, more than 100 residences are already under construction, and one retail building is already completed.

Picard, who will be a recurring character in a 13-part Discovery Channel series this summer about Greensburg's environmentally friendly rebuilding, cautions that

not all of these buildings are sustainable. "In terms of homes, did some people build back green? Somewhat. But we didn't get the chance to effect really significant, across-the-board change in the residential work." Picard adds that 10 commercial and public buildings had already committed to obtaining LEED certification as per Greensburg's earlier Green Initiative. Other projects that should earn Platinum include local John Deere and GM dealerships.

Residents and city officials hope that green initiatives could ensure the economic viability of Greensburg, where population has been shrinking as younger residents seek jobs in larger urban areas. They envision sustainability as a business engine, fueling tourism and a new generation of manufacturing jobs. Economic development is just one component of BNIM's phase-two sustainable comprehensive master plan, which the city council was expected to adopt in April. David Sokol



Tulane students finishing another NOLA house



A Modernist insertion among New Orleans shotguns.

Last fall, when Tulane University
School of Architecture students were
given the dimensions of the tiny lot
in New Orleans's Central City neighborhood that their URBANbuild
prototype house would occupy, they
knew their scheme for the designbuild project would have to be tight.

But the test of their ingenuity was kicked up a notch when it turned out that the lot was 5 feet smaller than it was supposed to be. Still, the fourth-year students managed to configure a three-bedroom, two-bath house on a lot smaller than 30-by-57

feet in size. Icing on the cake was a parking space they squeezed into the 1,200-square-foot project.

"When we first saw the lot, we knew it would have to go up two stories," says Adriana Camacho, whose drawings fellow URBANbuild students chose for their house, due to be finished this month. "When we found out that it was smaller than it was supposed to be, we also knew there would be no room for anything not to work as we designed." One strategy turned a staircase into built-in furniture that holds kitchen storage on one side and entertainment equipment on the other. Also, most rooms open to a porch or deck—increasing the amount of livable space.

The house is the third in the URBANbuild program, created shortly before Hurricane Katrina decimated the city's stock of affordable housing. After the storm, Tulane redoubled its effort and teamed with Neighborhood Housing Services (NHS), a nonprofit that helps low-income families buy houses. "This partnership forces the students to work within the confines of the lots, budgets, and housing

requirements that we give them," says Lauren Anderson, NHS's executive director. "They will be better architects because of this experience working within these tight parameters." NHS provides the lots and pays for construction materials from a revolving loan fund that is repaid when home buyers get their mortgages. Blueprints and labor are free, which helps construction costs remain below \$100 per square foot.

With each new project has come fresh goals. The current house was built using structurally insulated panels. In a previous prototype, students experimented with steel-frame construction, and for another they used conventional stick built methods. Students in GREENbuild, a sister program at Tulane, have tried modular construction. Shawn Kennedy

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RMJM helps Harvard launch practice program

RMJM, the international design firm based in Edinburgh, donated \$1.5 million to the Harvard University Graduate School of Design (GSD) for the creation of the "RMJM Program for Research and Education in Integrated Design Practice." This new project aims to increase the finances of architects by incorporating business principles into design education.

"Architecture is at risk of losing talent," explains RMJM C.E.O. Peter Morrison, who is also a guest lecturer at the GSD. "On the surface, things look good: Projects are good, profits are good, there are serious people doing well, and places like Dubai and China are doing large-scale projects. But once we started looking into it further, we uncovered some harsh truths about the profession: People are not making enough money. Brokers and agents are making much more selling the spaces we design."

Underscoring the problem, a 2007 study conducted by the Society for Marketing Professional Services, a nonprofit trade association serving the AEC industries, suggests that architecture and engineering graduates are increasingly opting for careers in high-tech and management consulting.

"We have researched professional issues at the GSD for many years," says Spiro Pollalis, a professor of design, technology, and management, "but with the RMJM gift, the school will expand its inquiries into integrated designthe approach that takes the required resources and technology as inherent parts of the design itself, with responsibility and integrity toward making the physical construct."

Harvard University is supplementing RMJM's gift with \$500,000. The total amount, which will be disbursed over five years, will go toward funding a research program, and developing new courses for students, and new public programs and conferences for professionals. Key issues include talent retention, boosting creativity in large corporate firms, branding, analyzing fee structures, especially for conceptual design, and developing succession strategies for

Record Reveals: Boston

The Boston Redevelopment Authority (BRA), responsible for planning and economic development in Boston, is presiding over a major urban transformation. Despite the economic slowdown, cranes dot the city's skyline with roughly 65 large projects under construction and dozens more in the pipeline. Also moving forward is the integration of the Rose Kennedy Greenway—a mile-long stretch of parks and civic amenities taking shape along the route of the old elevated Interstate 93-with surwill be out by the end of spring or early summer. RECORD correspondent Ted Smalley Bowen recently discussed the greenway and the city's other major public and private developments with BRA director John Palmieri and Kairos Shen, the BRA's director of planning and Boston's chief city planner. The interview is available online (go to Web site at top of this page) as part of an in-depth guide to Boston, which is hosting the American Institute of Architects 2008 National Convention and Design Exposition, May 15-17. Look for profiles, video

Boston's I-93 highway (above) has been replaced

by parkland (left).

single-name firms. The research will be carried out with case studies, interviews, field research, and research through design studios.

rounding city blocks. The first design

contract, for roughly a dozen streets,

"Every design implies a business plan, and we will be looking at how architects take into account the objectives of the client and

other disciplines as they design," says Pollalis, who will help develop the program. "Architects have more to contribute than designing space, and we are attempting to improve our position. We want to be looking upstream, to really understand the business objectives." John Gendall

tours, and more. James Murdock

Beantown squeezed as colleges expand

Columbia University and New York University are planting ever larger footprints throughout Manhattan, but the Big Apple has plenty of company in managing tensions between academic institutions and their urban neighbors. Boston, the quintessential college town, is in for major changes as its schools accelerate their building programs. Although officials generally welcome them, some projects test town-gown relationships.

The expansion of Harvard University's campus in Allston, on the Boston side of the Charles River, commences this spring with ground breaking on a 1-million-square-foot, \$1 billion science center designed by Behnisch Architekten. The four-building complex is the first project in the school's significant Allston buildup, which will likely include the relocation of Harvard's schools of public health and education, as well as the construction of new student housing, museums, and performance space under a master plan created by Cooper, Robertson & Partners, Frank Gehry, and the Olin Partnership.

"Harvard is clearly in a league of its own," says Gerald Autler, senior project manager at the Boston Redevelopment Authority, the city's planning agency. "They've got hundreds of acres and plans for 4 million to 5 million square feet of

development over the next 10 to 20 years, and 10 million to 12 million square feet over the next 50 years."

Ongoing negotiations between the university and neighborhood groups over community benefits including jobs, education programs, and infrastructure improvements are proving contentious. Harvard offered to invest \$21 million over 10 years, but this amount falls significantly short of community demands. "We want the building to happen, but Harvard hasn't been open to community input," says Tim McHale, of the Allston Brighton Community Planning Initiative. University officials contend they've taken residents' priorities into account. Pending city approval, the Allston plan could be finished this fall.

Southwest of Allston, Boston College straddles the Brighton neighborhood and the city of Newton. Its recent acquisition of a 70-acre property adjacent to the main campus opens the way for the construction of new dorms, a fine arts complex, and athletic facilities. An expansion master plan by Sasaki Associates is working its way through the public review process. Brighton residents are concerned about round-the-clock activity, noise, stadium lights, and the loss of open space that could result from the expansion. The college is pledging to retain much of the neighborhood's open space and existing buildings; it will also restrict the height of new construction to four or five stories. Ted Smalley Bowen



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CAF's textbook turns the page on drafting

Many high school students aspiring to be architects are heading into this year's summer vacation with a fundamentally new learning experience under their belts, one that recognizes that the profession is as much about landscaping and room circulation as drawing lines. This holistic approach comes courtesy of The Architecture Handbook, published by the Chicago Architecture Foundation, a 462-page primer that debuted last August and has quickly caught fire in schools across the country. As of April, 71 schools in 34 states, plus 10 community colleges, were using it, says Lynn Osmond, foundation president. The list is expected to grow in the fall.

For some, the textbook could not have arrived sooner. Chicagoarea teachers had been stuck with the handbook's predecessor, Architectural Drafting, a 1951 work whose emphases are as outdated as that era's tail fins and Brylcreem. Lessons called for

designing a single-story ranch house, a style that seems atavistically rooted in the early suburbs. Also, that ranch needed to be accompanied by a garage—but in today's age of ecomindedness, encouraging fossil-fuel-dependent auto travel seems increasingly quaint. By contrast, in The Architecture Handbook, the case study is a skinny, three-story residence known as the F10 House, designed by EHDD Architecture. Its name refers to the fact that it's 10-times less environmentally harmful than the typical American dwelling: Sedum plants sprout on the roof, for instance, and a second-floor carpet is made of recycled soda bottles.

The text, the culmination of a three-year, \$500,000 development process, is also easier to read than its predecessor, teachers say, and the 60 hands-on activities included on a companion CD-ROM are desirably interactive. Most important,

perhaps, it moves beyond drafting to teach design through different disciplines. There are lessons about vocabulary—explaining "contour line" and "clerestory windows"—math, and reading, including passages from Sandra Cisneros and Jane Jacobs.

"Firms need people who can draft, but who also understand the bigger picture of how a building comes together," says Jennifer

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Masengarb, the book's coauthor. Even if the students who will use it pursue careers other than architecture, "they could be homeowners or future clients or city council members, and so the more we can impact them, the better."

On the national stage, the new publication's timing is fortuitous because attracting more young people to the profession—especially those who hadn't considered it before—is a key goal of Marshall E. Purnell, FAIA, the 2008 AIA president. A book with many entry points can accomplish this, he believes: "We need to broaden the appeal of the profession because it's not just

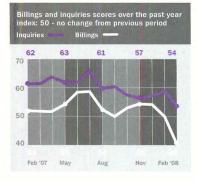
about drawing a single building; it's also about planning neighborhoods. I want to expand people's thinking about what an architect is and what they can do professionally."

Being well-rounded may give students a better shot at a top college, says George Ranalli, dean of the architecture school at the City University of New York, who studied drafting in high school. As the general

public grows more aware of how development contributes to climate change, he explains, "schools are thinking more broadly about the profession. We want students to be aware of the forces on the planet."

even help land a job down the road, says Krisann Rehbein, the textbook's other coauthor, summing up the input she and Masengarb received from architects. "We asked them the million-dollar question: idered "Where would you place people in arshall your firm with drafting backgrounds?" A presipoints recalls. "But it's been wonderful to see how architects pick up this book and say, 'I wish I had this in high school.' " C.J. Hughes

Architects' billings fall sharply in early 2008



As economists track mounting evidence of a recession in the U.S., the Architectural Billings Index (ABI), a key measure of the market for architectural services compiled by the American Institute of Architects (AIA), fell steeply during the month of February—the second tumble in as many months and the largest consecutive decrease in the ABI's 13-year history. From its score of 55

in December 2007, the ABI dropped 4.3 points in January, ending the month at 50.7. This was followed in February by an 8.9-point plunge, for a score of 41.8. An ABI number over 50 indicates growth in billing activity; below 50 represents a decrease. February's numbers marked the biggest monthly decline since October 2001, when the nation's economy was last in a recession. The AIA compiles the ABI based on surveys sent

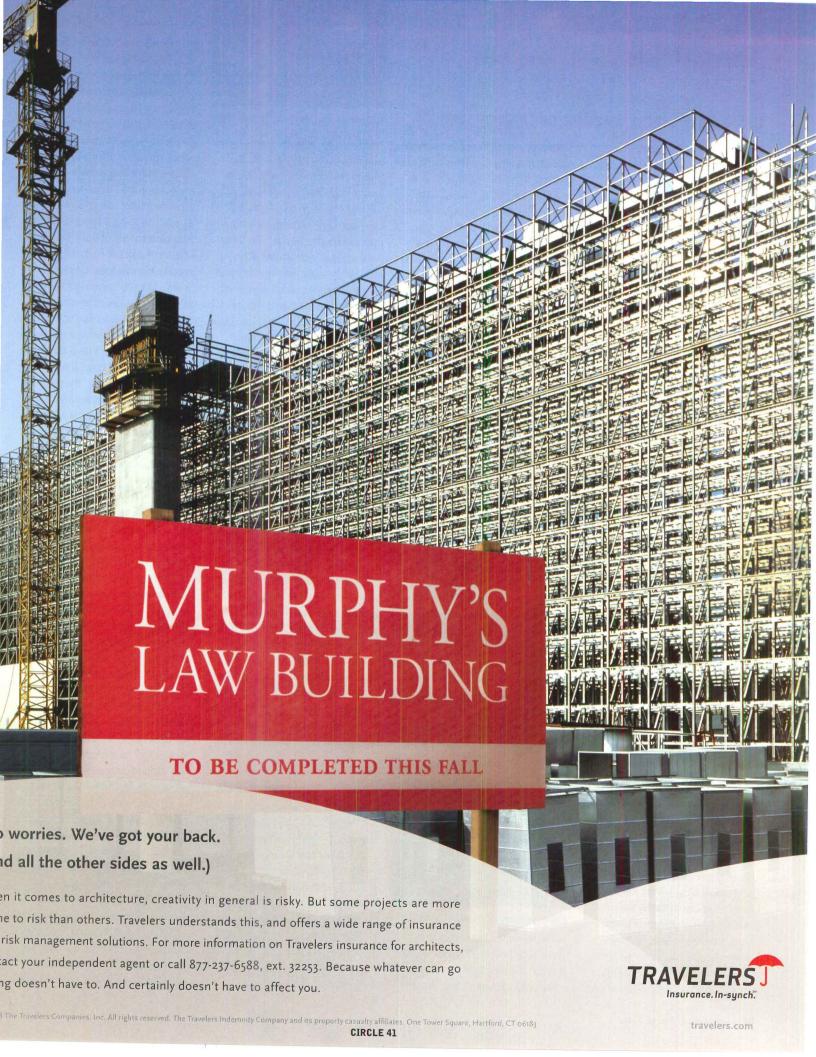
to mainly commercial firms; studies suggest it is a good predictor of construction activity nine to 12 months in the future. While the housing sector is at the heart of the current fiscal crisis, the ABI data confirms that design activity is being scaled back across the board, with the exception of institutional projects. The AIA also tracks architects' new business inquiries, which fell 5.2 points in February to a score of 54.3. Ted Smalley Bowen

Duany, Plater-Zyberk donate Driehaus money

Andrés Duany and Elizabeth Plater-Zyberk, the recipients of the sixth annual Richard H. Driehaus Prize for Classical Architecture, plan to take their \$200,000 honorarium and invest it—not in stocks or bonds, but in the future of urbanism and the environment. At their acceptance speeches made during the awards ceremony in Chicago on March 29, the husband-and-wife team pledged to donate their winnings to a non-profit research center for the publication of books related to New Urbanism and Classical architecture. Richard Driehaus, the Chicago-based

investor and philanthropist who sponsors the prize, said he would match their gift, for a total donation of \$400,000. The Driehaus Prize recognizes achievement in the pursuit of traditional, Classical, and sustainable architecture and urbanism. Duany and Plater-Zyberk have been dubbed the "parents of New Urbanism." They are donating the money to the

Center for Applied Transect Study, a nonprofit group—closely affiliated with their own practice—that Duany describes as "dedicated to the reconciliation of urbanism and the environment, thereby generating a New New Urbanism." This year's Driehaus cash prize of \$200,000 is double the amount previously given. Jennifer Richter



Dellis Cay: Green paradise or fantasy island?

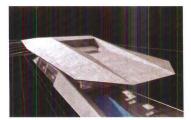
The Turks and Caicos Islands, a British commonwealth of roughly 30 islands in the Caribbean, occupy a small piece of paradise. The isle of Dellis Cay, for instance, is a sanctuary for local sea birds that live there yearround and an important stopover for migratory birds. But the flamingos and herons are getting some human neighbors in a development dubbed The O Property Collection: pricey residences by big-name architects including Shigeru Ban, Kengo Kuma, and Zaha Hadid. For many observers, the project raises troubling questions about sustainability.

Created by the Turkish businessman Cem Kinay, the development features 124 private villas, 154 residences, a Mandarin Oriental hotel, and a marina located on a 35-acre

beachfront site. Residences will range from \$2 million to \$20 million and are aimed at those looking to purchase their third and fourth houses. David Chipperfield, Carl Ettensperger, Piero Lissoni, and Chad Oppenheim are also designing for the development, which broke ground in January and is slated for completion in 2009.

While all of the houses express the vision of their unique architects, each aims to incorporate the existing landscape. "The original idea was to make a paradise without the buildings modifying the feeling of being in a paradise," Lissoni says. "The development was designed with a maximum respect for nature."

But some observers take issue with this claim. Kinay purchased the previously uninhabited island from the



A concrete roof shelters Hadid's villa.

Turks and Caicos government. To preserve the bird sanctuary, officials limited development to only 20 percent of the 560-acre landmass. Still. any construction creates problems. "It can harm birds and make them vulnerable because, with people, there are also usually cats, mice, and rats—all of which wreak havoc," says Greg Butcher, Audubon's director of bird conservation. "New buildings can kill migrating birds, which fly into glass walls that are built in their paths."

While none of the Dellis Cay buildings are going for LEED certification, the resort's sustainable design features include using photovoltaic arrays to produce electricity, large overhangs for cooling, crossventilation, solar-heated water, a green roof, and a rooftop pool that

doubles as a rainwater collection tank. Another green element is that no cars will be used on the island.

Still, travel to the destination itself poses larger questions about sustainability. Aside from the carbon generated during construction, most houses will serve as only part-time residences for their owners-many of whom will fly long distances to visit. generating more carbon than might be saved by using a few solar panels. "You have to look at the total cost, which includes the environmental impacts to developing places that haven't been developed before," says Josh Dorner, a spokesperson for the Sierra Club. "It becomes a little tricky when people have this as a holiday home, and they use quite a bit of carbon to visit it a few times a year."

Lissoni responds, "The problem with pollution that comes from travel is a problem for all of society. We did the best that we could to keep the design for the island as natural as possible." Dianna Dilworth

Few assurances made on UAE worker rights

Developers and officials in the United Arab Emirates (UAE) are enlisting renowned museums, including the Louvre and the Guggenheim, as well as top architects such as Frank Gehry and Jean Nouvel, to build cultural facilities in Abu Dhabi and Dubai, But citing what it describes as the UAE's poor record on preventing abusive labor conditions, the international advocacy group Human Rights Watch (HRW) has made several appeals for these cultural institutions to assure

fair worker treatment. So far, it has not received any pledges. "We've had some vague responses, but they've been noncommittal and don't address the basic issues of labor standards," says Joe Stork, deputy director of HRW's Middle East and North Africa Division.

In several reports, HRW has documented alleged exploitation of the UAE's huge migrant-worker population, which mainly comes from India, Pakistan, and Sri Lanka. Problems include recruiting agencies that charge astronomical fees to immigrants, and contractors who seize workers' passports and withhold paychecks. The UAE does not allow workers to strike legally, but laborers have staged illegal walkouts-including one at the Skidmore, Owings & Merill-designed Burj Dubai in late 2007. Stork says that HRW representatives are planning to visit the UAE in early May to see firsthand if conditions are improving.

HRW's campaign began in 2006 with letters sent to directors of the

Louvre and the Guggenheim, which are building facilities in Abu Dhabi's new Saadiyat Cultural District, and nearly 30 other institutions building in Dubai. Stork says that despite the letters and subsequent phone calls, few have responded with "substantive" comments. RECORD's own calls to the Guggenheim and Gehry's office also went unreturned; only one architect responded for a similar story about the UAE in RECORD's July 2007 issue.

The UAE Ministry of Labor maintains that it is "overhauling" its labor laws and "substantially increasing" its inspection capacity. Alex Zalami, an international affairs adviser at the Ministry, says that compliance with the Abu Dhabi government's strict labor standards was a prerequisite for Gehry to move forward with the Guggenheim project. "Leveling charges before the project has even begun and without bothering to investigate is revealing of an attitude that betrays HRW's repeated claims that it seeks a dialogue with the UAE government on the protection of construction workers," Zalami adds. Sam Lubell

OMA unveils new Waterfront City in Dubai

Already known for oversize projects, Dubai is getting its biggest development yet: a 34,435-acre urban district to house as many as 1.5 million people. Rem Koolhaas's Rotterdam-based Office for Metropolitan Architecture (OMA) is creating the master plan for Waterfront City, a site on the western edge of Dubai. It centers on an artificial, square-shaped island with



Koolhaas feeling delirious again.

a five-by-five grid of streets and a gross floor area of 75 million square feet. On the mainland will be four more urban districts totaling 130

million square feet. The island will be created by drawing water from the Persian Gulf and channeling it into canals. OMA is also designing one of five iconic buildings: a spherical structure, with a diameter of 590 feet, that will house a convention center, residences, hotel rooms, and shops. "Our goal is for the building to attract attention through its design cleverness, rather than by its size," says OMA partner Reinier de Graaf. Dianna Dilworth

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Ralph Rapson, 93, a Modernist who drew to the end

Ralph Rapson, FAIA, regarded as one of the foremost architectural draftsmen of the 20th century and Minnesota's premier Modern architect, died of heart failure on March 29 at his Minneapolis residence. He was 93 and still working at his office the day before he died. "For him, it wasn't really work; it was what he enjoyed the most. He was drawing a cabin and making furniture designs," says his son Toby, president of Rapson and Associates. Drawing was one of Rapson's special talents and professional trademarks, despite the loss of his right arm, which was amputated during boyhood. He used his left hand as deftly as any artist.

The Michigan native graduated from the University of Michigan in 1938, then studied at the Cranbrook Academy of Art under Eliel Saarinen, working with Charles and Ray Eames, László Moholy-Nagy, and Alvar Aalto, among others. Later he ioined the Saarinen architectural office. While at Cranbrook, he also began designing furniture. His popular Rapson Rapid Rocker debuted in 1945 as part of the Knoll furniture line and has since been reissued.

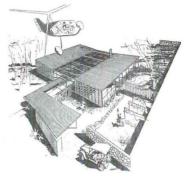




Ralph Rapson, FAIA, (left) designed the original Guthrie Theater (above), in Minneapolis, and the Greenbelt House (below).

Thoroughly imbued with Modernism, as well as new materials and technology, Rapson moved to Chicago in 1941 and began his illustrious career. There he designed one of the first Case Study Houses: Case Study House No. 4, the Greenbelt House. The iconic, 1,800-square-foot residence includes a central interior enclosed by a translucent wire-glass roof, intended to bring nature indoors. Some four decades later it was rebuilt for an exhibition at the Los Angeles Museum of Contemporary Art—and recently, his office designed a line of prefabricated Modern houses, The Rapson Greenbelt, based on one of his original 1941 designs.

Rapson joined the faculty of the Massachusetts Institute of Technology, and by 1951 was recruited to design the first modern American embassies in Europe, including those in Stockholm and Copenhagen. He came to Minnesota



in 1954 to begin what was to be a three-decade term as dean of the University of Minnesota School of Architecture. Although his academic duties meant less time for running a practice, Ralph Rapson and Associates-staffed by his son Toby and recently his grandson Lane—remained productive. His work was recognized with many honors, including five national awards from the American Institute of Architects and the ACSA/AIA Topaz Medal for Educational

Excellence, in 1987. He was the first Minnesota Gold Medalist, in 1979.

By far, Rapson's best-known work was the Guthrie Theater, in Minneapolis, designed for Sir Tyrone Guthrie, a brilliant but demanding client. The rectilinear building contained a unique thrust stage that jutted into its auditorium. Guthrie opposed Rapson's desire to surround the stage with seating in a zig-zag pattern. He also objected to the exterior, which was clad by a Mondrian-like patterned screen made of plywood, intended to frame attendees inside a glass-walled lobby. But Rapson prevailed, and his building, opened in 1963, was praised as one of the most innovative theaters of the postwar era. Today, a similar thrust stage exists at the new Guthrie Theater, designed by Jean Nouvel—an homage to the original building, which was demolished after Nouvel's work opened in 2006.

Throughout his married life, Rapson, sketchbook under his arm, and his late wife, Mary, often traveled abroad to see landmark buildings. Many delightful watercolors resulted, which his friends and legions of admirers have collected. He was a warm-hearted family man, customarily sporting a bow tie, evergracious to students and faculty alike. In addition to his son Toby, Rapson is survived by his elder son, Rip, who is president of the Kresge Foundation, and six grandchildren. Bette Hammel

Nader Khalili, noted Earth Architect, dies



Sandy shelters (above right) by Khalili (above left).

Nader Khalili, an architect and teacher known for his innovative work with adobe, died on March 5 of congestive heart failure. He was 72 years old. Among his best-known inventions is the "super adobe" Earthbag construction system, which he developed in the early 1980s in response to a call for designs for human settlements on the Moon and Mars by the National Aeronautics and Space Administration. The sys-

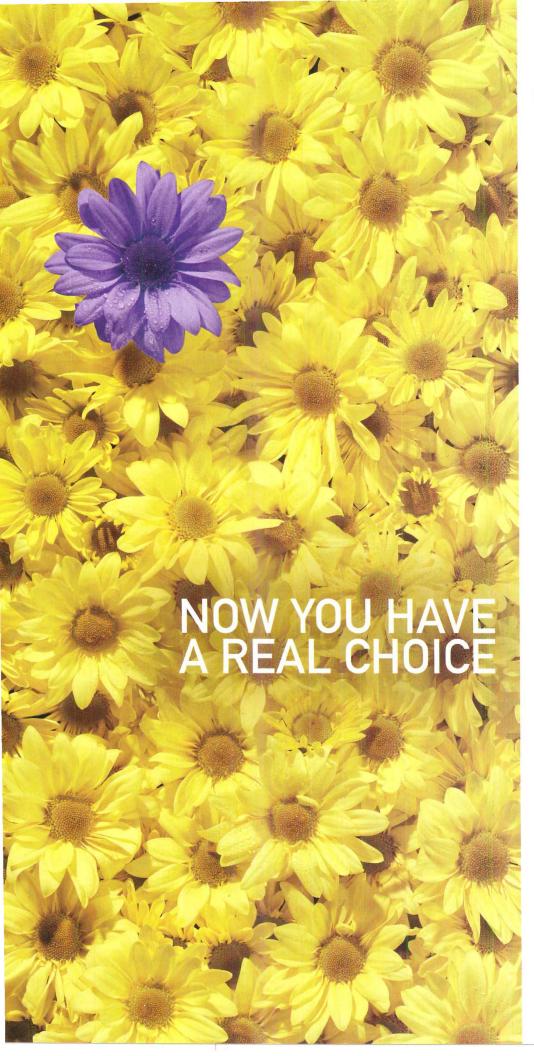
tem consists of oblong plastic bags that are filled with dirt and then laid in circular courses, like the blocks of an igloo, and held in place by barbed wire. When covered in stucco, the bags create a permanent shelter.

Khalili championed Earthbag

houses-which cost as little as \$500—as an affordable solution for poverty stricken areas in Africa. India, and South America. He received special recognition from the United Nations in 1987, and his prototypes were recognized with the Aga Khan Award for Architecture in 2004. Khalili also invented the Geltaftan Earth-and-Fire system: a fired-adobe structure, dubbed the "ceramic house," that could resist strong winds and earthquakes.

Born in Iran, Khalili studied Persian literature and poetry at the University of Teheran, and later engineering and architecture at the Istanbul Technical University. He

came to the U.S. in the early 1960s, but became disenchanted with designing high-rise apartments and parking, so he returned to Iran to study rural village homes that were closer to nature. His involvement with Earth Architecture and Third World development led him. in 1991, to found the Cal-Earth Institute, near Hesperia, California, which teaches students how to construct low-cost, dome-shaped houses. He also taught at the Southern California Institute of Architecture. Khalili is survived by his wife, Iliona; son, Dastan; daughter, Sheefteh; eight brothers and sisters; and extended family. Tony Illia





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CIRCLE 43



The downtown of Mesa del Sol, a 25-square-mile development in Albuquerque, will feature a cultural, office, and retail core whose design is unlike most others at the heart of similar master-planned communities. Designed by Antoine Predock, FAIA, with Jon Anderson as executive architect, the 78,000square-foot, steel-and-stucco Town Center building



In deciding how to repair the skin of the Louisiana Superdome, in New Orleans, a design team faced several challenges. Locals love the bronze hue of aluminum panels that clad the arena's curvy walls, but Hurricane Katrina blew off some of those panels. For Trey Trahan, principal of Trahan Architects, the problem became one of reverse engineering. Working with Billes Architecture and Sizeler, Thompson, Brown Architects, he sought a panel thick enough to withstand future storm damage and that could also bear patina like that of the old, ultra-thin panels that the original architects, Curtis and Davis, specified during construction in the 1970s. A bigger dilemma: The hurricane blew off 15 to 20 percent of the panels, in random places, which had been held together by rivets. "If you take off one panel, you have to take off everything above will be clad in a silicon-glass curtain wall whose ceramic frit-which doubles as a film screenwas inspired by the cellular structure of bone. Video clips as well as aerial images of the town will be projected onto a 60-foot-tall-by-280-footwide double-walled screen that arcs in a 360-foot radius. (Fittingly, one of the building's tenants is an experimental-film and digital-media teaching studio.) The curtain wall mitigates solar gain through a combination of low-E coatings, interior solar shades, and a customized silkscreen ceramic-frit pattern derived from a bone's internal lattice structure. Aiming for LEED Silver certification, the \$11 million building also features photovoltaic cells incorporated into a glass trellis at a restaurant terrace, and rainwater harvesting. It is set to open in October. Tony Illia



it, too," Trahan says, creating a patchy look. After lots of testing, he found an aluminum panel and a chemical bath to give it the correct patina—that provides a whole new skin for only \$200 million. Panels will affix to the surface without rivets, allowing repairs. Construction will begin in 2009. Alec Appelbaum



If architecture is didactic, and Frank Harmon, FAIA, thinks it is, then his design for the American Institute of Architects North Carolina headquarters in downtown Raleigh is a master course in what the architect calls "earthy Modernism." The 12,000-square-foot, \$4.5 million project is intended to meet LEED Platinum standards, a "teaching tool," says David Crawford, the chapter's executive vice president, for the AIA's goal of carbon-neutrality by 2030. A cantilevered metal roof will provide shade for a public gathering space beneath, while a berm of stone and earth will surround the southwest corner. In addition to using photovoltaic cells, a rooftop garden, and geothermal wells, Harmon employed techniques that farmers have long used when building their homes; a garden of deciduous trees, for instance, shields the linear building's windward side. Harmon, whose work often acknowledges buildings designed by nonarchitects, says that his studio practices a kind of "critical regionalism that is a form of resistance to 20th-century capitalism. It is a return to the basic roots of the place." Sebastian Howard







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News Briefs architectural record.com/news/

Tishman Speyer won the rights, on

March 26, to develop Manhattan's Hudson Rail Yards with a scheme designed by Murphy/Jahn and Peter Walker. Now owned by New York's Metropolitan Transportation Authority, the 26-acre site stretches from 30th to 33rd Streets, between 10th and 12th Avenues. Tishman outbid three competitors with an offer of \$1 billion. Its master plan features 10 million square feet of office space, 3,000 residential units, 550,000 square feet of retail space, a 200,000-square-foot cultural venue, a public school, and 13 acres of open space; at its core are four massive tow-

The American Academy of Arts and Letters will award its Gold Medal for
Architecture to Richard Meier on May 21, in New
York City. The honor recognizes an entire body of
work. The Academy is also bestowing its Awards
in Architecture to Neil Denari and Jim Jennings, for

The Solomon R. Guggenheim
Foundation is cashing in its chips on a
Rem Koolhaas—designed museum branch that
it had operated in Las Vegas since 2001—but it
is placing a new bet on an outpost in Vilnius,
Lithuania, designed by Zaha Hadid. The 7,660square-foot Vegas venue, adjacent to The



Frank Gehry's summer pavilion for the Serpentine Gallery in London marks his first project in that city and the first time he has

collaborated with his son Samuel. The Serpentine's brief requests a fully accessible, weatherproof space to accommodate as many as 250,000 visitors from June to August. Gehry responded

with a highly articulated timber structure whose interior will be sheltered by glass panels hung at swooping angles, prompting one newspaper critic

The New York Public Library has narrowed its choice of architects to six, from a field of a dozen, for the \$300 million renovation of its main branch at Fifth Avenue and 42nd Street in Manhattan, according to Paul LeClerc, its president and chief executive. The



ers that taper as they rise, surrounding a circular plaza. But the plan has drawn sharp criticism, and its details could change. *Tim McKeough*

work "characterized by a strong personal direction," and to James Carpenter and Kenneth Frampton, who "explore ideas in architecture through any medium." Peter Zumthor will receive the Arnold W. Brunner Memorial Prize in Architecture, which is open to all nationalities. *James Murdock*

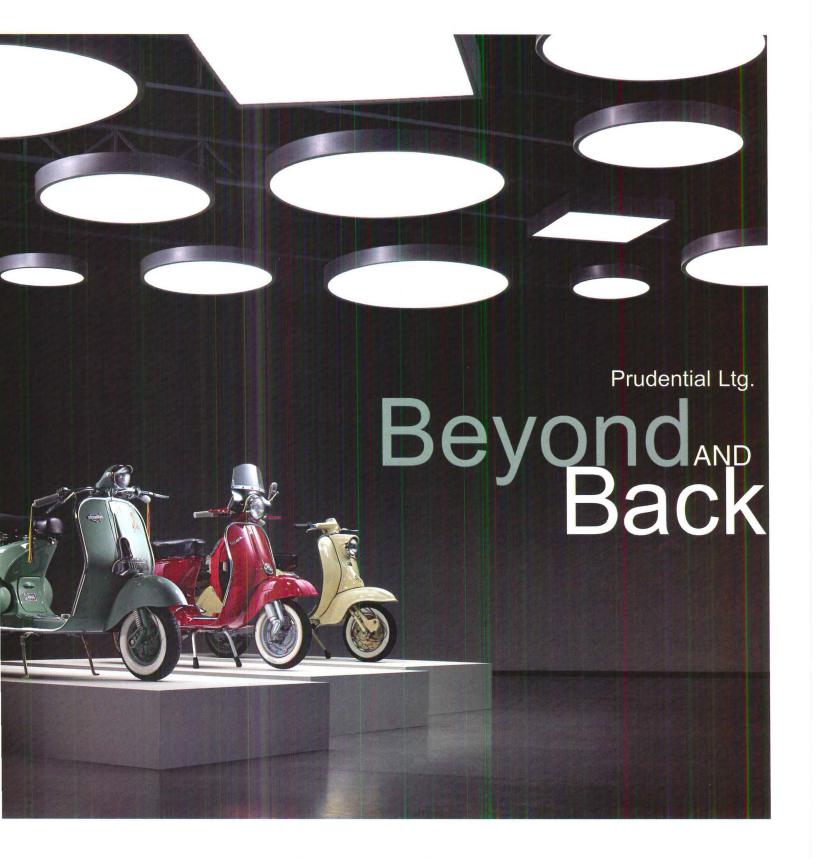
Venetian Resort Hotel on the Strip, closes on May 13. Operated in partnership with Russia's State Hermitage Museum, it had struggled to attract visitors. The Guggenheim hopes that its Vilnius venture, on which it is also partnering with the Hermitage, will be better received—but it is first awaiting the results of a feasibility study. As part of a competition launched with the study, Hadid's design (left) beat out entries from Daniel Libeskind and Massimiliano Fuksas. Her concept calls for a curvy concrete shell, sheathed in aluminum panels, containing 139,932 square feet. The feasibility study is expected to finish by mid-June. *Tony Illia*

to liken it to an "exploded timber yard." Gehry has said that he regards his pavilion "much like an amphitheater." Visitors will be able to sit on interior

terraces and elevated exterior seating pods. These pods will also provide space for performance stages and dining. Arup reviewed the design, materials, and structure. Now in its ninth year, the Serpentine program

is open to practitioners who have not yet built in England. Gehry's Maggie Center, opened in 2003, is located in Dundee, Scotland. *Lucy Bullivant*

library is including a circulating collection at the branch for the first time in three decades. It will revamp some 260,000 cubic feet of space stretching over seven interior levels at the rear of the landmarked building. LeClerc says that a finalist will be announced by July. *C.J. Hughes*

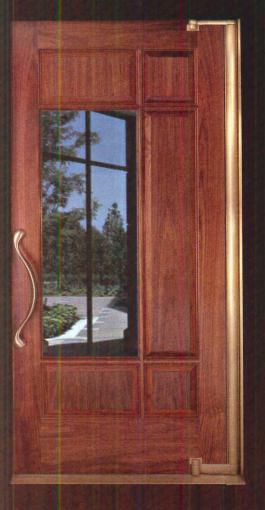


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CIRCLE 48

News Briefs architecturalrecord.com/news/

It's 1956 again in Palm Springs, California:

Developers Michael and Bob Friedman of Maxx Livingstone are reprising the residential designs of William Krisel. During the 1950s, the architect and his former partner, Dan Palmer, worked with



Alexander Construction to build 2,500 post-and-beam tract houses. That collaboration doubled the city's size and produced weekend-getaway residences, dubbed "Alexander homes," that helped define its Modernist identity. The Friedman brothers fell in love with them on a 2005 vacation. Their new butterfly-roofed houses, which average 1,625 square feet, appear largely unchanged from the original version, although Krisel, now 83, has made some modifications. Four homes are completed or under way and the developers are also launching a prefabricated version in May. *David Sokol*

James Corner's firm, Field Operations, won the competition to design one of America's largest urban parks: a 4,500-acre site in Memphis, five times the size of Manhattan's Central Park. Announced on April 9, Field Ops beat Hargreaves Associates, Tom Leader Studio, and other entrants in a six-month contest to master plan Shelby Farms, a patchwork of open space that had been a state-run prison farm during the mid-20th century and has since remained unprogrammed. "Imagine a Central Park that

Bang Dang, of Cunningham Architects in Dallas, won a competition to design an artists' colony near the site of a failed 19th-century utopian community in Dallas. Sponsored by a fledgling arts organization called La Reunion TX—named after the original community founded by French socialists in 1855—the contest drew 68 entries from 17 countries to design a complex of studios, apartments, classrooms, and performance space on 35 acres donated by a Dallas couple. Dang's scheme con-

people use for fox hunting; what's difficult to convey is the sheer size," Corner says. His scheme includes an open bison range, an arboretum, a 4-mile perimeter lake, and gardens. It absorbs the site's agricultural history and the philosophy of the Agricenter, a public-private partnership that currently occupies part of the land and offers sustainable farming. A conservancy established to manage the park hopes to begin construction by 2009, with an initial outlay of \$100 million, and complete the project by 2023. Alec Appelbaum

sists of a multipurpose building that incorporates the remains of a concrete train trestle, and a series of spare studios and studio apartments set delicately into the landscape, with only their piers touching the ground. La Reunion TX is committed to incorporating the best ideas from Dang's design, and from four other finalists, into a plan that it can build for roughly \$10 million. David Dillon

Polshek Partnership's

Newseum, the world's largest museum dedicated to journalism, opened on April 11 in Washington, D.C. The institution now occupies 250,000 square feet,

three times more room than at its old home in Arlington, Virginia. Located near the National Mall, the new building fronts Pennsylvania Avenue with a glass facade intended to sym-



bolize the openness of the press and democracy. Visitors enter next to a 74-foot-tall, 50-ton panel of Tennessee marble engraved with the words of the First Amendment. Inside, a winding, 1.5-mile path leads to 14

galleries—containing 6,200 artifacts—and 15 theaters. The \$450 million, 643,000-square-foot building also includes the Freedom Forum's offices and 136 apartments. *Barbara J. Saffir*

ENDNOTES

- The Home Depot Foundation is donating \$30 million over five years to Habitat for Humanity International for the inclusion of energy-efficient and sustainable resources in its housing.
- Louis I. Kahn's 1961 Esherick House, in Philadelphia, will be auctioned by Richard Wright on May 18.
- The Cooper Union, in New York City, now offers a post-professional Master of Architecture II program.
- The University of Southern California School of Architecture will begin offering a Ph.D. program this fall.



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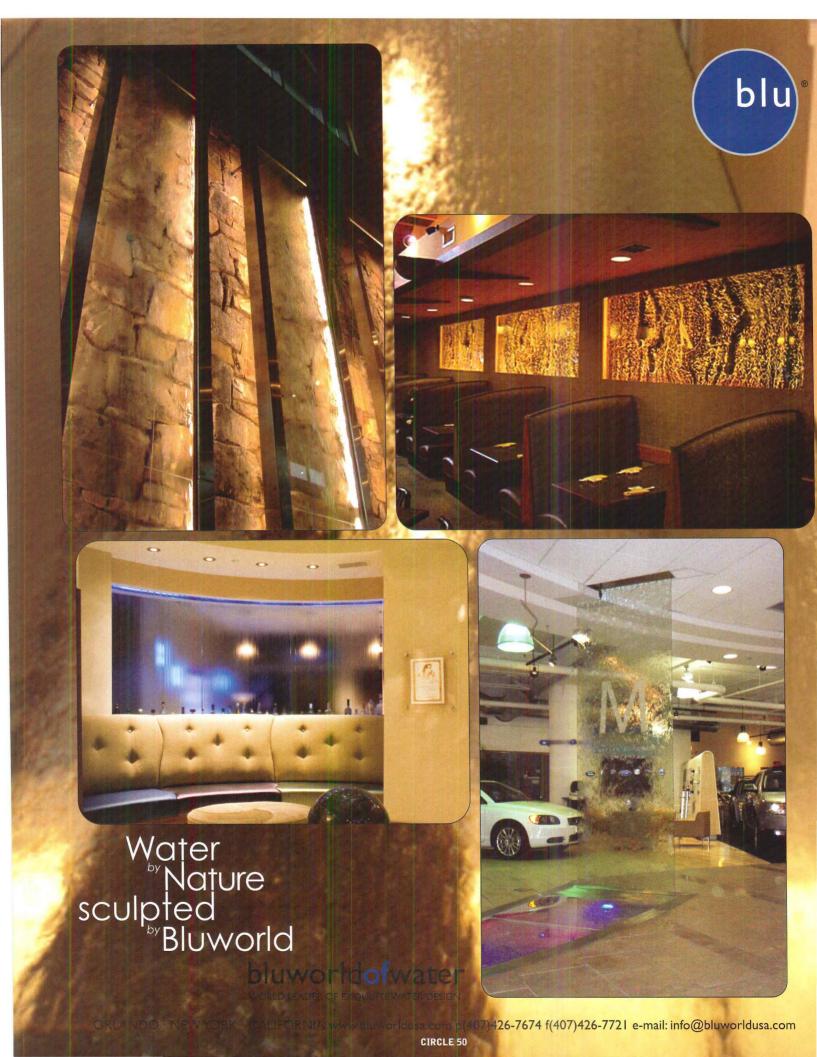
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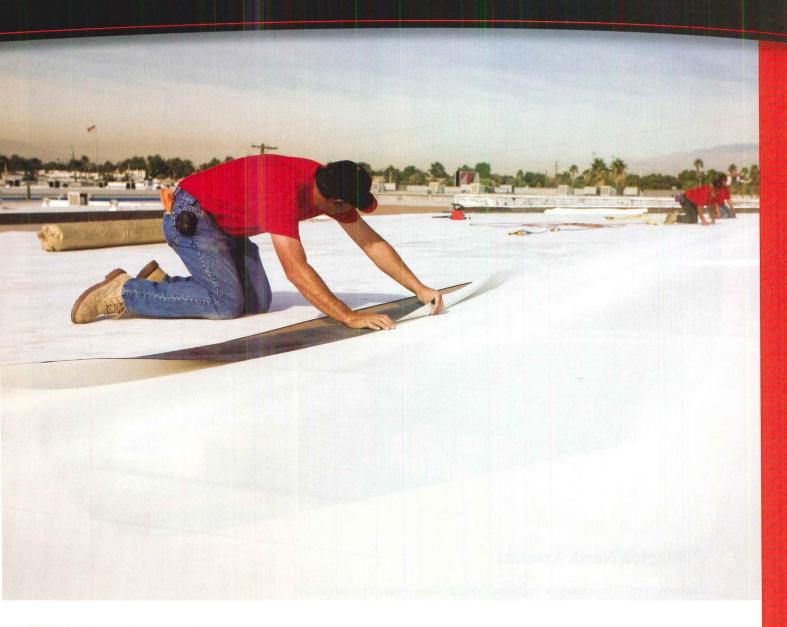


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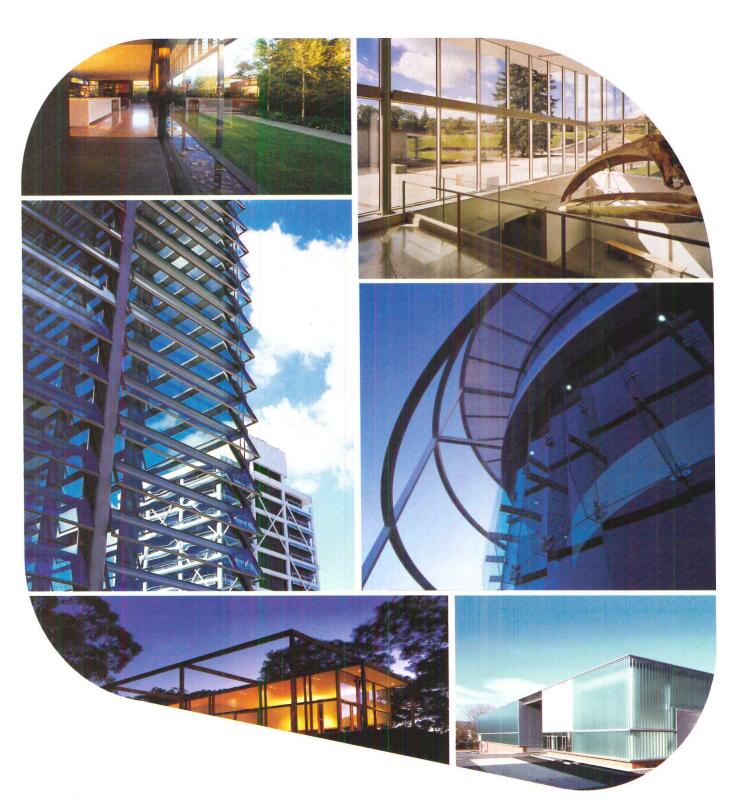
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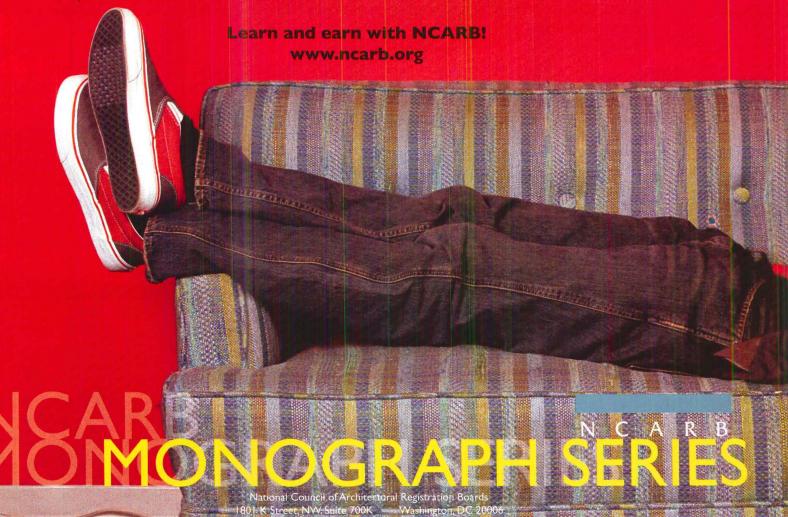
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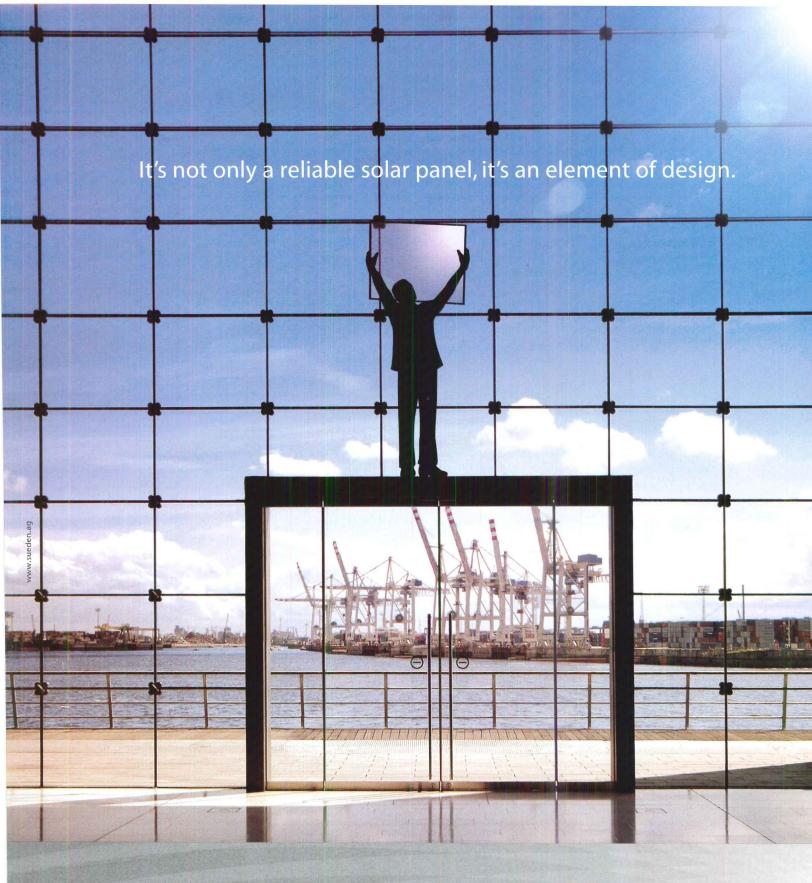
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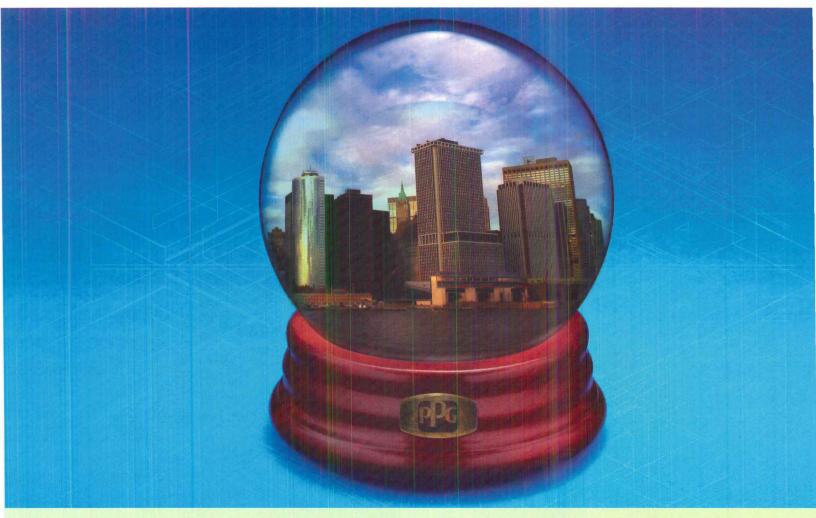
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For and about the emerging architect

archrecord2

Why are we back in New York City and Los Angeles this month? Because the number of talented young architects in those two cities is astounding, and you should know about them. archrecord2 found Grzywinski Pons changing the face of New York with a number of hotels and residences. And in L.A., F-Lab builds a table for SCI-Arc that proves the digital age isn't just smoke and mirrors.

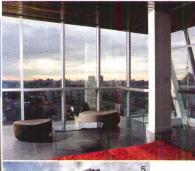
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Design

Grzywinski Pons Architects takes Manhattan

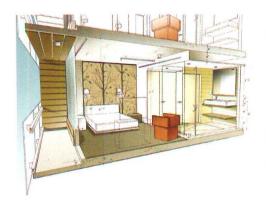
Grzywinski Pons Architects is a name that the New York City Department of Buildings is hearing more often these days. The young architects—31 and 32 years old, respectively-met 13 years ago, when Matthew Grzywinski was at the Rhode Island School of Design and Amador Pons was at Syracuse University. They began working together in 2002, when they teamed up to pitch and win the design for a program change of the Hotel on Rivington on the Lower East Side of Manhattan. Since the hotel was completed in 2005, the two have been working regularly on gut renovations of older buildings for residential and commercial spaces and have recently taken on more ground-up work. They are currently working on a handful of buildings in the city, including three new hotels, six new multifamily condos buildings, and a seven-story town house in Manhattan.

Challenged with the constraints of working in New York City, including laying the foundations for a hotel just 29 inches above a subway line, the two have defined their design approach based on their location. "Having real-world limitations forces us to be creative," says Grzywinski.

Grzywinski and Pons position themselves not by promoting the use of a material or a particular architectural approach, but rather by trying to work within such limitations. Ground-floor residential space is usually less valuable in New York, whether it's a rental property or a condominium. Inspired by keeping condo values up, the two have worked to take the ground floor and address the street with more recreational space, by lifting buildings up to a second level. This technique was used for a condo building in the borough of Brooklyn and one in the Manhattan neighborhood of Harlem. "We take the zoning of the building and we fill it from the top down," says Grzywinski.

While the two have been developing their design approach based on context and do not identify with any particular materials, they have a progressive approach to the elements that make up the building. "We are not apologetic about the fact that our buildings are of the 21st century, so we use materials that are appropriate from an environmental standpoint and within the context of the neighborhood," Grzywinski says. "A lot of times, the materials themselves are pretty timeless—like zinc and terra-cotta—but it's in a system that's really modern and efficient." One example is their use of NBK, a terra-cotta rain-screen system, as a waterproofing material and for aesthetic effect on an unnamed

(1) Amador Pons and Matthew Grzywinski. (2) Norfolk Street, New York City, 2008, is a multifamily, 24-unit building with a preglazed curtain-wall facade that serves as the envelope for living spaces. (3) East 115th St., New York City, 2008, an apartment building with 31 units, is a single building in two parts connected by a multistory enclosed bridge. (4,5) Hotel on Rivington, a 111-room hotel, is a hybrid of new construction and renovation.



Elizabeth Street Hotel, New York City, 2008

This 61-room hotel will be one of the first LEED-certified hotels in New York City. The envelope consists of channel glass. Terraced, terracotta shingles serve as a rain screen.

For additional photos and projects by Grzywinski Pons Architects, go to architecturalrecord.com/archrecord2/.

Work

SCI-Arc's CHUB table



It's not often, if ever, that a boardroom table causes a sensation. But recently, architects Ramiro Diaz-Granados and Heather Flood created one of the most original pieces of furniture for the board of directors of the Southern California Institute of Architecture (SCI-Arc). Their table, called CHUB, which stands for cen-

tral hub, was created after the two SCI-Arc teachers won a faculty competition. They enlisted the help of several SCI-Arc students, who worked at the school's downtown location over the course of a summer and fall seminar.

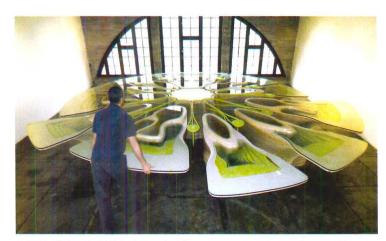
Diaz-Granados and Flood, former SCI-Arc students themselves, say their students have endless descriptions for the unusual, lime-green, glasstopped table, which is located at the back of the SCI-Arc library. They have said it resembles a grapefruit, a flower, a pomegranate, a jellyfish, a vagina, a collection of toilets, bottle openers, even an elephant. But the driving force behind the design, say the architects, was the desire to foster egalitarianism between the board and the rest of the school. "We weren't studying any particular form," says Diaz-Granados. "We were more interested in organization. This table is meant to be used by everyone. The school isn't there for the board. The board is there for the school."

Another important purpose, explains SCI-Arc director Eric Owen Moss, who commissioned the project, was to encourage the school's digitally minded students to build, rather than just imagine, designs. "We wanted to make this world more plausible," says Moss. "We've always said that the teachers at SCI-Arc were busy building, so we wanted to show what the faculty was advocating. That it wasn't just hot air." Diaz-Granados adds, "The ability to generate seductive, powerful images is getting increasingly easy these days, but it only serves as a surrogate for rigorous architectural production."

The 19-foot-diameter project, which can accommodate 25 people, is round, ensuring that there is no "head" of the table. It can be broken down into 11 smaller wheeled tables of three sizes (the humorous architects call the small tables chubbies, the medium-size tables chubbers, and the largest piece, Chubba the Hut) that can be rolled away and used for meetings, presentations, classes, studying, and even as food trays at exhibitions and events. The individual wedges have curving side profiles, reminiscent of a wind-eroded landscapes and intended to make each piece stand out on its own. To create the table, Diaz-Granados, Flood, and their student assistants imagined hundreds of possibilities on Maya and Rhino and fed the final information onto Surf Cam for direct CNC milling.

hotel project on Manhattan's Lower East Side that the firm is currently working on. "It's not a cheap veneer that will weather poorly," Grzywinski adds. "We choose materials both from an aesthetic and performance perspective and a consideration for how it's going to look and how it's going to feel from the street and from the property itself."

Despite their growing roster of projects, the two are currently the only full-time employees of the firm. "We like to maintain a real connection to the project so that when we talk to any of our clients we know exactly what is going on," Grzywinski says. Keeping the firm small and busy means they now have the luxury of being choosy with clients. "Sometimes there are people who don't have the same priorities that we have, and it is best for everyone that we don't take those jobs." Picking and choosing notwithstanding, in the future the team hopes to take their work beyond New York's five boroughs. "We are getting excited about doing jobs abroad or across the States," Grzywinski says. Dianna Dilworth



F-Lab's CHUB for SCI-Arc's board of directors is more than a lovely table. It's a way for the school to foster egalitarianism, and to practice what it preaches—that a digitally oriented education can yield well-designed, functional objects and structures.



Each piece of the table is made of a staggered stack of plywood planks, held together with puzzle-piece joints. The top of each wood plank is stained lime green while its sides keep the natural hue of the wood, creating a rhythmic combination of colors. The pieces' hollow interiors can be seen via their clear and slightly green-tinted glass tops,

revealing the curved, offset, stepped-wood inside. The tops closer to the table center are slightly raised to facilitate display; the others are lower for comfortable sitting. The table's core contains its "brain," a central computer that can be accessed for presentations via several of the table pieces (two large monitors will soon be installed behind the table). PVC conduit and aluminum outlets project from the core to hold the pieces in place and provide power.

SCI-Arc is commissioning other faculty projects to encourage students to "explore the potential of making in the digital age," as Flood puts it. These include a new café by Marcelo Spina (that project is about a third finished), and a new metallic shelf system by Dwayne Oyler and Jenny Wu [RECORD, October 2007, page 63], which is almost complete.

Since working on the table, the architects started their own firm, F-Lab (they're still trying to figure out what the F stands for). Meanwhile, they're hoping that someone else will want their own, alienlike table in the future. Sam Lubell

For more photos of the CHUB table, go to architecturalrecord.com/archrecord2/.

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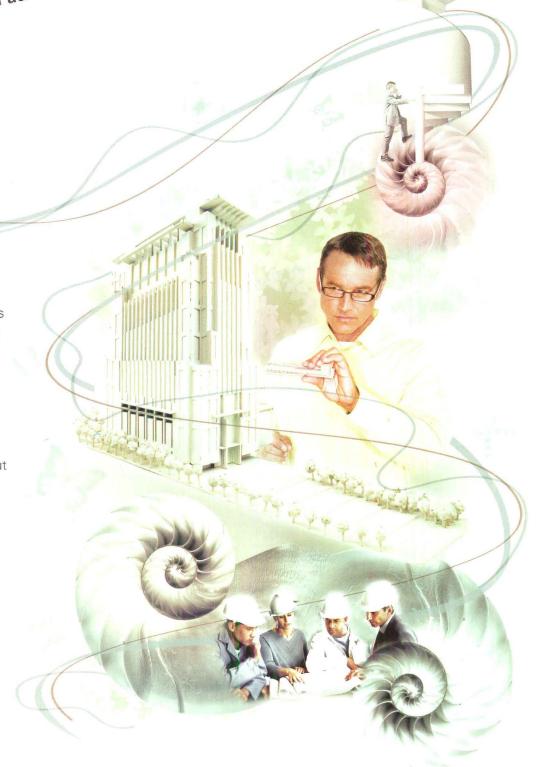
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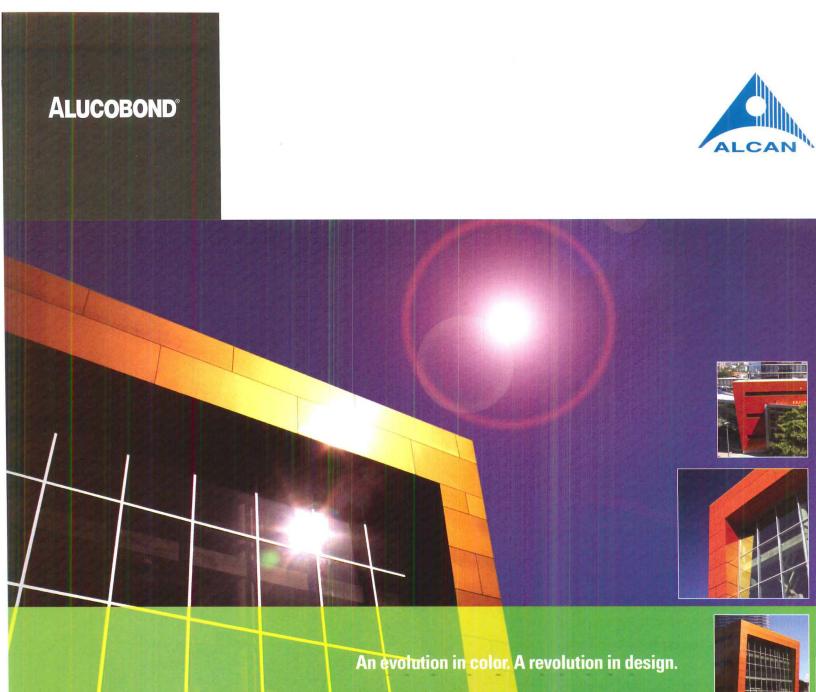
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Strolling through Tokyo's hothouse of architectural wonders

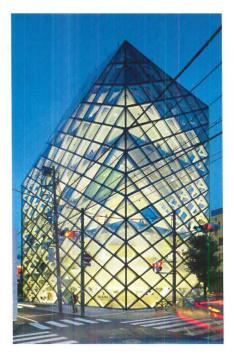
Critique

By Michael Sorkin

The cherry blossoms were at their peak on a Thursday in late March when I went for a stroll in Ueno Park in Tokyo. A nimbus of white glowing pink with dramatic dark branches etched through it floated above the crowds strolling, photographing, and picnicking on blue tarps spread beneath the trees. What could be more Japanese than such civic reverence for this shortlived phenomenon in all its tender aesthetic frailty? Of course, everyone's behavior was exemplary, not a scrap of litter and no one disrespecting the pedestrian flow.

Tokyo is a shrine to convulsive order, at once chaotic and fastidious. The density of graphic information, of building, of infrastructure, of people, of circumstances is like nowhere else on earth. It is a city constantly reconfigured by juxtaposition and remarkable in its tolerance of diversity in scale. (How does the market allow this, I wonder?) All over the city, small structures jostle with midsize and large ones in a counterpoise of energy and repose. It's an enduringly fabulous place and the mingling of tradition, originality, and money has made it a center for design. This sensibility extends from the postwar generation of Japanese Modernists to the current day, and no country has produced a more refined and innovative cohort of practitioners or an environment more hospitable to contributions from abroad, a place at once insular and open.

Contributing editor Michael Sorkin is the director of the urban design program at City College of New York.





Herzog & de Meuron's Prada store (left) and Toyo Ito's Tod's building (above) emerge from a dense and chaotic urban context.

For the architectural tourist, the epicenter of attraction these days is a street called Omotesando and the neighborhood around it. The street itself is unusual for Tokyo: Broad and bowered by elegant zelkova trees, it slopes at a mild but palpable incline, enlivening section and experience. Sidewalks are wide and conducive to promenading and offer an opportune arena for a parade of youth-culture fashionability. After the heterogeneous crowd at Ueno, the more homogeneousif totally fashion-forward—scene on Omotesando is striking. Surely, Japanese kids are as meticulously put together as any on the planet, and the style of the day is exquisite, at once recombinant and singular. The kids on the street in their raffish, sexy, distressed, vaguely aggressive

but ultimately conformist getup challenge the salary-man uniformity of black suits that sets the adult-world tone while reproducing its assumptions. In both cases, precision matters, as it always has with Japanese culture and architecture.

A seething rhapsody

Kids have red hair blown big, lowriding jeans, and zooty watch
chains, a uniform slouch of nonchalance and languid gait, tiny skirts
and short shorts (pockets dangling
out below the hem) with knee-high
stockings, endless variations on the
tarty school-girl look, four and five
layers of clothing in a range of overlapping lengths, filmy, gauzy skirts
topped by thick leather jackets worn
with tough boots, studs galore (if not
so many visible tattoos), shades and

specs perched on the head—a seething rhapsody of uniform insubordination. Omotesando is a spot to preen, to study, to practice style solidarity, and to shop.

The famous-architect-designed buildings that line Omotesando are almost all name-brand, upmarket shops and the street is both a collection of the architecture of boutiques and a boutique for architecture. Here the brands gather: Prada, Vuitton, Tod's, Dior, Chanel, Bulgari, Dolce, MoMA, Lauren, Vuitton, Fendi, Celine, Fcuk (not to mention McDonald's, Starbucks, and Sharkey's Pizza). And here, too, the leading brands of contemporary architecture: Ando, Ito, Sejima, Kurokawa, Aoki, Maki, Herzog & de Meuron, Kuma, and Tange. The corroborating symmetries between the

Critique



Jun Aoki's Louis Vuitton store draws architecture junkies to the Omotesando area.

goods and their packaging are dense and speak volumes about the contemporary deployment of style—its utility as advertisement and value enhancer, and its assertive enforcement of the permanent elision of culture and consumption. On Omotesando, the loop between architecture, shopping, and the subjects who buy into it is hermetic and complete.

I found the place at once a cause for celebration and for depression, as well as a good spot to reflect on the way in which architecture accretes its meanings. Here are buildings that reflect the profession at its best, most inventive, and most artistic. The remarkable collection richly addresses so many issues that are native to all architecture: the play of light and shade, opacity and density, the expressive meaning of structure, the logic of geometry, the nature of materiality, the tectonics of gravity, the flow of space, the meaning of scale, the limits of meaningful adjacency, the intertwining of form and function. What fun! What inspiration! What detailing!

But as much as I was dazzled

by the assembly of talent, this orgy of superluxe selling soon started some synapse flashing the word Darfur in my brain with increasing and annoying frequency. Ah, the sanctimonious prig in me spoiling my pleasure once again. I grew mildly agitated between sips of cappuccino. What does all this superlativeness owe the rest of the earth, if anything? Nowadays we often dispatch our political responsibilities through the medium of environmental action, and this is surely most important. But these buildings seemed tenacious in taking not the slightest cognizance of green issues. Sealed up

in perfectly gasketed glass and slathered in the finest finishes, this gathering—in its own conformity of indifference—certified the amazingly AWOL behavior of our stars to architecture's social side and our own complicity in promoting this narrowed meaning of form. Somewhere, I blundered across a Patagonia store with its advertisement: "1 Percent For The Planet." That about sums it up.

Checking out the goodies

Okay. Enough of this self-righteous rant. What about the architecture? There is some marvelous work. Herzog & de Meuron's Prada is striking at the scale of the cityscape, jutting appealingly just above its roofline context. The diamond-gridded structural wall, with its mix of bubbled and flush glass panels, is a lovely thing, and the interior is luminous and dramatic. Circulation is suave, carpet is white, clerks are impeccable in gray. At Tod's down the row, Ito claims inspiration from the angularity of the branches of the trees out front and creates a facade of big, irregular

openings that play against the rectilinear form of the building. The interior is less successful, with too much action and too little resolution in the overbusy details. Part of the problem—which also occurs at Prada—is that exterior walls that depend on the play of nonorthogonal openings must resolve the crisis of intersection with floor slabs that are perforce horizontal. Herzog & de Meuron simply allow the slabs to butt against the building's skin, which doesn't look too bad. Ito fusses away on the interior, using surface details to try to resolve the meeting of the irregular openings with the right-angled floors and walls. This dissipates what I think would be the greater potential of a more direct approach.

The building that most impressed me was Ando's big Omotesando Hills complex, which combines a shopping mall on its lower floors with two levels of apartments on top. The facades—in a lovely green glass—are expressed rectilinearly but complexly and embody several rhythms in deft syncopation. The mall is particularly successful. Part of the reason is Ando's usual impeccable detailing. Another part of the reason (and this is true of the city as a whole) is that the shops themselves are small and establish a continuity of interest and through-the-wall interactivity that enlivens the whole. But the best move-brilliant, really-was creating circulation that's continuous, up a gently inclined ramp that rises along the long sides of the space. The incline derives from the slope of the street outside, so the first long run can be accessed from the sidewalk at both its high and low ends. The rest of the spiral continues, in effect, the rise of the street up through the building. This is both extremely urbane in and of itself, and also solves one of the big formal problems of shopping malls: the dull stacking of space with point circulation strapped on at key spots. It's a great section as well as an homage to Maki's well-known Spiral Building down the street.

I was also quite taken by

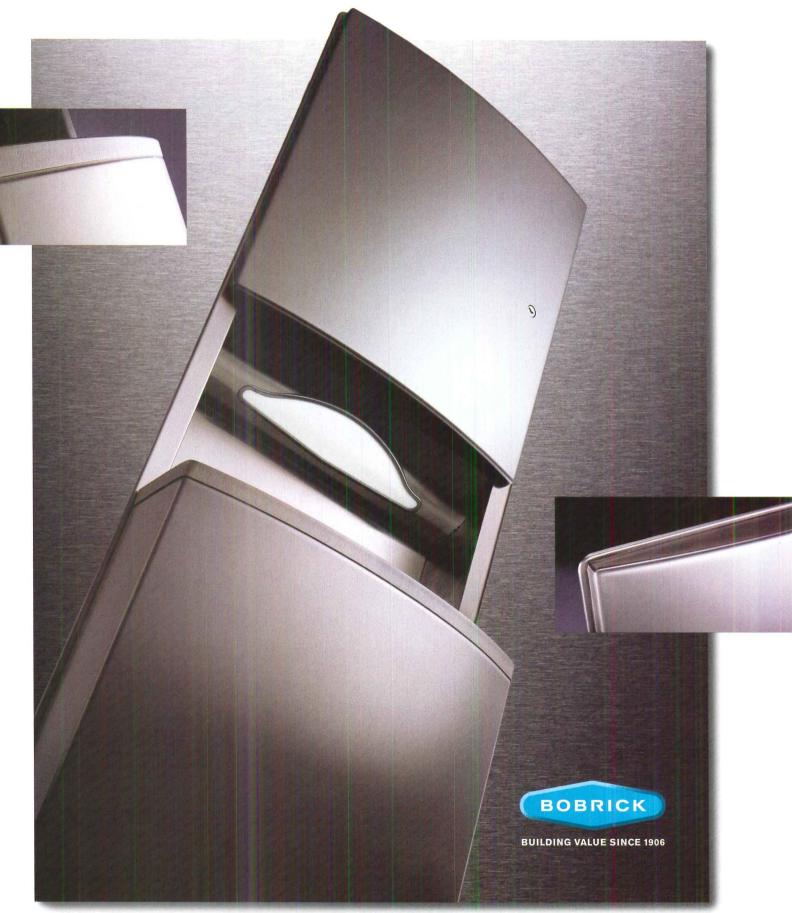
Kengo Kuma's One Omotesando building (which has a truly elegant projecting cantilever on its upper floor), by several other Ando buildings sprinkled throughout the neighborhood, and by Sejima and Nishizawa's straightforward but thoroughly crisp glass box for Dior. And, lurking not far away is what is, for my money, the finest Modern building in Tokyo, Kenzo Tange's sublime stadium for the 1964 Olympics. Here is architecture with chops, and spotting it down streets from the midst of boutique-land is a good reminder of the power of building when it goes beyond the endless buffing and fuss that comes from thinking of architecture as a species of jewelry.

Where more is more

When I was in school, we were often pompously taught that buildings were to be divided into "foreground" and "background" types and that the former always depended on the presence of the latter for their meaning. Omotesando—and Tokyo more generally—gives the lie to this particular piece of pat convention. Indeed, the street—which is lined not simply with one Modern gem after another but also more conventional kitsch and everyday mediocrity, from Ralph Lauren's usual dopey ersatz classical drag to the goofy green mansardic item next to Tod's—has no "background" at all. It works both because it is simply dense with interest and because the environment—charged up by both the wonderful street itself and the forgiving labyrinth of lanes that run off from it-is easy with variety, excess, and density.

So, can an architectural tourist of good conscience have a good time on Omotesando? Of course! I am not trying to argue that Prada must immediately be converted to an AIDS clinic or glassy Dior to permaculture greenhouses. I am simply raising a question: Why must fashion be the most fashionable thing we create?

ONLINE: What other streets can rival
Omotesando? Respond at architecturalrecord.com/community/critique.



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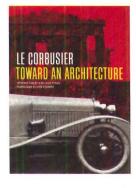
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Revisiting Le Corbusier without the thrill of the new

Books

Toward an Architecture,

by Le Corbusier. Translated by John Goodman, with an introduction by Jean-Louis Cohen. Los Angeles: Getty, 2008, 341 pages, \$25.



It is impossible to recapture the thrill with which this book was encountered by young architects in the years just after World War I.

One such architect was a youth from Spain, a student of architecture in a traditional school. He occasionally visited an aunt in Paris. On one visit in 1926, when he was 24, he found something new. More than 50 years later, he described the moment: "That time is when I first found the works of Le Corbusier. which I discovered in the little booksellers that still exist on a corner of the Rue Castiglione. And these little books that they had displayed in the window-I hadn't heard of him. I didn't know anything about the man, but I saw these books-Vers une Architecture, La Peinture Moderne, L'Art Decoratif d'Aujourd'hui, Urbanisme, etcetera, were all there. all displayed. So I bought them and brought them back to Barcelona, where we were a group of unhappy people in a sort of Beaux-Arts school. We all read them and discussed them ... Well, we found something there that intrigued us very much and influenced our lives and work."

The young architect was Josep Lluis Sert, who went on, eventually, to be president of CIAM, dean of the Graduate School of Design at Harvard, and a Gold Medal honoree of the AIA. He and his fellow students started a magazine and began exchanging it for magazines from Holland and Germany, from which they learned of the work of De Stijl and the Bauhaus. Something called Modern architecture was in the process of being born.

Let me quote one more of Sert's memories: "We had the feeling that after that big war that was supposed to end all wars, as was usually said—we did believe it was supposed to-it would be a period of change, of total change ... We thought we were going to rebuild the world."

You have to wonder how many times, in how many places, that scenario was played out. How many other kids were galvanized by the early writings of Corbu?

Vers une Architecture, first published in 1923, was the most influential treatise on architecture of the 20th century. But the republication, 83 years later, begs a sad question. In what distant future—if ever-will young architects again feel empowered to rebuild the world?

Today the book is no longer a trumpet blast to the armies of youth. It's now a historic document. And in this new edition, it gets the full academic treatment. The famous text and pictures are unchanged, but

they're now sandwiched between 177 pages of critical paraphernalia. What originally was a handy little volume you could shove in your pocket is now a weighty work of scholarship.

I should quickly add that the scholarship is, so far as I can judge, impeccable. The fascinating, 84page introduction by Jean-Louis Cohen, the noted architectural historian at N.Y.U., traces the growth of the book from its origins as a series of articles in the magazine L'Esprit Nouveau through the history of its revisions and influence.

Toward an Architecture is a very filmic book. It reads like a silent movie of the era, alternating blackand-white photographic images with a text that sprouts headlines like title blocks. And it speaks to the reader in a very personal voice, the voice of the character Le Corbusier willed himself into becoming, inventing a new name for publicity purposes like any media hopeful.

At times Cohen follows the text in much the way Roger Ebert explicates the film Citizen Kane on the DVD, moving frame by frame, page by page, giving us the inside dope, the story behind the story. He tells and shows us not only where Corbu found the images he reproduces, but how he doctored them-how he reversed one image left-to-right, or cropped another, or blacked out parts of a third to make it better support his argument.

It's often argued, as in the recent book From a Cause to a Style, by Nathan Glazer, that the Modern movement in architecture began as a program of social betterment and declined into a mere aesthetic. Toward an Architecture reminds us that aesthetics was always the heart of the movement, at least in Corbu's case.

He tips his hat to social issues, especially in the final chapter, "Architecture or Revolution." But even there he's more interested in showing us pictures of formal objects, few of which have any obvious social function. They include everything from an American battleship to a man's pipe. (It's part of the charm of the notes that they fill us in on exactly what kind of a pipe it is: "A briar pipe produced by the La Pipe cooperative firm, established at Saint-Claude ... ") He's obsessed with the work of engineers-cars, bridges, ships-and he knows exactly why: "In modern industry, the airplane is certainly one of the products of highest selection. The War was the insatiable client, never satisfied, always demanding better."

And there are precepts worth being reminded of. He writes, "Considering the impact of a work of architecture on its site, I will show that here again the outside is always an inside." He foresees that "family life would not adapt well to the astounding machinery of elevators." He writes: "When a type is created, we are at the portals of beauty (the automobile, the liner, the railway car, the airplane)." Or this: "The sound economic management of building sites requires the exclusive use of straight lines, the straight line is the grand acquisition of modern architecture."

Or this one, which summarizes the whole book: "Contour modulation leaves the practical man, the bold

Books

man, the ingenious man behind; it calls for the plastic artist." In a preface, the translator, John Goodman, explains why he translates key terms like "contour modulation" the way he does. By so doing, he casts light on the subtleties of Corbu's argument. His translation is often very different from previous English editions.

From my own student days, I remembered *Vers une Architecture* as an irritatingly hortatory work, always shouting at you to do this or do that or scolding you for being sentimental or antiquated. A rereading in later life reveals a richer and subtler work. Maybe it's the translation. *Robert Campbell*

Thinkers for Architects series, London: Routledge, 2007: Deleuze and Guattari for Architects, by Andrew Ballantyne, 136 pages, \$28; Heidegger for Architects, by Adam Sharr, 144 pages, \$28;



Irigaray for Architects,

by Peg Rawes, 128 pages, \$29.

There is a famous sentiment, variously attributed to Oliver Wendell Holmes, Jr., and to Mark Twain, touching on the deceptiveness of generalization. Readers of Routledge's new series *Thinkers for Architects* should bear it in mind, and the very astute and learned authors of this series on Gilles Deleuze, Félix Guattari, Martin Heidegger, and Luce Irigaray

understand it, whatever they may know of Twain and Holmes. Watching them try to reduce these giants of 20th-century thought, all of them staunchly resistant to simplification, into 100-page pamphlets is one of the most intriguing aspects of this valuable addition to any studio space or computer lab.

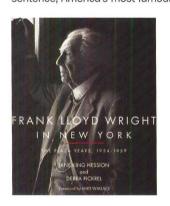
The most effective elucidation is Andrew Ballantyne's of Deleuze and Guattari. Ballantyne is an evangelist: He doesn't simply want to introduce his thinkers to architects, he wants them to change architects' lives. His enthusiasm helps him navigate the convolutions of the theories at hand, and is likely buoyed by the knowledge that Deleuze and Guattari are probably the most pertinent philosophers for architecture at the moment. Adam Sharr, the series editor, produces a workmanlike effort with his contribution on Heidegger—a product of enforced restraint, as Sharr had previously written a far longer book on the German phenomenologist. Peg

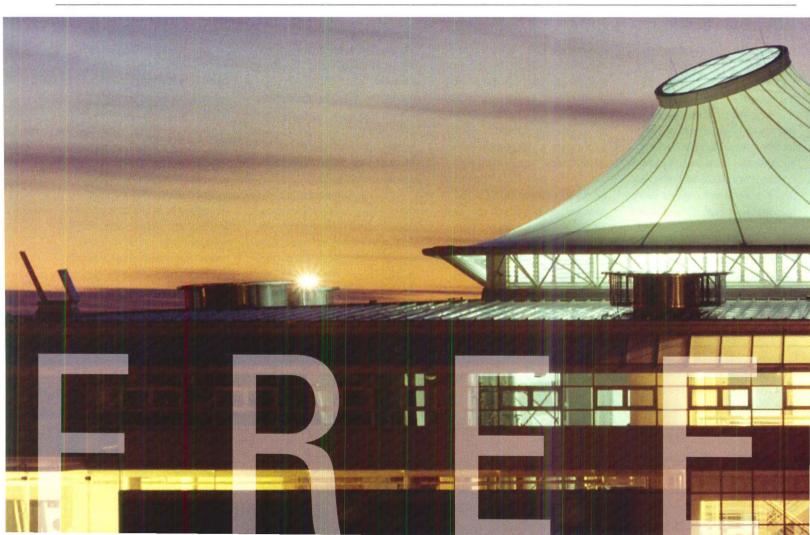
Rawes is dealt the hardest hand, since much of Irigaray's architectural import comes not directly from the feminist theorist herself but from her proxies in architecture. As with the other volumes, the result is not inaccuracy, but elision. *Ian Volner*

Frank Lloyd Wright in New York: The Plaza Years, 1954–1959,

by Jane King Hession and Debra Pickrel. Layton, Utah: Gibbs, Smith, 2007, 160 pages, \$30.

As the authors of *Frank Lloyd Wright* in *New York* remind us in their first sentence. America's most famous





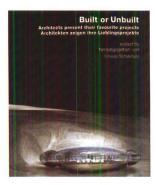
architect was no fan of the country's most famous metropolis. They note that he "professed to hate all cities, but none more than New York." Nevertheless, Wright spent five years off and on in New York overseeing what would become his most powerful monument, the Solomon R. Guggenheim Museum. Wright's base of operations was Henry Hardenbergh's 1907 Plaza Hotel. Hardenbergh's chateau aesthetic was hardly Wright's, but Wright evidently enjoyed the hotel's paneled excesses when renovating an apartment in it in his own style, and it provides the subtitle for the book, The Plaza Years.

While Wright lived at the Plaza, a hub of New York high society, whose attention he craved, he professed disdain for all things conventional and rejoiced in his image as a radical. Instead of probing such contradictions in the architect's complex personality, the authors, Jane King Hession and Debra Pickrel (both associated with the Frank Lloyd Wright Building

Conservancy), merely present a cheerfully packaged overview of familiar aspects of Wright's career. Tethering such a survey to the architect's Plaza renovation is a slim premise for a book, even one with only 159 pages, especially in light of the more creative treatment of the same subject by the late New York Times architecture critic Herbert Muschamp in his 1983 book Man About Town. Carter Wiseman

Built or Unbuilt: Architects Present Their Favourite Projects, edited by Ursula Schwitalla. Stuttgart: Axel Menges, 2007, 238 pages, \$98.

Since 1986, the University of Tübingen's Architecture Today program has invited nearly 100 architects to lecture on their work and offer critical analyses of contemporary urbanism and design. The program has attracted some of the "great stars," as well as lesser-known, younger thinkers to the small German city.

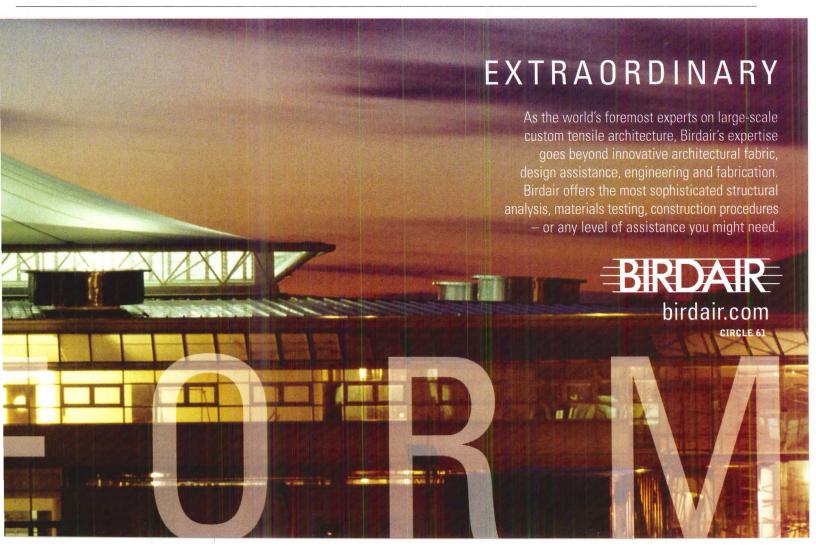


For the sumptuously illustrated, handsomely produced *Built* or *Unbuilt*, 55 of those speakers chose one favorite project from their own oeuvre. The result is a random overview of some very good buildings and exciting unrealized schemes, many by architects unfamiliar to Americans.

The Tübingen series featured a remarkable range of talent (including six Pritzker laureates), but the book is dominated by Germans, followed by Dutch, English, and American designers. Swiss, Japanese, and Mexicans appear, but curiously no Scandinavians. Peter Zumthor, Glenn Murcutt, and Peter Cook are among

the provocative speakers who did not contribute.

There are predictable choices in the alphabetical arrangement: Hadid's Phaeno Center in Wolfsburg, Germany, Libeskind's Jewish Museum in Berlin, Safdie's Holocaust History Museum in Jerusalem. Can such flashy corporate schemes as Ben van Berkel's Mercedes-Benz Museum or Wolf Prix's BMW Welt really be their designers' favorites? David Chipperfield is more revealing when he singles out a small house in a Spanish fishing village, and Thom Mayne laments his unbuilt biomorphic design for Rensselaer Polytechnic Institute. Stephan Braunfels's uncompromisingly Modern competition scheme for a "cloudhanger" perched over the Danube would have been one of the best new museums around. Among less-well-known architects, Milan Rak's attractive yet cheaply constructed row houses in the Czech Republic offer a welcome antidote to the egomania of starchitecture. William Morgan





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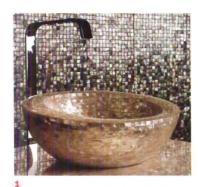
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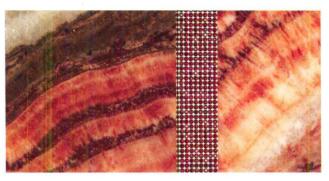
Trade Show Review Verona • Marmomacc

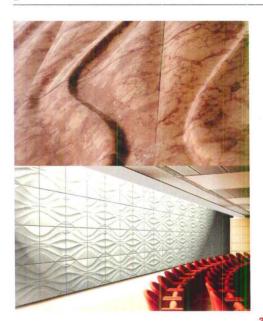
The ancient and the high-tech met last October at Marmomacc, the 42nd International Exhibition of Stone Design and Technology in Verona, Italy, featuring innovative material applications alongside classic stones, some quarried since antiquity. Sarah Amelar

- 1 Glints of crystal The Antolini
 Luigi Diamond Collection (far right)
 combines Swarovski crystal with such
 exotic stones as Cloud Onyx, Blue-green
 Labradorite, and Emerald Quartzite.
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 Verona, Italy. www.antolini.it CIRCLE 200
- 2 Making a splash Evoking the flow of water, Testi's Hyperwave offers natural stone carved with undulant patterns. Fabricated via CAD/CAM technologies, the customizable panels are suitable for a broad range of interior and exterior applications. There is even a Hyperwave Shower Collection. Testi Fratelli, Verona, Italy. www.testigroup.com CIRCLE 201
- **3 White on white** CaesarStone has developed a sandblasting method for applying detailed stenciling to its quartzengineered stone. The technique creates an extremely low-relief, tactile motif, playing polished against matte surfaces. CaesarStone Quartz Surfaces, Van Nuys, Calif. www.caesarstone.com CIRCLE 202
- **4 A touch of lace** Using a digital heat process and laser-waterjet cutting method, Santa Margherita is able to print and/or cut remarkably intricate patterns on slabs of quartz or quartz-resin composite—achieving a positive/negative effect. Santa Margherita S.p.A., Verona, Italy. www.santamargherita.net CIRCLE 203
- 5 Hard rock foil A mere 0.3-millimeters thick, Grein's natural-granite veneer can cover complex 3D surfaces. Granite Glass is a laminate of glass with stone so thin the material is luminously translucent. Grein Itallia, Verona, Italy. www.grein.com CIRCLE 204

For more information, circle item numbers on Reader Service Card or go to architecturalrecord.com/products/.

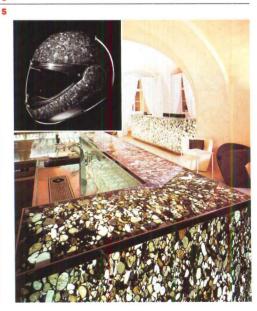




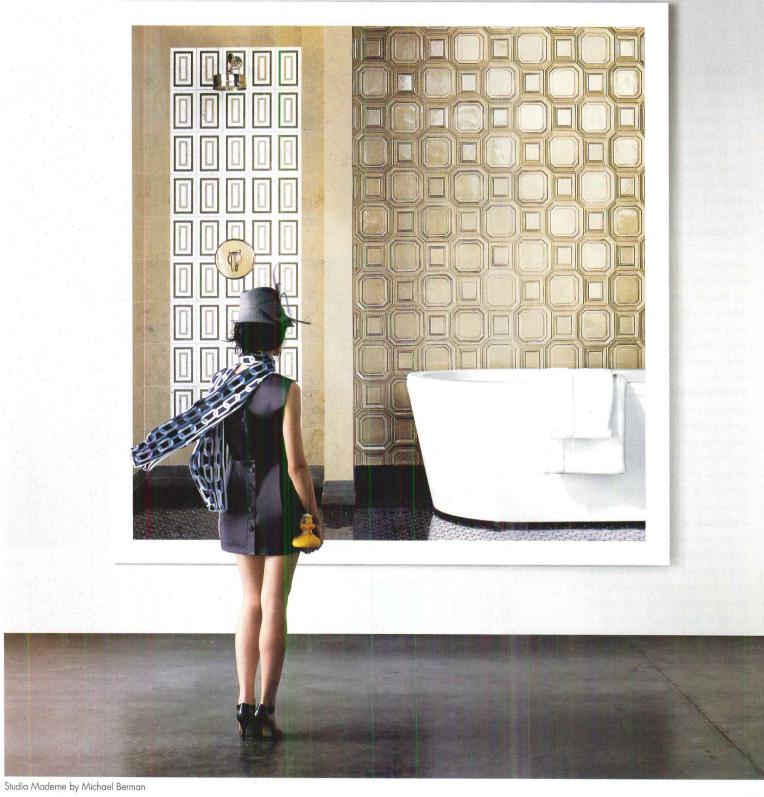




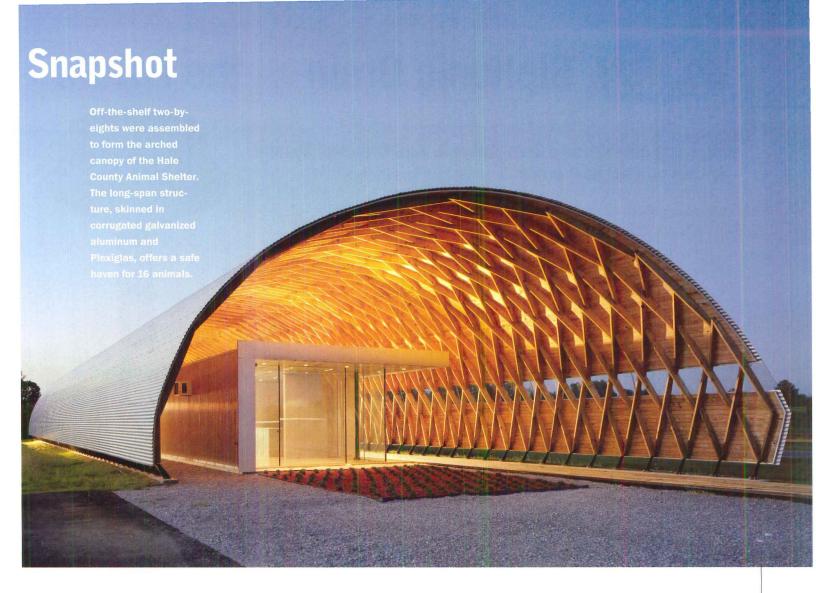




Our Tile. Your Vision.







By David Sokol

It was as if the Rural Studio's 2005 thesis candidates had hit the jackpot. "That year's set of projects was amazing: a 40-acre park, the Hale County Animal Shelter, and the courtyard for the Hale County Hospital," says Andrew

Sweet home Alabama for stray dogs

Freear, director of the altruistic design-build program founded by Samuel Mockbee for Auburn University in Alabama. "Any architect would have died to do one of those projects." Any architect, too, would have been proud of the animal shelter that resulted, in which corrugated galvanized aluminum and bands of Plexiglas cover a long-span wood structure.

"We liked the idea of working on a humane project, but we also wanted to create something from the ground up," says student participant Connely Farr, who now works at Vancouver-based Ramsay Worden. Before Hale County acquired the animal shelter, its large stray-dog population dissuaded farmers from rearing lambs.

The 150-foot-long canopy, which is open on both ends—ideal for natural ventilation, daylighting, and community interaction, says former student Julieta Collart, a project manager at studio:anderson in San Diego—shields treatment rooms, offices, and 16 cages from the elements. Its 1,200 two-by-eights are bolted into diamond-shaped patterns that form an arch 32 feet wide and half as high. This armature supports purlins and sheathing clad with the aluminum-and-Plexiglas skin.

Freear and his colleagues had predetermined this structural system. "We wanted to show local people that they could make a long-span structure using off-the-shelf timber, not an expensive piece of steel," he says. But the students made it their own: The structural arch attaches via steel legs to a bressumer beam that's mounted into the ground, making the canopy appear to hover just above it. They also conceived an ingenious hydraulic jig from which the framing could be bolted together.

The Hale County Animal Shelter opened in February. Besides unwanted animals, the project has had other beneficiaries. Local craftsmen poured and finished the concrete floor, and Rural Studio's 2006 thesis candidates adapted the jig to build a Boys & Girls Club basketball court in nearby Akron.





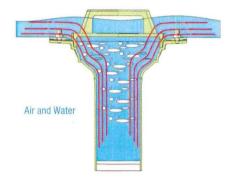
ZURN. Siphonic Drain ... the Future

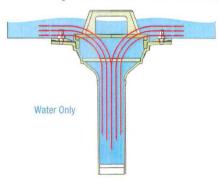
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Conventional Drainage Versus Siphonic Drainage

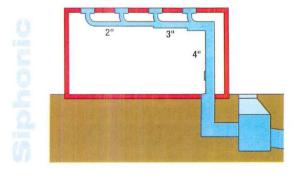




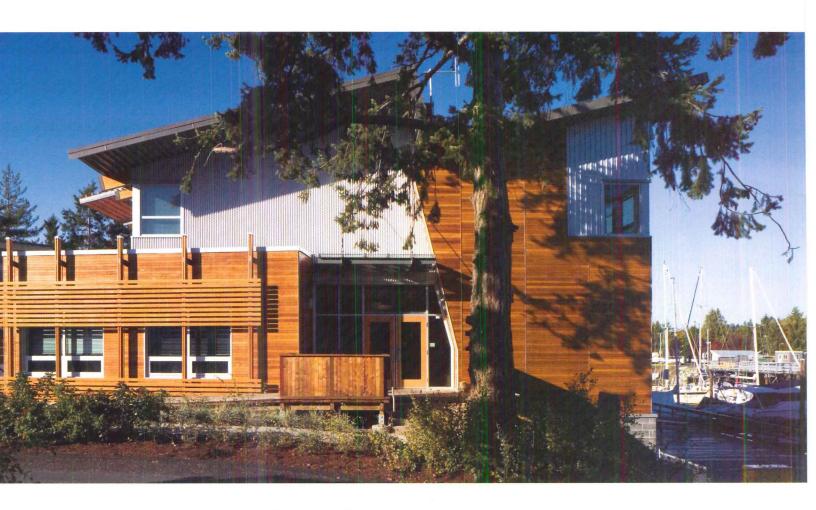
Gravity Roof Drain Systems Versus Siphonic Roof Drain Systems

- Conventional flow. Piping is only filled up 1/3 to 2/3 of the way with water. The rest is air.
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- Lower drainage velocities due to atmospheric pressure in the system.
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- Water flows naturally through the system due to the gradient. Air is necessary to balance pressure.
- Larger pipe diameters create increased construction costs.
- Higher construction costs because more downspouts mean more excavation and underground pipe.

- + Full-bore flow. Piping is completely filled with water, providing the most efficient drainage solution.
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- + Flow rate is constant while siphoning. Distance from roof to discharge point acts as driving head for the system.
- + Siphoning action forces water through level pipes. Piping full water creates negative pressures in pipe and higher flow velocities.
- + Smaller pipe diameters drive building cost down.
- + Lower construction costs due to the need for less downspouts which makes for less excavation work and less ground pipe.







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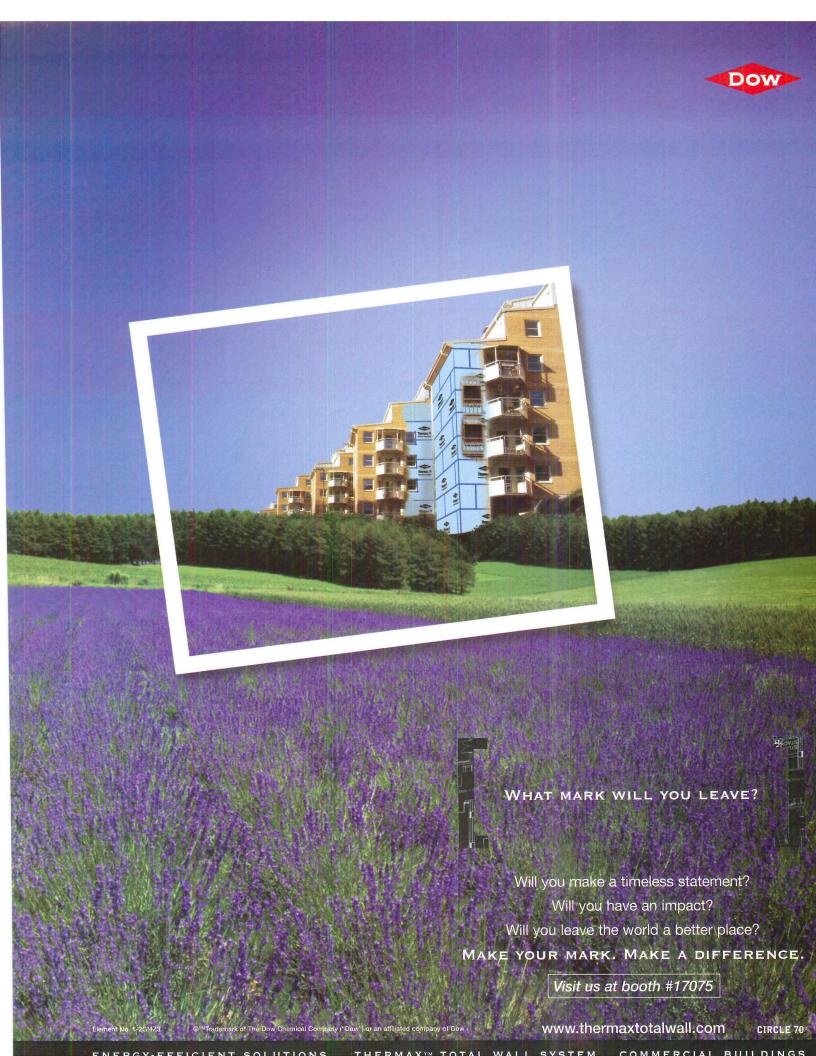
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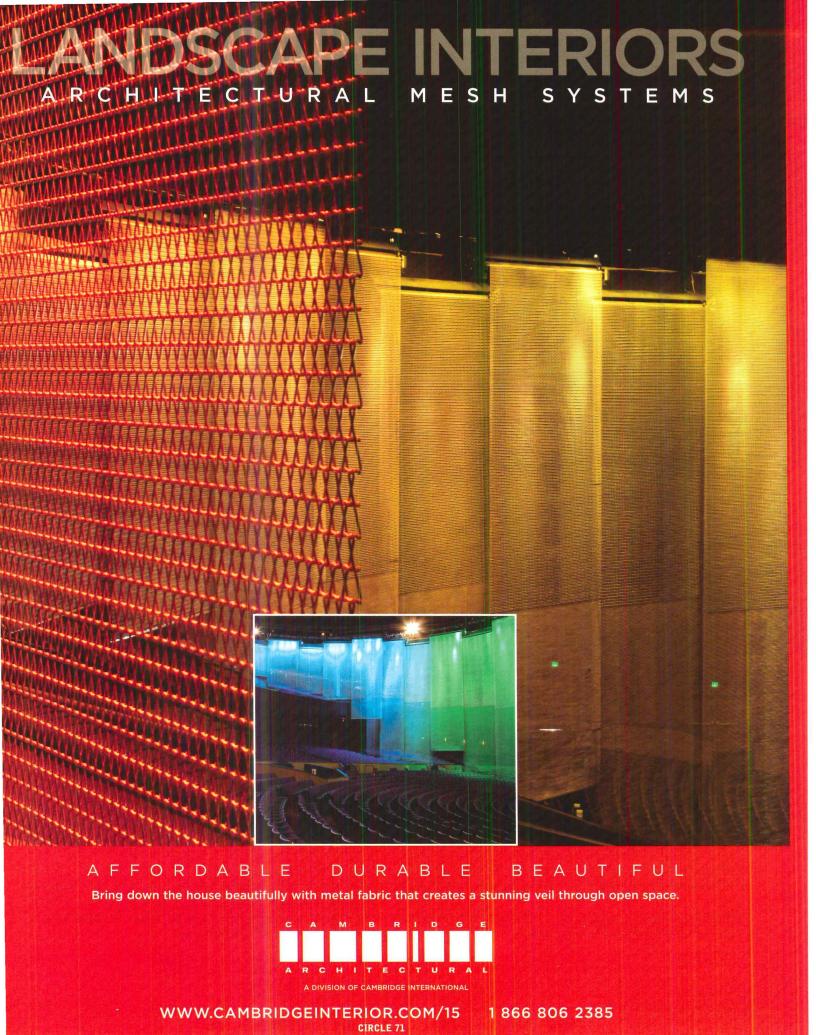
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CIRCLE 69





By Hubert Murray, AIA

he bold cantilever of Diller Scofidio + Renfro's Institute of Contemporary Art thrusting over the waters of Boston Harbor revealed to locals that there could indeed be life beyond brick [RECORD, March 2007, page 108]. There is also something happening in Boston from the bottom up, an effervescence of local firms, startups that promise to sweep away some of the cobwebs that still accrue to the "Athens of America."

Among the emerging generation, the firm with perhaps the highest profile is Höweler & Yoon [RECORD, November 2007, page 190; December 2007, page 82]. Eric Höweler, as it happens, worked at Diller Scofidio + Renfro between 2002 and 2005. Meejin Yoon, meanwhile, is an alumna of the Harvard Graduate School of Design (GSD). The majority of other young practices in Boston also trace a lineage to Harvard—and to Machado and Silvetti Associates, formed in 1985 and arguably Boston's most influential firm of the last generation. Through teaching at Harvard and maintaining an active practice, Rodolfo Machado, Assoc. AIA, and Jorge Silvetti, FAIA, have influenced established young firms, including Office dA and designLAB, and more recently, Utile. It is not that one can map a stylistic coherence derived from the parent firm's pedagogical and professional ascendancy. It is more an attitude of research and enquiry, of historical understanding and the power of analytical abstraction that explores the possibility of building in a contemporary idiom within the framework of a strong cultural heritage and a demanding physical fabric.

Harvard, MIT, and Boston's four other architecture schools draw students from all over the world, many of whom remain in the area to pursue their careers. Thus, while the city's architecture is often viewed as parochial, conservative, and restrained, its architects have an international diversity and sophistication constantly replenished and reoxygenated by the opportunities to teach and by the new graduates and ideas coming out of the schools. In this academic and professional symbiosis there is also a propensity for research-based design. Office dA, the normative tendencies of more established practices, emerging firms such as Studio Luz, Merge, and others have combined to kick over the traces of professional conformity by encouraging and exhibiting design in all its facets and embracing cultural polemic. The pinkcomma gallery and its publications, affiliated with the practice over, under, are part of this movement—as is the installation titled Young Boston at the American Institute of Architects 2008 National Convention here this month. While this is a continuation of academic culture by other means, what is remarkable—and perhaps distinctively Bostonian—is the degree of collaboration and mutual support in getting this movement going.

As interesting as the new wave is, one still has to ask why cutting-edge Boston architects are more honored in other parts of the country and overseas than perhaps they are here, at least when it comes to major buildings. Office dA has broken the mold in the private sector with the Macallen Building Condominiums in South Boston. But as far as public buildings are concerned, there is no Bostonian equivalent of New York City's prequalification program for young, interesting firms that has opened opportunities to Boston-based Kennedy & Violich as well as Ted Galante, AIA, to design municipal buildings. Public and private investors in Boston have still for the most part been unwilling to depart from the formal stereotypes of brick and pitched roofs. So while the emerging firms' frisky conversation on style is a welcome addition, the history of this city of revolutionary nonconformists suggests—and the future surely demands—much bolder thinking.

THE NEW ESTABLISHMENT

Members of the newly emerged generation of Boston architects would cavil with the notion that they are in any way a new establishment—a common theme in all of these practices is not one of style but the imperative for constant critical enquiry. If there is any merit in the attempt to identify a DNA of Boston architecture, it is to find it in the uniform rejection of such complacent categorization.

ew Establishmer

for instance, engages in formal and textural experimentation, reflected also in the work of younger firms, such as Merge and Studio Luz. Almost without exception, the principals of today's young practices included on the following pages teach in area schools.

The Boston Society of Architects (BSA)—the local chapter of the AIA—and ArchitectureBoston magazine have acted as a public grandstand and salon for Boston's mainstream architects, but a new generation of young practitioners has decided to throw its own party. Impatient with

Hubert Murray, AIA, practices architecture in Cambridge, Massachusetts. He was the 2007 president of the Boston Society of Architects.

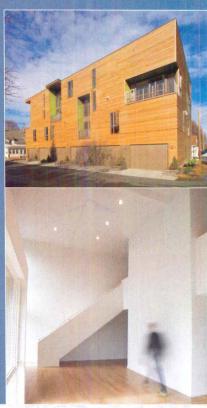
Anmahian Winton Architects

Alex Anmahian, AIA, and Nick Winton, AIA, graduated from the Harvard GSD in 1990 and a year later formed their partnership, now a 14-person firm. Most of their current work is with local universities and institutions or private residences. They've also worked in Lebanon, where Anmahian has family ties. Unashamedly Modernist in their philosophy, they are now in a position where they can choose to work with those who are ready to engage with them in architectural discussion. Anmahian cites the Community Rowing Boathouse as the outcome of architect and client engaging in vigorous debate on building a 21stcentury facility on a "19th-century river."



MERGE ARCHITECTS MiniLuxe (above right) is a new nail salon prototype in Newton, Massachusetts, opened in 2007. A hybrid program was invented to define the concept of a "salon." Elizabeth Whittaker, Assoc. AIA (above), designed oversize graphic panels that are backlit at night, allowing the space to double as a lounge and private party venue. Penn Street Lofts (middle and bottom right), in Quincy, Massachusetts, consists of six loft-style units, each having single- and doubleheight spaces that fit together like a puzzle. Voids and recessed balconies highlight individual units within the elevation.









Partners Mimi Love, Michael LeBlanc, AIA, Time Love, AIA, and Matthew Littell make up Utile (above, from left). 557-559 East Second Street (left two), built in 2007, comprises eight singlefamily row houses located on the cusp of residential and industrial neighborhoods in South Boston. The design creatively calibrates abutting-edge conditions, the dimensional limits of the residential code, and the chic but parsimonious use of standard materials, which combine to make these

Meets The Next

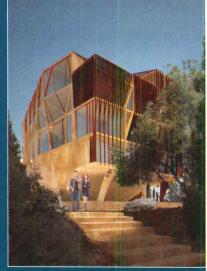
BOSTON'S YOUNG
AND MID-CAREER
PRACTICES FIND
COMMON GROUND IN
THEIR TRAINING AND
ESEARCH-BASED DESIGN.



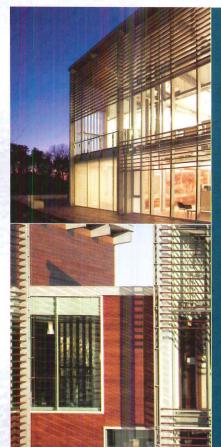
EMERGED FIRMS



OFFICE DA A 2006 competition entry by Office dA principals Monica Ponce de Leon and Nader Tehrani (above) for the Issam Fares Institute at the **American University of** Beirut (above right) was inspired by forms in the surrounding trees (this project is unbuilt). In 2007, Boston's **Institute of Contemporary** Art commissioned the Voroduo installation (right), composed of interlocking acrylic cells.





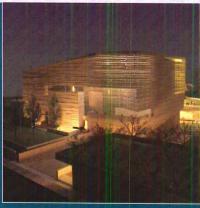


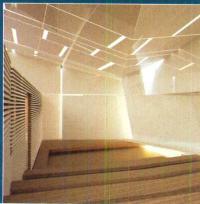


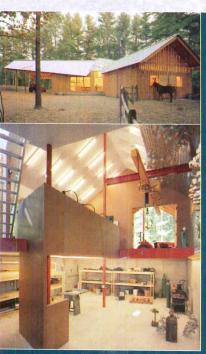
DESIGNLAB ARCHITECTS Expressing the client's green values, the headquarters for the International **Fund for Animal Welfare** (left two), in Yarmouthport, Massachusetts, is composed of three wood-clad volumes that encircle a reclaimed brownfield, providing a central open space where staff can gather. designLAB principal Robert J. Miklos, FAIA (above), designed the building to achieve a LEED Silver rating.



BRIAN HEALY ARCHITECTS
During warmer months
at the Mill Center for the
Arts (top right), in
Hendersonville, North
Carolina, doors to the main
indoor performance hall are
opened to link that space
with an outdoor amphitheater. Brian Healy, AIA
(above), recently designed
a children's chapel addition
to the Korean Church of
Boston (right), in Brookline,
Massachusetts.











KENNEDY & VIOLICH ARCHITECTURE Working at a wooded site, Frano Violich, AIA, and Sheila Kennedy, AIA (above), made use of an existing concrete basement foundation to create a three-level studio for a sculptor (top left and middle); a large central skylight marks the junction of two wings. A plastic fabric forming the roof of the ferry terminal on East 34th Street (left), in Manhattan, will transmit and reflect daylight, eliminating the need for artificial sources.

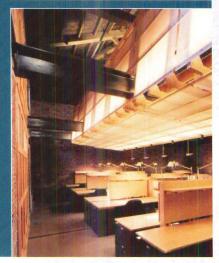


ANMAHIAN WINTON **ARCHITECTS**

Recent Boston-area projects by Nick Winton, AIA, and Alex Anmahian, AIA (above, from left), include a horticultural support building at Harvard University's **Arnold Arboretum (top** right); a new boathouse for the group Community Rowing (middle); and staff offices for the American Meteorological Society, located inside a former carriage barn, designed by Charles Bulfinch in 1806, next to Bulfinch's famed **Harrison Gray Otis House** in Beacon Hill (right).







Brian Healy Architects

A graduate of Penn State and Yale, Brian Healy, AIA, set up his practice in 1988. He says the attraction of Boston was "the intense culture of astute, well-educated people," as well as the legacy of Le Corbusier, Sert, and others within the historic fabric of the city. Healy relishes the challenge of developing "a contemporary language in a traditional setting" and finds this skill translatable to the work his office has up and down the East Coast. Even with a firm of eight, Healy finds the time to teach, to serve as president of the BSA, and to run the society's "Conversations" series of evening seminars with leading designers.

designLAB architects

Robert J. Miklos, FAIA, and Scott Slarsky, both mid-careerists with considerable experience in Boston firms, founded designLAB in 2004. They have managed to attract major cultural and educational clients all over the country. The name designLAB reflects the principals' commitment to "design as a vehicle for helping institutions do their job," Miklos says. Generating form is not their primary goal. Rather, they see their research and critical analysis of a client's program as the starting point for design process and architectural resolution. Miklos also takes pride in the nonhierarchical, nimble, low-overhead quality of the 10-person firm—qualities he seeks to maintain even as it grows.

Kennedy & Violich Architecture

Sheila Kennedy, AIA, from the Sorbonne, and Frano Violich, AIA, from Berkeley, met at the Harvard GSD. After graduating, they established, in 1988, a "proactive, research-based practice," suspicious of "the complacency of accepted ideas" and "daring to be different." The firm has earned a national reputation as an innovative practice engaged in research and product design fully integrated into architecture, at the same time maintaining its intensity by staying small, with just 14 people. Their work on integrating distributed energy generation systems into their architecture is manifested in their "Portable Light" project and on a larger scale with the as-yet-unbuilt East 34th Street Ferry Terminal in Manhattan.

Both products of the Harvard GSD and the Machado and Silvetti practice, Nader Tehrani and Monica Ponce de Leon founded Office dA in 1991, impatient to build [RECORD, April 2006, page 114; June 2007, page 200]. In their focus on detailing and materials through digital manufacturing, their ambition is to "marry local craft and tradition to global and contemporary techniques." Teaching and practice is essential to their work. Tehrani talks of being a "profound pragmatist" while maintaining a critical edge through "a constant dissatisfaction with our work." Their location in Boston was for long merely circumstantial, as they built all over the world and the United States, but their work on the Macallen Building Condominiums has brought with it a new commitment to the city.

THE NEXT WAVE

Boston's next wave of architects is nationally, culturally, and ideologically diverse. They are drawn to the city by its schools and united in their intensive quest for formal and material expression. Judging by precedent, one would expect to see these firms blossom in the 2010s and beyond—but some are already breaking the mold.

The Galante Architecture Studio

On graduating in 1993 from the Cranbrook Academy of Art, in Michigan, Ted Galante, AIA, worked there as resident architect for an elementary school designed by The Office of Peter Rose, based in Cambridge, Massachusetts, where he set up his firm. A New Yorker, Galante grew up in a family of builders, learning steel fabrication and construction firsthand. Along with his Cranbrook training, he has an understanding of material and craft that subtly imbues the form and material in his work with reassuring technical competence. While Galante has a local portfolio of private

EMERGING FIRMS

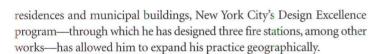


STUDIO LUZ

At the Kenmore location of Fins Sushi and Grill (above right), opened in 2008, beams and columns delineate private from public dining spaces and serve as an armature for lighting. The plan by Hansy L. Better Barraza, AIA, and Anthony Piermarini, AIA (above), for Campus d'Espoir (middle and bottom), in Port-au-Prince, Haiti, locates a school at the heart of a campus that includes a medical clinic and housing for at-risk children.



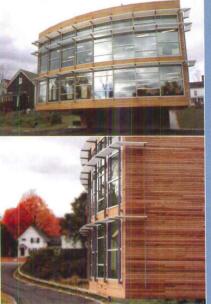




Merge Architects

Merge Architects is composed of principal Elizabeth Whittaker, Assoc. AIA—a Harvard GSD graduate who once worked with Brian Healy and, in Los Angeles, with Frank Gehry, FAIA—and vice president Stephen Zecher, with a staff of three. Founded in 2005, it has graduated from designing stylish interiors to a growing portfolio of residential development. Whittaker believes passionately in professional and client collaboration, hence the name of the practice. Her involvement in the BSA, and her leading role in creating the Young Boston installation for this year's AIA convention, shows Whittaker's commitment to engaging owners, builders, community, and designers in the "particularity of a







THE GALANTE ARCHITECTURE STUDIO For the Free Public Library in Ashby, Massachusetts, Ted Galante, AIA (above), designed an 8,000-squarefoot addition (left three) to a 3,600-square-foot colonial-style building that **Negotiating the strictures** of zoning as well as cultural sensitivities, his 2006 solution was to create a modern interpretation of the postand-beam barn buildings common to the area.

project" as the generative path to high design. Merge experimented with acting as general contractor on some early projects but now prefers a lessambitious design-build collaboration.

O'Hagan Architects

Audrey O'Hagan, AIA, came to the city neither as a student—she graduated from the University of Kansas—nor as a recent graduate, since she had already spent 10 years as an architect in the United Kingdom. Knowing no one here when she arrived, O'Hagan networked through the BSA, became a principal at Stubbins Associates, and eventually set up on her own in 2007. She is already capitalizing on her experience and local contacts, quickly securing commercial commissions as well as the residential and interior work common to start-up practices. What O'Hagan finds attractive in the Boston scene is the constant presence of big name architects working for major institutions, as well as the increasing influence of the smart high-tech and biotech presence in the city. Her work with Stubbins on the Novartis Institutes of BioMedical Research, in Cambridge, represents one outcome of this influence.

over, under

over, under embodies eclectic practice. Consisting of a British-born Canadian, an Egyptian, a Colombian-born Swiss, and an American— Chris Grimley, Rami el Samahy, Roberto de Oliveira Castro, and Mark Pasnik, respectively—the partnership has woven itself together via Harvard GSD, which three out of its four principals attended, and Machado and Silvetti (four out of four). As if reflecting this polyvalent



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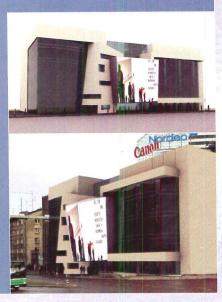


EMERGING FIRMS



O'HAGAN ARCHITECTS While at Stubbins Associates, Audrey O'Hagan, AIA (above), converted an old candy factory into labs for Novartis (top right). Her competition entry for the Estonian Academy of the Arts (right two), in Tallinn, allowed her to explore creative ideason the facade to display student videos-and bolster her portfolio to pursue more educational and cultural clients.





provenance, over, under invented itself as a multidisciplinary studio for architecture, furniture design, and graphic and Web design, as well as as a publishing and art gallery concern. over, under has designed a residence under construction in Guatemala and is working on a master plan in Qatar. Its pinkcomma gallery has curated exhibitions that include Rethinking City Hall—with ArchitectureBoston—and, with Utile, it has published a compendium of recent Boston residential projects called Urban Housing Atlas. While over, under pursues the realities of practice, pinkcomma is intended as agitprop: an underground organization to foster and recognize a "more creative, youthful, and experimental scene" in Boston nurtured by the universities.

Studio Luz

Founded in 2001, Studio Luz is led by husband-and-wife team Anthony Piermarini, AIA, and Hansy Better Barraza, AIA, who met at Cornell and continued through the Harvard GSD together [RECORD, December 2006, page 80]. While cutting their teeth in the profession, Piermarini worked with Kennedy & Violich, and Barraza with Office dA. In their own practice, the formal aspect of their interiors work clearly shows this provenance in the creative use of light and material. But it is through their social engagement that they add another dimension to their portfolio of built projects and installations. In addition to working with nonprofit groups making urban interventions in Boston and Somerville, Massachusetts, Studio Luz has worked with Hope for the Children of Haiti to develop a master plan and design for an orphanage, school, and clinic in Port-au-Prince, Haiti. During an era in which high







OVER, UNDER In their 2007 design study of Boston's Brutalist City Hall (left top and middle). the partners of over,under-Roberto de Oliveira Castro. Chris Grimley, Rami el Samahy, Mark Pasnik (above, from left)-proposed softening the exterior with canopies and, on the interior, improving wayfinding with color panels. The Marina del Sur beach house (bottom), under construction in Guatemala near San José, engages with its oceanfront site and climate. Wood screens allow views and ventilation but protect outdoor rooms and the mass of the house from solar heat gain.

design and social responsibility often take divergent paths, Studio Luz is a refreshing reminder that these are not mutually exclusive pursuits.

Utile

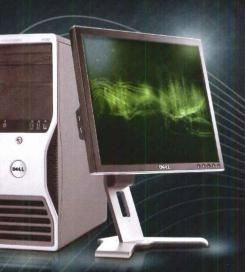
Founded in 2002, Utile has four partners, all ex-Machado and Silvetti— Mimi Love, Michael LeBlanc, AIA, Time Love, AIA, and Matthew Littell—and 16 employees. The firm's approach is to develop a specific expertise in multifamily urban housing and leverage that into the development world and the expanded scope of developer-pragmatic urban design. Utile has now established itself as the leading proponent of edgy, European-style housing throughout the Boston area. Teaching at Northeastern University and, with over, under, publishing the Urban Housing Atlas, are all facets of the firm's single, focused strategy. Now that the residential market is softening, the practice is taking a similar approach to the commercial market.





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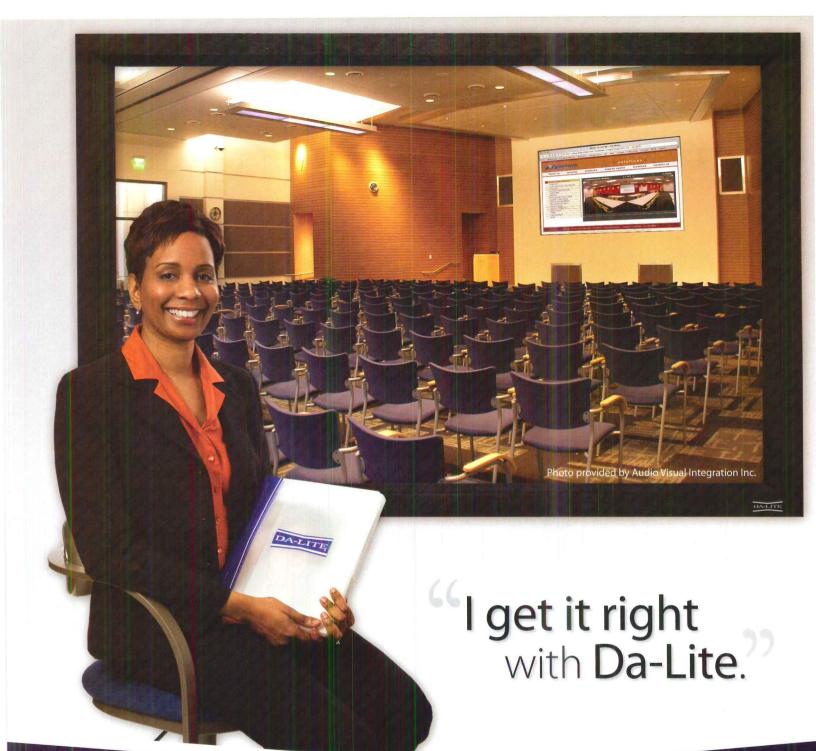


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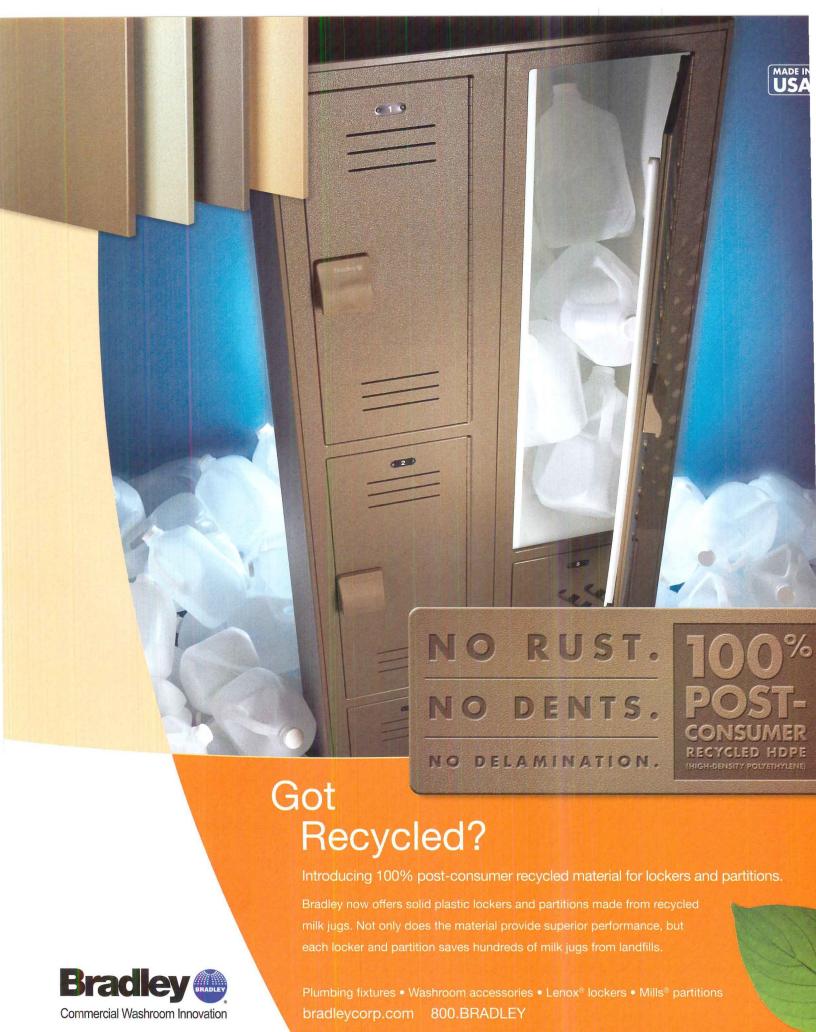
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CIRCLE 77

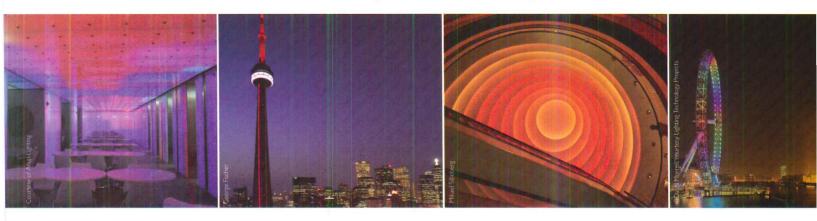


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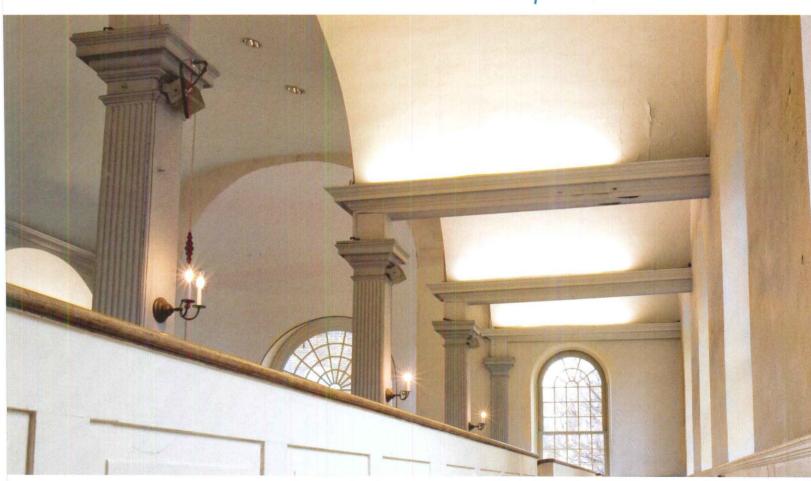
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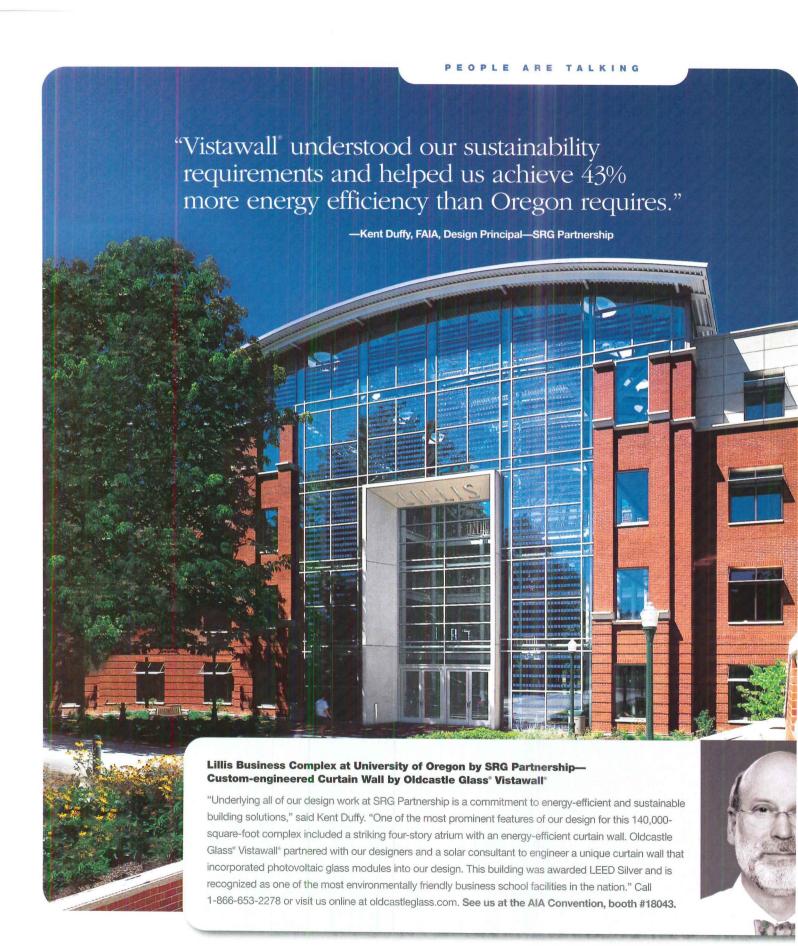






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HONOR AWA

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p. 172 Firm Award

t's difficult to find a constant theme among the diverse building types, programs, and projects that make up this year's Honor Award winners. Sustainability is there, certainly, as exemplified by Architecture Award winners that include the Platinum LEED-rated Heifer International World Headquarters, by Polk Stanley Rowland Curzon Porter Architects; the Thomas L. Wells Public School, by Baird Sampson Neuert Architects; and KieranTimberlake's Loblolly House, much of which can be disassembled and recycled. And while we're on the subject of the Philadelphia-based firm, the 2008 Firm Award winner, it should be mentioned that the sort of thoughtful architecture KieranTimberlake lives and breathes by (notably research-based) is what most impressed the jury this year.

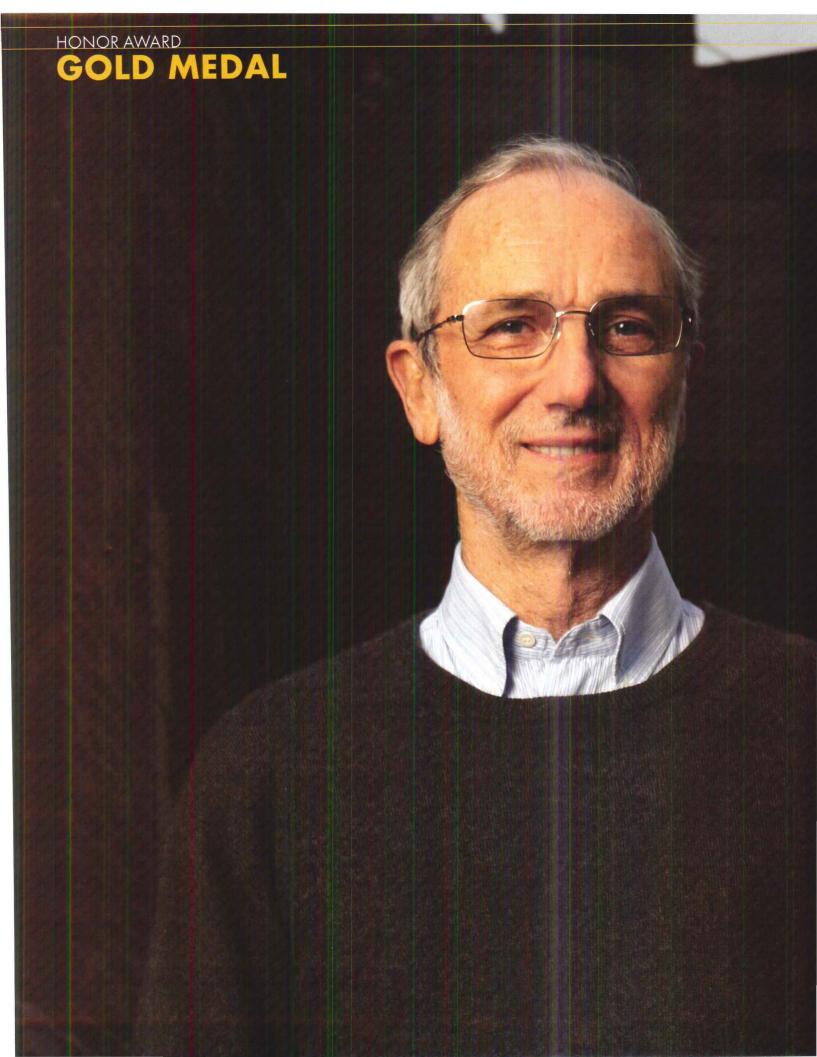
While the building types were varied in both the Architecture and Interiors categories, the number of winning cultural facilities stands out as significant. From Schwartz/Silver's Shaw Center for the Arts to the Griffith Observatory renovation, by Pfeiffer Partners Architects, to the Nelson-Atkins Museum of Art, by Steven Holl Architects—the winners prove that architects continue to create beautiful and vital arts and cultural destinations. The Gold Medal winner, Renzo Piano, has built his reputation on creating such inspirational cultural buildings. This year he is receiving well-deserved recognition for his efforts to enhance our environment with

buildings in this category. He is joined by the many other architects whose arts and cultural buildings won in both the Architecture and Interiors categories, as well as the 25 Year Award, which went to the gleaming, porcelain-paneled Atheneum, in Indiana, by Richard Meier, FAIA.

Transparency also emerges as a possible link among projects. A glass-clad penthouse makes Fougeron Architecture's Tehama Grasshopper a luminous dwelling, while a glazed-wall overlooking the tank-andbottling room of the Novelty Hill Januik Winery, by Mithun, lets visitors witness the grape-to-glass process. Here, magical interior spaces openly reveal themselves.

Also revelatory is the astounding University of Arkansas Community Design Center. Three out of five of the Regional and Urban Design Awards go to the remarkably proactive group, which the jury spoke of as having "a deep understanding of sustainability" and the ability to embrace problems of an urban nature and scale and turn them into assets. The Campus Hydroscapes, Visioning Rail in Northwest Arkansas, and Habitat Trails projects all exemplify how people can live in harmony with the natural environment.

At the end of the day, that's what the AIA Honor Awards are all about: a celebration of the carefully designed structures that delight, engage, and inspire us to create ever better work. Ingrid Spencer



From Beaubourg
to New Caledonia,
the man and his
Workshop have
reimagined places
for art, culture, people,

and commerce

Gold Medal:

By Clifford A. Pearson

O UNDERSTAND RENZO PIANO'S FIVE-DECADE-LONG CAREER, WE NEED TO EXAMINE HIS REMARKABLY FLUID journey from architectural rebel to cultural establishment go-to man. The bearded provocateur who experimented with movable structures in the 1960s and, with Richard Rogers, inserted a colorful Tinkertoy in the staid center of Paris in the 1970s has evolved into the trusted hand of museum boards and corporate clients. His work no longer challenges the way we view architecture or topples established notions of design, but it impresses us with its refinement and its elegant solutions to the everyday problems of building.

Born in 1937 to a family of builders and contractors, Piano, Hon. FAIA, rejected his father's trade to study architecture at Milan Polytechnic. He remembers his father asking him, "Why become an architect when you can be a builder?" After earning his degree in 1964, he worked for his father in Genoa under the guidance of the Neo-Rationalist Franco Albini, then spent the rest of the decade abroad in the offices of Louis Kahn in Philadelphia and Z.S. Makowsky in London.

During the 1960s, Piano moonlighted on his own projects, including a series of temporary structures featuring steel space frames wrapped with reinforced-polyester panels. These early pavilions reveal a number of themes that would run through almost all of his subsequent work: a drive to minimize a building's actual and apparent weight, an experi-

Renzo Piono mental approach to materials, an obsession with inventive ways of connecting building elements, and a knack for turning exposed, repetitive structure into poetic form. He also designed a mobile structure to shelter sulfur-extraction work in Pomezia, Italy: Its barrel-vaulted space frame could be moved as mining operations advanced along the landscape. In the 1970s and early '80s, Piano continued to explore notions of mobility in projects such as an experimental vehicle for Fiat, a mobile construction unit for use in Senegal, and a traveling exhibition pavilion for IBM.

In 1979, he and his first wife, Magda Arduino, developed the Neighborhood Workshop, an experiment in participatory design that would travel to old towns in Italy and help restore crumbling buildings and reinvigorate local building trades. Piano and Arduino designed a cratelike structure that could be transported on the back of a truck, then unfolded so its sides became the floors of outdoor rooms. An easily assembled, tentlike roof provided shade and protection from rain. Instead of relocating residents during the rehabilitation of their town, the Workshop engaged them in the planning and construction efforts and kept them in their homes.

Piano's investigations in temporary architecture led to his first major commission: the Italian Industry Pavilion at the Osaka Expo in 1970. A tensile structure with a steel frame and reinforced-polyester panels, the giant rectangular building conjured images of a high-tech circus tent. An experiment in prefabrication, the building was shipped to Japan in 15 containers.

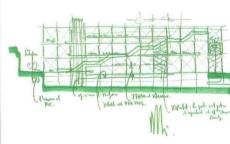
International fame came in 1971 when he and Rogers won the competition for the Centre Pompidou in Paris. A controversial selection, Piano and Rogers's design ers of ancient Paris. The architects clearly saw their building as a subversive act, one that would undermine notions of museums as stodgy, inward-looking institutions reserved for the cultural elite. Instead, they designed an enormous contraption with its mechanical and circulatory systems not only running up and around an exposed structural frame but painted in bright colors so you couldn't possibly miss them. The team also carved out a large plaza from the dense urban fabric of the Beaubourg neighborhood, connecting their building to a public outdoor space that could play host to fire-eaters, buskers, and all sorts of unprogrammed activities. Inside the building, they created large, flexible spaces that would encourage a similar range of ever-changing uses. Because the project's exterior skeleton reduced the number of structural elements inside, museum curators had more freedom to reconfigure galleries and other interior spaces.

Beaubourg was a huge and immediate hit with the public, attracting 25,000 visitors a day and energizing an entire neighborhood. Even people uninterested in art came to ride the exterior escalators and hang out in the plaza. "When we first met Georges Pompidou," says Piano, "he told us that



Centre Georges Pompidou, Paris, 1977

Designed with Richard Rogers, this project subverted old notions of museums as inwardlooking, tradition-laden institutions for the cultural elite.







Kansai International Airport, Osaka, Japan, 1994

Built on a man-made island, this winglike terminal extends 1.7 kilometers (1.05 miles), handling 100,000 passengers a day.

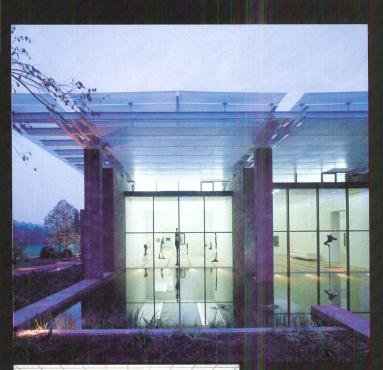
HONOR AWARD GOLD MEDAL





Menil Collection, Houston, 1986

A modular system of 1inch-thick ferro-cement "leaves" covering the roof regulates daylight coming into gallery spaces below.





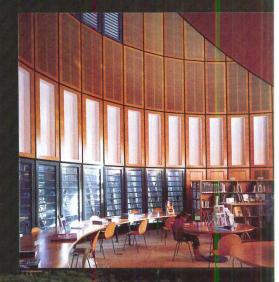
Beyeler Foundation Museum, Riehen, Switzerland, 1997

Piano set a lightweight glass roof above redstone perimeter walls here and created what many critics say is one of the best places to view art in the world.



New Caledonia, 1998

Ten pavilions made of iroko wood, steel, and glass recall traditional huts of the local Kanak people while using modern means.

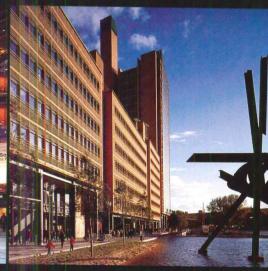


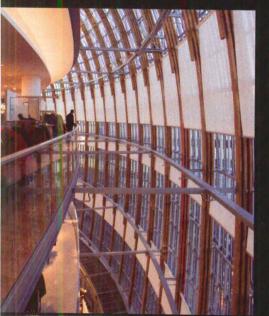


Potsdamer Platz, Berlin, 2000

This mixed-use complex with more than 6 million square feet of space in 18 buildings (eight by Piano) helps reconnect east and west Berlin. Piano's master plan revolves around a central "piazza" and creates a villagelike place.







P & C Department Store, Cologne, Germany, 2005

Made of 66 wooden arches set between 3,800 glass panels, this building offers excellent views of the city's cathedral.

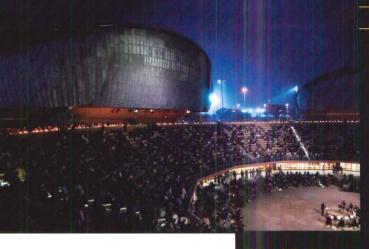


Morgan Library Renovation and **Expansion, New York** City, 2006

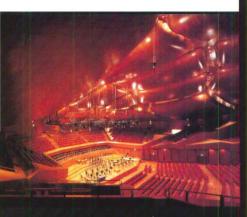
Piano added three new pavilions to the historic library and tied them together with an indoor "piazza" covered by a "flying" glass roof.

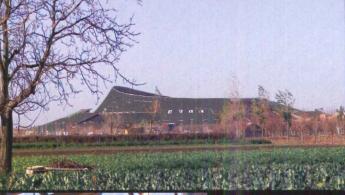






Parco della Musica Auditorium, Rome, 2002 Inspired by the forms of musical instruments, Piano designed three halls set around an outdoor amphitheater. Inside, the halls are finished in cherry wood to improve acoustics.







II Vulcano Buono, Nola, Italy, 2007

This mixed-use, shopping-and-entertainment complex near Naples and Mount Vesuvius takes the form of an artificial volcano 1,000 feet wide. Its sloped ridges range in height from 82 to 135 feet.

the building would stand for 500 years. At that point in our careers, we had designed mostly temporary structures. We said, 'Oh, my god.' As we developed the building, we designed it to last 500 years, but imagined it changing every 25 years."

On Beaubourg, Piano and Rogers worked with engineer Peter Rice, beginning a remarkably fruitful collaboration that both architects would continue in many of their subsequent, separate projects. As Piano tackled major commissions, such as the Menil Collection in Houston (completed in 1986), San Nicola Stadium in Bari, Italy (1987), and Kansai Airport in Osaka, Japan (1994), Rice helped him integrate structure and form in each project. Throughout this period, Piano never developed a signature became a guiding principle shaping all of his work. Another force driving his work was a collaborative design process that turned various consultants, fabricators, and contractors into essential team members. As a result, each of Piano's buildings looked different, shaped by different hands and responding to different sets of user needs and local contexts.

Looking back at Piano's work in a monograph published in Italy in 1983, Massimo Dini commented, "Piano's is an architecture of connection, one that tries to create contacts and demolish divisions, barriers; an architecture that fights against the current and is hard to classify amid all the shooting stars of contemporary architecture."

Many architects who design acclaimed buildings at an early age get stuck in one particular mode or trapped by their own success. Piano, though, followed Beaubourg with a remarkable string of major accomplishments: the Menil and the San Nicola Stadium in the 1980s; then Kansai Airport, the Fiat Lingotto Factory renovation, and the Jean-Marie Tiibaou Cultural Center in New Caledonia in the '90s; and the Rome Auditoria, the Nasher Sculpture Center, the Beyeler Foundation, Berlin's Potsdamer Platz, the Zentrum Paul Klee, and the Padre Pio Pilgrimage Church in the 21st century. His ability to tame the enormous scale of Kansai and Lingotto, to express the spirit of the indigenous Kanak culture using a thoroughly modern vocabulary in New Caledonia, and to create exquisite spaces for viewing art at the Nasher and Beyeler demonstrated the range of his talents. Some architects know how to do airports, and others have proved their mettle gant homes for art museums. But very few can do all of this.

Piano's sure hand with spaces for art, in particular those at the Menil and Beyeler, has brought him a flood of museum jobs in the U.S., including recently completed buildings for the High in Atlanta, the Morgan Library in New York City, and the Los Angeles County Museum of Art (LACMA), as well as ongoing projects for the Kimbell in New York City, the Isabella Stewart Gardner in Boston, the Harvard University Art Museums in Cambridge, Massachusetts, and the California Academy of Sciences in

2008-FUTURE

San Francisco. But this abundance of plum commissions has brought with it some sour responses from critics. In a story for Bloomberg.com, James Russell said Piano had worn "out his welcome." And in The New York Review of Books, Martin Filler called the light in one of the galleries at Piano's new Broad Art Museum at LACMA "gray and gloomy" and criticized his use of color on the outside of the building.

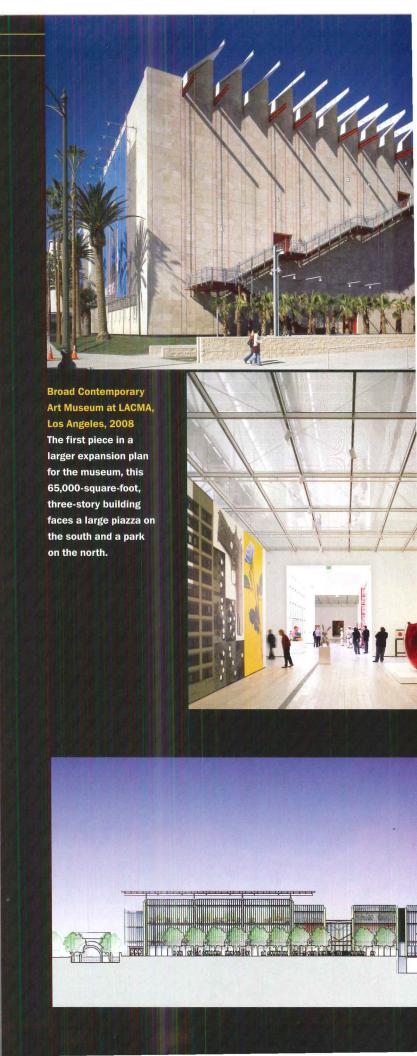
Has Piano stretched himself too thin? Although he recently opened an office in New York City to go with his long-standing operations in Genoa and Paris, he reports that the number of people working for him has remained steady for most of the past three decades, ranging from about 100 to 120 (the current number), and he usually has about 20 active projects at any one time. Perhaps most important, almost all of his seven senior partners (especially Shunji Ishida, who

Some critics point to Piano's recent projects for the High Museum and LACMA and see a formulaic approach creeping into his work. But projects with similar programs naturally elicit similar designs, especially when key elements such as artworks demand similar kinds of lighting. "Making new shapes is not difficult," says Piano, "but I don't believe in making up a new architecture every Monday morning."

He sees, however, a new architectural language developing for the 21st century. "We understand now that "Our work needs to be anchored to this understanding." When he mentions recent projects, he invariably talks about buildings that "breathe," conserve resources, and use less energy. His California Academy of Sciences, nearing completion in San Francisco, for example, recycled 90 percent of the material from the previous building on the site and will have air-conditioning only in areas where animals and plants are displayed or stored. A giant glass canopy over a central plaza will feature microphotovoltaics, while the building's rolling green roof will support plant species that don't require irrigation. "Morality informs aesthetics," states Piano.

"For each project, Piano seeks an appropriate balance between the use of leading-edge, and probably imported, technology and materials with those of the locality and its traditions," states Peter Buchanan in a 2006 AV Monograph on Piano's work. "It is all this, along with his of neighboring buildings and local features and to evoke essential aspects of that culture that makes Piano the only architect operating globally who could claim to approximate the 'glocal,'" says Buchanan.

At 71, Piano shows no signs of slowing down. With major new projects in London, Athens, Chicago, and Fort Worth, he is as busy as ever. And from early photographs of London Bridge Tower, he seems to be pushing environmental and structural technologies in new and expressive directions. Indeed, these projects show he is still able to surprise us. ■



California Academy of Science, San Francisco, 2008

Set to open in September, this building features a giant green roof undulating over elements such as a planetarium, a rainforest exhibition, and an aquarium.



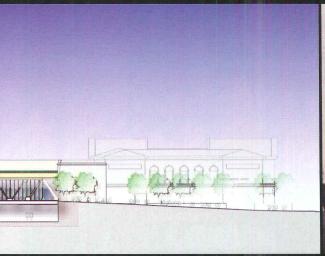




London Bridge Tower, London, 2011

Piano conceived this 1,000-foot-tall tower as a vertical city where 10,000 people will work and thousands more will commute from the nearby **London Bridge Station.**







Art Institute of Chicago Expansion, Chicago, 2009

A luminous, 216-footwide sun-shading structure will float above this new glass, steel, and limestone building, while a bridge will connect it to Millennium Park.

ARCHITECTURE



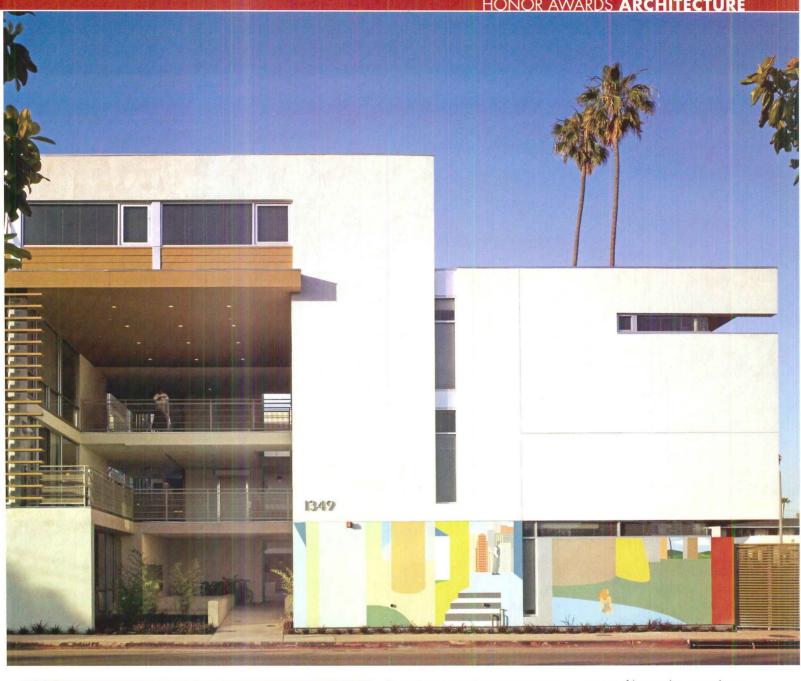
Residence Halls Units 1 & 2 **Infill Student Housing** Berkeley, California Architect: EHDD Architecture

During the early 1960s, the University of California, Berkeley built up two city blocks with eight residential monoliths, set on plinths, facing away from the street, in a tree-lined neighborhood of single-family homes and low-density apartment buildings. The university hired San Francisco firm EHDD to design four new "infill" towers, situated between the original buildings. Adding more than 200,000 square feet of construction, the new towers step down in segments from the taller existing buildings, helping to mitigate the scale disparity between the housing blocks and the modest residential neighborhood. Lobby entrances, porches, exterior stairs, and landscaped walkways address the street, making the two superblocks less formidable. Single-story dining halls occupying the central plazas were replaced with landscaped courtyards above 80,000 square feet of below-grade student services space.









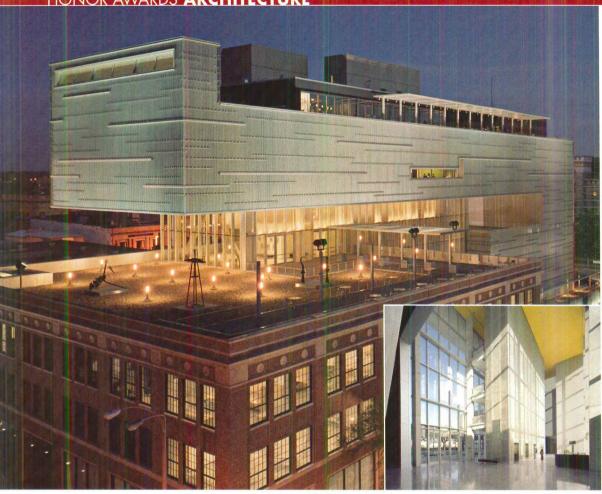


26th Street Low-Income Housing Santa Monica, California **Architect:** Kanner Architects

Inspired by the work of Modernist architects Irving Gill and Richard Neutra, this 44-unit, low-income housing project features the smooth white-plaster envelope of California Modernist architecture of the early 20th century. The floor plan offers the latest in sustainability, with

communal interaction as a primary goal. Passive heating and cooling systems are incorporated into the design, including louvers shading west-facing windows from the heat of the afternoon sun. A landscaped courtyard and community room encourage neighborly interaction, while dual-glazed and laminated windows keep urban decibels from penetrating into the quiet apartment interiors.

HONOR AWARDS ARCHITECTURE



Shaw Center for the Arts Baton Rouge, Louisiana Architect: Schwartz/Silver Executive architect: Eskew+ Dumez+Ripple Associate architect: Jerry M. Campbell & Associates [RECORD, June 2005, page 86]

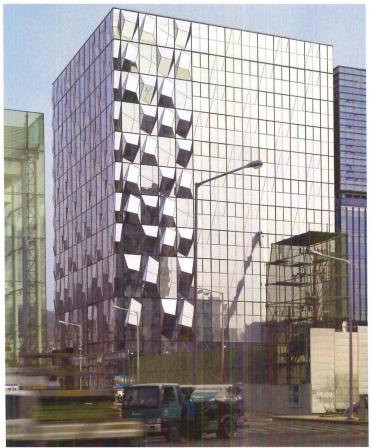
Part of an effort to revitalize downtown Baton Rouge, the Shaw Center for the Arts is a one-and-a-half-block destination that houses the Museum of Art and performing arts theaters. The channel-glass-and-aluminum-clad structure, which cantilevers over the existing historic Auto Hotel, was resilient enough to withstand Gulf hurricanes Katrina and Rita without damage. The illuminated glazed facade of the building has been referred to as the "Lantern on the Levee" because of the attention it has attracted to downtown redevelopment.

The Liberty Memorial Restoration and Museum Kansas City, Missouri **Architect:** ASAI Architecture [RECORD, February 2008, page 106]

The 1926 Liberty Memorial designed by H. Van Buren Magonigle housed the largest collection of World War I artifacts in the United States. When it closed in 1994 due to structural and material deterioration, 85 percent of its archive was stored off-site for lack of exhibition space. With a renovation, adaptive reconstruction, and a new building project, ASAI Architecture returned the derelict National Historic Landmark to its original glory. A cultural-history exhibition, an auditorium, education center, research archive, and public support spaces complement a 160,000square-foot addition.







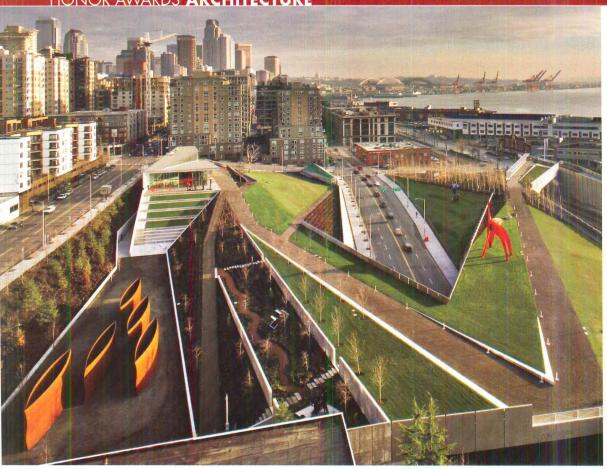


TRUTEC Building Seoul, South Korea Architect: Barkow Leibinger Architects

The TRUTEC Building stands in Digital Media City, a governmentinitiated business-development project in one of the last undeveloped sections of North Seoul. Mirrored fractal glass articulates a series of crystalline-formed bays that undulate across the 11-story

structure. The pattern of the dynamic glazing refracts light and image, which abstracts both the building's surface and the views out of the building, creating an interplay with its surroundings and its future neighbors, whoever they will be. The architects established a relationship with a park kittycorner to the site by setting the main entrance diagonally, at the building's corner.

HONOR AWARDS ARCHITECTURE

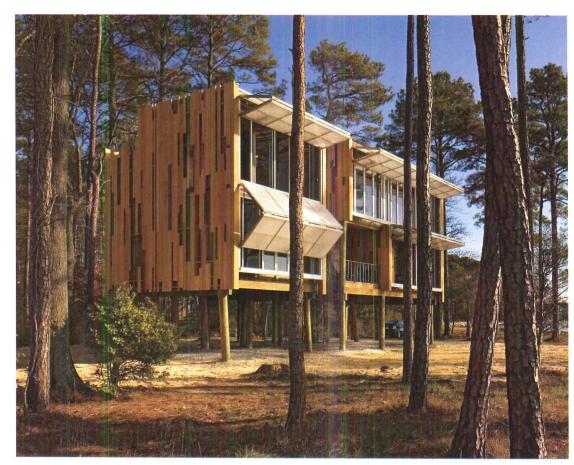


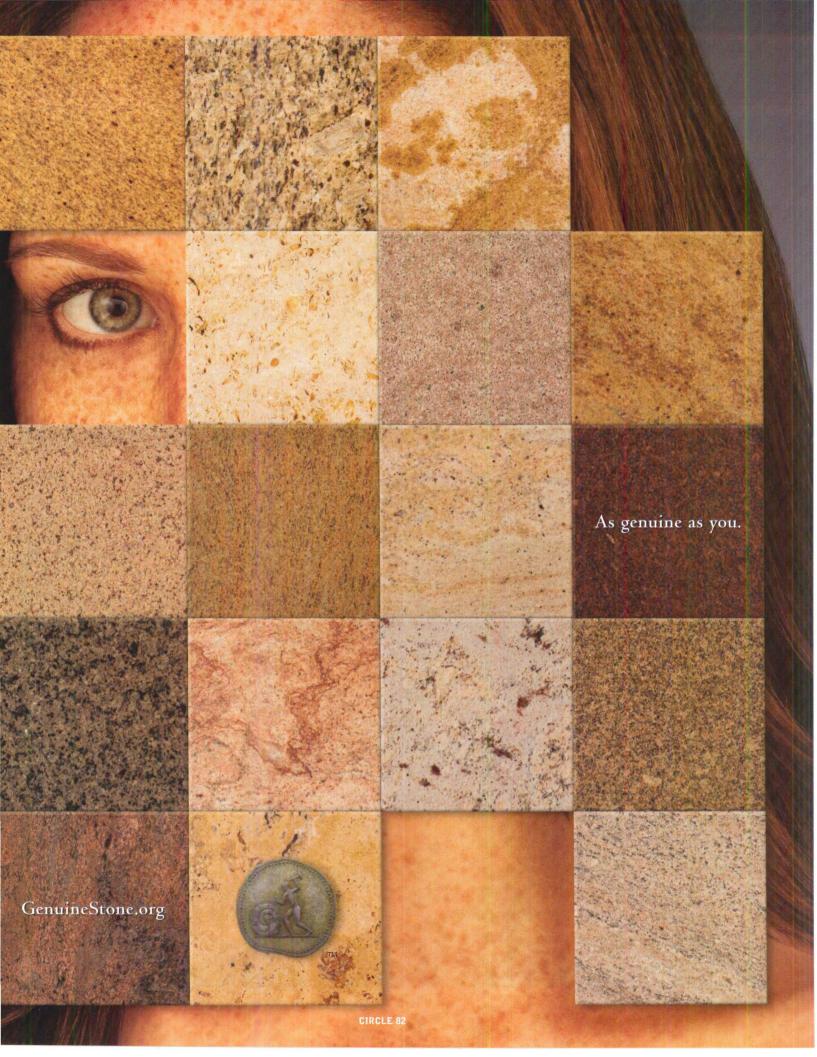
Olympic Sculpture Park
Seattle, Washington
Architect: Weiss/Manfredi
[RECORD, July 2007, page 110]

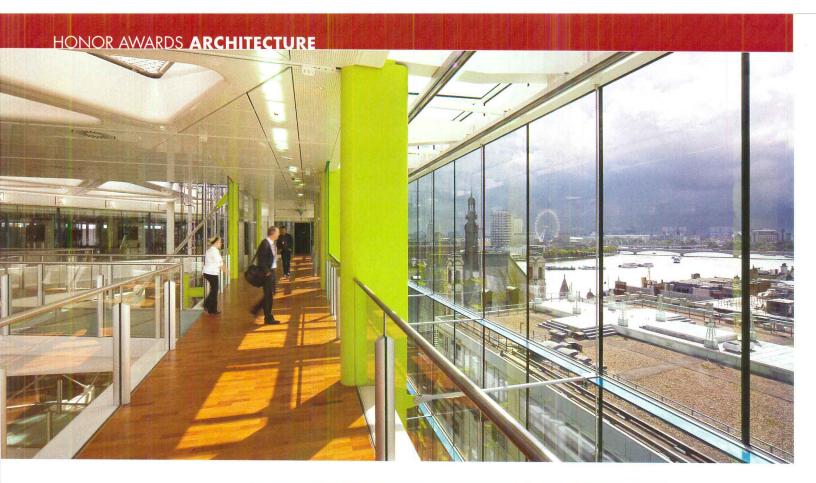
Three stretches enhanced by sculptures from the Seattle Art Museum descend along a Zshaped path in this public park. The first stretch crosses a highway; the second, train tracks. The last traverses a 40-foot grade and transports visitors from urban Seattle to the newly restored beachfront that overlooks Elliot Bay. Before construction, 12,000 tons of contaminated soil from the former Union Oil of California site was removed. The remaining soil was capped with 200,000 cubic yards of clean fill, much of which came from the Seattle Art Museum's expansion project.

Loblolly House Taylor's Island, Maryland Architect: KieranTimberlake Associates [RECORD, April 2007, page 140]

In just under six weeks of construction, this 1,800-square-foot residence was assembled with prefabricated components onto an aluminum scaffolding system with the mere twist of a wrench. Elevated on a foundation of loblolly tree stumps, this twostory abode features prefabricated floor and ceiling cartridges that contain heating, ventilation, and electricity, and fully integrated mobile bedroom and bathroom units. A prefabricated wood rain screen clads the west facade, with polycarbonate-clad hangar doors on the east.







Unilever House (100 VE) London Architect: Kohn Pedersen Fox Associates

The crescent facade of the Unilever headquarters in London has been a prominent sight along the Thames since the 1930s. Working with English Heritage and the City of London, Kohn Pedersen Fox Associates developed a scheme to retain the historic fabric of the 120,000-square-foot building while transforming the interior, which could no longer accommodate Unilever's operational needs. Consolidating several elevator cores, the architects opened a luminous, eight-story atrium. A four-story grid of suspension cables hangs from the atrium's glass ceiling and supports a series of "flying carpets," small break spaces floating in the atrium, which are linked to each other by a spiral staircase and to the surrounding floors by glass bridges. The design creates an imaginative and invigorating work space and updates a historic building to suit modern office requirements.





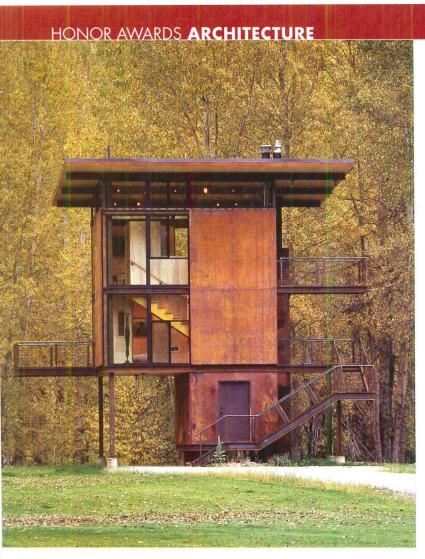
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Delta Shelter

Mazama, Washington

Architect: Olson Sundberg

Kundig Allen Architects

[RECORD, April 2006, page 93]

To keep this 1,000-square-foot weekend retreat out of flood danger, the architects raised the building onto four steel columns. The second-level entrance leads to

two bedrooms and baths; the living area and kitchen are on the third floor. A cantilevered steel deck extends from both the upper and middle floors. To protect the steel-and-glass-clad cabin, four shutters open and close simultaneously via a handwheel that operates drive shafts, U-joints, spur gears, and cables to move the shutters across the glazed portions of the facade.



Griffith Observatory

Los Angeles

Architect: Pfeiffer Partners

Architects

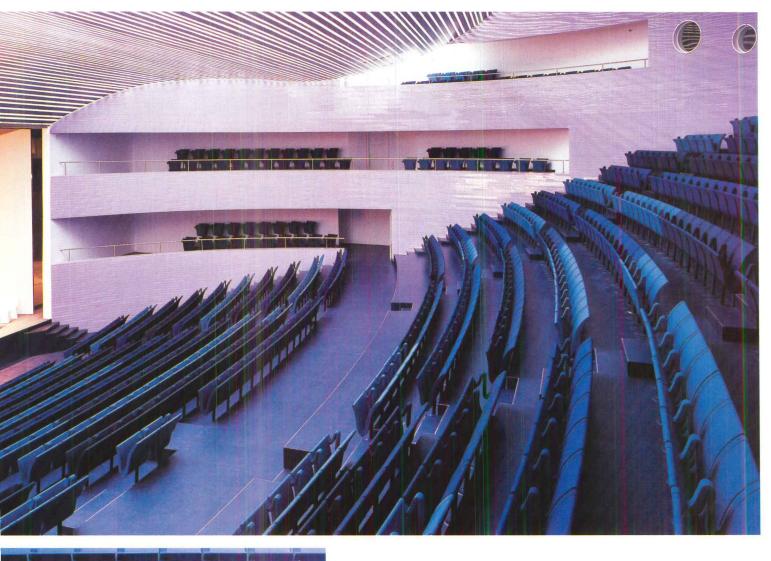
Associate architect: Levin &

Associates Architects

[RECORD, June 2007, page 154]

The architects' challenge was to maintain the iconic Art Deco integrity of this eminent landmark in the Hollywood Hills and add nearly 40,000 square feet of new gallery space. While the observatory's coelostat directs visitors' attention heavenward, the new spaces now also take them underground—the extended gallery spaces are tucked beneath the vast grassy landscape. A new café along the western edge boasts distinctive glass walls, futuristic pylons, and bronze ornamentation, enhancing the original structure's purpose.











Palacio de Congresos, Badajoz - Project Josè Selgas and Lucia Cano Architects Model Flow - Design Monica Förster

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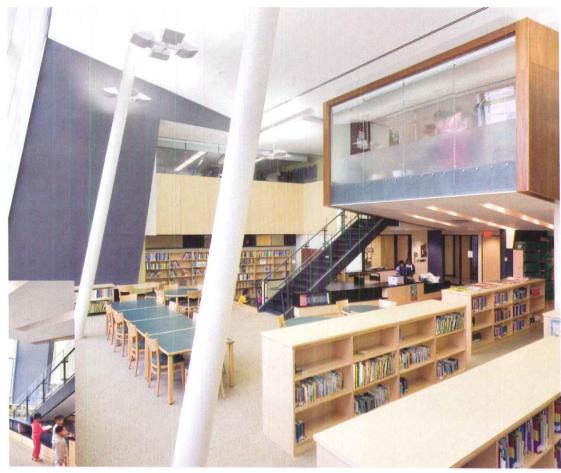






Thomas L. Wells Public School Toronto, Canada Architect: Baird Sampson Neuert Architects

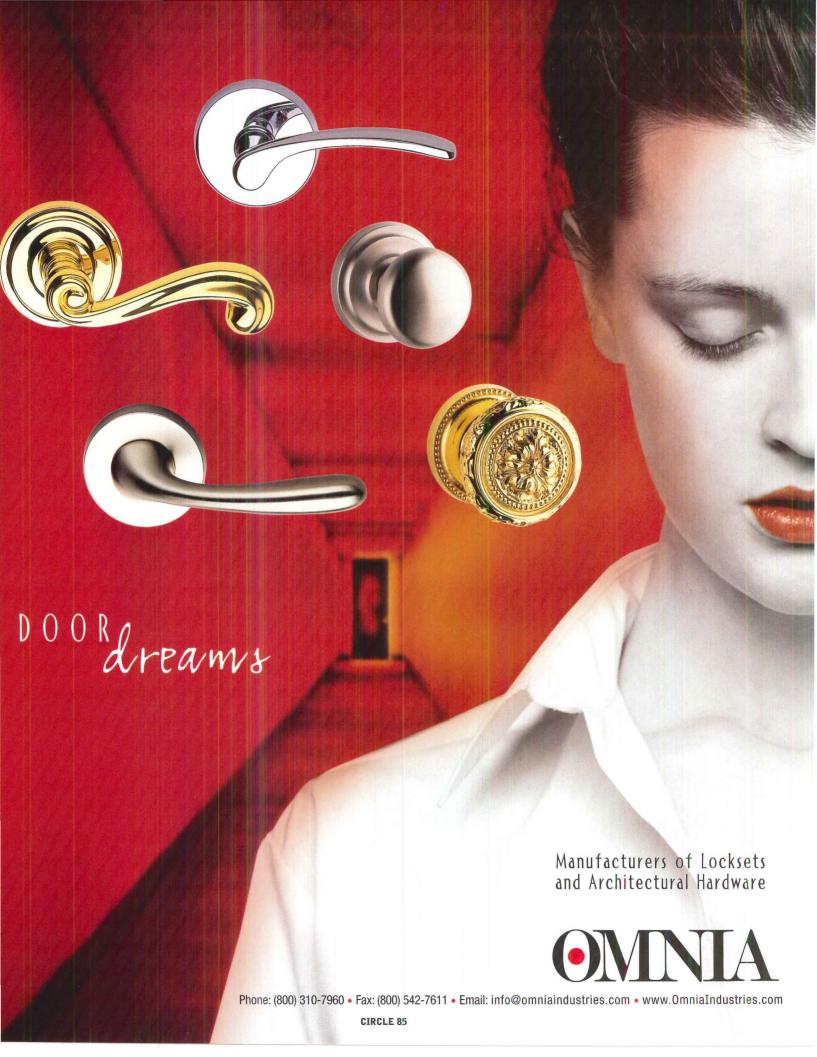
The first LEED Silver-rated public school in Canada, Thomas L. Wells Public School commences a new generation of green schools for the Toronto District School Board. Baird Sampson Neuert Architects devised a program for the small, 3-acre site that efficiently maximizes exterior play space as well as solar exposure for the classrooms. Responding to Toronto's northern geographical location, the Canadian architecture firm used computer modeling to calibrate light shelves for the large classroom windows, shading high summer sun and reflecting low winter solar rays deep into the building. A displacement ventilation system injects fresh air into classrooms through benches adjacent to the corridor, drawing the air across radiant floor heating to return air grilles above the windows.









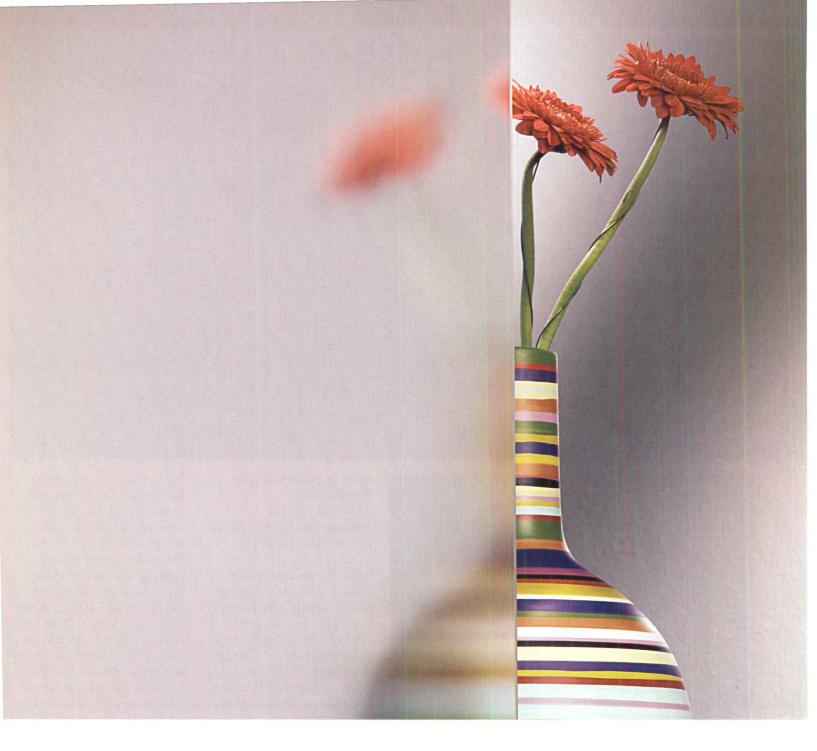






The Nelson-Atkins Museum of Art Kansas City, Missouri **Architect:** Steven Holl Architects [RECORD, July 2007, page 92]

Steven Holl's expansion of the Nelson-Atkins Museum of Art infuses Modernism into the grassy landscape of the site, contrasting the 1933 Classical structure with five glass-lens boxes that gather, diffuse, and refract light into new gallery spaces. These glass boxes, illuminated at night, appear as ice blocks along the eastern edge of the museum and incorporate the existing Sculpture Park. The museum extension features multiple entry points, an attempt to open the world of art inside to the larger community.



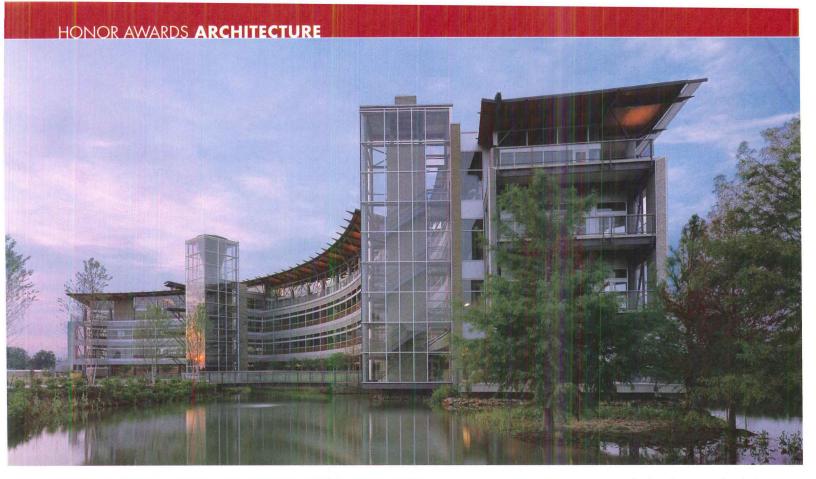
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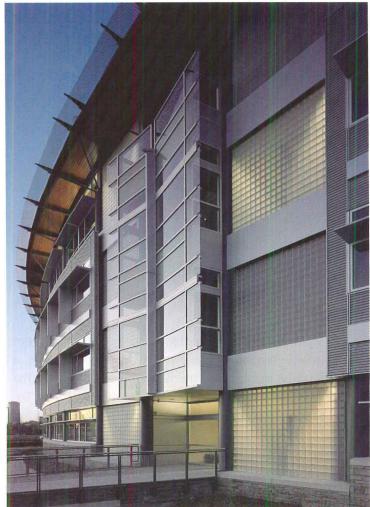
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Heifer International World Headquarters

Little Rock, Arkansas Architect: Polk Stanley Rowland Curzon Porter Architects

Heifer International donates livestock to families in need to assuage world hunger. This sustainable approach to giving is reflected in the company's new world headquarters. Constructed on a former railroad switchyard polluted with creosote and diesel fuel, the brownfield became the home for this 94,000-square-foot

facility that earned a platinum LEED rating for its ecologically minded design. The narrow, fourstory building gently curves along a wider concentric master plan; staircases are visibly encased in glass and extend over wetlands to provide natural ventilation throughout the building. The narrow, 62-inch width of the building enables daylight to penetrate the interior office spaces, contributing to the pleasant work environment. Each floor features a cantilevered balcony that serves as an outdoor meeting room.

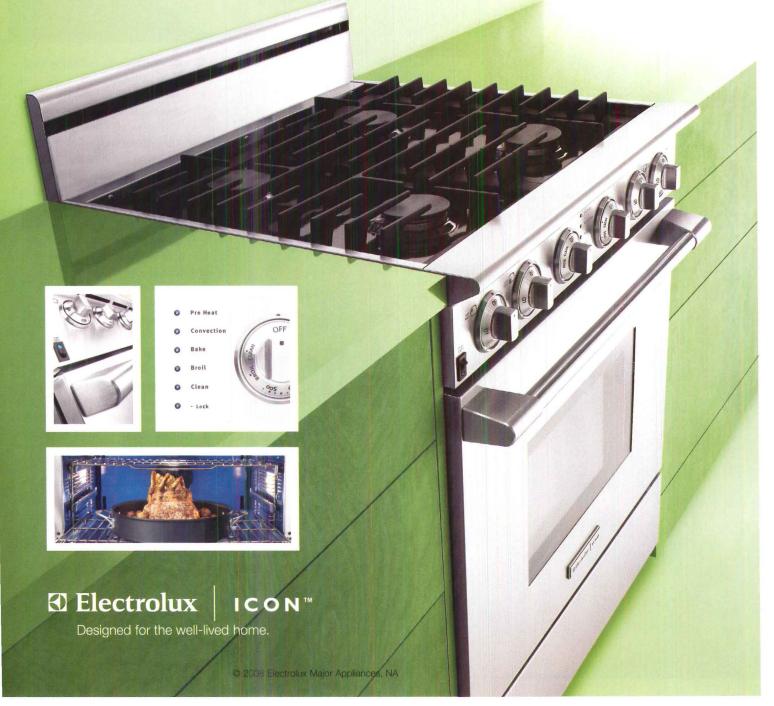


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Central Park South Apartment New York City Architect: Gwathmey Siegel & Associates Architects

The architects transformed this former 25th-floor hotel apartment from a mishmash of exposed plumbing and arbitrary columns into a remarkable 8,000-squarefoot residence. Accommodating the owner's extensive Modern and Contemporary art collection, the architects created a spacious gallery ambience in the apartment, despite the low, 8-foot-4-inch-tall ceilings, by interconnecting the rooms. Sinuous walls gently envelope the spaces, the most unique of which is the powder room, enclosed in leather-clad walls. A bronze-andglass door leads into the kitchen, which features custom-designed wood cabinets, as well as counters and other surfaces of stone, stainless steel, and titanium. Walls are made of stainless-steel mesh and integral plaster.

Novelty Hill Januik Winery Woodinville, Washington Architect: Mithun Architects + Designers + Planners

The concrete-paneled facade of the Novelty Hill Januik Winery fits seamlessly into its industrialized suburban location, but the utilitarian allusion quickly melts into warmth once inside, as wood, stone, and glass are interwoven throughout the classy concrete interior. Guests enter the 31,000square-foot building through the tasting room, where fir trellis beams hang over the rectilinear space. The wine-tasting bar incorporates dark stone quarried from the vineyard property into the design. A rear glass wall overlooks the tank and bottling room below, and guests can witness part of the grape-to-glass process. Storage facilities and the barrel room are on the basement level, along with office spaces. The main level includes a kitchen and function room, as well as a boardroom, all of which provide easy access to several outdoor terraces.





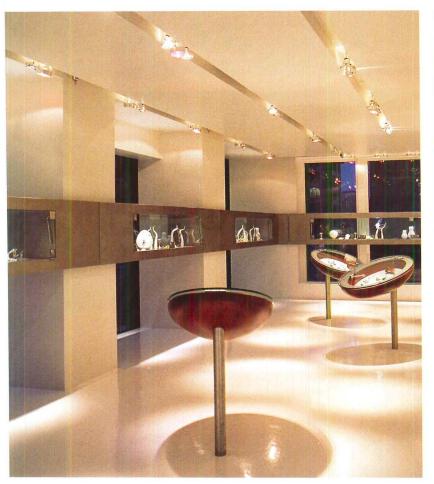


Illinois State Capitol Chamber Restoration

Springfield, Illinois **Architect:** Vinci/Hamp Architects

To recover the integrity of the Illinois State Capital's original Second Empire architectural style that was lost in a 1970s remodel, the architects took extensive measures to return the structure to its original form, with minor modifications to incorporate new technologies. The mahogany-and-walnut millwork was carefully restored, and light fixtures and carpets were custom designed to match period photographs of the original installations. Seats in the grand Senate and House Chambers feature rolltop and hinged-top desks based on 19thcentury designs.







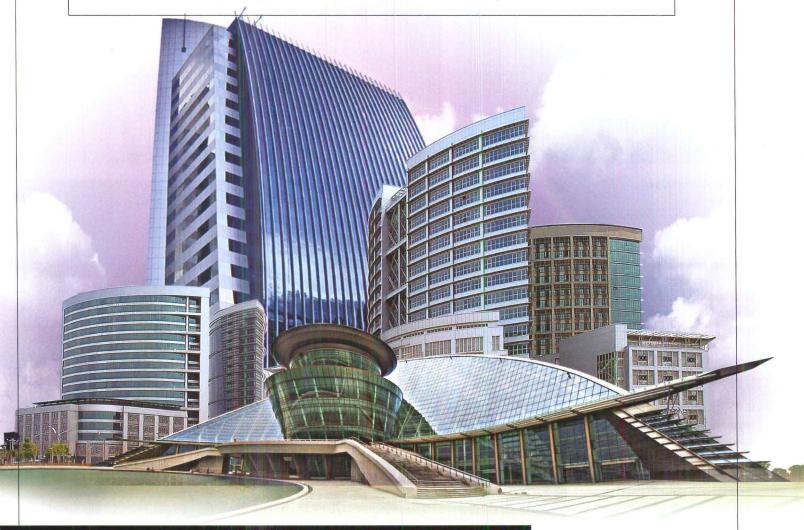
Anthony Nak Flagship Store Austin, Texas

Architect: M.J. Neal Architects

Completed in just 12 weeks, this 800-square-foot flagship jewelry store was transformed from a 1970s ground-floor office space into an edgy showcase for haute couture jewelry. A gently arching gypsum-board ceiling hovers above three pods made of metal, wood, and glass, mounted on stainlesssteel posts that encase jewelry in

the center of the showroom. Twelve-inch-tall steel-and-glass cases appear to levitate in the center of the windowed perimeter between the exterior columns. The windows, enlarged from ceiling to floor, open the white Minimalist interior to downtown Austin's streetscape. The rear wall serves as a screen for a digital display of the client's products, projected 24 hours a day and illuminating the interior with images of jewelry flashed throughout the night.

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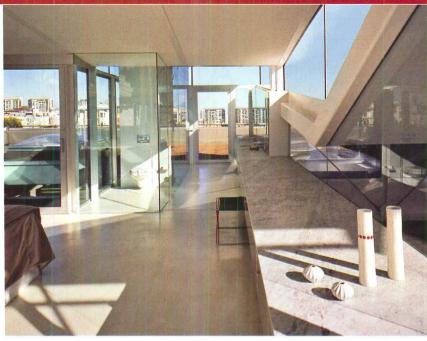
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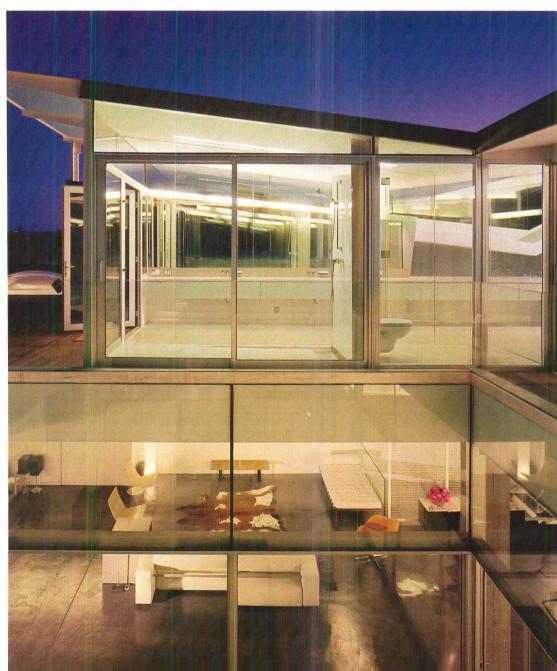
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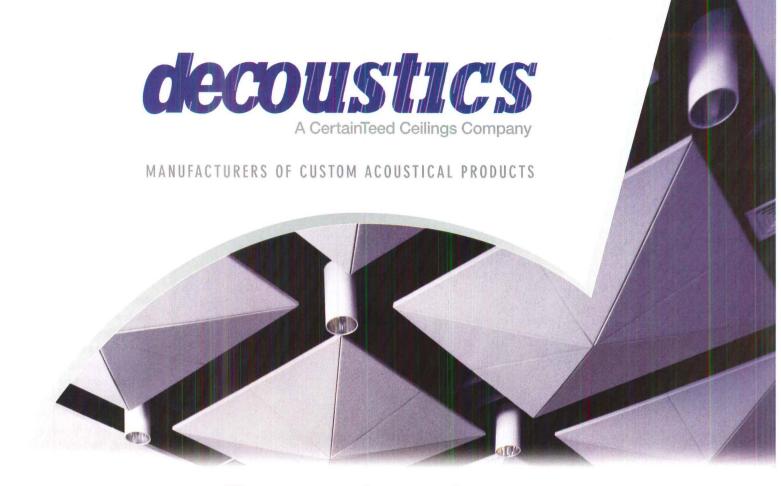




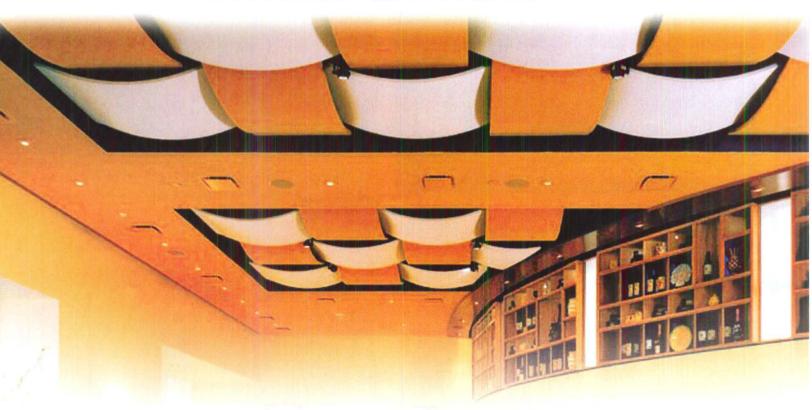
Tehama Grasshopper San Francisco Architect: Fougeron Architecture

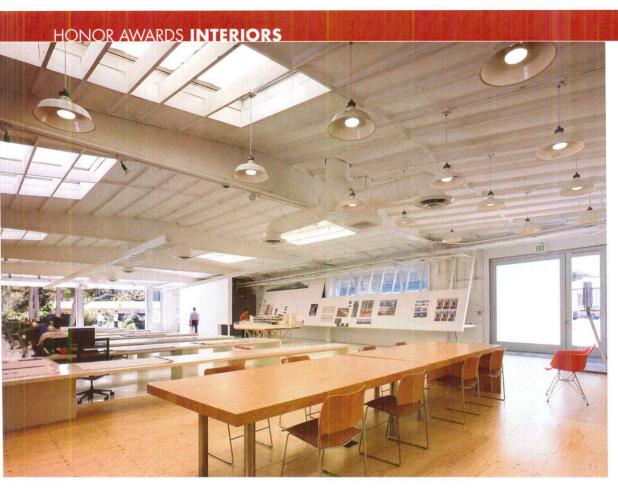
The architect transformed a former concrete warehouse in San Francisco into an office, living area, and penthouse for a family of three. Visitors enter a lobby that separates the main-level office from the private upper levels, which are reached via a custom steel staircase. A courtyard, cut out from the existing floor plate, occupies the central space of the second floor and opens and connects to the sky above, drawing light into the innermost interior. Glass walls enclose the bathrooms and child's bedroom. The courtyard offers views of the third floor, with its expansive penthouse living area, including the master bedroom and bathroom.





The many faces of Decoustics Fabric Finishes





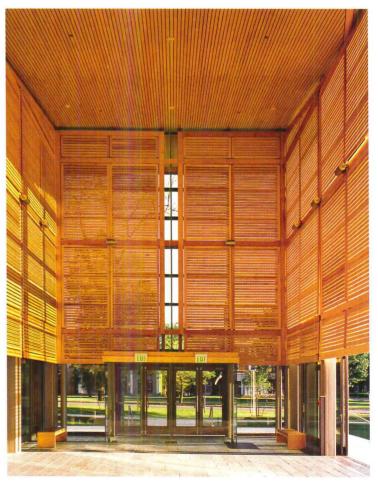
Architects Office
Los Angeles
Architect: Lehrer Architects

For a mere \$20 per square foot, Lehrer Architects resurrected a dilapidated, 50-year-old, 5,400square-foot warehouse into a bright and vibrant office space. After razing the southern wall and installing glass garage doors in its place, the interior was transformed into a well-ventilated work space overlooking an outdoor garden terrace. Natural light fills the office through glass doors and overhead skylights within the hangar ceiling. The unusual trapezoidal shape of the block and the building is emphasized with a bold red line that runs the length of the work space along the epoxy floor.

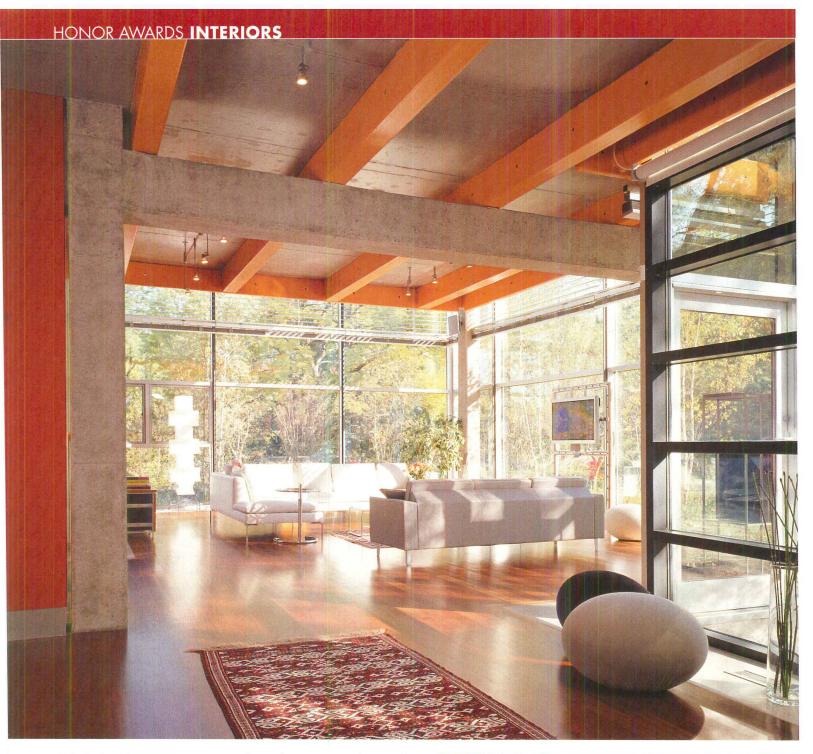


The '62 Center for
Theatre and Dance
Williamstown, Massachusetts
Architect: William Rawn
Associates, Architects
[RECORD, January 2008, page 114]

Due to the absence of a fourth wall, the traditional distinction between behind-the-scenes and front-ofhouse activity becomes blurred in this liberal arts college theater and dance center. The theater provides four venues in one building, with rehearsal spaces, costume shops, and faculty offices set along the circulation, allowing students, faculty, and the public to interact. The glazed-facade dance studio permits a view from the outside to the activities of choreography within, which can be seen from multiple paths that connect the campus with the three entrances into the building. The 200-seat CenterStage Theatre opens to a lobby, while the wood-ribbed MainStage theater lobby faces the town's Main Street.



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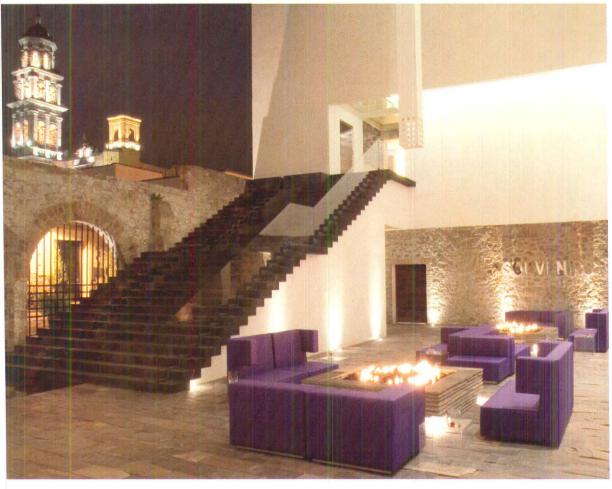
Private Residence Northfield, Illinois Architect: Roszak/ADC Associate architect: Wallin/Gomez Architects

Set on a wooded 1-acre plot in a residential area, the architect's private residence sets the stage for a new mode of transparent suburban living that has become popular in urban glassy-boxed high-rises. The 8,200-square-foot glass house receives its privacy from the dense landscape, yet the

home features an unobstructed interior that defies the typical delineated residential floor plan. The first-floor foyer, living area, kitchen, and dining room connect seamlessly. Comprising 16-by-16-foot modules with an 8-foot interstitial, red-paneled core, the house tells the story of its construction through its exposed elements: Wood forms frame the steel beams that run along the ceilings, and the concrete supports provide a frame from module to module.





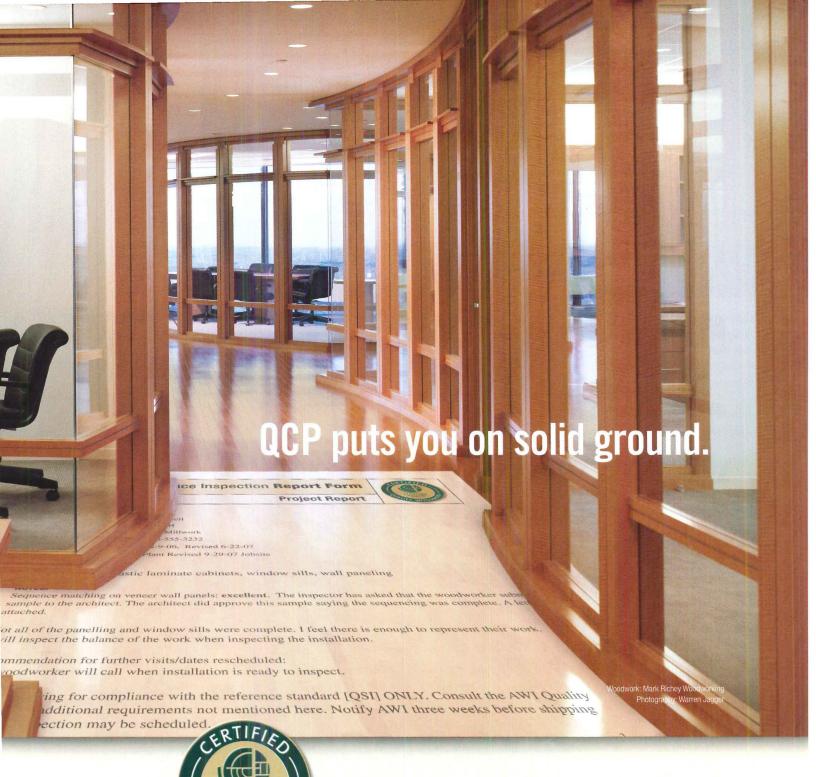


Hotel Boutique La Purificadora Puebla, Mexico Architect: Legorreta + LegorretaAssociate architect: Serrano Monjaraz Arquitectos [RECORD, October 2007, page 140]

Set within the Paseo San Francisco urban area of historic Puebla, Mexico, this hotel skillfully juxtaposes architecture of the past with modern, 21st-century sensibilities. Built on the foundation of a one-story, 19th-century stonewall water-purification factory, this 32,290-square-foot luxury hotel extends up three stories. Guests enter an open-terraced lobby, which is enveloped by the L-shaped structure housing a restaurant, 26 guest rooms, a rooftop bar/lounge, and a glasswalled pool. While continuing the original, rustic 19th-century stone-and-plaster facade in the additional stories, the architect adds contemporary glass-andmetal balconies that overlook the historic district beyond.







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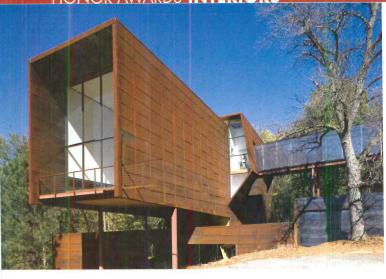
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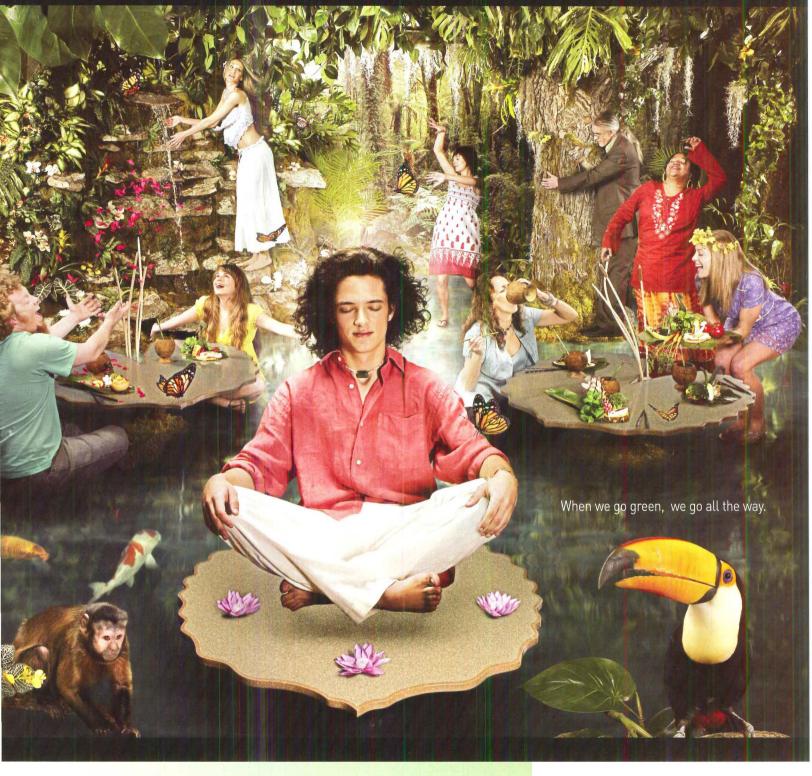
Laboratory Douglas County, Nebraska Architect: Randy Brown Architects [RECORD, April 2007, page 112]

Architect Randy Brown purchased this 10-acre property for his own residential experiment, which was constructed over a seven-year period with the help of architecture students during the summer. The rusted-steelclad home includes two sleeping and bathing pods, a guest room, a toy room and playroom, and a three-story master space, which features a bathroom, bedroom, and office. Ribbed southern yellow pine and poplar boards line the stairways, contrasting with the perforated and hot-rolled steel stairs. The glass southern wall of the "Big Tube," an entertainment space, provides views of the gentle hills and woods surrounding the property.









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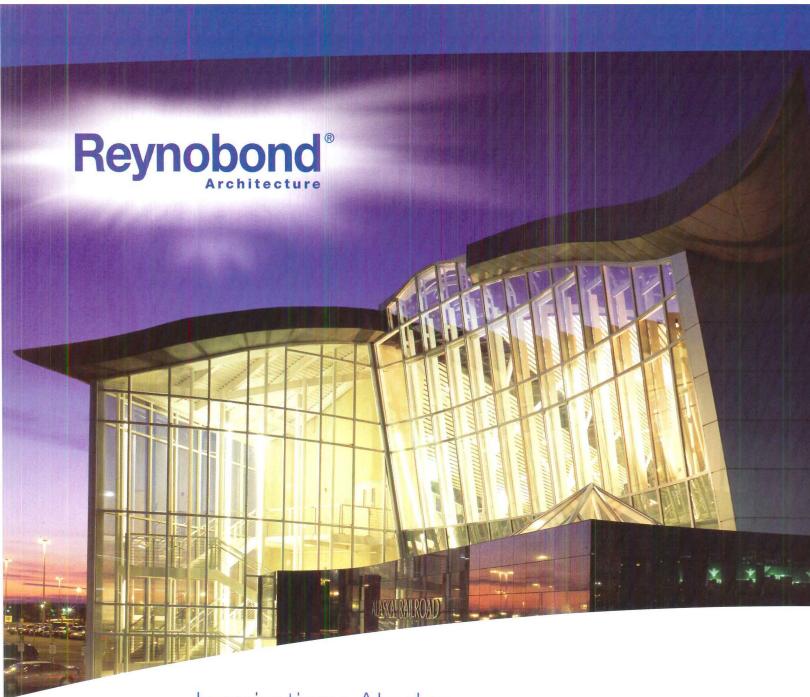
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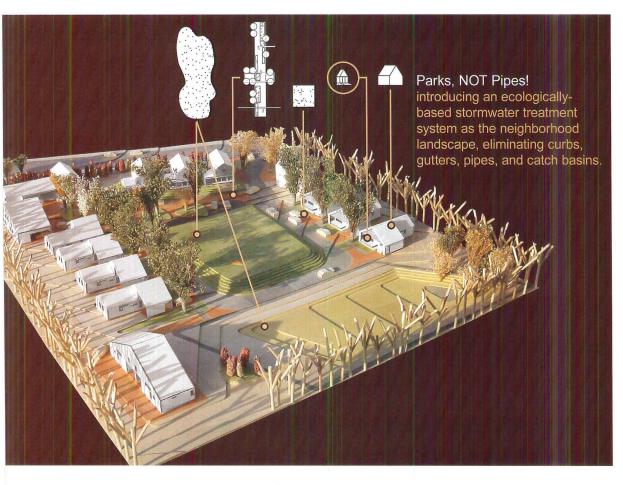


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Trinity Place at the southwest.



Habitat Trails

Rogers, Arkansas

Architect: University of Arkansas Community Design Center Associate architect: IKI Architects

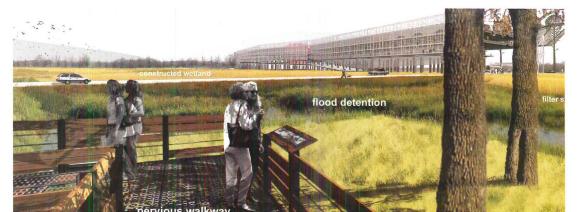
This 17-unit, low-impact, 5-acre residential development of singlefamily homes and duplexes aspires to create an ecological development model that reduces conventional construction and infrastructure costs. Obtaining 30 zoning variances, planners preserved one third of the site for public space and incorporated water-treatment infrastructure, including bioswales, infiltration trenches, sediment filter strips, green streets, and a wet meadow. By eliminating the need for curb, gutter, catchments, and pipes, road cost was reduced from \$450 to \$250 per linear foot. With volunteer labor, housing construction costs averaged \$60 per square foot.

Campus Hydroscapes

Fayetteville, Arkansas Architect: University of Arkansas Community Design Center

The University of Arkansas Community Design Center developed three holistic solutions for a stream remediation program for a 2,000-foot urban stream corridor running through the Fayetteville campus of the University of Arkansas. Flooding, erosion, and groundwater pollution degrade surrounding campus and highway infrastructure. Each solution emulates the ecology of healthy riparian systems, avoiding conventional forced-water-management strategies. Aiming to increase ecological and urban services at the same time, the plan also includes transportation, housing, and recreation proposals for a 40-acre quadrant of the campus.





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Los Angeles River Revitalization **Master Plan**

Los Angeles

Architect: Mark Johnson, FASLA; Richard Farley, FAIA

Engineer: Civitas

For decades, Angelinos have called for revitalization of the degraded, channelized, concrete-armored Los Angeles River. A new master plan developed by the city's Bureau of Engineering with consultation from Civitas can make it a reality. The plan proposes redevelopment of more than 750 acres of contiguous riverside real estate for open space and commercial, educational, recreational, and industrial land uses. Restoring the river ecology and creating a chain of parks within the city will improve regional water quality and help set the stage for greening this sprawling city.



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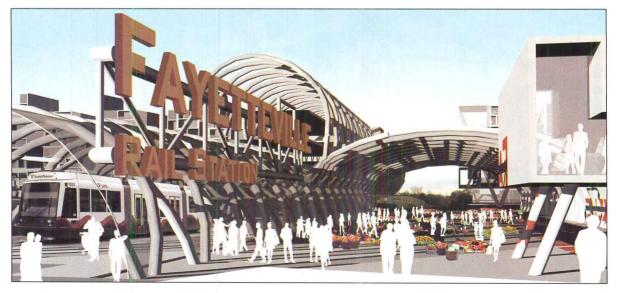


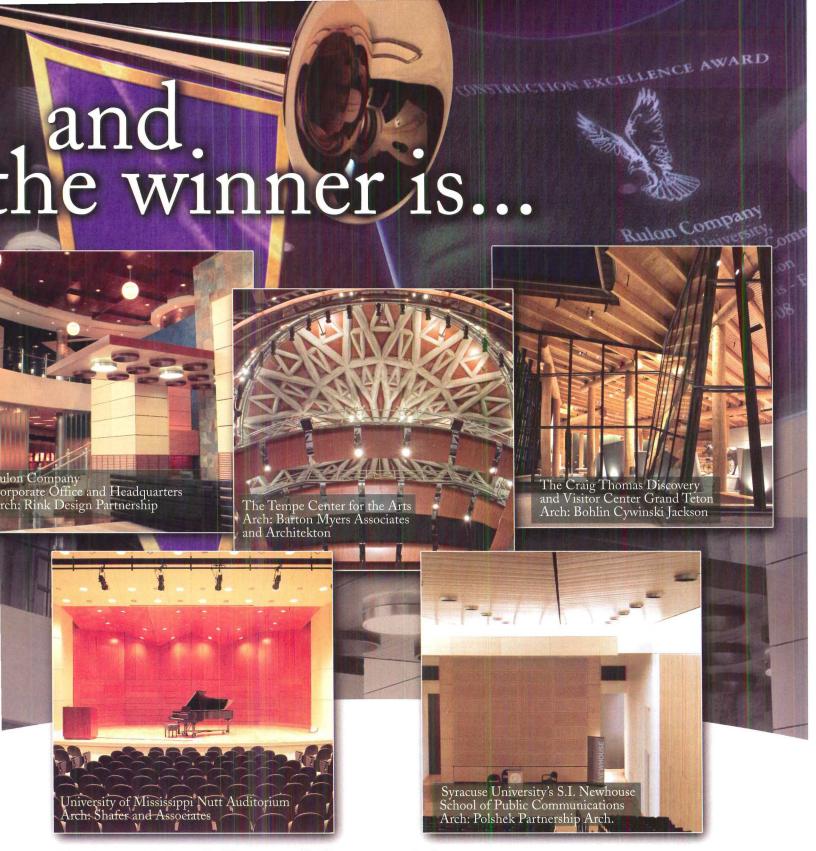




Visioning Rail Transit Northwest Arkansas Architect: University of Arkansas Community Design Center

Visioning Rail Transit is a study produced by a collaboration of design professionals at the University of Arkansas Community Design Center to initiate public awareness of development opportunities in Northwest Arkansas, the nation's sixth-fastest-growing region. Housing and employment in the region are concentrated along an existing rail right-of-way, which runs through the center of a 32mile urban corridor connecting four cities and two airports. Hoping to generate support to enroll Northwest Arkansas in the Federal Transit Authority's New Start program, the study conceives a rehabilitation of the rail that would revive historic downtowns, integrate commerce into neighborhood development, and transform the region into a model for sustainability. At a cost of \$750 million to \$1 billion, the program would take five to 12 years.





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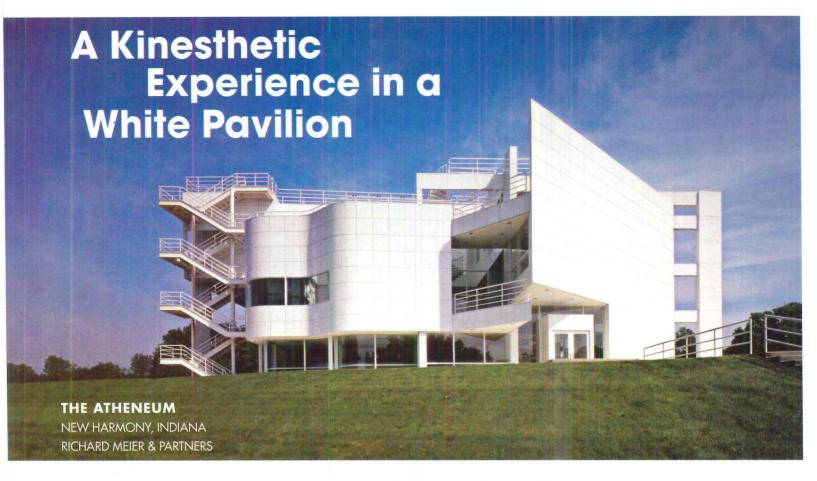


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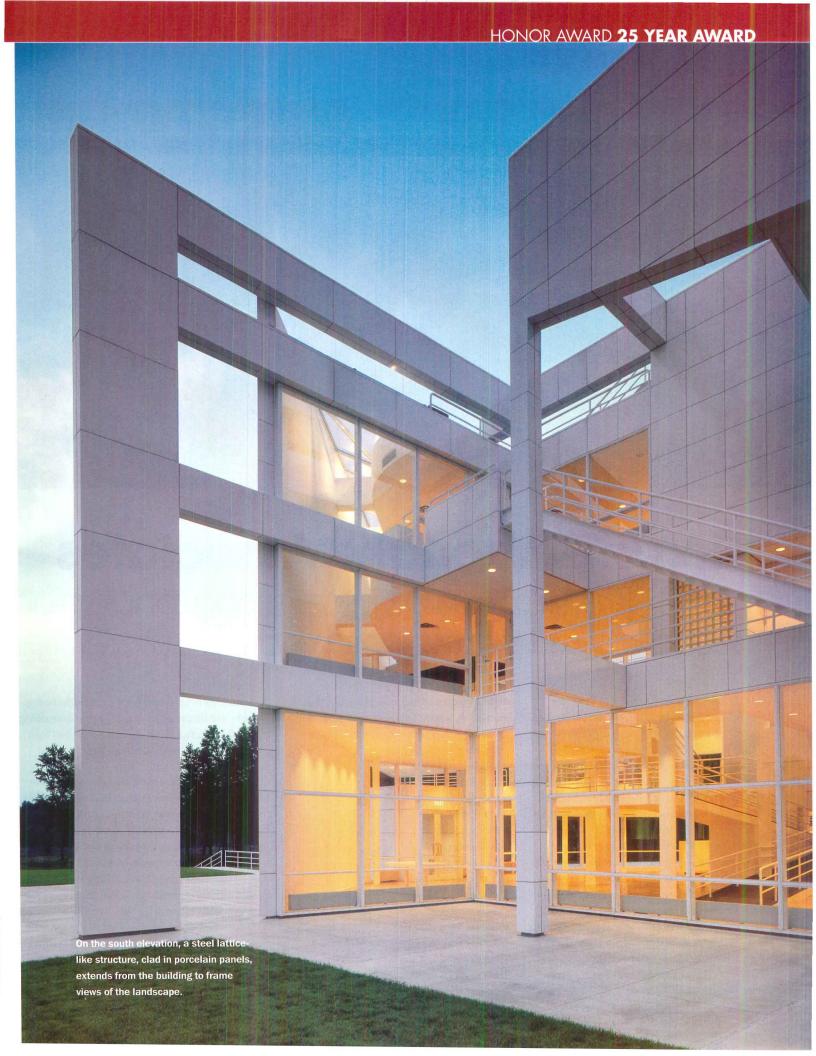
The Atheneum, in New Harmony, Indiana—designed by Richard Meier, FAIA—this year's winner of the AIA 25 Year Award, stands strong and proud in the landscape. The building, which opened in 1979, serves as an entrance to the municipality—a town once dubbed the "Athens of the West"and as a visitors' center. The building sits between the banks of the Wabash River and the historic limits of the town. Developed in 1825 according to the utopian ideals of Welsh industrialist and social reformer Robert Owen, the town attracts 25,000 visitors annually. Since this is Meier's second 25 Year Award (in 2000, he won the award for the Smith House in Darien, Connecticut), he now enjoys a distinction few have achieved.

Award nominator Peter Eisenman, FAIA, deems the building "one of Meier's seminal works of architecture ... a classic Meier design." The exterior, porcelainpaneled and perfectly in accord with the character of Meier's oeuvre, is entirely white. Regarding his use of white for the Atheneum, Meier remarked: "White is light, and it is movement. It reflects and refracts all the changes in color of the day in the best [possible] way. Just as white is about movement, so is the Atheneum."

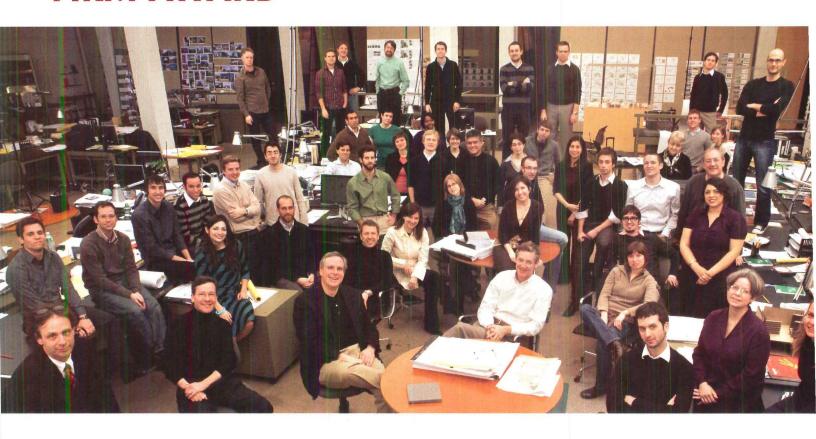
His intention becomes evident as soon as visitors enter the building, when they immediately encounter his "architectural promenade." The circulation is based on a switchback ramp that takes visitors from the groundfloor lobby and an exhibition area detailing New Harmony's history, up to the second and third floors, where more galleries, an auditorium, and a conference room are located. On the fourth floor, at the pinnacle of the structure, lies a rooftop terrace yielding a panoramic view. Here, one may

gaze at the Indiana flatlands beyond New Harmony, which is spread out below the building. By descending two flights of external stairs connecting to an elongated ramp, visitors are brought directly to the threshold of the town. *Jennifer Richter* The west entrance elevation (above) reflects the basic orthogonal grid determining the plan. On top of this grid, Meier overlaid another one cranked at 5 degrees, which generates a spatial complexity in the disposition of ramps (below), walls, and soffits.





FIRM AWARD



KieranTimberlake Associates

This Firm Award winner's long-range plan led to a successful research-based culture

ames Timberlake, FAIA, has often described his firm, KieranTimberlake Associates (KTA), as a tortoise. "We've not done things fast," he says. And although it is almost 25 years old, until the past six or seven years, the firm did its work "in relative obscurity." Timberlake's partner, Stephen Kieran, FAIA, agrees. "One of the things about being located in Philadelphia is that you can work there for a long time and never get noticed." But, he says, it was during those early years they developed the culture that made KTA this year's Firm Award winner. That culture emphasizes the value of doing research and having a great deal of skill in understanding building systems and how to detail them in ways that are efficient and elegant.

The pair are both graduates of the Department of Architecture at the University of Pennsylvania and began working together in the mid-1970s while employees of Venturi, Scott Brown and Associates. Each won a Rome

Prize from the American Academy—Kieran in 1981 and Timberlake in 1983. They set up their own practice the following year, taking teaching jobs to support the firm and their families. "We were able to afford some sessions with the management consultant Weld Coxe,"says Kieran. "He taught us the value of

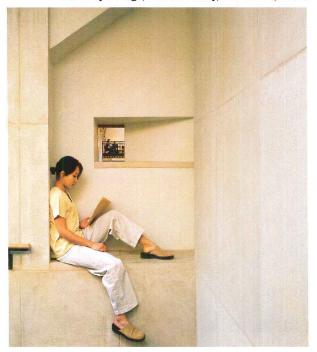
making long-range plans that

would allow us to build our firm, both strategically and financially. We spent more time doing small projects, but we also gave ourselves time to learn the craft of building. And it is a real painful craft to learn."

It was not until 1996, when the firm won the \$25 million commission to renovate Berkeley College at Yale University, that the partners felt they finally turned the corner financially. "People whose doors we had been knocking on for years were suddenly calling us," Kieran says. Then in 1998, the firm held strategic planning sessions that examined what it had achieved. "We knew there were internal impediments to what we could achieve, which we could address. But there were external ones, too," The firm's research

says Timberlake. "We felt we could work resulted in a best seller. address the external ones by formal-

Berkeley College, Yale University, New Haven, 2000.



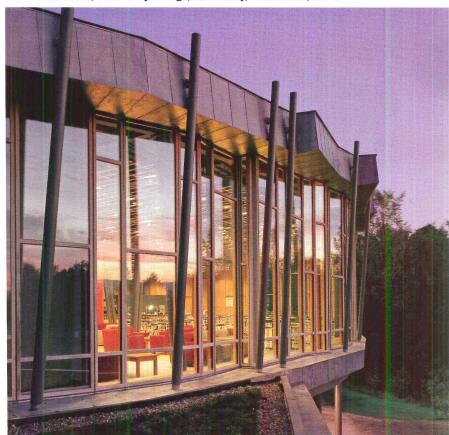
Levine Hall, University of Pennsylvania, Philadelphia, 2003.



Residential Initiative, Cornell University, Ithaca, New York, 2004.

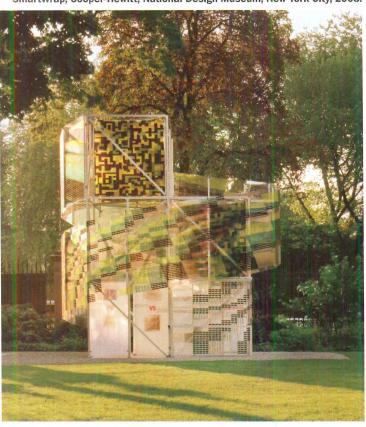


Atwater Commons, Middlebury College, Middlebury, Connecticut, 2004.

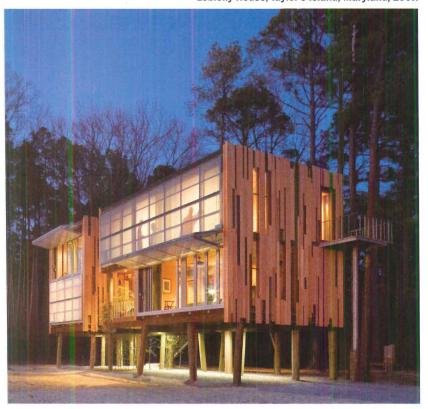




SmartWrap, Cooper-Hewitt, National Design Museum, New York City, 2003.



Loblolly House, Taylor's Island, Maryland, 2007.



Sidwell Friends School, Bethesda, Maryland, 2005.



Noyes Community Recreation Center, Cornell University, Ithaca, New York, 200









Yale Sculpture Gallery, New Haven, 2005.



Project for the Make It Right Foundation, New Orleans, 2007.



Cellophane House, Museum of Modern Art, New York City, 2008.

izing the research culture in our office." Kieran adds, "We had become known as architects who could put together some beautifully detailed buildings. But quality and productivity problems were threatening the art of what we were doing and the rest of the construction industry. We felt we could address that using research. And we oriented our financial plan, marketing, and public relations to support that agenda."

Addressing quality and productivity issues in construction became the basis of KTA's proposal for the first-ever Latrobe Fellowship for architectural design research, which the AIA College of Fellows awarded the firm in 2001. The grant allowed the team to hire a full-time director of research and travel the country visiting aircraft, automobile, and ship manufacturers to understand how the technologies they use to improve quality and

productivity while cutting costs could be applied to construction. This study resulted in the publication of the book *Refabricating Architecture* (McGraw-Hill Companies, 2004). Since then, KTA has documented its research efforts by publishing three more books.

Meanwhile, research into materials and mass customization was paying off elsewhere. In 2003, the firm's Levine Hall building at the University of Pennsylvania used a factorybuilt, double-walled facade whose ventilating system was preinstalled. It was the first of its kind in the U.S. Later that year, the firm installed the Smartwrap exhibition on the grounds of the Cooper-Hewitt museum in New York City. Its photovoltaic cells and organic light-emitting diodes were printed on a composite skin, then stretched over a proprietary prefabricated-aluminum-alloy frame that the firm invented.

Its principles of mass customization were fully exploited in the construction of the Loblolly House, which was fabricated in New Hampshire and put up in Maryland in just seven weeks. This fall, the firm will construct its prefabricated Cellophane House in the courtyard of the Museum of Modern Art in New York City.

Doing research has not put KTA off its game. It continues to do higher-education projects for Princeton, Cornell, and Yale, and it designed Sidwell Friends School, the nation's first LEED-Platinum K-12 school building. Yet, Kieran says, "I can't understate what the research agenda has done for us on all fronts, including making money. It gives the firm a competitive edge that's not insignificant, and people hire us because they believe we will give them a competitive advantage. We've gained a lot we did not necessarily envision." *Charles Linn, FAIA*

American Institute of Architects Vinners and Jurors 2008

WINNERS

Gold Medal (page 124)

Renzo Piano, FAIA

Architecture (page 132)

Residence Halls Units 1 & 2 Infill Student Housing: EHDD Architecture: 26th Street Low-Income Housing: Kanner Architects; Shaw Center for the Arts: Schwartz/Silver Architects; executive architect: Eskew+Dumez+Ripple; associate architect: Jerry M. Campbell & Associates: The Liberty Memorial Restoration and Museum: ASAI Architecture: TRUTEC Building: Barkow Leibinger Architects; Olympic Sculpture Park: Weiss/Manfredi; Loblolly House: KieranTimberlake Associates; Unilever House (100 VE): Kohn Pedersen Fox Associates: Delta Shelter: Olson Sundberg Kundig Allen Architects; Griffith Observatory: Pfeiffer Partners Architects; associate architect: Levin & Associates Architects; Thomas L. Wells Public School: Baird Sampson Neuert Architects: The Nelson-Atkins Museum of Art: Steven Holl Architects: Heifer International World Headquarters: Polk Stanley Rowland Curzon Porter Architects

Interiors (page 148)

Central Park South Apartment: Gwathmey Siegel & Associates Architects; Novelty Hill Januik Winery: Mithun Architects + Designers + Planners; Illinois State Capitol Chamber Restoration: Vinci/Hamp Architects; Anthony Nak Flagship Store: M.J. Neal Architects; Tehama Grasshopper: Fougeron Architecture; Architects Office: Lehrer Architects; The '62 Center for Theatre and Dance: William Rawn Associates, Architects; Private Residence: Roszak/ADC; associate architect: Wallin/Gomez Architects; Hotel Boutique La Purificadora: Legorreta + Legorreta; associate architect: Serrano Monjaraz Arquitectos; Laboratory: Randy Brown Architects

Urban Design (page 163)

Zuccotti Park: Cooper, Robertson & Partners; Habitat Trails: University of Arkansas
Community Design Center; associate architect:
JKJ Architects; Campus Hydroscapes:
University of Arkansas Community Design
Center; Los Angeles River Revitalization
Master Plan: Mark Johnson, FASLA; Richard
Farley, FAIA; engineer: Civitas; Visioning Rail
Transit: University of Arkansas Community
Design Center

25 Year Award (page 170)

The Atheneum: Richard Meier & Partners

Firm of the Year (page 172)

KieranTimberlake Associates

JURORS



Architecture
Jury Chair
Peter Kuttner, FAIA
Kuttner is president of Cambridge

Seven Associates, in Boston, which

won the 1993 AIA Architecture Firm Award. His work focuses on museums and colleges and includes exhibition design, with a particular emphasis on interactive and participatory design. He is a graduate of the University of Michigan and currently serves on the national AIA board as New England director.

Phillip M. Crosby, Assoc. AIA, St. Petersburg, Florida John Grable, FAIA, San Antonio Walker Johnson, FAIA, Chicago Marsha Maytum, FAIA, San Francisco George Nikolajevich, FAIA, St. Louis Mark Reddington, FAIA, Seattle Tallman Trask, Hon. AIA, Durham, North Carolina



Interiors Jury Chair Neil P. Frankel, FAIA Frankel holds the Fitz-Hugh Scott Endowed Chair in Design Excellence

at the University of Wisconsin-Milwaukee Graduate School of Architecture and Urban Planning. In addition to receiving many design awards for architectural spaces, with the 1999 introduction of the Frankel Series of seating and tables he joined a prestigious group of architects who have designed products for Knoll International.

Thomas A. Meyer, FAIA, Minneapolis Julia F. Monk, AIA, New York City Sandra Paret, AIA, Dallas



Urban Design

Jury Chair
Harry G. Robinson III, FAIA
The principal of TRG Consulting
Global, Robinson is also the

James E. Silcott Professor of Urban Design and Architecture and dean emeritus at the School of Architecture and Design, Howard University. His current projects include the Botswana International University of Science and Technology campus conceptual plan.

Krista Ann Becker, AIA, Santa Monica, California Bert Gregory, FAIA, Seattle Lyn Rice, AIA, New York City Gil Kelley, Portland, Oregon

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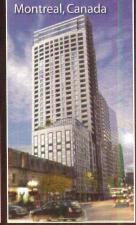








Washington, DC







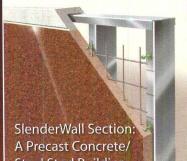




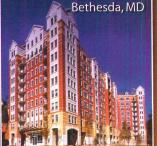
Johnson City, TN

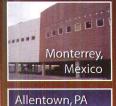


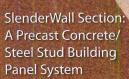




























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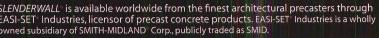
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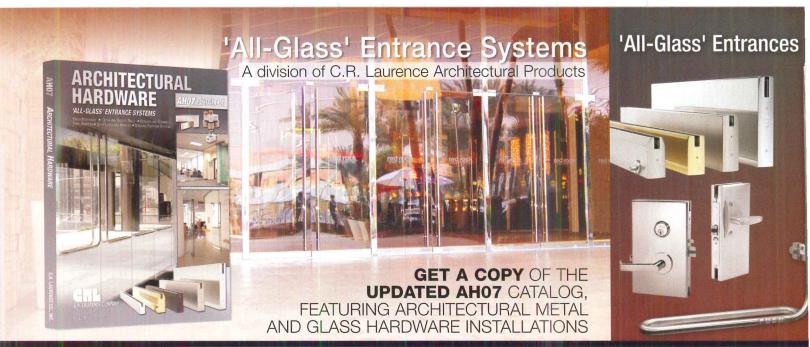
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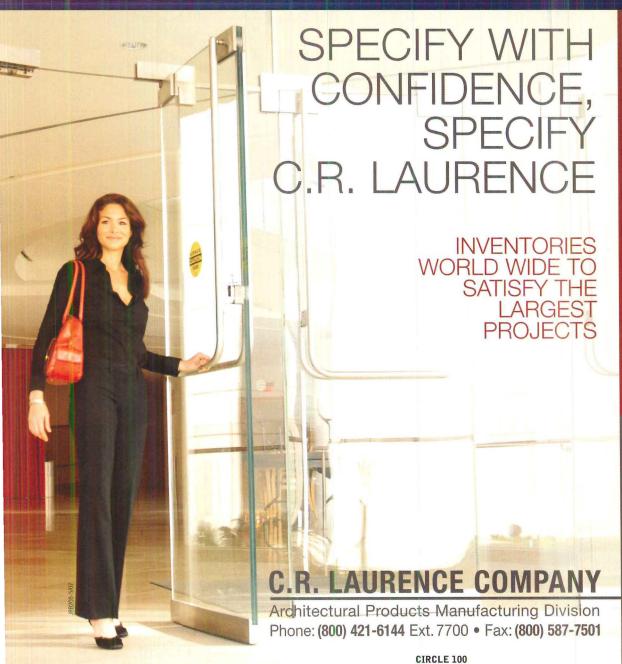
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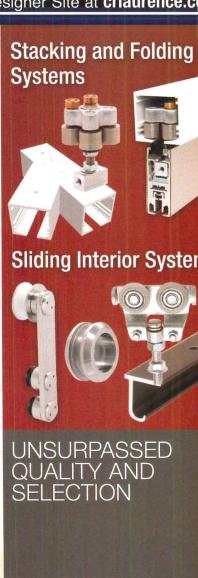






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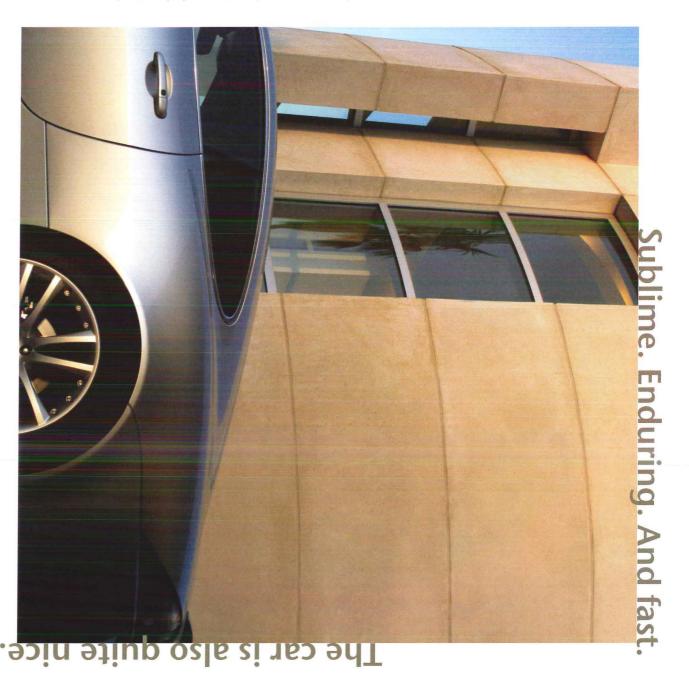
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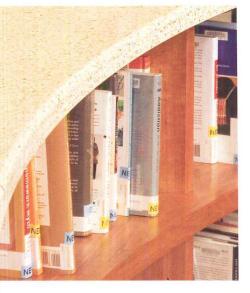
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MY DIARY















A project like Tully Community Branch of the San Jose Public Libraries has a life for me, a beginning and end, and it is part of me. There is a community process around every new library, and the local people wanted it to hearken back to the original family apricot orchard on the site. "This isn't your father's library," they told us. "Challenge the idea." In the middle of Silicon Valley, the library has an agrarian nature, from the barn in the kids' area to the finishes we used. Avonite's Kaleidoscope recycled product brings an earthy, organic quality we were looking for, and combining it with Avonite's Antique Glass gives the space an extra spark. The client and public love it!

I am Anne Sherwood from Anderson Brulé Architects, and I bring new ideas to fruition. Tully Library is now part of my life.

ANNE SHERWOOD

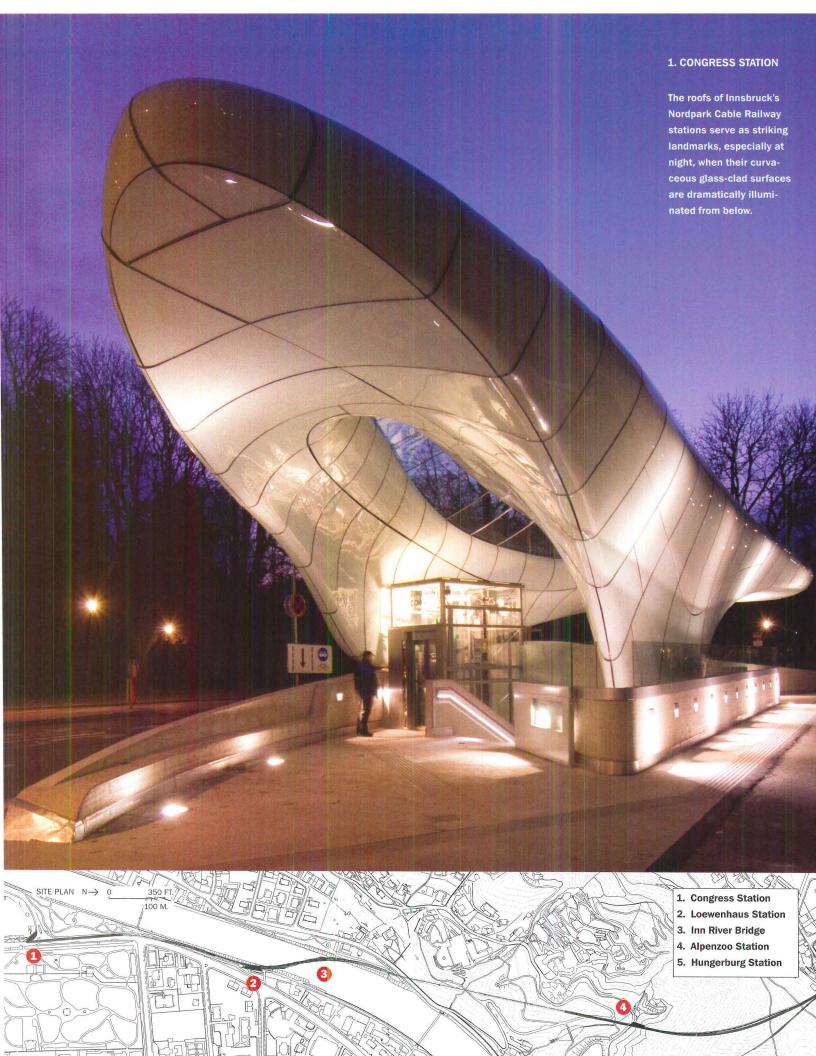
Anderson Brulé Architects * San José, California











Zaha Hadid redefines "contextual" with four sinuous stations for Innsbruck's

NORDPARK CABLE RAILWAY

By Joann Gonchar, AIA

ne of the limitations of relying on images to explain architecture is that the practice can sometimes encourage viewers to see buildings primarily as objects. And when viewed only in two dimensions, such as in photos on a printed page, the work of some architects looks a lot like seductive sculpture. Zaha Hadid's assertive buildings would fall into this camp. But the stations that the London-based Hadid has designed for the Nordpark Cable Railway in Innsbruck, Austria, demonstrate that her work is not just about making isolated sensual objects. The project confirms that she is also concerned with creating fluid connections between buildings and their sites, and with linking to the larger surrounding environment.

Hadid's four stations and her 820-footlong, cable-stayed bridge, all completed late last year, define a route that transports skiers, snowboarders, hikers, and local residents from just outside the medieval center of the city, over the River Inn, to the hamlet of Hungerburg, about 950 feet above Innsbruck. The route, just over a mile long, is one piece of a larger, approximately \$80 million project to replace and expand a series of antiquated lifts connecting the city with the summit of the Nordkette Mountain range defining the northern edge of this narrow valley.

Describing the stations as "contextual" may be a stretch (no Tyrolean bric-a-brac here), but

their swoopy roofs were derived from examination of the forces that shaped this alpine region millennia ago, according to the architect. "We studied natural phenomena such as glacial moraines and ice movements," says Hadid. The glass-clad structures, which, depending on the time of day and atmospheric conditions, seem milky white, cold blue, opaque, or glowing from within, do seem to be melting at a glacial pace, especially at the few points where each roof dips down to meet its reinforced-concrete base. The stations have softer and decidedly more organic contours than Hadid's own sweeping Bergisel Ski Jump [RECORD, January 2003, page 76], which opened on the opposite side of the valley in 2002.

Inspiration did not only come from Innsbruck's natural history, but also from the particulars of the individual station sites and their varied









All of Hadid's Nordpark stations deploy the same fluid forms, but adapted to the terrain and context of their individual sites.

surroundings. For example, the zoomy entrance to the underground Congress Station seems shaped by the auto traffic that zips around it, while the Loewenhaus roof appears elongated by the flow of the river it sits alongside. The Alpenzoo Station is poised for takeoff from its perch atop a 65-foot-tall tower embedded into its wooded slope, and Hungerburg's winged shelter hovers over a man-made plateau to frame spectacular views

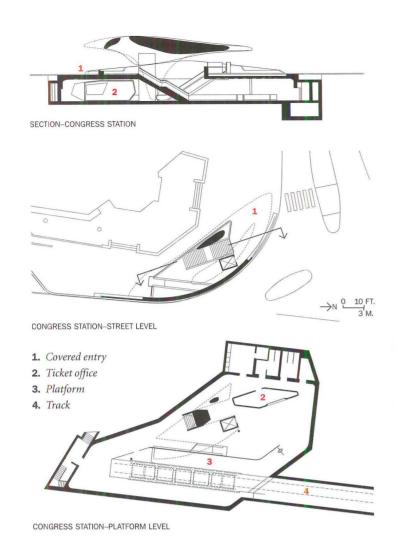
of the city and the opposite mountain range. Each station has its own context, topography, altitude, and circulation, says Hadid.

The architect describes the station roofs as "shells," although she uses the term loosely to refer to their fuselagelike shapes rather than their supporting structures. Inside the cladding is a rectilinear armature of steel

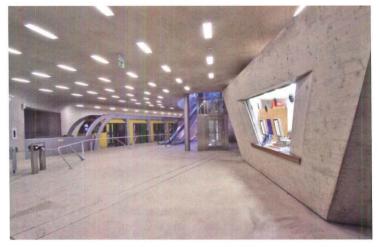
Project: Nordpark Cable Railway, Innsbruck, Austria

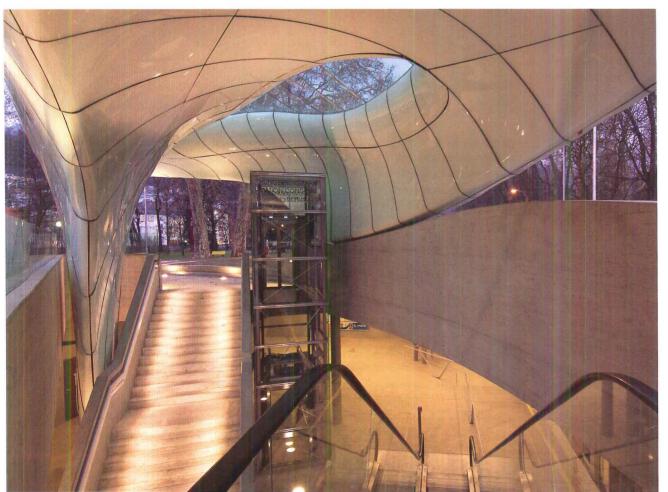
Architect: Zaha Hadid Architects-Zaha Hadid, principal; Patrick Schumacher, senior office partner; Thomas Vietzke, project architect; Jens Borstelmann, Markus Planteu, team Engineers: Bollinger, Grohmann & Schneider (station roofs); Baumann & Obholzer (concrete platforms); ILF (bridge and tracks)

General contractor: Strabag



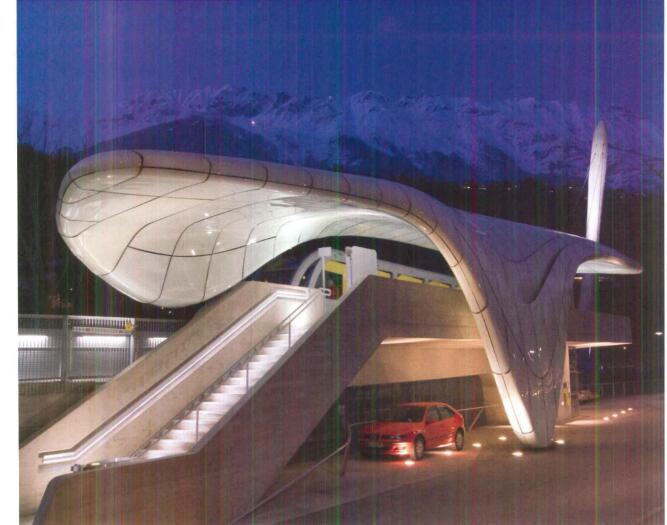






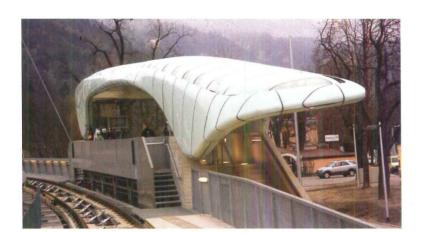
The Congress Station, near the historic heart of Innsbruck, is the first stop on the 1-mile-long funicular line, and its only underground platform.

Passengers descend to trains via escalator, elevator, or stairs, under a covered and skylit entryway seemingly shaped by the movement of the auto traffic that zips around it.

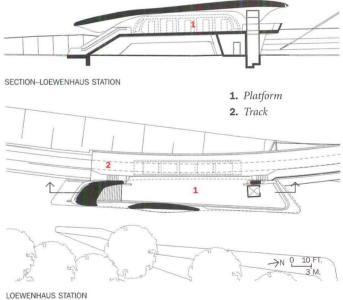


2. LOEWENHAUS STATION

Hadid says she drew her inspiration for the station roofs from the study of natural phenomena such as glacial moraines and ice movements. The fluid roofs seem to be slowly melting or oozing, especially at the few points where they dip down to meet grade or the reinforced concrete base.

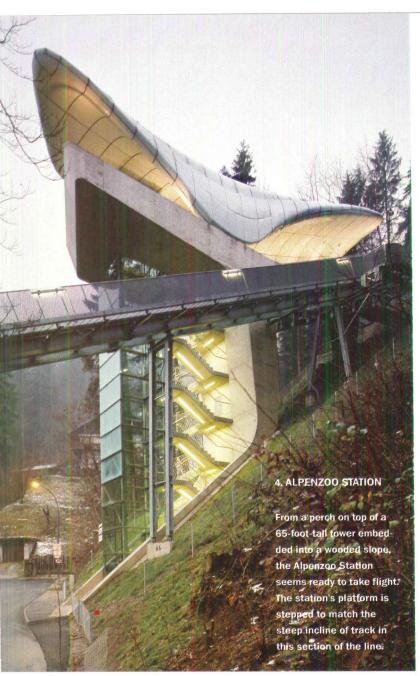


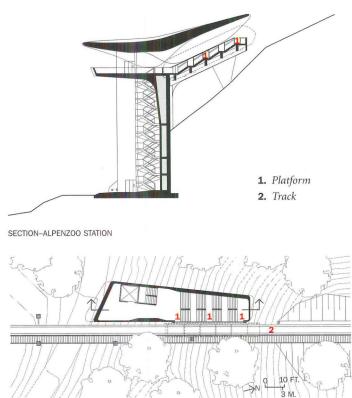




3. RIVER INN BRIDGE

From the Loewenhaus station, trains follow a slightly curved route over a Hadid-designed cable-stayed bridge that crosses the Inn River.





ALPENZOO STATION

plate, between $\frac{1}{6}$ and $\frac{1}{6}$ inch thick, that forms a grid with dimensions determined by the loading requirements of each roof's impressive cantilevers (some almost 50 feet long) and the manufacturing limitations of the double-curved glass. The joints between panels express the underlying structural grid on the surface of the roofs.

The joints, which are filled with black silicone on the roofs' upper surfaces but are left open on their undersides for ventilation, are for the most part uniform and precise, giving the impression that they are little more than lines in space. But in a few spots, especially in areas of tight compound curvature, these joints are a distracting break in the roofs' otherwise continuous and smooth surfaces. The situation will soon be remedied by replacing a few of the panels that were not manufactured according to specification, says Thomas Vietzke, project architect from Hadid's office. Problems with about 5 percent of the thermoformed glass panels stem from difficulties that the fabricator had accounting for the change in shape and size that occurs during the cooling process, he explains.

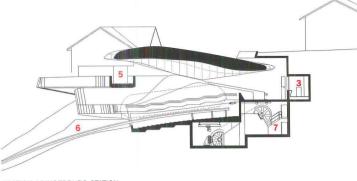
Programmatically, Hadid's stations are relatively clear-cut. They serve as dramatic landmarks, especially at night, when their sinuous surfaces are illuminated from below, and they provide access to the railway







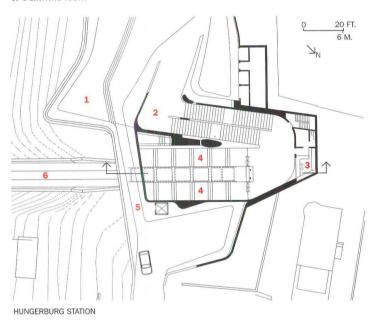




SECTION-HUNGERBURG STATION

- 1. Terrace
- 2. Covered entry
- 3. Conductor's room
- 4. Platform
- 5. Bridge
- 6. Track
- 7. Machine room





cars and shelter from the elements. Despite this straightforward program, realizing the funicular and its stations was nevertheless logistically demanding. "It was a small infrastructure project," says Erich Anmasser, executive director of project development for Strabag, the Vienna-based firm that was both general contractor and client, since it holds a concession contract to operate the railway through 2037. But it involved several construction disciplines, including tunneling, tracks, equipment, and system integration, he points out.

These aspects were not the direct responsibility of Hadid's office, but coordination between architecture and infrastructure was still challenging. For example, the architects had little leeway to adjust the relationship of one station and another, or between the tracks and platforms. These geometries had to be precise just to ensure that passengers could get in and out of the funicular cars, says Vietzke. "There was a knock-on effect of any changes," he says. "If one element moved, the rest had to."

The line's two railway cars are themselves a neat bit of engineering. Each has five largely glass-enclosed cabins that pivot within an overall chassis, providing a level ride and almost unobstructed views as the car climbs the mountain's slope. And when one of the cars pulls into a station, the degree of precision with which the funicular system operates becomes very clear. Then, as if by magic, a guardrail that prevents riders from falling onto the tracks noiselessly retracts, the train doors open, and a hinged metal plate flips down to cover the small gap between the car and platform edge. Just before the train pulls away from the station, the process repeats in reverse.

The need to accommodate this automated ballet, a host of other functional parameters, and conditions peculiar to Innsbruck and each funicular stop shaped the stations and tied them to their context. "You couldn't remove the stations and put them somewhere else," says Vietzke. "We could employ the same design strategy for another project," he says, "but it would yield totally different results."

Sources

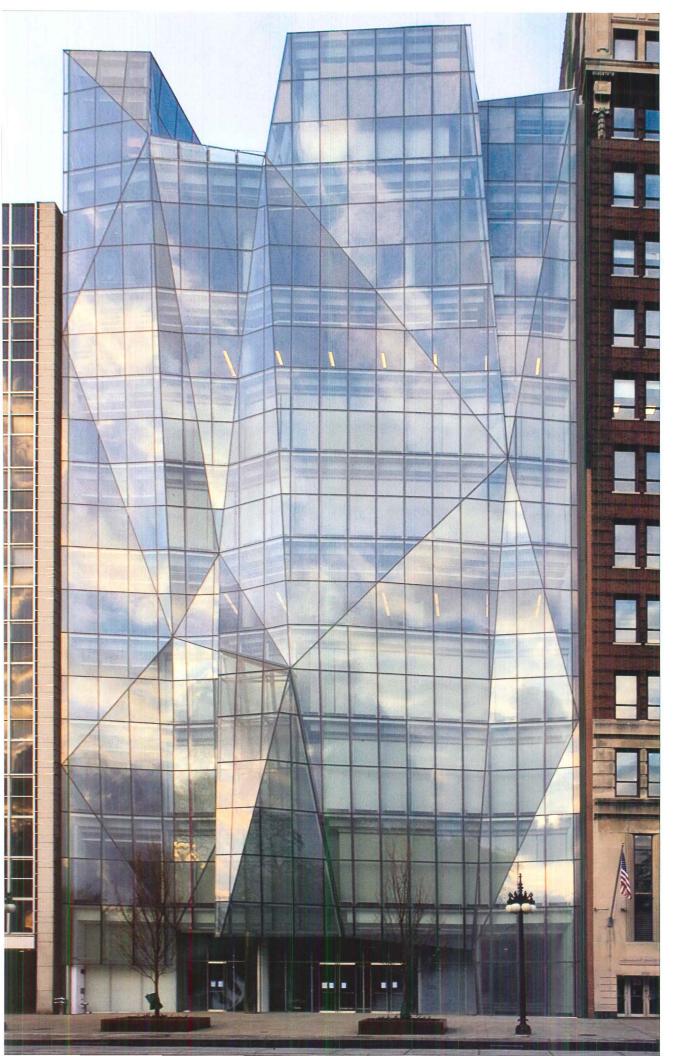
Thermoformed glass cladding: Pagitz Metalltechnik

Concrete formwork: Firmengruppe Thaleck; B&T Technologie

Lighting: Zumtobel; BEGA Engines and cables: Leitner Security devices: Kohne; Carvatech Metal doors: Riha

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Chicago's new Spertus Institute of Jewish Studies is a study in light, communicating the values of openness and lifelong learning. Its folded, faceted exterior resembles a piece of quartz (this page). This project marks the first insertion of a contemporary design into the landmark district of historic buildings that form a clifflike wall across from Chicago's Grant Park. Spertus's previous home is just to the left of its new one (opposite).

Like a cut diamond, Krueck and Sexton

Architects' SPERTUS INSTITUTE

OF JEWISH STUDIES fits seamlessly

into Chicago's downtown street wall

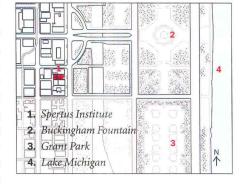
By Blair Kamin

ike the imposing towers lining the edges of New York's Central Park, the street wall of historic skyscrapers fronting on Chicago's Grant Park exist as built topography—a man-made cliff of stone and brick that includes such seminal structures as Adler & Sullivan's robust Auditorium Building. Now, with the completion of the Spertus Institute of Jewish Studies by Chicago architects Ron Krueck and Mark Sexton, this mighty street wall—a mile and a half long—has made a dazzling leap into the 21st century. The 10-story building resembles a shimmering piece of quartz exquisitely inserted into a great stone wall, its faceted, folded facade of glass glinting in the morning sun.

While Spertus may appear to be yet another one-off "icon building," it actually imparts several broader lessons. It is, first, a cultural building on a budget, with a construction cost of just \$39 million—far less than the recent crop of spectacular museums whose price tags typically exceed \$100 million. It is, second, a creative essay in Jewish architecture, eschewing facile iconography or familiar historicism for its beguiling study in light. Lastly, it is, like Steven Holl's much-praised Bloch Building at the Nelson-Atkins Museum in Kansas City, Missouri, an exercise in complementary contrast, with the new subtly juxtaposed to the old instead of trying to outshout it.

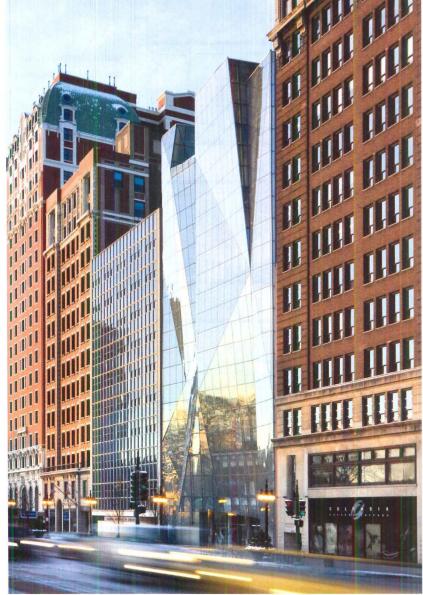
For both architect and client, the building represents a felicitous

debut on a broader stage. Krueck and Sexton's commissions have tended to be quiet triumphs, like the firm's skilled 2005 restoration of Mies van der Rohe's Crown Hall. For its part, Spertus, a leading Jewish institution in the Midwest, with three interrelated divisions—Spertus College, the Asher Library,



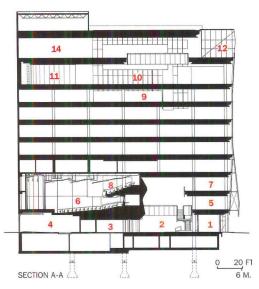
and the Spertus Museum—was stuck in a remodeled turn-of-the-century office building. In a move straight out of *The Fountainhead*, the building suffered an International Style makeover in the 1950s that concealed its cultural identity. Inside, the institute's three divisions were separated from each

Record contributing editor Blair Kamin is the Pulitzer Prize—winning architecture critic of the Chicago Tribune.



Project: Spertus Institute
of Jewish Studies, Chicago
Architect: Krueckand Sexton
Architects—Ron Krueck, FAIA, design
principal; Mark Sexton, FAIA, project
principal; Tom Jacobs, Tim Tracey,
project architects; Rico Cedro, AIA,

Yugene Cha, Jamie Cook, Laura Fehlberg, John deKraker, Sara Lundgren AIA, Greg Schmidt, Don Semple, Heejoo Shi, Paul Tebben, project team Associate architect: VOA Engineer: Environmental Systems Design



- 1. Entry
- 2. Lobby
- 3. Store
- 4. Dock
- 5. Café
- 6. Auditorium
- 7. Classroom
- 8. Upper auditorium
- 9. Library 10. Great hall
- 11. Permanent collection
- **12.** Sky terrace
- 13. Conference room
- 14. Temporary galleries



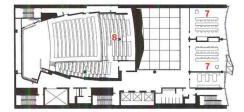
TENTH FLOOR



NINTH FLOOR

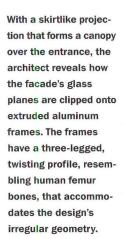


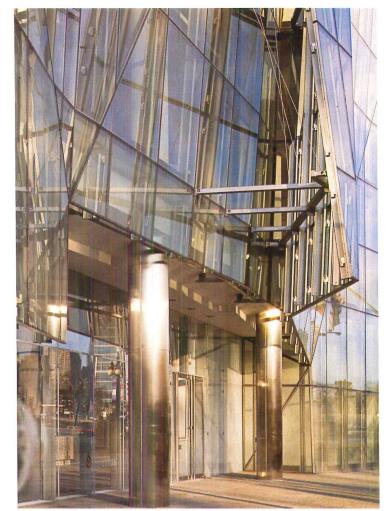
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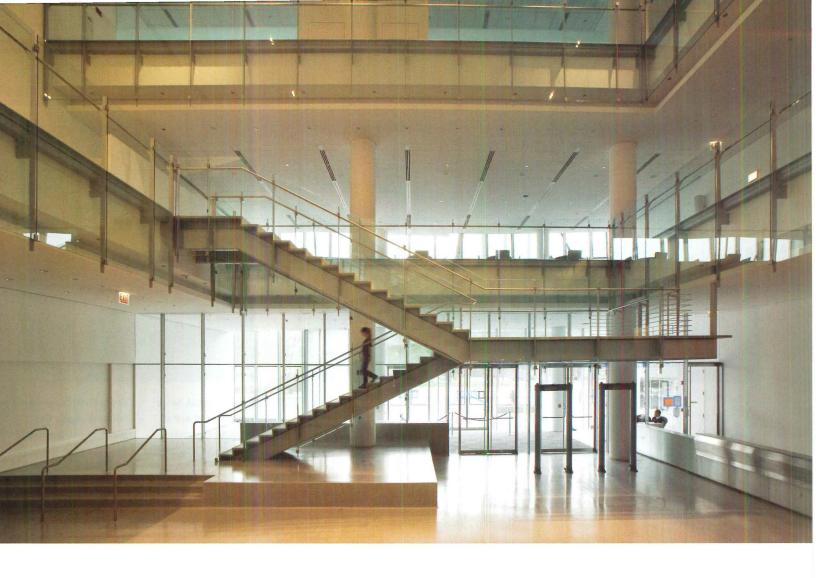




other by a conventional stack of office floors. "People would come in and they would say, 'Spertus is dead. Why doesn't anybody come here?'" recalls the institute's ebullient president, Howard Sulkin. "There would be 700 people in the building. There was no way you could know that because everything was compartmentalized." For its new home, located directly north of the old one on a former vacant lot, Spertus chose Krueck and Sexton over three highly regarded finalists—James Stewart Polshek, Tod Williams and Billie Tsien, and Rafael Pelli. The winning team wasn't just brilliant, they were the best listeners, Sulkin said at the time.

Nevertheless, it took Krueck and Sexton several tries to develop a scheme that achieved the delicate balance of form and identity the client sought: A bold contemporary statement that would, of necessity, respond sensitively to the Michigan Avenue street wall, which Chicago had declared a landmark district in 2002. At the same time, the building would seek to communicate the Jewish values of learning and culture through light while it expressed the institute's identity as a civic institution, "not a ghetto institution," as Sulkin puts it.

All the early schemes included a connecting atrium inside, expressed outside with glass walls that would bring light into the deep, narrow lot. But none proved satisfactory. Those combining glass and the overtly contextual material of stone were junked as fussy. Instead, the architects decided to let the surrounding stone buildings be the compressing bookends. At Sulkin's insistence, they also ditched another obvious contextual move—a cornice—after the client told them that a Jewish building shouldn't have a top. "A top like that seems to be limiting," he



said. "There's no end to education."

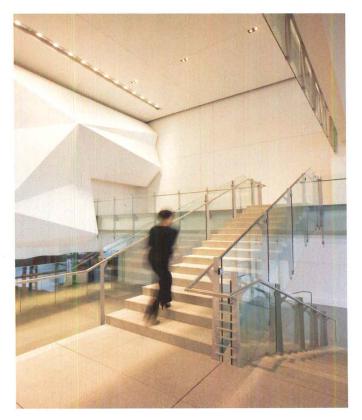
Another key move came with the shift from a simple grid of glass to a complex triangulated surface. In the end, the facade would have 726 pieces of glass, formed in 556 different shapes. The pieces, which project both inward and out, are clipped onto customized frames of extruded aluminum whose three-legged, twisting profile resembles a human femur. (None of this would have been possible without CAD.)

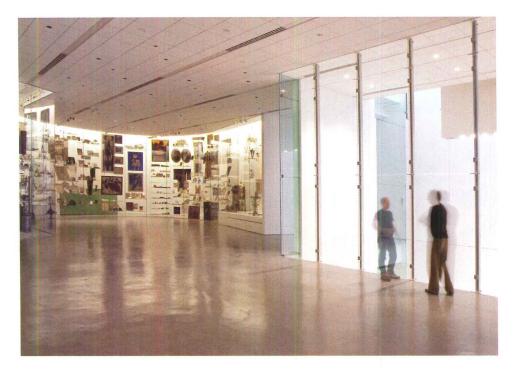
For Krueck, the lead designer, the key source of inspiration was not Christian de Portzamparc's much-praised LVMH Tower in New York City, whose facade of faceted, folded glass predated Spertus by eight years, but

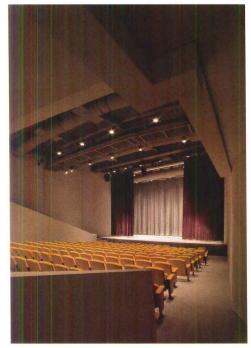
Mies's two legendary 1921 studies for office buildings in Berlin-one with undulating walls; the other, triangular in plan. Radical and utterly unbuildable, given the technology of their time, the studies nonetheless became iconic images illustrating the play of light on glass. "What allowed us the freedom to go in this direction were those early studies of Mies's," Krueck says.

The result, which marks the first insertion of a contemporary structure in the historic Michigan Avenue wall, turns out to be immensely persuasive, and the finest cultural project in Chicago since the 2004 completion of Millennium Park. The building's crystalline forms are bold enough to

A steel-and-glass switchback stair graces the light-filled, threestory lobby, the hub of activities that includes a café (above). On the other side of the lobby, the architect expresses the energy of the building's 400-seat auditorium with a wall of folded, fragmented white plaster that reprises the glass exterior.



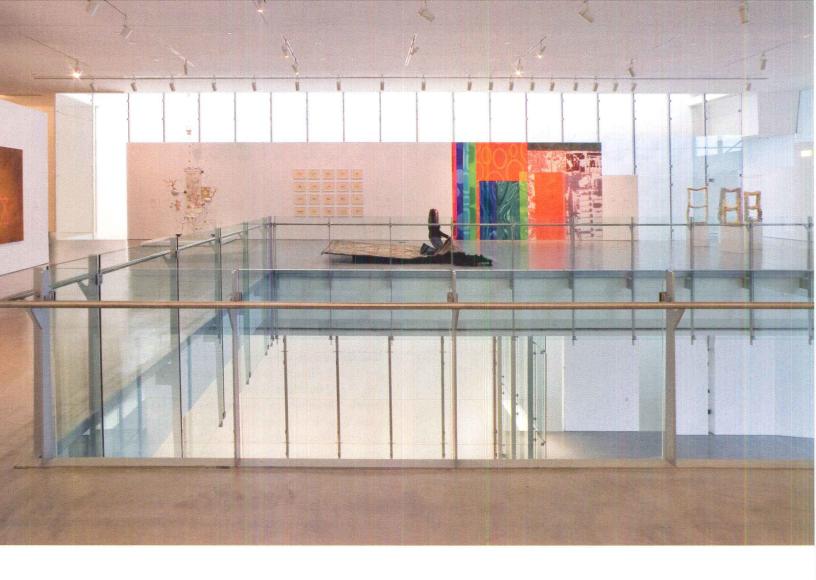




A monumental, horseshoe-shaped wall of glass (left) displays more than 1,000 objects of Judaica. In the auditorium, a split balcony, which slopes down to

the main floor, creates intimacy (right). The multistory atrium relies on skylights and lightwells to bring daylight into the deep, narrow building (below).





hold their own against the muscular older structures in the street wall, and yet they are not jagged and aggressive, as Daniel Libeskind's buildings can be. Subtle modulations enhance this careful balancing act, from "valleys" in the facade that create a sense of verticality compatible with the landmark district to a 7-foot-tall window module that extends the horizontal rhythms of the historic buildings into the newcomer, slipping

Temporary exhibition spaces occupy the privileged perch atop the atrium. Sometimes, sound wafting up from the multipurpose room below has proved disturbing.

beneath the expressive facade like a tensioned net. Also well-handled is Spertus's "skirt," a sheltering projection of glass that playfully sweeps over the sidewalk and reveals the structural underpinnings of the design to passersby, just as the rusticated base of the Auditorium Building expresses its astonishingly thick, load-bearing walls. A frit pattern helps control heat gain, one of several features (along with a green roof) that are expected to win the building LEED Silver status.

Literally and symbolically open, the building bravely rejects the fortress mentality that has gripped innumerable clients since 9/11. Security is dealt with, but quietly, in the nonshattering, laminated exterior glass and the presence of metal detectors just beyond the entrance. Spertus is equally effective inside, though soaring prices for the building's steel frame and other materials forced Krueck and Sexton to abandon its plan for a unifying atrium that would run the building's entire height. Still, the architects retained the essence of this idea, beginning in a light-filled, three-story lobby ringed by a gift shop, a kosher café, classrooms, and a theater. The two-level

theater, its column-free spaces made possible by 14-foot-deep trusses, uses a partitioned balcony, one side of which slides down to the main level like a ski slope, to create intimacy—even when the room is only half full.

The glory of the new Spertus, however, occurs on the building's upper floors, with a wandering atrium that meanders from a student lounge on the 7th floor to a soaring reading room on the 8th to a grandly scaled multipurpose room on the 9th to temporary exhibition galleries on the 10th. These are magnificent public spaces, enhanced by skylights and lightwells. There are, to be sure, minor problems, such as the somewhat intimidating security guard in the outer lobby, whose presence may discourage people from entering, making the lobby feel bare at times, and a technically complex lighting and audio system in the museum, with its more than 1,000 objects of Judaica. Lastly, disturbing noise seeps from one part of the atrium to another—a problem that could be fixed. All in all, what the exterior promises is delivered inside—unlike so many contemporary buildings that are nothing more than slick packages.

Sources

Roof: GreenGrid

Glazing: Viracon; Super Sky

Doors: Blumcraft

Hardware: Schlage Ceilings: Armstrong Paints: Sherman Williams

Terrazzo: Wausau

Concrete flooring: Ardex

Bath tile: Daltile

Carpet: Bentley Prince Street Lighting: Cooper; Lutron

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Shigeru Ban sets showrooms and facades in motion at the Swatch Group's

NICOLAS G. HAYEK CENTER in Tokyo



By Naomi R. Pollock, AIA

ike an expertly crafted Swiss watch, the Nicolas G. Hayek Center is an assemblage of movable pieces that work together with machinelike precision. The product of Japan's globe-trotting architect Shigeru Ban, the 61,300-square-foot building houses the Swatch Group's Tokyo headquarters: a combination of corporate offices and individual boutiques for seven of the watchmaker's leading brands. Though the center's wavy steel roof is fixed, the facade moves. For years, Ban has been experimenting with operable shutter walls in houses and other modestly scaled projects, but the Hayek Center is his latest and largest installation to date. In addition, eight separate elevators animate its ground-floor public plaza. Even its innovative structural system, fittingly inspired by a grandfather clock, is designed to move.

The project began with a search for rental space in Ginza, Tokyo's high-end shopping area. When this did not yield satisfactory results, the client decided to purchase and replace an existing, 1960s-era building facing one of the district's grand boulevards. An invited, international design competition followed. Rewriting the project brief is not usually the way to win a competition, yet that didn't stop Ban. "It was very risky, but the program specified two boutiques per floor, and I wanted all brands to have an equal opportunity for public exposure," explains the architect.

Creating street frontage for seven full-fledged shops within the narrow, 56-foot-wide site was clearly impossible. Instead, Ban organized the building into a stack of three- and four-story volumes, each with its own set of retractable shutters on the main front, and turned the lowest volume into a public thoroughfare contiguous with the sidewalk. Within this four-story, indoor-outdoor passage, he placed tiny, satellite showrooms, one per brand. Doubling as an elevator, each showroom/cab connects only to the brand's main shop, either above or below grade. Various designers, including Ban, created the boutiques and their matching showrooms/elevators. For the luxury line Jaquet Droz, Ban used a monotone vocabulary of slatted screens, creamy limestone floors, and his own L-unit furnishings made of dark wood. "When some people see the price of a watch, they are afraid to go up," chuckles Ban. "So they go down to Swatch instead."

Naomi R. Pollock, AIA, is RECORD's special correspondent based in Tokyo and is the author of Modern Japanese House, published by Phaidon in 2005.

Project: Nicolas G. Hayek Center, Tokyo Architect: Shigeru Ban Architects— Shigeru Ban, Nobutaka Hiraga, Taro Okabe, Yoshiaki Irie, Grant Suzuki Engineers: Arup (structural); ES

Associates (mechanical)

Consultants: studio on site (landscape); Lighting Planners Associates (lighting) General contractors: Suruga Corporation; Kajima Corporation



A second set of conventional elevators hugging the south wall feeds the entire 14-story building. The boutiques fill the first four levels (plus part of the basement), followed by three floors for customer service and six floors of offices topped by a dramatic event hall overlooking the city in three directions. Yet another elevator pops up from the plaza to escort cars down to an 18-bay underground garage. But when not in use, the boxy conveyance becomes flush with the stone pavers, magically disappearing from view.

"Ban's way of including all of the boutiques on the ground floor was fantastic," comments Arlette-Elsa Emch, president of Swatch Group Japan. But this clever strategy had other benefits, too, such as integrating the new architecture with its surroundings. While the plaza physically links the broad avenue in front with a narrow alley in back, the lifts conceptually recall the small-scale shops lining many Ginza streets. The open plaza was also an opportunity to introduce greenery into a densely developed urban area. "Even in New York City, there are many small pocket parks," explains the architect. But in central Tokyo, where land values remain exorbitant, they are few and far between.

Ban solved this problem with a vertical garden that starts at the plaza and grows upward, uniting the ground floor with the three, tripleheight atriums above. While the mixture of plants varies by level, the landscape architect Toru Mitani devised a uniform suspension system made of steel shelves and tension rods to hold them in place. Positioned between the building's structural columns, the shelves support individual soil-filled pots, each one overflowing with lush, leafy greenery. Finding species hearty enough to withstand the less-than-ideal conditions—they must tolerate both winter and summer weather as well as interior and exterior climates—required months of experimentation. "We tried 30 or 40 different types, but only eight survived," says Mitani. And even that mixture of indigenous and tropical plants could not be sustained without an elaborate built-in irrigation system as well as a heavy dose of electric light supplied by agricultural-grade ceramic-metal-halide bulbs. Upstairs, the green walls contribute to the casual character of

the atriums, which function as lounges or waiting areas for the three programmatic blocks on the upper floors. In contrast to the slick, corporate reception space on the 8th floor, done up in red and white (the shared colors of the Japanese and Swiss flags), or the elegant repair center for the company's top-of-the-line timepieces on the 6th floor, each light-filled court dotted with potted trees evokes the

fully retracted and stacked overhead. With the push of a button, the horizontal

atmosphere of an outdoor terrace—espe-

cially when its multistory shutters are

bands of glass and steel ascend, admitting gusts of fresh air and minimizing the need for air-conditioning.

The numerous atria and elevators, however, carve out holes in the floor plates, weakening the building's structure, particularly at its base, where forces stressing the steel frame accumulate. "Our biggest challenge was integrating Ban's daring design with the client's request for higher than normal seismic resistance," explains engineer Ryota Kidokoro of Arup Japan. Kidokoro's solution entailed stiffening the first-floor slab with ¼ to ½-inch-thick steel plates but loosening four of the upper ones. Perched on rubber bearings, these upper slabs are completely detached from the main frame, enabling them to dampen building movement and counteract seismic forces by sliding back and forth like a pendulum.

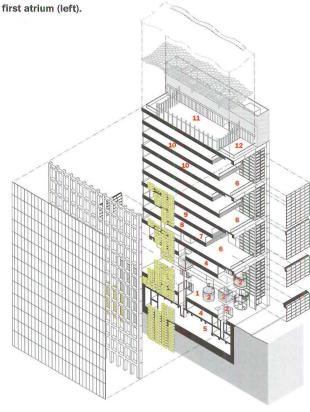
Since early in his career, when he created the Curtain Wall House, Ban has experimented with movable facades. The Swatch building is his largest application of glass-shutter technology (right two).

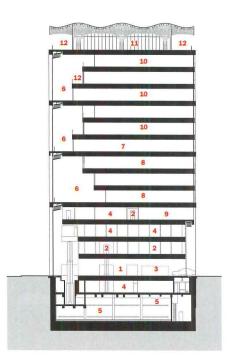






The building is layered both horizontally and in section (axonometric, below), with a planted green wall and showroom/ elevators animating the first atrium (left).





- 1. Plaza
- 2. Showroom
- 3. Car lift
- 4. Boutique
- 5. Parking
- 6. Atrium
- 7. Reception
- 8. Customer service
- 9. Meeting
- **10.** Open offices
- **11.** Multipurpose
- 12. Terrace



FOURTH FLOOR

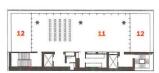


THIRD FLOOR

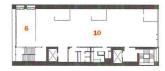


SECOND FLOOR





FOURTEENTH FLOOR



ELEVENTH FLOOR



EIGHTH FLOOR



FIFTH FLOOR





Each multistory atrium provides a lounge area (opposite) facing the front of the building and a reception area behind this (curving red desk in photo, below right). On the top floor, Ban designed a web of woven steel strips to support an undulating roof above a large, multipurpose space (right).





Though no special foundations were needed—in fact, the building utilizes the previous occupant's concrete underpinnings—the roof required some structural acrobatics. The undulating roof plane—a prototype for the satellite branch of the Georges Pompidou Center that Ban has designed for Metz, France—is made of woven steel strips whose hexagonal pattern was inspired by a bamboo hat. Partially self-supporting, the web of steel drips down in three places, forming tree-shaped columns that also conceal downspouts. Composed of pinned pairs of intersecting flat bars running in three directions, the roof was painstakingly put together at the fabricator's facility, then disassembled, transported, and ultimately rebuilt on-site.

Like the building's namesake and cofounder of the Swatch Group, Nicolas G. Hayek, Ban works within his industry but is not confined by its conventions. "I don't invent anything. I'm just happy to use materials in new ways," explains Ban. But in so doing, he produces works of architecture, like the Hayek Center, that will stand the test of time.

Sources

Glass shutters: Gartner Japan Glass wall: Nihon Sheet Glass D&G Rear curtain wall: YKK AP

Sliding glass doors: Okamura

Cabinetwork: Naigai Technos Granite flooring: Ando Marble Downlights: Yamada Shomei Lighting; ERCO; Nakamura

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UNStudio shocks a quiet Dutch city to life with the crystalline form and electric colors of the AGORA THEATER

By David Sokol

magine Ben van Berkel as a child, traveling among the theaters of the Netherlands to listen to his mother sing in the chorus of the latest musical. Now fast-forward to adulthood: Van Berkel, principal of the renowned architecture firm UNStudio with Caroline Bos, is standing on the artificial shores of Lake Isjlemeer, about 45 minutes' drive from his Amsterdam office. From dawn to dusk, the designer charts the changing colors of the sky as low cumulus clouds rush overhead in typical Dutch maritime fashion.

Van Berkel conjures up these two pictures of himself in discussing the Agora Theater, a new 37,500-square-foot building that contains 753-seat and 207-seat auditoriums, a restaurant, and corollary

David Sokol is a New York-based freelance writer. In addition to contributing to RECORD regularly, he writes for Azure, Interior Design, Mark, and Surface.

spaces, which UNStudio completed last year. These experiences inspired both the remarkable rakes and projections of the theater building as well as the range of fiery colors in which that form is clothed.

The Agora Theater is located in Lelystad, a distant suburb of Amsterdam that sits at the foot of Lake Isjlemeer. When the municipality invited UNStudio to present a proposal for the theater in 2002, it had already begun implementing a master plan to revitalize Lelystad by Adriaan Geuze of Rotterdam-based urban planning and landscape design firm West 8.

Project: Agora Theater, Lelystad,

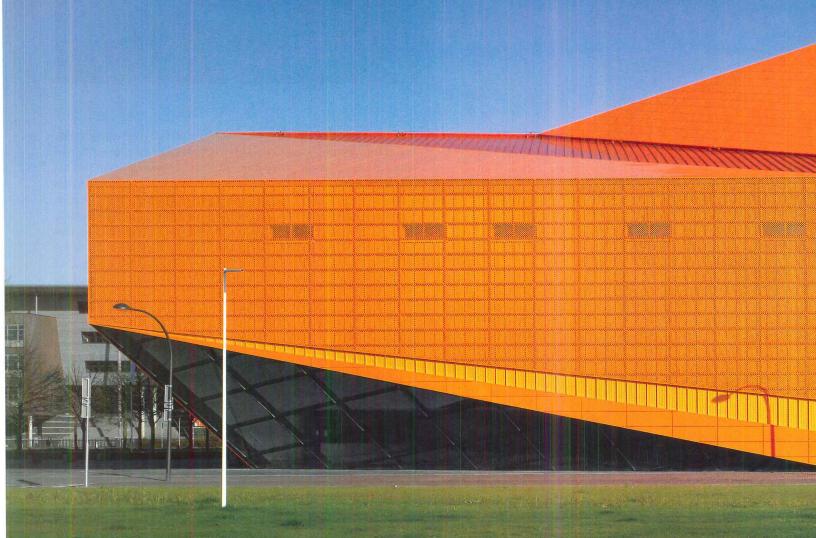
Client: Gemeente Lelystad

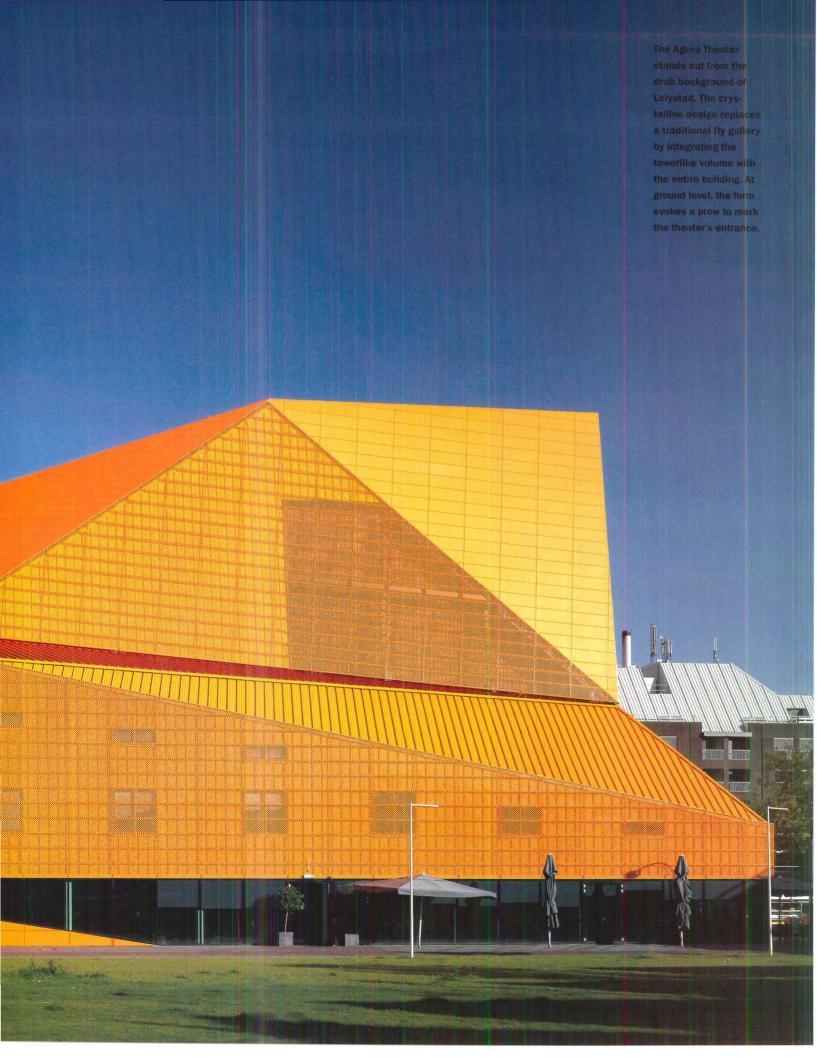
Architect: UNStudio—Ben van

Berkel, Gerard Loozekoot, project heads

Engineer: Pieters Bouwtechniek

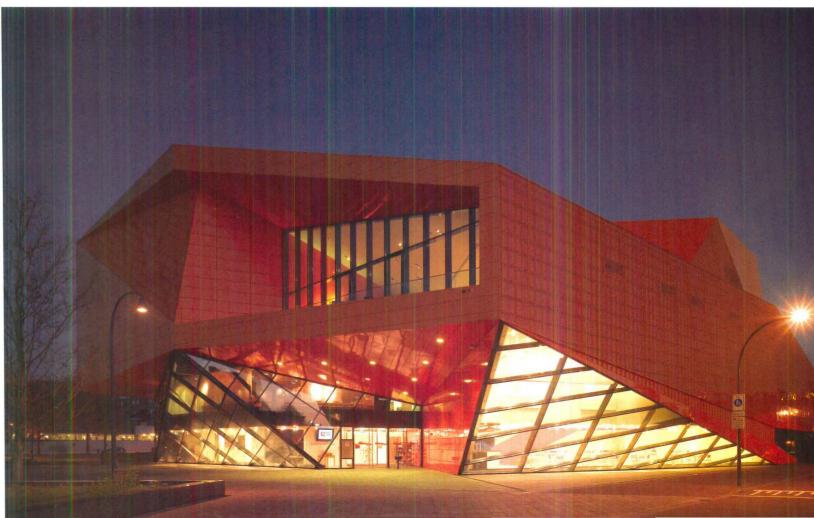
Acoustics: DGMR
Lighting consultant: Arup
Theater consultant:
pb/theateradviseurs







The southern, rear elevation of the **Agora Theater abuts** Lelystad's public square, which comes alive on market days (left). Although the building's entrance faces a road, at night the shardlike glass volumes surrounding this front door glow from the interior lighting (below), drawing pedestrians from the city square and toward the entry. Lobby, coatcheck, and café areas hug these giant windows on multiple levels (opposite).







At the time, the master plan's realization had not yet touched Lelystad's innermost core, a public square adjacent to the local train station. The city was founded in 1967, and its center exemplifies Dutch planning in that era: an assemblage of bland, brown-brick, low- and mid-rise structures. These buildings border a too-big negative space where market stalls are set up on summer weekends, but they are not packed tightly enough to foster a cohesive forum in colder or darker conditions. According to Geuze's scheme, the Agora Theater would anchor this floundering public space.

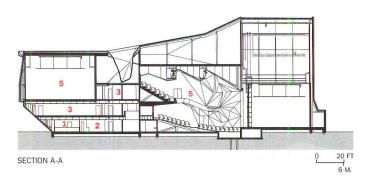
While the haphazard arrangement of buildings around Lelystad's plaza seems to inform the polygonal facets of UNStudio's competition-winning design, van Berkel says the geometry of the Agora Theater springs from his personal history. In following his mother from performance to per-

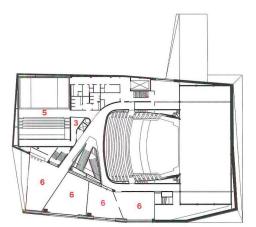
formance, he learned that most theaters' fly galleries protrude from their main volumes more like sore thumbs than dainty conductors' batons. "You don't enjoy going to theaters, because they don't look so inviting," van Berkel recalls, although he also notes several good examples of the building type from his childhood, such as the intimate Tivoli Concert Hall in Utrecht.

UNStudio's design for the Agora Theater consequently hides the fly gallery by integrating it with the entire structure. The steel-frame building's footprint is largely rectilinear, except for its zigzagging northern side. A glazed ground-floor entrance and the smaller auditorium two stories above it border this rough edge. Moreover, a fingerlike projection off the eastern elevation serves as a green room for the main stage. In section, the building appears to emerge from the ground, tilting boldly outward at that north-facing entrance to form a large horizontal volume above it—a kind of plinth that merges with the fly gallery in a series of dramatically angular gestures.

Evoking a miniature mountain, the building skin is tessellated, comprising panels of steel, corrugated aluminum, and aluminum mesh in addition to expanses of glass. The use of a variety of metals reflects contemporary Dutch designers' ability to make something transcendent from otherwise common materials, and amplifies an integral quality of the prismatic form. That is, the building, like a highly skilled dancer, is intriguing from all sides. Considering that the Agora Theater stands freely in Lelystad's public square, and its entrance faces an adjacent roadway rather than the pedestrian urban core, the dynamism of all its elevations ensures a dialogue both with the city and with those theatergoers who may arrive by car.

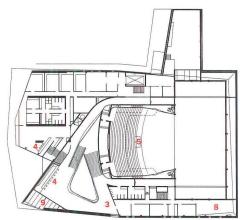
The Agora Theater's color palette energizes the public sphere perhaps most of all. The exterior panels are finished in a small but spectacular range of intense yellows and oranges. Explaining the choice, van Berkel emphasizes the time he spent taking in the scenery of Isjlemeer. "All of those buildings from the '60s look the same, and in the competition I wanted to



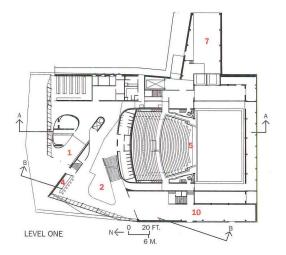


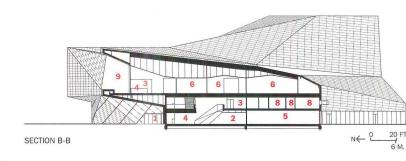
LEVEL THREE

- **1.** Entrance
- 2. Main lobby
- 3. Foyer
- **4.** Bar
- 5. Auditorium
- **6.** Multifunctional hall
- 7. Green room
- 8. Office
- 9. Balcony
- 10. Restaurant

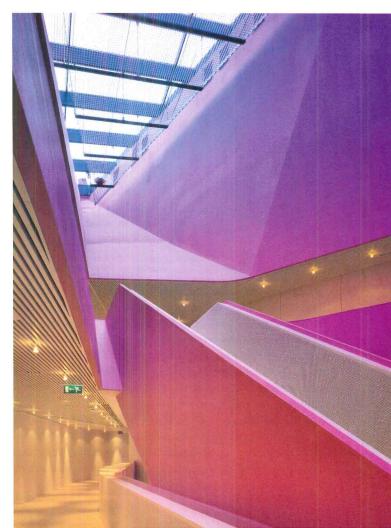


LEVEL TWO

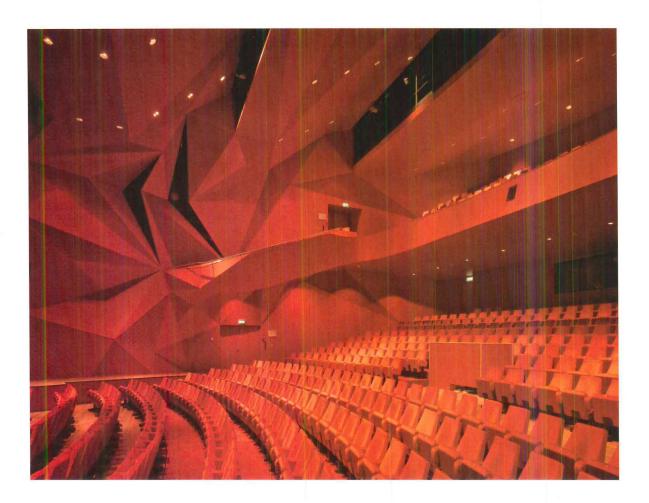












The facets of the building skin resurface inside the 753-seat main auditorium (left), where the motif is realized as angular acoustic panels of medium-density fiberboard and plasterboard. In addition to a small orchestra pit, UNStudio minimized the number of aisles and created a horseshoe-shaped balcony to foster intimacy between audience and performers (opposite).

show how a theater could look different from them." To select the exact hues, the architect turned to local conditions. "Standing around Isjlemeer, there are loads of colors in the sky and the landscape. The layers of the Agora facade pick that up, creating a kaleidoscopic effect."

Simply, the Agora Theater is a diva. By day, its exterior is an enthusiastic street performer, taking its place in the dynamic fabric of a revitalizing Lelystad. At night, its jumble of shapes and the glow of its lobby light looms on the horizon from the nearby train station, luring Amsterdam commuters to enjoy a few more hours of culture before heading home.

The colorful, crystalline elements that make the building so seductive, however, also lend it a mystifying quality. The Agora Theater's tallest volume exemplifies the difficulty of translating outward appearance into interior experience. Besides twisting and turning to accommodate the fly gallery of its 750-seat main auditorium, the tower contains an unexpected, violet-colored, slightly faceted stairwell that wraps around the lobby and angles toward a mesh-covered skylight. Besides acoustically separating the theaters of this small performance complex, the stairwell, which snakes upward seemingly endlessly, symbolizes the flights of fancy often associated with theatergoing while it evokes the exterior architecture. The same could be said for the main auditorium, in which jagged acoustical panels reflect the crystalline building skin and, coated in a saturated red, also conjure up the velvet curtain that traditionally hangs behind the proscenium.

In addition to echoing the exterior, interior choices work in concert with the architecture to engage the urban realm. This is particularly notable in the building's lobby. By placing the room at the end of a sequence of ticket-taking and coat-checking facilities, UNStudio has funneled circulation into this space—and keeps guests from wandering, thanks to a bar that anchors the room. Although a stairwell soars above the revelers, its underside gives the effect of a ceiling, providing an intimacy to the purple-tinged area.

The sight from outside of a crowded room through the lobby's tilting glass walls is a comfort in the desolation of Lelystad's nighttime plaza, particularly for pedestrians who approach the theater by rounding the building's rear.

The Agora Theater's acknowledgement of Lelystad's public realm, and its almost obsessive attempts to energize it, clearly make this building as much an activator of urban space as a sculptural work. While tessellated surfaces are widely deployed by other architects—in what could almost be considered a hallmark of parametric modeling—van Berkel's awareness of the role of his building in the fabric of Lelystad transcends mere styling.

The Agora Theater is not only a benchmark for other architects seduced by volumes constructed of triangular panels, but perhaps a critical point for UNStudio itself. Earlier in this decade, van Berkel and Bos produced buildings more focused on color treatments and other visual effects than morphology. For the Agora Theater, UNStudio returns to a transformational approach to architecture that does not sacrifice the dynamic skin. In fact, in combination, those qualities may just help Lelystad shed an identity that has been both visually and culturally bland. "Lately, I tend to believe that you have to be experimental and innovative whenever you can," van Berkel says. "And in order to trigger an organizational value or other effective quality, you really have to know your subject."

Sources

Aluminum cladding: Hafkon

Elevators: ThyssenKrupp

Signage: Dehullu

Facades: Van Dool Geveltechniek Interior graphics: Vertical Vision Seating, main auditorium: Fibroseat

Seating, small auditorium: Stol

Nederland

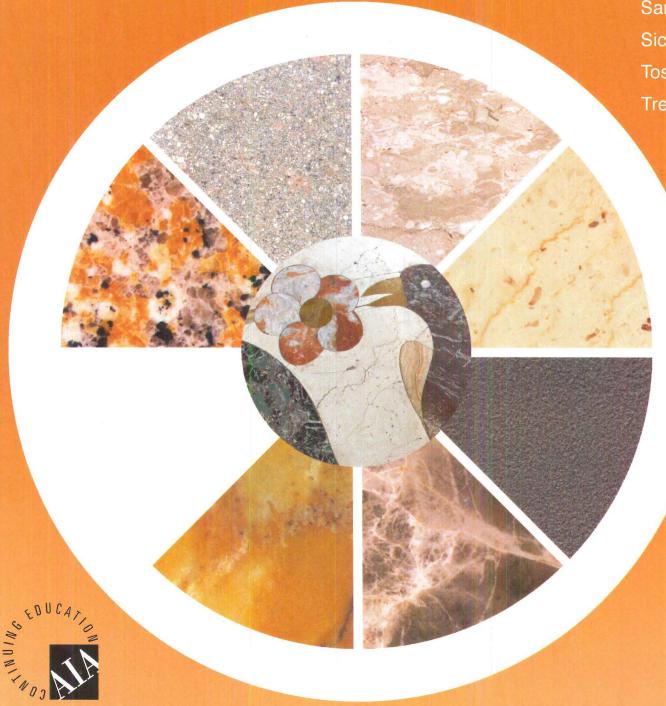
Bamboo flooring: Moso
Ceiling panels: Luxalon
Acoustic panels: Topakustik

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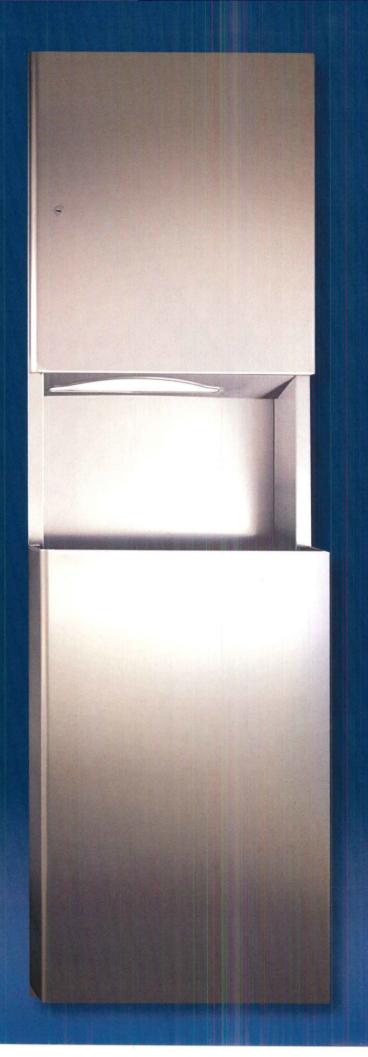
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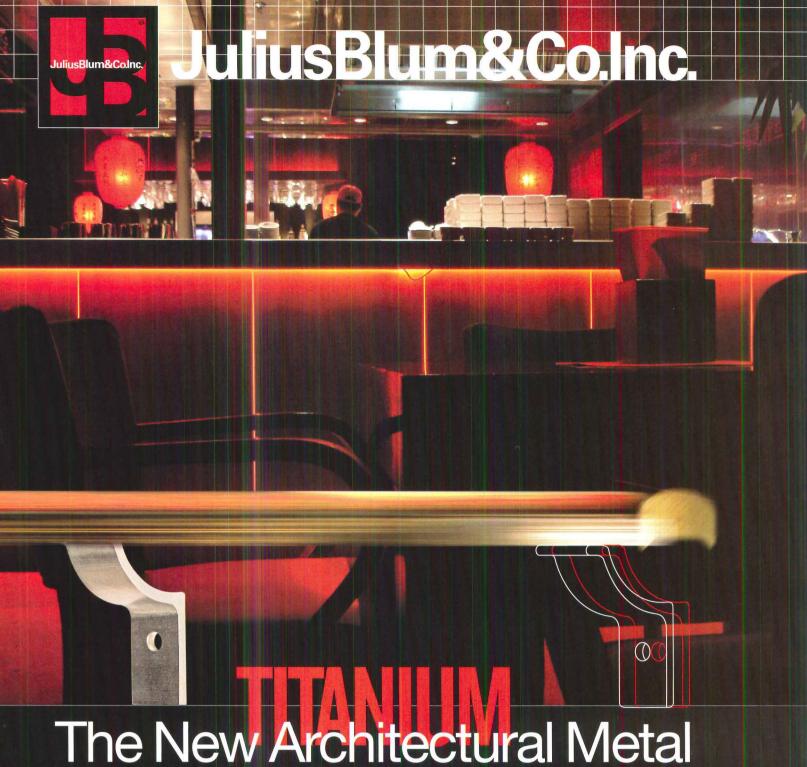
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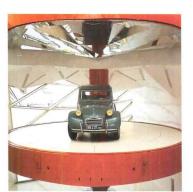


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STRUCTURES FOR CARS

Wheels Turning

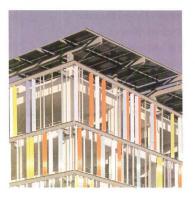
As long as we prefer the individual automobile to all other forms of transit, cars will continue to be made and sold, displayed and parked, in large numbers.



CITROËN C42

Paris, France

The full-line, luxury carmaker is celebrating its history of embracing daring ideas by opening a brash, new showroom on the Champs Elysées by French architect Manuelle Gautrand.



SANTA MONICA CIVIC CENTER PARKING STRUCTURE

Santa Monica, California

Moore Ruble Yudell has literally lit up the beach town with a stunning 900-space parking structure adorned with multicolored glass channels and fluorescent fixtures.



PARKIT HERE

Memphis, Tennessee

Demonstrating that good design can be created out of humble materials, archimania has elevated one public parking structure above the competition.

By Sara Hart

hey paved paradise and put up a parking lot," as the Joni Mitchell lyrics admonish. And the paving continues. Because in the U.S. there are 243 million registered passenger vehicles, hundreds of thousands of acres of uncovered, black-top lots bruise the urban and suburban fabric to accommodate them.

Multistoried parking structures anchor shopping malls, airports, schools, colleges, hospitals, arts centers, and churches. New- and used-car dealerships need both enclosed structures for displaying the automobiles and outdoor lots for the overflow. Its ubiquity alone should qualify the parking structure as a major building type.

And yet, because of its decidedly utilitarian function and lowly status as a mandatory convenience, architectural efforts applied to parking structures have typically been limited to complying with building codes. In the end, the resulting desolate parking garage is often the setting of crime dramas.

A handful of exceptions to the rule are noteworthy. The city of Santa Monica, California, is integrating a new parking structure into its master plan for the expansion of its civic center. Because of the new building's gateway location, it was designed to be an identifiable marker for the area. The architects of the project, Moore Ruble Yudell, set up a rhythm across the building's facades using precast, ribbed, white concrete panels, which conceal the cars and distract attention from the structure's mass. The scale is further reduced by bays composed of multicolored channel glass and fluorescent tubes, creating a surface that is constantly changing.

Using design to brand a product is not new, but two projects reviewed on the following pages achieved similar results, although their budgets and programs could not have been more different. Citroën has opened a dazzling new showroom/exhibition space on Paris's Champs Elysées, designed by French architect Manuelle Gautrand, to celebrate the 90-year-old automaker's storied history and to jump-start, so to speak, its reputation for innovation and radical design.

At the other end of the spectrum, a start-up called parkit here, in Memphis, needed an identity on which to build the company's reputation. The Memphis-based architecture firm archimania found one in the honest use of industrial materials, a lively palette of colors and textures, and generous lighting. While parkit here lacks Citroën's theatrics, its clean, unadorned aesthetic has an authenticity that should be duplicated everywhere.

One: CITROËN C42

Paris, France

Manuelle Gautrand uses architectural sleight of hand to make a showroom wedged into an urban slit sparkle like a diamond.

By Sam Lubell

Architect: Manuelle Gautrand Architects-Manuelle Gautrand, principal; Anne Feldmann, project manager; Yves Tougard, Milena Wysockzynska, Bertrand Colson, Thomas Daragon, Frederic Arnoult, Sandrine Puech, Christophe Regnier, design team

Client: Citroën

Consultants: Khephren Engineers (structural); Eciac (project manager); Avelac Consultants (acoustics)

Size: 12,900 square feet Cost: \$17 million

Completion date: February 2007

Sources Steel: Secim Glazing: Okalux Curtain wall: Gartner From its famous rounded 2CV to its sloping, sculpted, and a bit buglike DS, French car manufacturer Citroën has always put emphasis on unique design. Its 1932 showroom on Paris's Champs Elvsées, a minimal structure with an Art Deco curtain-wall facade, considered revolutionary at the time, was a symbol of the company's passion for nonconformity. Unfortunately, the form had become dated, and the effect of its soaring facade and pristine openness had been diminished in the 1980s by the addition of a secondfloor restaurant. The company, seeking to offer its aesthetic fervor to a new generation, held a competition in 2002 to reimagine the space, which emerging Paris architect Manuelle Gautrand won.

The new space, named C42 (the building number is 42, and the C stands for Citroën) opened last fall. It is adventurous, both stylistically and technically, for any site, but especially for the venerable Champs Elysées, located in the heart of Paris's posh Right Bank. While the thoroughfare is known for boisterous crowds and packed stores and restaurants, its Haussmannian street wall has been little changed since the 19th century.

Program

In its brief, Citroën asked the archi-

Los Angeles-based writer Sam Lubell is the West Coast editor of Architect's Newspaper.



tect to reopen the space and once again make it a symbol of the company's design achievements. The original showroom was only three stories and didn't reach the roofline of the adjacent buildings. "First, we had to demolish the envelope of the existing building and then fill in a completely new structure," Gautrand explains. The program called for restoring the same number of square feet the original Citroën showroom had, which meant increasing the height to seven stories, matching the heights of the adjacent buildings.

Gautrand made every aspect of the 98-foot-high, 12,900-squarefoot space revolve around the dramatic display of the company's cars. The intricate facade, she points out, is simply a giant window



SITE PLAN

Citroën's new showroom (left) adds nighttime drama to Paris's famed Champs Elysées. New cars are displayed vertically (opposite) in the eightstory volume.

for their display. Numbers underscore the effect: The frontage extends only 40 feet, but there is 7,000 square feet of glazing.

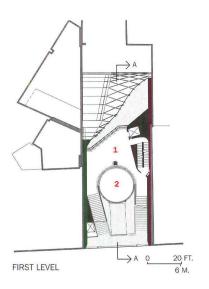
The glass-and-steel materials and sleek forms echo the cars themselves. From the moment people enter the wide, open, steelframed space, their attention is drawn to a set of circular steel platforms that house the cars. Besides a small shop that sells Citroën merchandise, the program is simple: a showroom for cars, nothing more.

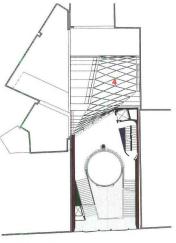
Solution

As with the 1932 space, the two lower levels of the building's latticed glass-and-steel facade are formed by a large, flat window. But moving upward, the facade begins to morph

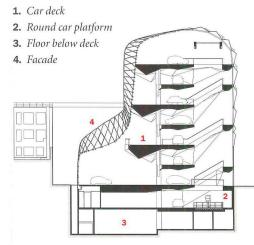
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SECTION A-A



into a folding, three-dimensional diamond pattern that projects dramatically into the street. "The facade is like glass origami," explains the architect.

The top facets are tinted bright red with translucent film. The facade then bends back over the roof and curves down the other side. Its glassand-steel makeup and its sharp angles and smooth curves echo the sleek design (and materials) of the company's cars, as well as its wellknown chevron logo.

The glass latticework took five months to assemble. Because the building is right on the Champs Elysées, there was very little room for storage, so most of the materials had to be kept inside the structure or trucked in almost daily. Local regulations restrict blocking traffic on the boulevard, so most construction had to be undertaken in the middle of the night.

Inside, Gautrand designed a minimal, streamlined atrium space that contains a U-shaped staircase winding around a central, vertical progression of eight circular steel platforms. "I wanted to design a sculpture that reminded visitors of childhood memories," explains the architect. "I wanted to recall the magic of the merry-go-round and to conjure up childhood memories of toy garages."

The platforms are suspended from the structure's concrete slabs and from a red-colored steel mast near the back of the space. Display



Mirrors, mimicking the diamondlike facets of the curtain wall (left), provide a fractured reflection of the cars on each level (far left and below). One car is displayed on each of eight steel disks, which are connected to a single spine (opposite).

floors and walls are covered with reflective red-and-white resin (the only colors used in the project), while sliding glass railings protect the cars.

On the underside of the platforms, kaleidoscopelike arrays of mirrored, stainless-steel triangles, an allusion to the tectonic facade, reflect the cars underneath.

The large void fronting the interior gives the building unity and grandeur and allows light to penetrate from the facade all the way to the other side of the space. It also allows cars to be hoisted to the display platforms via a lift system housed on the bottom floor.

Commentary

Several car companies (including BMW and Mercedes, among others) have lately built structures to cement their reputations as innovation leaders. This ultra-contemporary project is much smaller, but it is equally ambitious. With the urban regulations in this historic area, it's a wonder it was ever built. And its fascinating facade and unified interior make it stand out among all of the city's new buildings.

Along with other new projects on the Champs Elysées, such as Michele Saee's Publicis drugstore and Carbondale and Peter Marino's Louis Vuitton store, it is helping to radically update the street's image. It's a good example of how stunning and unorthodox structures can fit well into the urban fabric. If a city can overcome its fears about such design, it may find that it suits the street better than a bland box or faux-historic rehash.



Two: SANTA MONICA CIVIC CENTER PARKING STRUCTURE

Santa Monica, California

Moore Ruble Yudell develops a lively parking garage that simultaneously cloaks and celebrates Southern California's car culture.

Bv Russell Fortmever

Architect: Moore Ruble Yudell Architects & Planners, in association with International Parking Design-John Ruble, FAIA, Buzz Yudell, FAIA, partners (Moore Ruble Yudell); Don Marks, AIA, Dirmali Botejue, principals (International Parking Design); James Mary O'Connor, AIA, principal in charge (Moore Ruble Yudell); Halil Dolan, job captain (Moore Ruble Yudell) Client: City of Santa Monica

Consultants: ARB (general contractor); Melendrez Design Partners (landscape architect); Francis Krahe & Associates (lighting consultant); Mark Lee (artist); Willis Construction (precast contractor); Frame Design Group (structural); Werner Systems (curtain-wall engineer); Woodbridge Glass (curtain-wall installer)

Size: 300,000 square feet Cost: \$29 million Completion date: 2005

Sources

U-Glass panels: Bendheim Colors (glass panels): Grosvenor Solutions in Glass Photovoltaic panels: RWE Schott Solar

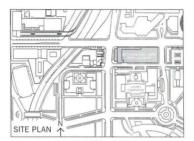
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For better or worse, Los Angeles invented car culture. For the late academic Reyner Banham and his continuing, devoted band of theorymongers, ostensibly every building, public space, and fragment of architecture in Los Angeles is really about the car. Moore Ruble Yudell Architects & Planners' new parking structure for Santa Monica's civic center is but the latest shout-out to Banham's influential thesis, set forth in 1971 in the book Los Angeles: The Architecture of Four Ecologies. There is always a new example to reaffirm Banham—his book is now unanimously understood as the first honest (and perhaps most gushing) critique of Southern California's freeway culture—because the trashy, flashy, global architecture culture that has emerged in Los Angeles from the late 1960s onward took the critic seriously.

Program

Parking garages, generally excluded from the categories of architecture and urbanism, have typically been bland utilitarian boxes or podiums for superstructures. In a nod to Venturi, Scott Brown's supergraphics and decorated sheds, the parking garage for Frank Gehry's 1979 Santa Monica Place mall, north of the civic center, presented a scrim of chain link printed with dim white letters

Russell Fortmeyer is a writer and engineer in Australia.



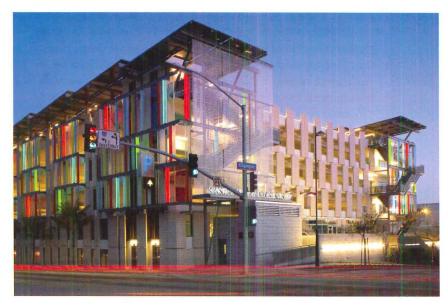
spelling out the mall's name. Gehry's chain link may have been tolerated more than loved, but the parking garage is a landmark, if not a touchstone for architects pondering such building types.

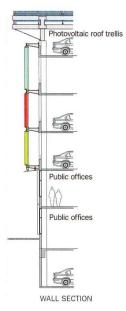
Santa Monica wanted this 900-car garage in order to redevelop adjacent land currently used as surface parking. A new master plan for the civic center placed the garage at the existing east entrance to the center, so the city, which is well-known in the area for its aesthetic fussiness, didn't want to build a concrete box in such a prominent location. The architects were, in effect, hired to decorate the nearly 300,000-square-foot structure—to wrap it in visual interest—as well as to tease more use out of what could have been a dead box by planning 10,000 square feet of street-level retail to enliven the neighborhood and introducing sustainable design strategies.

Solution

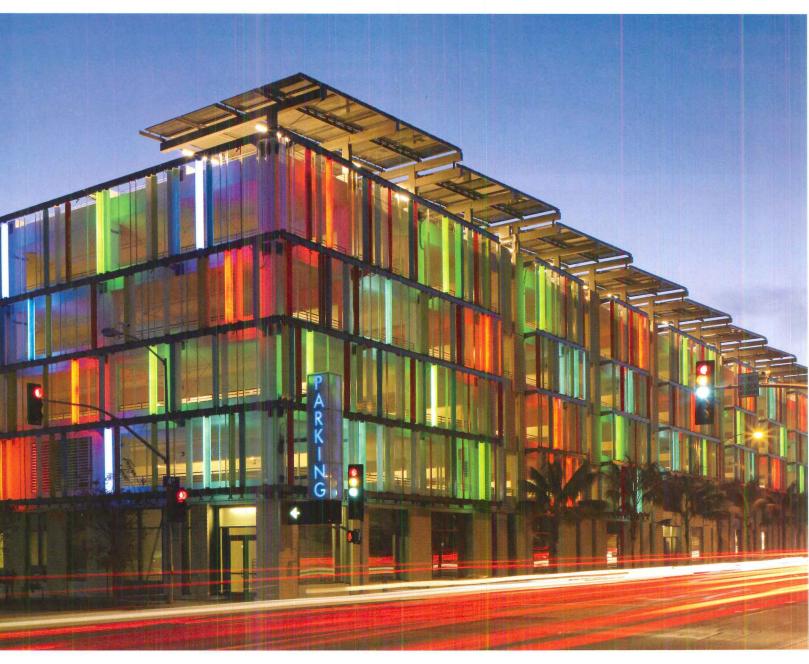
Except for the addition of 25 percent fly ash to the cement mix, the 8story concrete structure (two stories

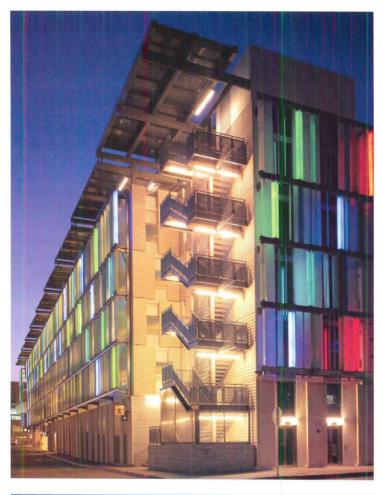


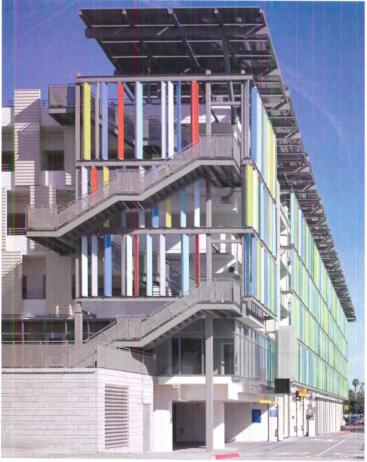




The glass-and-metalmesh cladding (left) hangs off the concrete structure, adding a rhythm and scale appropriate to the neighborhood. A cantilevered photovoltaic roof trellis provides necessary shading (left and below).







are below grade) is entirely conventional. Befitting a firm founded by the late Charles Moore, the architects designed a porous skin of multicolored, laminated, U-shaped glass channels that hang off the primary concrete structure and keep the garage open to fresh air and views. Coupled with ribbed, precastconcrete panels and stainless-steel mesh on the corner stair towers. the exterior cladding addresses the varied urban contexts of the four elevations. For example, the west elevation's glass strikes green and blue colors for the ocean, while reds. greens, and blues respond to the eastern freeway side. The designers also solved a long-standing problem in Southern California by adding a dramatic, cantilevered, 19,200square-foot, 181-kilowatt installation of solar photovoltaics on the roof, which also provides shading for the top floor of parking.

To keep the structure playful at night, Le Nguyen, the project's lighting designer and an associate at Los Angeles—based Francis Krahe, placed a colored neon tube in every 10th glass channel. For the all-white interior of the garage, she designed indirect, pendant-mounted T5 fluorescent fixtures to cut down on glare and to create a glowing effect through the exterior glass. "We wanted a well-lit, high-security space, but we also needed to minimize light trespass," Nguyen says, noting the presence of a hotel to the east of the garage.

Commentary

Although Moore Ruble Yudell's parking garage deftly addresses the city's design challenges, integrating itself into a larger urban context and establishing a presence on the street, it ultimately reflects an architecture of ambivalence. The architects find themselves caught between a full embrace of cars—with an eager willingness to put them on display-and the task of decorously hiding them in plain sight. With \$4-a-gallon gas on the summer horizon, that ambivalence might be merely a sign of the times. Although, perhaps chain link would have been more frugal and. perversely, more enjoyable.

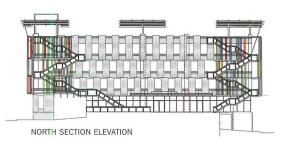
The architects located the circulation spaces on the exterior (left two) to provide access to views, as well as to enliven the building's appearance. Using rooftop solar panels, storm-water filtration, and recycled materials, the architects designed the structure to meet **LEED** certification standards. The main entrance and offices face the street (below).



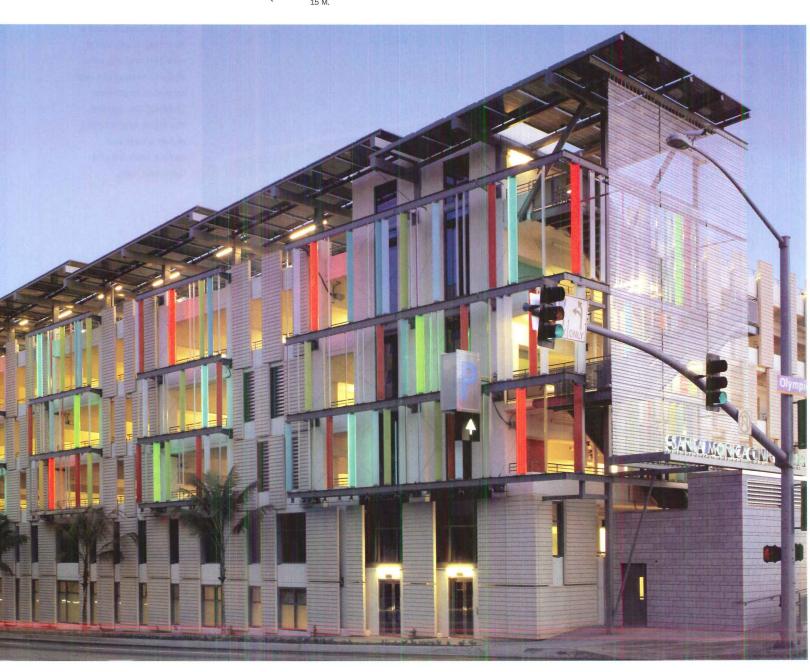


SOUTH ELEVATION





- **1.** Public offices
- 2. Restaurant/café
- 3. Outdoor terrace
- 4. Lobby/public art
- 5. Elevators/stairs



Three: PARKIT HERE

Memphis, Tennessee

Applying vision to modest materials and a tight budget, archimania energizes a humble, but ubiquitous, building type. By Sara Hart

Architect: archimania—Barry Yoakum, AIA, Todd Walker, AIA, partners in charge; Scott Guidry, Joel Kaserman, AIA, Stephanie Malone, Tim Michael, David Pang, Andrew Parks, project team Client: JWEACE/parkit here Consultants: Dalhoff Thomas Daws (landscape architect); Montgomery Martin (general contractor); Davis Engineering (civil); Askew Hargraves Harcourt (structural); Gala Engineering (mechanical and plumbing); DePouw Engineering (electrical); Walker Parking Consultants (parking)

Size: 73,750 square feet Cost: \$3.86 million Completion date: 2007

Sources

Metal building: Metallic Building Company

Storefront and glazing: YKK Translucent building panels: CPI Translucent wall panels: Kalwall Metal building panels: MBCI Plastic laminate: Formica Furniture: IZZI

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The architects folded a standing-seam metal roof (left and opposite, bottom) around the roof structure to provide shading. Throughout the night, bright lights signal a safe and secure environment (opposite, top).

All airports, whether new or a hodgepodge of ad hoc additions, have the same urban condition around their edges-acres of asphalt and concrete where tens of thousands of cars occupy 9-by-18-foot boxes in an endless grid. For the most part, airport parking lots and garages do not benefit from any architectural intervention and are minimally differentiated by letters and numbers.

Memphis International is no exception: When travelers exit the airport, they pass through a visual wasteland. The owners of parkit here have been in the car business for a couple of generations. They had hired a local firm, archimania, to design their Infiniti showroom in

Sara Hart is a New York-based writer and RECORD contributing editor.

Memphis, so they knew firsthand the firm's talent for renewal and reinvention on a shoestring. One would expect a showroom where luxury automobiles are to be displayed to require a certain amount of architectural finesse, but the idea of putting design effort into a parking lot at the airport might seem counterintuitive. The owners gambled that bringing good design and amenities to an industry not known for either could distinguish their company from all the others and draw business to it. They challenged archimania to figure out how to do it.

Program

The program required in part new construction, in part adaptive reuse of a vacant and dilapidated car dealership. In order to distinguish itself from

the bare-essentials offerings in the area, the client decided to add value to the business by providing unusual customer conveniences within a visitors' center: a café, executive center, dry cleaning, and free Internet access. The program called for automotive services in an adjacent structure. Here, customers could choose from a menu of amenitiescar washing, complete detailing, and oil and filter replacement.

Solution

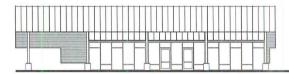
The architects demonstrated to the client that the existing shop buildings could be reused and converted to covered parking. They then devised a two-component strategy for the new construction. The first component involved the erection of a long Kalwall partition to screen the exist-



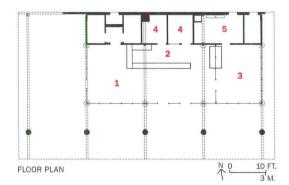




One of two new structures (above, foreground) houses several customer amenities, including a café with free Internet access (below).



SOUTH ELEVATION



- 1. Lobby/café
- 2. Customer service
- 3. Conference room
- 4. Offices
- 5. Supply room



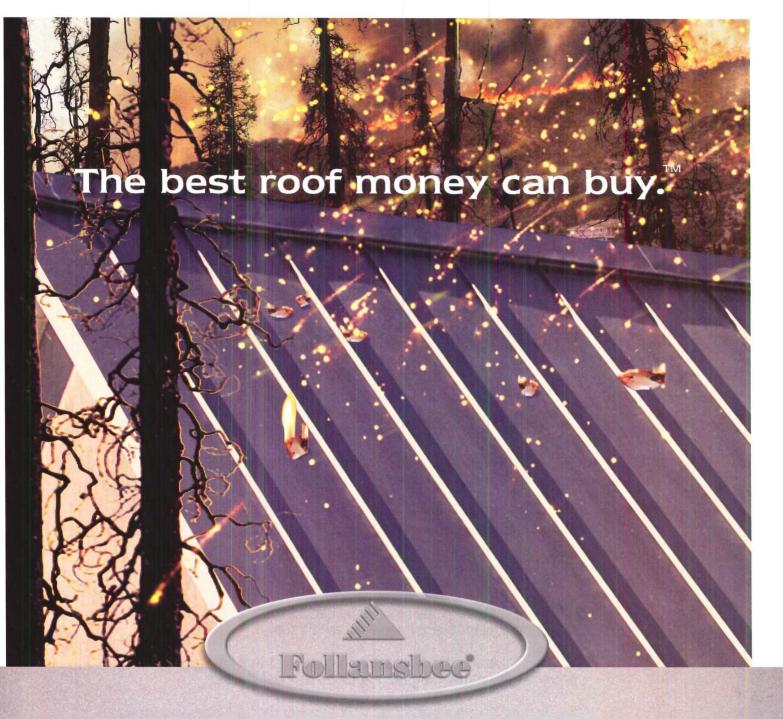
ing buildings during the day. At night, the Kalwall expanse is dramatically backlit, acting as a beacon for parkit here's around-the-clock operation.

The second component encompasses customer services in the visitors' center and automotive shop described in the program. Steel columns anchored in concrete bases create an industrial veranda, which shades the curtain walls of both buildings.

Principals Barry Yoakum, AIA, and Todd Walker, AIA, expanded the program beyond boilerplate functionality to include a branding strategy for the company. Their idea to let the architecture assist in the branding enabled the company to further distance itself from the competition. The orange-and-green color scheme, logo, lighting, and textures of the building are embedded in parkit here's promotional material and advertisements and splashed across the vans that take customers to and from the airport.

Commentary

Perhaps you can't create an architectural masterpiece for \$52 per square foot, but archimania shows that you can make something authentic. Instead of being disabled by a tight budget and a derelict site, the architects coaxed potential from every material without stretching it to do more visually and spatially than was possible. In the end, the client got a handsome and honest structure that exudes confidence.



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Choice is good. But, by not choosing AAA arbitration, you could get litigation by default, or worse, another ADR provider—and both could put your clients' projects and businesses at risk.

- Risk #1 You could end up in litigation, where the average case gets bogged down for 2 years before even getting to *trial*, never mind resolution.
- Risk #2 Without AAA arbitration, your client's construction case won't be resolved in the AAA's median time frame of 10 months from filing to award.
- Risk #3

 If you end up in litigation, or choose another ADR provider, you could get a judge or neutral who knows little—or nothing—about construction issues.
- Risk #4 With litigation or another ADR provider, you probably won't get the expertise of an AAA arbitrator who is also an architect, engineer or builder.
- Risk #5 You could pay through the nose for hidden administrative fees when you choose non-administered or non-AAA arbitration.
- Risk #6 You won't have access to AAA tools and resources that help you to customize all-important dispute resolution contract clauses.
- Risk #7 You run the risk of not getting an ADR provider that will offer you support, every step of the way, whether you file online or conventionally.

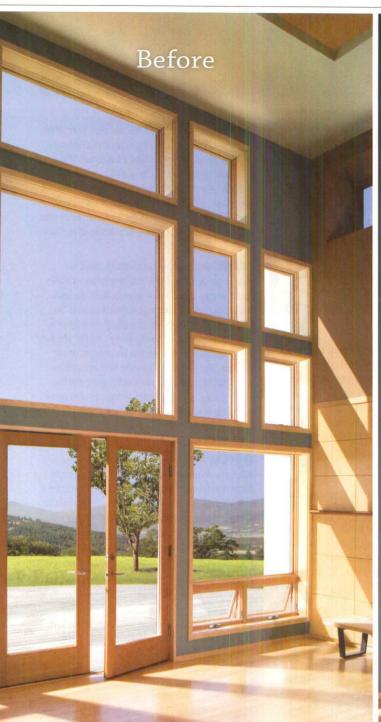
If you do choose AAA Arbitration, disregard all of the above.

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ON RECYCLING

CHANGES What you have to keep in mind is that getting rid of waste material is a big expense. The demolition industry is a lot more sophisticated than it used to be. There's new equipment. Government regulations are tighter...and harder to comply with. We've become more involved in recycling than ever before.

Bill Moore, Vice President, Brandenburg Industrial Service Co., Chicago, one of the largest demolition companies in the U.S. President, National Demolition Association. Degree in Safety, Indiana State University. Spent a decade in insurance and safety specializing in the construction of high-rise buildings, another in demolition safety, and another in marketing for Brandenburg.



PROCESS First thing we do is gut the interior of a building as much as possible and do whatever handwork is needed. We remove all the hazardous materials — mercury bulbs, asbestos, that sort of thing. And if there's office furniture or architectural artifacts, et cetera, left in the building, we'll pull them out and re-sell that too. Then we'll tear out the drywall, glass and wood — basically strip the building down to its structure. Once we're ready to wreck, we use a crane to drop a big machine on the roof to hammer out the concrete floor by floor, crushing it, until we're at ground level.

REALITY We don't necessarily recycle for good "green press" — it's economics pure and simple. Anything we can salvage out of a building, we'll do it because there's a market for it. The more we recycle, the more we salvage and less we landfill, the more competitive we can be for our customers.

DELICATE Brandenburg does much more than complete demolition. One job we did — the Rookery building at the corner of Adams and LaSalle — is the oldest high-rise building in downtown Chicago. It's a landmark, more than 100 years old. So the owner decided that rather than tearing the building down, it should be completely gutted to make way for a modern interior. So we do work like that too.

COSTS If we go to a landfill with a load of concrete, it's going to cost three or four hundred dollars here in Chicago — and probably double that on the East Coast. Landfilling concrete is expensive, so we're always trying to find different things to do with it. We'll crush it, use it to fill basements, try to find other jobs that need fill — we even have portable crushers to make it into CA6-type material for road beds and parking lot bases. Anything to get rid of it.

WORTH Concrete, basically, has no value. Even when we recycle it, we still have the expense of crushing it, which is about 10 to 50 dollars a truckload. While that saves us from having to go to the dump with it, it doesn't have a positive value. You'll never break even. Steel, on the other hand, has always been valuable. And like other commodities, the price varies quite a bit — right now, we're in a very good position when we sell steel.

SHIPPING Let me explain something about the transportation of material. You have a tractor trailer and it weighs about 40,000 pounds. Well, the legal load limit on most highways is 80,000 pounds. So you're going to put 40,000 pounds of material into the back of the truck. It really doesn't matter whether it is filled with steel or concrete because you're not going to load that trailer to water level and still be legal. But because steel is so much lighter and less bulky, you get rid of a greater percentage of material each time you load a truck with steel. To ship material is expensive — you want to do it in the least amount of trips.

PLANNING Building owners and developers need to think about demolition someday — what's going to happen to the material when the building isn't useful anymore? There's a movement by the Green Building Council pushing owners to think about their building when it has to be torn down. If you make a building out of steel, it will always be recyclable. Steel will always have value.

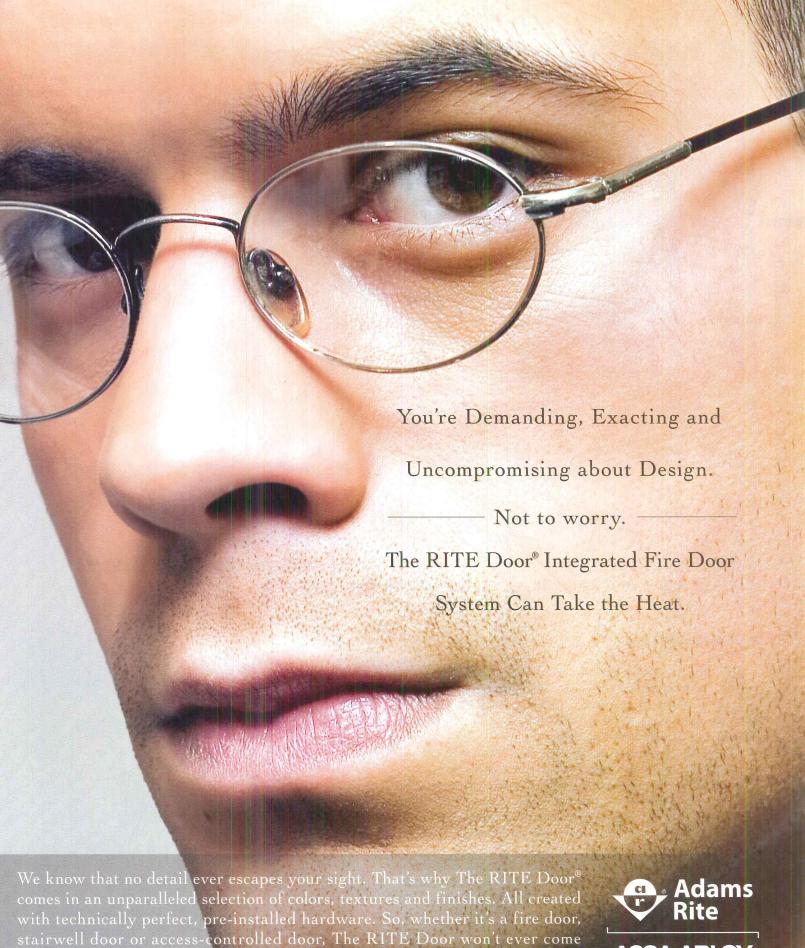
MIXING Try to picture a pot of molten steel, it's kind of like a big pot of stew or soup. When you're cooking and you want to make it spicier, you just put an additive in. But instead of pepper, you might put in more manganese or chrome. That's what's called altering the chemistry of the batch. Basically, if you're making structural steel, the mill will put in a base of reclaimed structural steel — like a recipe. Now if we were making re-bar, the chemistry for that is completely different than structural steel.

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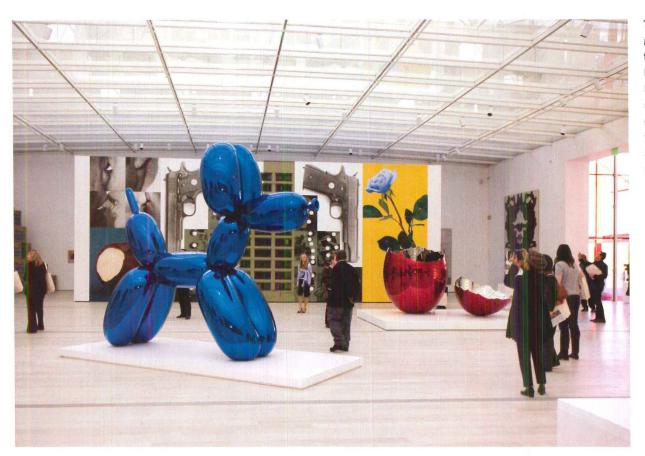


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The column-free galleries on the top floor of the new BCAM building in Los Angeles have a daylighting system that provides even lighting but gives visitors a sense of subtle changes in outside conditions.

Let the (Indirect) Sun Shine In

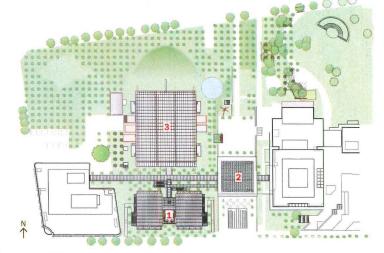
A HIGHLY COLLABORATIVE DESIGN PROCESS AND IN-DEPTH ANALYSIS PRODUCE DAYLIGHTING SYSTEMS FOR TWO EXPANDING ART MUSEUMS ON OPPOSITE COASTS

By Joann Gonchar, AIA

rt museums are motivated to expand by a variety of factors. Some need to accommodate growing collections. Others hope to satisfy stringent traveling exhibition requirements for climate control or security. While still other institutions hope to raise their profile and attract more visitors.

Although some of these expanding institutions prefer a theatrical approach to illuminating their exhibition spaces, relying primarily on electric lighting, others are driven by a different curatorial philosophy and choose to harvest light from the sun. "Instead of a black box with light sources focused on individual objects, [these institutions] desire a room with natural light and the freedom to place objects anywhere within," says Arfon Davies, an associate director with Arup lighting in London.

Daylight can be an asset in a museum because it renders color perfectly. But beyond this technical advantage, many museum designers incorporate daylight because of the experiential dimension it adds to buildings. "The day coming and going makes spaces more interesting," says Renzo Piano (see page 124). His skylit museums include the Menil Collection, in Houston; the High Museum of Art, in Atlanta; and the recently completed Broad Contemporary Art Museum (BCAM) at the Los Angeles County Museum of Art (LACMA).



LOS ANGELES COUNTY MUSEUM OF ART PARTIAL SITE PLAN

- **1.** Broad Contemporary Art Museum
- 2. BP Grand Entrance
- **3.** Special Exhibitions (planned)

Successfully incorporating daylight into museum exhibition spaces involves balancing its natural variability with the need for adequate lighting levels for viewing artwork. "A sense of subtle changes in outside conditions is desirable. But rapid swings in lighting levels are not," says Mark Husser, principal in the New York City office of Grimshaw. The firm, known for highly detailed buildings that are both rational and formally expressive, is working on an expansion of the Queens Museum of Art, in New York. The BCAM building's sawtooth roof (right) is an adaptation of those found on many industrial buildings. Its structure (below) is made up of east-towest spanning trusses and tension-andcompression bracing.

Designers that incorporate daylight into exhibition areas must deal with a host of other challenges, including meeting conservation criteria that limit exposure levels for artworks and creating visually comfortable conditions for visitors. And in order to achieve the best result, architects and their consultants must work in an integrated team to analyze site conditions and weather data, establish the orientation and geometry of a building, and position and size apertures.

Making the most of the Southern California sun

The BCAM building in Los Angeles was the outcome of such a collaborative process, involving the Renzo Piano Building Workshop, a multidisciplinary group of engineers from Arup, and Gensler as executive architect. The 72,000-square-foot building is part of a larger multiphased expansion that includes a just-completed new entrance to the LACMA campus





and a projected 40,000-square-foot, single-story daylit exhibition space.

The three-story BCAM, opened earlier this year, is made up of two nearly identical travertine-clad, linked, boxlike volumes. A northfacing skylight system illuminates the building's top-floor galleries. Piano intends visitors to travel to these daylit spaces first, via an exterior zigzagging collection of escalators and stairs that he refers to as "the spider."

The building's roof is an adaptation of the sawtooth roofs found on many industrial buildings. But instead of the typical combination of a

> sloped opaque surface and a vertical glazed surface, each 8,500-square-foot ceiling of the top-floor, column-free galleries is entirely glazed, serving as skylight and weather enclosure. Above the glass, 17-foot-tall aluminum sunshades, sloped 45 degrees, admit light from the north but block direct light.

> The skylight ceiling, cambered to permit water to drain, is made of low-iron, insulated glazing units. In addition to a polyvinyl butyl (PVB) interlayer that filters nearly all of potentially art-damaging ultraviolet light, the units have a translucent frit pattern that reduces visible light transmission to 38 percent. "The ceiling is working hard from a thermal and daylighting point of view," says Arup's Davies, the lighting design team leader for the BCAM project.

> The all-glass ceiling posed challenges for seismic designers because it did not allow for a roof slab that would serve as a structural diaphragm in earthquake-prone Los Angeles, explains Simon Rees, a structural engineer in Arup's local office and the project's multidisciplinary team manager. So, in order to maintain the

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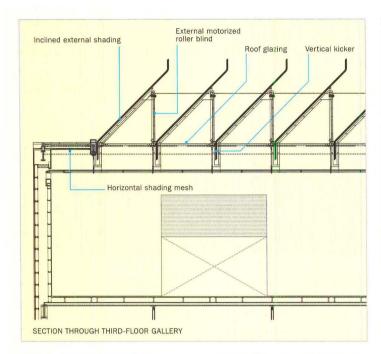


Use the following learning objectives to focus your study while reading this month's ARCHITECTURAL RECORD/AIA Continuing Education article. To earn one AIA learning unit, including one hour of health, safety, and welfare credit, turn to page 247 and follow the instructions. Another opportunity to receive Continuing Education credits in this issue can be found on page 251.

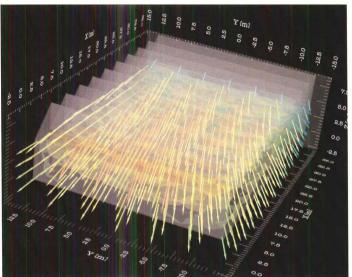
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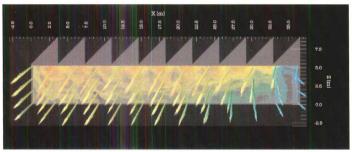
After reading this article, you should be able to:

- 1. Describe the benefits of incorporating daylight into museums.
- 2. Discuss the challenges of incorporating daylight into museums.
- 3. Discuss the daylighting design process.









At BCAM, inclined aluminum sunshades prevent direct light from penetrating the gallery's glazed ceiling (left, prior to installation of sunshades). To determine the primary direction of light within the galleries, the con-

sultants conducted an illumination vector analysis (both images above). The analysis takes into account light passing through the skylight from the north and light reflected between the inclined sunshades.

stability of the building during a temblor, engineers devised a system of east-to-west spanning trusses and tension-and-compression bracing. In conjunction with an unbonded brace frame, the components help "limit the forces the roof will experience during a seismic event," says Rees.

Although the BCAM daylighting system is primarily passive, it includes motorized exterior blinds that exclude almost 90 percent of visible light. The blinds can be lowered to shut out daylight during nonoperating hours, or to meet the curatorial and conservation demands of a particular exhibition. The blinds are also programmed to close during summer early morning and late afternoon hours—those few periods when direct sunlight will pass through the inclined roof panels.

A potential drawback of a north-facing skylight system is that it can create diffuse light conditions that lack uniformity. "One disadvantage of the sawtooth system is that the light is directional," says Davies. "The south-facing wall does not 'see' the sky at all," he says.

To determine the primary direction of illumination within the gallery space Davies and his team conducted an illumination vector analysis. This analysis takes into account light passing through the skylight from the north and light reflected between inclined sunshades. As a result of the study, designers refined the sunshade, adding a "kicker" at its bottom edge. This 3-foot-tall vertical element bounces light back to the south-facing wall, creating more uniform daylighting conditions.

The top-floor galleries' electric lights, which include both wall washers and spotlights for highlighting individual pieces, are integrated into the skylight mullions. Photo censors control the dimmable fixtures, adjusting electric lighting levels as daylight varies. "To maximize energy savings and provide adequate lighting, it is important to have a coordinated approach, not only for museums, but for any building type," says Davies.

A storied structure in Queens

In contrast to the ground-up new BCAM, the Queens Museum of Art (QMA), in New York City's Flushing Meadows Corona Park, is expanding within its seven-decade-old building. Since 1972, the QMA has occupied the northern half of a 105,000-square-foot, limestone-clad, long-span



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QMA now occupies only half of a building constructed as the New York City Pavilion for the 1939 World's Fair (below) but will soon take over the rest of the structure. Expansion plans include inserting a skylight and a hanging structure of glass fins (right), which will define a central gallery for large threedimensional works.







- 1. Existing panorama
- 2. New large-works gallery
- 3. New temporaryexhibition gallery
- 4. New media galleries

structure that served as the New York City Pavilion for both the 1939 and 1964 World's Fairs and briefly housed the General Assembly of the United Nations. But in the fall of 2010, the museum will double its size by taking over the southern half of the storied "modern classical" building, replacing an ice-skating rink with daylit galleries designed by Grimshaw and Washington, D.C.-based Ammann & Whitney.

The plan for QMA is in some ways an inversion of other recent museum expansion schemes, such as Foster+Partners' courtyard at the National Portrait Gallery, in Washington, D.C. [RECORD, March 2008, page 98]. But at QMA, instead of enclosing an outdoor space, the architects plan to carve out a covered courtyard from an existing building. The central programmatic element in the QMA scheme is a new "large works" gallery with a 55-by-40-foot fixed baffled skylight inserted in the roof above. A 30-foottall structure suspended from the roof trusses and floating about 10 feet from the gallery floor will surround the new skylight with frosted-glass fins.

The hanging element, together with fabric baffles enclosing the roof trusses and the large-works gallery floor, reflect, refract, and diffuse

daylight passing through the new skylight and direct it to flanking side galleries. These seven smaller galleries—except for two intended for multimedia pieces or extremely light-sensitive work that are completely enclosed—have fixed aluminum louvered ceilings that further reflect and diffuse daylight. "The strategy provides two levels of control," explains New York City-based Tom Gallagher, QMA project manager for lightingdesign firm George Sexton Associates. "It prevents direct light from hitting artwork and controls diffuse and scattered light," he says.

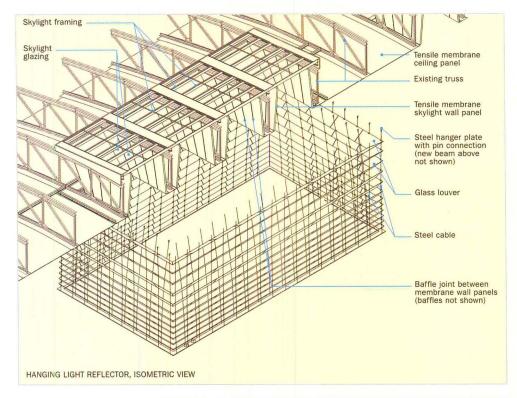
Because even indirect light can be detrimental to artwork, the designers established an annual exposure budget in consultation with QMA curators. Their target of 65,000 foot-candle hours per year includes both daylight and electric light provided by a straightforward system of manually switched wall washers and spotlights. An alternative conservation approach is to establish a maximum exposure level at any one point in time, based on worst-case daylighting conditions, such as those during summer solstice. But the annual exposure method used at QMA (and also at BCAM) "provided more latitude to design with natural fluctuations in Able to protect tall buildings in a single bound. Start Smart.
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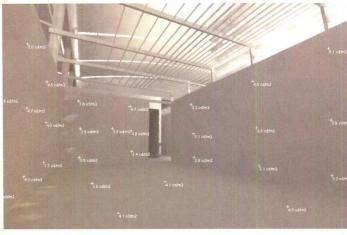
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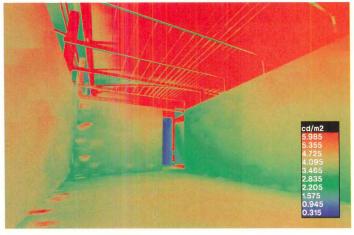


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The QMA skylight's fabric baffles and the frostedglass fins of the hanging structure (right) surrounding the central gallery will reflect, refract, and diffuse daylight and direct it to flanking exhibition spaces. In order to ensure that they achieved the desired contrast ratio in these smaller side galleries, team members performed extensive modeling, including studies of illuminance levels (bottom two) at various times of the day and throughout the year.







daylight levels," says Gallagher. This relatively common approach, sometimes referred to as "reciprocity," allows museums to balance conservation criteria with their desire to allow daylight into exhibition spaces.

Another design-team concern was control of the relative daylighting levels throughout the museum. The architects and their consultants wanted to be sure that within the individual exhibition spaces, the ratio of the brightest to the darkest wall (or between parts of walls) was no more than three to one. The ratio is derived from the measure of light arriving at these surfaces, or their illuminance. "This is an aesthetic issue," says Gallagher, explaining that to the human eye, a ratio of three to one would appear relatively uniform.

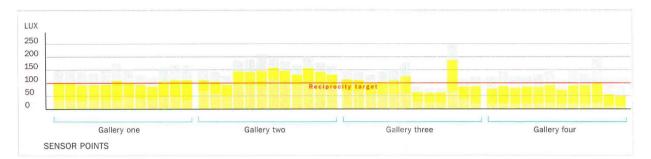
The team also paid special attention to the experience of visitors moving throughout the museum, from the lobby to the large-works gallery and on to the smaller galleries, striving "to create a sequence that avoided abrupt changes between spaces," says Husser. The goal was to limit the contrast ratio between adjacent spaces to 10 to one. But in this case, the designers were comparing luminance, or the amount of light leaving a surface. "This is generally considered a visitor comfort issue. If the contrast is too great, eyes have trouble adapting, causing fatigue," says Gallagher.

In order to produce a scheme that would realize their performance targets, the design team conducted extensive modeling of the museum's proposed spaces and the architectural elements. One such study was an examination of the relationship between roof aperture configuration and side-gallery daylighting levels. Using the simulation program Radiance, consultants placed virtual sensors in each gallery. They then manipulated the skylight size and shape while charting the amount of light falling on wall surfaces. The goal of the study was to come as close as possible to the annual reciprocity target without exceeding it, explains Matthew Herman, senior building physicist in the New York City office of Buro Happold, the project's environmental consultant.

Team members also closely examined the aluminum louvers over the smaller galleries, conducting a solar-ray analysis for various shapes, angles, and spacing. Ultimately, the designers selected louvers with elliptical sections, varying their slant and spacing them closer together near the wall



To refine the design for the QMA skylight, the team virtually manipulated its configuration and charted light levels at sensor points in the side galleries.



adjacent to the large-works gallery. The arrangement provides reflective surface area where it is needed most to direct light back toward the wall closest to the light source, one that would otherwise be in shadow, explains Husser.

After virtually modeling the components and spaces, the environmental consultant built a physical model and brought it to Flushing Meadows Park during summer solstice to measure actual light levels onsite. "The simulations were very effective in telling us if we were on the right track," says Herman. "But they have their limitations." He notes that their accuracy depends on the computational power of hardware and is hampered by the difficulty of mathematically describing the way various materials bounce light, especially when the simulated daylighting

scheme includes multiple filters, as does the design for QMA.

These layers, and especially the 30-foot-tall suspended structure surrounding the skylight, will be the defining elements of QMA's interior. The light diffuser "will be a hanging object of the same scale as the panorama," points out QMA executive director Tom Finkelpearl, referring to the 9,300-square-foot model of New York City that is the best-known piece in the museum's collection. "The method of directing light into the galleries will be an enormous sculptural statement."

For this story and other continuing education stories, or to take the quiz online at no charge, go to **continuingeducation.construction.com/**.



INSTRUCTIONS

- Read the article "Let the (Indirect) Sun Shine In" using the learning objectives provided.
- Complete the questions below, then fill in your answers on the next page.
- Fill out and submit the AIA/CES education reporting form on the next page or take the test online at continuingeducation. construction.com/ to receive one AIA learning unit.

OUESTIONS

- **1.** The advantages associated with using daylight in museums include all except which?
 - a. freedom with object placement
 - **b.** perfect color rendition
 - **c.** natural conservation of artwork
 - d. an indication of subtle changes in outside conditions
- **2.** The polyvinyl butyl (PVB) interlayer in the Broad Contemporary Art Museum (BCAM) skylight glazing serves which purpose?
 - a. it filters visible light
 - b. it filters ultraviolet light
 - c. it mitigates heat gain
 - d. it mitigates heat loss
- 3. Which is not an example of the passive features of the BCAM daylighting system?
 - a. the cambered glazed ceiling
 - b. the sloped aluminum sunshades
 - **c.** the exterior roller blinds
 - **d.** the translucent frit pattern
- 4. Which feature will help ensure the stability of the BCAM building during an earthquake?
 - **a.** a system of trusses and tension-and-compression bracing
 - b. a roof slab that acts as a structural diaphragm
 - c. a cambered glazed ceiling
 - d. none of the above

- 5. Which of the following is not true regarding north-facing sawtooth skylights?
 - a. they can create diffuse light conditions that lack uniformity
 - b. the south-facing wall does not "see" the sky
 - c. the north-facing wall does not "see" the sky
 - d. they are commonly used on industrial buildings
- 6. Which of the following is true regarding the BCAM illumination vector analysis?
 - a. it is intended to determine the primary direction of light
 - b. it takes into account light passing through the skylight from the north
 - **c.** it takes into account light reflected between the inclined sunshades
 - d. all of the above
- 7. The hanging light diffuser surrounding the skylight at the Queens Museum of Art (QMA) will be made of which?
 - a. frosted-glass fins
 - b. fabric baffles
 - c. aluminum louvers
 - d. wood louvers
- 8. The term "reciprocity" refers to all except which?
 - a. a method based on annual exposure levels
 - b. a method based on maximum exposure levels
 - **c.** a method that allows museums to balance conservation criteria and their desire for daylight in exhibition spaces
 - **d.** a method that provides latitude to design with natural fluctuation in daylight levels
- 9. A measure of light arriving at a surface is which?
 - a. luminance
 - b. illuminance
 - c. reciprocity
 - **d.** transmission
- **10.** QMA designers were striving for a contrast ratio no greater than which?
 - a. three to one within individual galleries
 - b. ten to one within individual galleries
 - c. three to one within the overall experience of the museum
 - d. none of the above



Program title: "Let the (Indirect) Sun Shine In," Architectural Record (05/08, page 238). 058EDIT1 AIA/CES Credit: By reading this article and successfully completing the exam, you can earn one AIA/CES LU hour of health, safety, and welfare credit. (Valid for credit through May 2010.) Directions: Select one answer for each question in the exam and completely circle appropriate letter, or take this test online at no charge at continuingeducation.com/com/. A minimum score of 80% is required to earn credit. d 2. a C d b d 3. a b d 8. a b d C C 4. a b C d 9 a b C d 10. **Last Name** First Name Middle Initial or Name Firm Name Address City State Zip Fax E-mail Tel. AIA ID Number Completion date (M/D/Y): Check one: 🔲 \$10 payment enclosed. (Make check payable to Architectural Record and mail to: Continuing Education Certificate, P.O. Box 5753, Harlan IA 51593-1253.) For customer service, call 877/876-8093. Charge my: Visa Mastercard American Express Card# Signature Exp. Date **Check below:** To register for AIA/CES credits: Answer the test questions and send the completed form with questions answered to above address or fax to 888/385-1428. For certificate of completion: As required by certain states, answer test questions, fill out form above, and mail to above address or fax to 888/385-1428. Your test will be scored. Those who pass with a score of 80% or higher will receive a certificate of completion.

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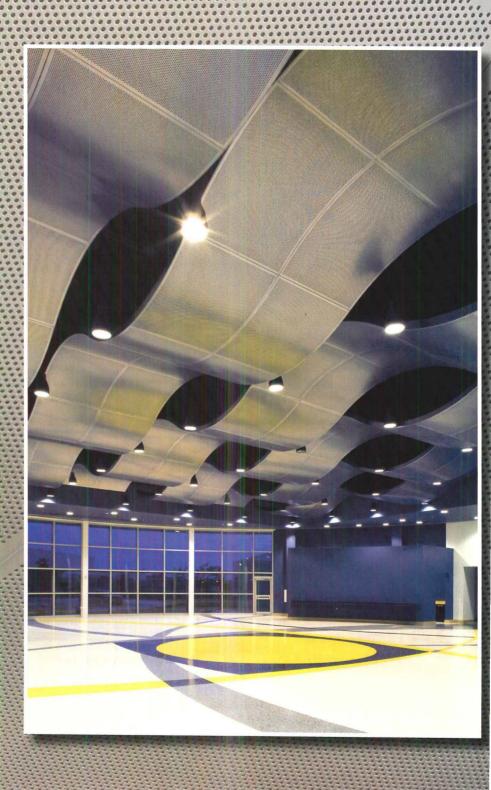
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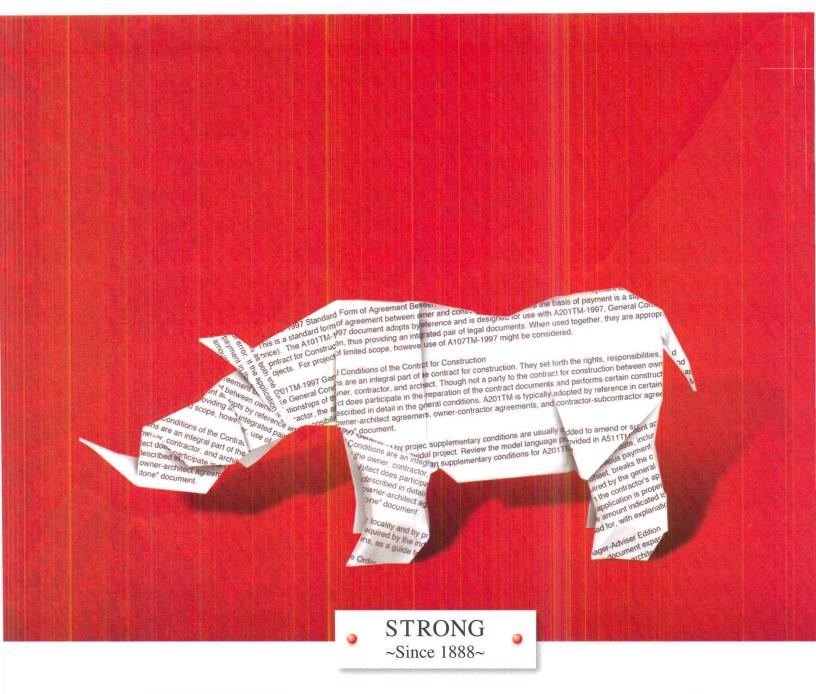


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Targets for Building Performance: Selecting Windows that Work

Building performance is affected by wind and water pressures — high-performance windows are chosen through the application of best practice calculations

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By Celeste Allen Novak, AIA, LEED AP

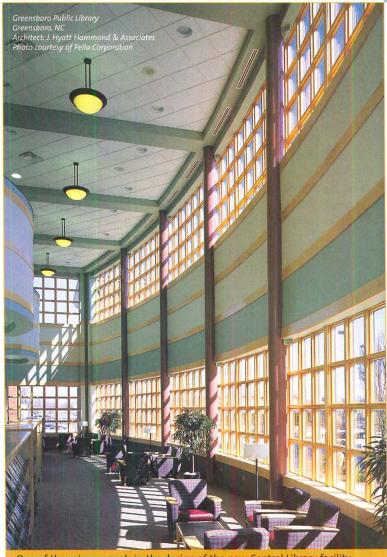
rchitects are aware of the importance of the impact of the local environment. They review building location and the building site to orient their buildings toward the sun and important views, as well as respond to local weather conditions. Specifying the correct cladding system for a regional location is based on numerous factors, among which are the average amounts of wind and water pressures found at the site. Architects can be proactive in their specifications of cladding systems, particularly windows if they understand and design to performance factors for the building location.

Sometimes, an architect will rely on a manufacturer's data for performance criteria, which may exceed the actual criteria for performance in a particular location. This reliance does not remove the architect's liability for performance design and may lead to specifying materials that are more costly and not more effective than designing to actual performance data based on the requirements of the local building code.

Often, structural engineers are asked to provide wind pressure data for a designer's buildings. The designer then provides this wind pressure data to the window supplier, who will supply a window that meets the specified design criteria. However, as stated in the 2006 International Building Code, structural design section 1603.1.4 — the design professional is responsible for determining design wind pressures for components and cladding.

In projects with curtain walls, architectural specifiers often defer to "delegated design." This is the practice of requiring a window manufacturer to provide the analysis for structural performance based

on calculations from a qualified professional engineer, licensed to practice in the jurisdiction of the project. Even with delegated design clauses, the professional must provide performance requirements and design criteria for wind loading in the construction documents and specification package.



One of the primary goals in the design of the new Central Library facility for the Greensboro Public Library was to have an abundance of natural light, and views both into and out of the building

CONTINUING EDUCATION

Use the learning objectives below to focus your study as you read Targets for Building Performance: Selecting Windows that Work. To earn one AIA/CES Learning Unit, including one hour of health safety welfare credit, answer the questions on page 255, then follow the

reporting instructions or go to archrecord.com, click CEU tab and follow the reporting instructions.

Learning Objectives

After reading this article, you should be able to:

- · Identify the impacts of wind and water on building performance in different locations in the United States.
- · Assess the specification criteria for wind and water performance in buildings and the impact on window performance values.
- Explain performance value information to manufacturers to supply windows for buildings with different design requirements.

Another common practice is that designers rely on multiple choice solutions in prepackaged specification formats. This may create confusion regarding which performance class to use for different projects and can lead to specifying windows that do not meet the needs of the owner. Owners want windows that work and are easy to maintain.

High-performance windows allow architects to seal the building envelope for maximum energy efficiency. Window performance is impacted by location, size and height of the building enclosure, as well as through proper installation. More designers are choosing to select windows that allow the building occupants to open the windows and let in fresh air. The operability of windows is related to the testing and rating of window performance class. Designers are challenged with identifying how to make the window system work as part of the building envelope, particularly in conjunction with different wind and water pressures, which can vary by location.

This article explores how to specify the right window for the project location based on the performance values for buildings. The impact of wind and water on window performance are discussed, along with a case study demonstrating the changes in wind and water pressure on the same building in different locations. The calculations required for determining performance values for windows are reviewed to educate the design professional in how to select the right window for the project location. Performance class and grades are explained, as well as the basis for the nomenclature used by the fenestration industry for window and door types. Choosing the right windows will optimize building performance and cost.

WEATHER AND WINDOWS: WIND DESIGN PRESSURE

Buildings stand up because of an architect's ability to design structures that can withstand a variety of forces. Some forces are static, for example, the weight of the building structure; some forces are dynamic, such as the pressure of wind on the many sides of a building. The

exterior face of a building is comprised of a number of separate design elements, including windows, flashings, wall panels, and decorative extrusions. The designer converts wind forces into units of pressure measured in pounds per square foot (psf). The wind load on a building is determined by the basic wind speed at the proposed construction site. For the most part, wind speeds have been found to be measurable and have been mapped by the National Weather Service.

Chapter 16, Structural Design of the 2006 International Building Code (IBC) requires designers to calculate the design wind pressures for a building, as well as for components and cladding based on local conditions. The main reference for wind design is the American Society of Civil Engineers (ASCE 7), *Minimum Design Loads for Buildings and Other Structures*. This standard provides guidelines for calculating minimum loads on buildings from a variety of sources, live loads, dead loads, service loads, seismic loads, as well as wind loads. The ASCE is not a building code, but the 16th Chapter of the IBC requires that the wind loads on every building be determined in accordance with Chapter 6 of ASCE 7. Local building codes may have other referenced material for the design professional to use or require the use of a particular version of the ASCE standard. Designers should contact the local building officials to determine which local codes and standards apply for their project.

Wind design pressures are impacted by building size, height, geometry, wind exposure as well as wind speed. Calculations for wind design pressure include a variety of other factors such as the intended occupancy and importance of a structure. ASCE 7 includes three different methods for determining wind design pressures for buildings. Method 1 — Simplified Procedure uses the following formula for calculating design wind pressure (Pnet) for components and cladding: $P_{\text{net}} = \lambda \ x \ K_{zt} \ x \ I \ x \ P_{\text{net30}}$

Where:

 λ = adjustment factor for building height and exposure K_{zt} = topographic factor evaluated at mean roof height I = importance factor based on building occupancy P_{net30} = net design wind pressure for exposure B, at h = 30 ft, and for I = 1.0

BUILDING HEIGHT AND EXPOSURE TO WIND

 $\lambda = Adjustment factor for building height & exposure$

To solve for the adjustment factor for building height and exposure, the designer selects the appropriate value from Figure 6-3 in ASCE 7 Chapter 6 based on the mean roof height of the building and the exposure of the building to wind.

The mean roof height is simply the average of the roof eave height and the height to the highest point on the roof surface, except that, for roof angles of less than or equal to 10°, the mean roof height shall be the roof eave height.

Determining the building exposure to wind requires a little more explanation. As wind flows to a building it is modified, strengthened or decreased by the path it takes, around, over or above other buildings. Building exposure (B, C, or D) is based on the context of the building location.

Exposure B is the least severe exposure and includes urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.

Exposure C includes open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone regions. Although a building might be in an urban area, the designer should be careful to evaluate the exposure to wind forces, based on the context of the building location in the city. For example, the designer may choose exposure C if the building location is at the edge of the city adjacent to farmlands, not Exposure B.

Exposure D is the most severe exposure and includes flat, unobstructed areas and water surfaces outside hurricane prone regions. This category includes the Pacific coastline, smooth mud flats, salt flats, unbroken ice, and inland waterways like the Great Lakes and Mississippi River.

As the building height increases and/or the exposure to wind increases, the design wind pressure also increases. Exposure factors are important with relationship to topographic features and building height as variables in solving for design wind pressure.

TOPOGRAPHIC FACTORS — K_{ZT}

Frank Lloyd Wright recommended that houses be constructed at the brow of the hill. He encouraged designs for nature and understood the effects of increasing wind speed as it blows across a hill. Topographic features such as hills, escarpments, or ridges may increase the design wind pressure for the building when the following conditions are present.

- The hill, ridge, or escarpment that the building sits on is isolated.
- The hill, ridge, or escarpment that the building sits on rises above the height of the surrounding terrain by a factor of two or more.
- The structure is located in the upper one-half of a hill or ridge or near the crest of an escarpment.

Instructions for calculating the topographic factor, if needed, are shown in Figure 6-4 of ASCE 7. If all three of the site conditions noted above are not applicable, the topographic factor K_{zz} is equal to 1.00.

BUILDING OCCUPANCY

I = Importance Factor

Not all buildings are required to be designed to withstand the highest wind loads. The code is designed to save lives, and buildings are rated as to the importance of their occupancy. The ASCE *Table 1-1:* Occupancy Category of Buildings and Other Structures for Flood, Wind, Snow, Earthquake, and Ice Loads, lists occupancy categories which are used to determine an importance factor. The use of a building is considered by the code and rated according to whether the loss of that structure would represent a substantial hazard to human life.

Occupancy categories range from IV, the most important, to I, the least important. Essential facilities such as hospitals, emergency facilities, government facilities such as fire and police stations, water treatment facilities and power generating stations have importance factors of IV. Higher factors are used for places where more than three hundred people congregate, where there are daycare

facilities with a capacity of over 150, elementary schools and schools with populations of over 250, health care facilities and jails. Standard construction and most buildings in the United States have an importance factor of II. These structures include residential dwellings, apartments, condominiums and offices as well as shopping centers. Temporary structures, storage units, and agricultural facilities are the least important.

For most buildings the importance factor will be either 1.00 or 1.15. The design professional selects the importance factor from tables in the ASCE. The importance factor is designed to keep wind forces from destroying cladding components during wind storms. Importance factors account for the degree of hazard to human life and damage to property during a typical storm for the design location.

The architect is responsible for determining, by themselves or with the advice of a qualified professional engineer, not only the basic wind speed applicable to the project but also the specific positive and negative design pressures at corners and other areas of the building.

WIND SPEED, EFFECTIVE WIND AREAS, AND BUILDING ZONES

 $P_{net30} = Net \ design \ wind \ pressure \ for \ exposure \ B, \ at \ h = 30 \ ft,$ and for I = 1.0

Wind pressure changes from positive to negative as it moves around and over a building. Wind speeds up at corners and along roof planes. As one side of a building experiences positive pressure, the other sides and roof experience negative pressures. This has implications for fastening, flashing and installation requirements which should be addressed by the designer when specifying windows. The architect is responsible for determining, by themselves or with the advice of a qualified professional engineer, not only the basic wind speed applicable to the project but also the specific positive and negative design pressures at corners and other areas of the building.

Chapter 6 of the ASCE standard provides numerous tables and figures which assist the designer in the calculations for the net design wind pressure (P_{net30}). This variable depends on the design wind speed at the project site, the effective wind area of a component, and the building zone in which the component is located. P_{net30} is determined from Figure 6-3 Components and Cladding — Method 1.

Basic wind speed is selected from the wind speed maps included in ASCE Figure 6-1 and is based on a 3 second wind gust, recorded in miles per hour, at 33 feet above the ground in Exposure C. Average wind speeds vary throughout the United States. They are greater along the gulf and east coasts than in the Midwest and west coast. Special wind areas include regions with mountains and gorges where it is too difficult to predict the average wind speed so local designers rely on area climatic studies and input from local building officials. As the wind speed increases, the design wind pressure increases.

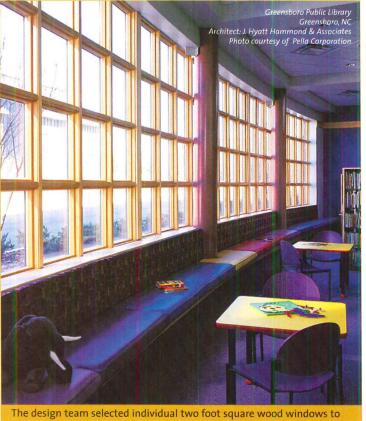
For windows in punched openings, the effective wind area is the area of the window opening in square feet. Larger windows tend to benefit from pressure averages and can be designed using lower pressure values. Consequently, as the effective wind area increases, the design wind pressure decreases.

The building zone of a component is based on its location on the building. Zone 4 is for windows located in the center of the façades and zone 5 is for windows located on the corners of a building. The corner zone dimension "a" is 10 percent of the least horizontal building width or 40 percent of the mean roof height, whichever is smaller, but not less than either 4 percent of the least horizontal width or three feet. Both zones experience positive and negative pressures as the wind flows over and around the building. Values for corner zones are higher since wind swirls at the corners of a building causing high negative pressures to occur at these locations. Windows located on the building corners (zone 5) will experience the highest design wind pressures and may require a different specification from windows located at the center of the building (zone 4).

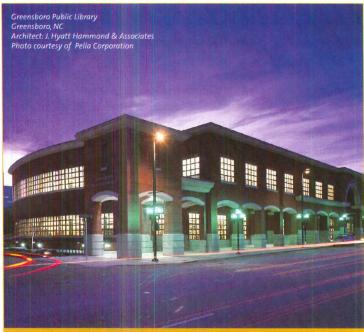
LOCATION, LOCATION

The Greensboro Public Library can be used to demonstrate the effect of building location on design wind pressure.

J. Hyatt Hammond and Associates designed the Greensboro Library within a very tight, public budget. The library required the architect to design a building that would be a welcoming home for the whole community. Project Architect with J. Hyatt Hammond, of



The design team selected individual two foot square wood windows to create a wood grid on the interior that contributes to the warm and natural atmosphere.



Since its completion, which was part of community revitalization, this building has drawn the community together. Windows provide natural daylight and views into the quiet, engaging library environment

Greensboro, North Carolina, Patrick Deaton, AIA, reports that "one of the primary goals in the design of the new Central Library facility was to have an abundance of natural light and views both into and out of the building. The previous facility was a 1960s design with very few windows and two underground levels. Patrons told the design team that the new facility should be warm and welcoming, and that the building should have plenty of windows.

After considering various storefront systems, the design team selected individual 2-foot square wood windows with a dark green aluminum cladding on the exterior, with low-E glazing. The individual window units, when joined together into larger assemblies, create a wood grid on the interior that could not be achieved through other means and contributes to the warm and natural atmosphere. The wood mullions also create more shade at certain times of the day than a typical storefront system. In total, there are approximately 7800 square feet of exterior window openings in the Central Library."

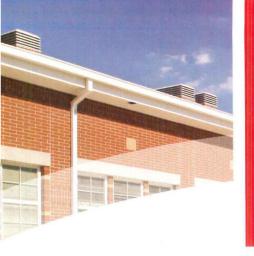
This traditional design included large arched windows and horizontal ribbons of glass. Since its completion, which was part of community revitalization, this building has drawn the community together. Windows provide natural daylight and views into the quiet, engaging library environment. Continues at archrecord.com.

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Celeste Novak, AIA, LEED AP, is the principal of En/Compass Architecture, a green design studio. She has authored many articles on sustainability from community design to building materials.

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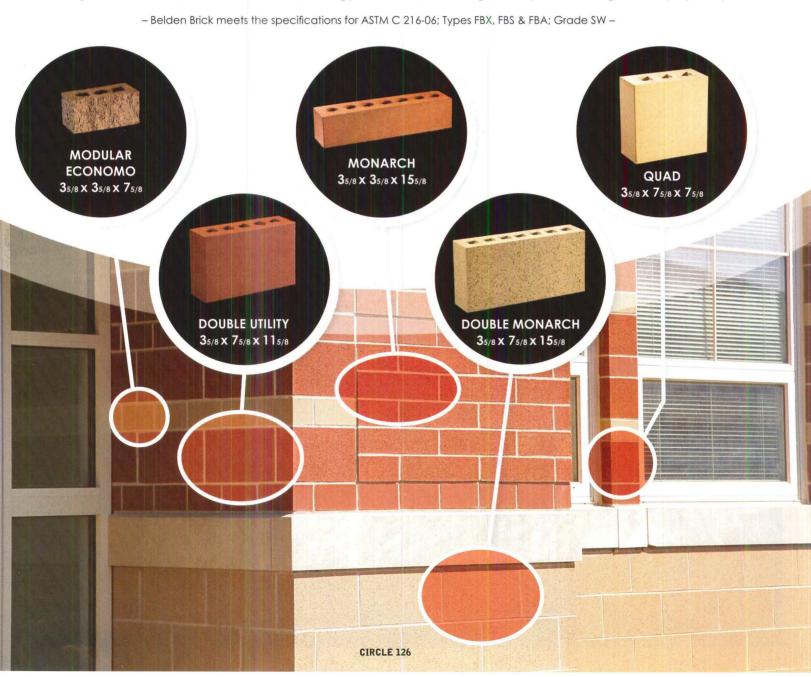






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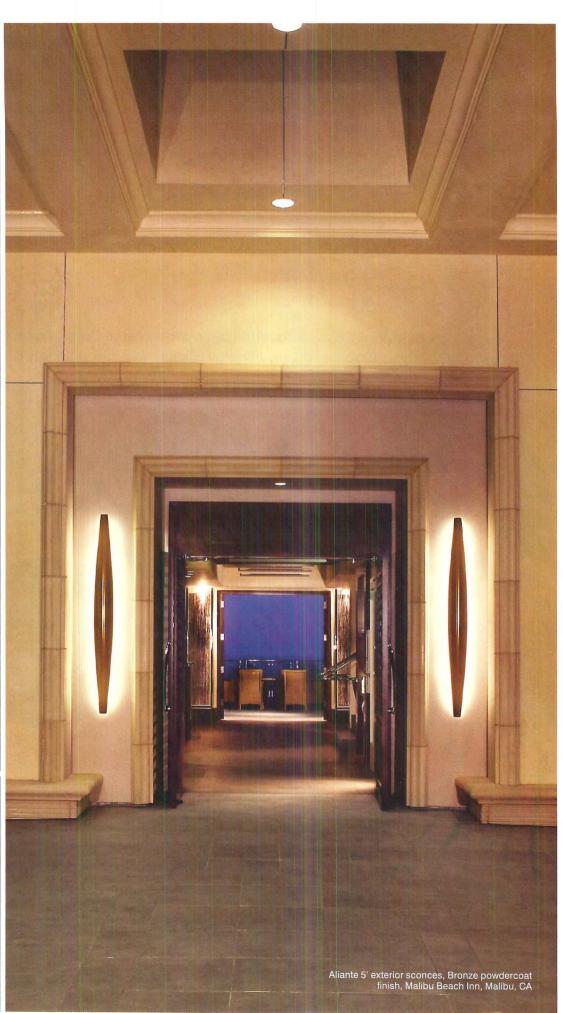
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Outer beauty: Illuminating facades

hyra Hilden and Pio Diaz practice a unique form of arson in which 6,000-lumen projectors play the role of kindling. The Copenhagen-based artists, collaborating with the Danish fire service, have ignited and videotaped fires inside the brigade's practice tunnels, then presented the resulting videos using building surfaces as movie screens.

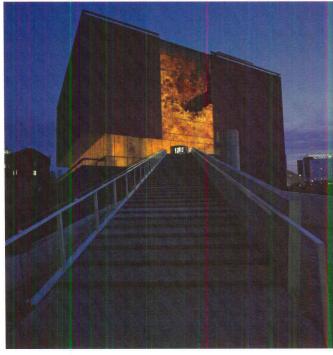
Hilden and Diaz inaugurated the series of artworks in 2005, setting figurative fire to Rome's Trevi Fountain on New Year's Eve. They have since staged the project on the facade of the Danish Institute of Rome, inside the Institute Library in that city, and, most recently, the apse of Sankt Katharinenkirche in Frankfurt, Germany. Entitled City on Fire, it is their first project working together. "[Hilden] did a lot of work with death, and I had been working on social and political issues," Diaz says of the artists' individual oeuvres, "so we wanted something that impacted both of our subjects."

Indeed, City on Fire represents an intersection of cultural meanings. Although Diaz says he and his partner are particularly fond of working in churches, "because we like the relation between fire and the church and religion in general," their installations provoke interpretations that range far beyond spirituality. The fires declare the impermanence of the institutions their buildings represent while also suggesting rebirth. They intimate the imperialism that elevated organizations to institutional status, further suggesting the violent acts that fringe groups commit against them today. More simply, the projects dare participants to walk through fire.

In 2007, Hilden and Diaz ignited a monumental gas conflagration and recorded it for a projection onto the ARoS Museum of Art in Århus, Denmark. "Just as the church once patronized the arts, today the museum is the new church," Diaz says of choosing an art venue. Equally significant, the museum, designed by Copenhagen's Schmidt Hammer Lassen in 2003, seemed perfect for City on Fire. The architects created an imposing brick cube but incised it down the middle, as if separating the volume into brickclad halves with a glass-walled atrium in the middle. The artists' videotaped flames amplified a dialogue on the emphemeral nature of art and the institutions that house it, which the architec-

ture had already begun.

Like the ARoS staging, the facade projects featured in this lighting section represent a dramatic melding of architecture and lighting design. In addition to increasing the nighttime visibility of buildings, illuminated facades lend meaning to the urban fabric. For example,



Thyra Hilden and Pio Diaz project a blaze onto the ARoS Museum of Art.

the polychromatic display of the AGC Quality Manufacturing Training Center, by Takenaka Corporation, changes viewers' minds about the drabness of Tokyo's Keihin industrial district. The project might also surprise Western observers, demonstrating that high-quality design is produced not only by Japanese ateliers, but also by the in-house design teams of the nation's large construction companies.

At Lánchíd 19 hotel in Budapest and the Centre de Création Contemporaine (CCC) in Tours, France, designers treated luminaires as one piece of a complex skin. In Budapest, Hungarian designers Péter Sugár, László Benczúr, and László Kara created Homo Lumens for the front elevation of the hotel, featuring screen-printed glass lamellas that move and display colored lights according to different variables. In Tours, architect Philippe Chiambaretta attached a new skin to the existing CCC building facade, transforming it into a surface whose undulations are made all the more dramatic by embedded LEDs. The glittering movement of Homo Lumens reminds pedestrians of the Danube River just steps away, offering respite from the frenetic pace of city life, while CCC's bright ribs lend delight and security to the streets. Both are beacons of 24-hour city living, and of the power of design thinking. David Sokol

ONLINE: Submit your Lighting project to construction.com/community/ gallerylist.aspx.

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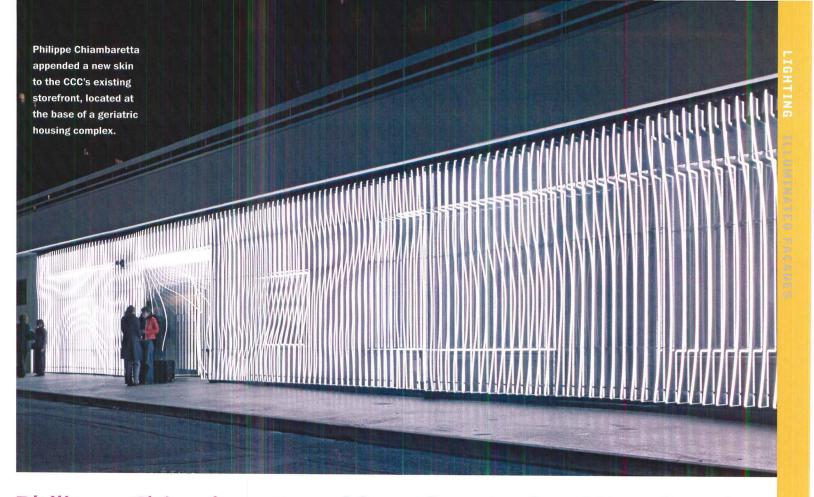
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Philippe Chiambaretta adds 19h04 to the CCC's facade

By Robert Such

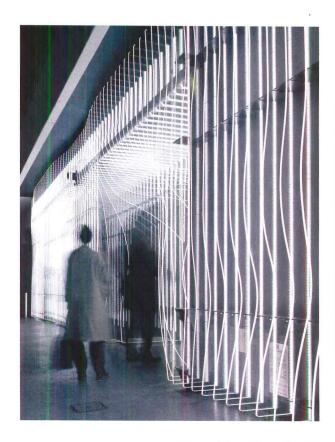
n Tours, France, a building-size mask has transformed the non-descript face of an experimental arts center into a striking neighborhood talking point. Built from clear Plexiglas and lit by LEDs, the work—by Paris-based PCA Architecture—conceals the drab exterior of the Centre de Création Contemporaine (CCC) in a curvaceous display of lines of white light and repeated reflections.

Along with a number of stores, the CCC occupies part of the first floor of a residential tower for the elderly. "This building," says CCC director Alain Julien-Laferrière, "is of no architectural interest. It's made of concrete; it's ugly." Julien-Laferrière's team decided against restoring the neglected exterior, instead selecting an architect who could show "the creation and the life inside the center, and to communicate that with the exterior," he says.

In 2003, the CCC launched a competition for "a concept for a new facade expressing contemporary art," says PCA founder Philippe Chiambaretta. After his studio won, it took another three years for the center to raise the 180,000 euros (\$284,000) to construct the project.

Smooth and blobby, Chiambaretta's winning proposal gave the CCC facade the appearance of green Jell-O stuck to the existing building's front—a glowing skin that evoked a cell deformed by molecules passing through it. "The project was a tridimensional envelope shaped by the flows of information," Chiambaretta says of the form, which he describes as allowing visual cues to pass between occupants, artwork, and passersby. For six

Robert Such is a U.K.-based freelance journalist and photographer specializing in lighting, architecture, and design.





months, PCA worked with engineering firm RFR to turn the concept into a buildable structure, but it was "very difficult to maintain the lightness of the initial idea due to the technical and financial constraints," he explains.

The designers call the final work 19h04 to honor the time, 7:04 in the evening, when they first switched it on. The project represents "low consumption, low cost, and long life cycle," an approach that Chiambaretta says he takes with all his lighting designs. The 82.4-foot-long 19h04 comprises 150 12.1-foot-high Plexiglas profiles spaced 9 inches apart, enough to maintain visual cohesion while providing space for maintenance. Slotted metal brackets hold the ½-inch-thick Plexiglas planks upright and in place. White LEDs are glued with silicon to the back edge of each plastic sheet.

To make a backdrop that contrasts with the project's 150 glowing slivers, Chiambaretta placed a dark, translucent film over the existing building's windows and painted the original elevation black. "We considered the possibility of using many colors and a sophisticated program to control them," he says, "but I decided to stay simple, with white on a black wall. It's a black-and-white project." Light passing through the plastic creates sensuous, curved, white lines, then slowly dims and brightens in tailor-made patterns to create a dynamic surface. Of the programmable dimmers, Chiambaretta explains, "For exhibitions organized by the CCC and openings, we go from very strong light to moderate. When the light is on 100 percent, it is incredibly clear, almost like daylight. And during the evening, when everybody goes out to smoke, we bring the level down."

Compared to PCA's larger built works, such as the Pinchuk Arts Center in Kiev, or competition entries such as the Tour Signal at La Défense outside Paris, the CCC facade is more experimental in nature. "We think a lot in these small and long-lasting projects, then they infiltrate the more applied projects," Chiambaretta says. 19h04 may inspire out-of-the-box thinking among users, too. As the architect posits, "This street is quite empty at night, but the lighting creates a sense of safety as well an oddity that attracts people who are curious about how the project works. They look closely, and then they want to learn about the exhibition inside."

Project: 19h04, Centre de Création Contemporaine, Tours, France Architect: PCA Architecture—Adrien Raoul, Marie Marouli, Steven Ware, Boris Vapne, Christian Delecluze, project designers

Lighting consultant: ACT Design— Kort Vermeulen Engineer: RFR

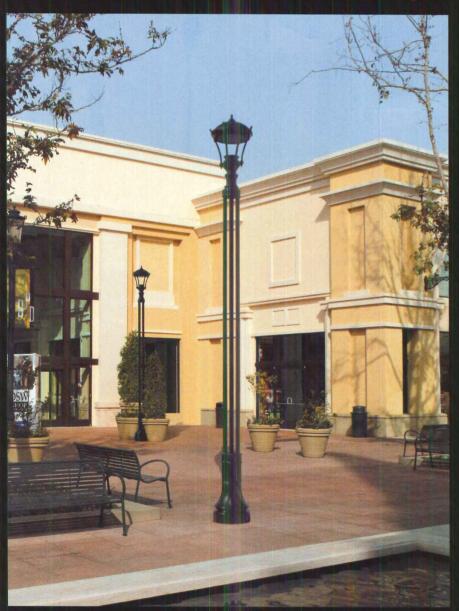
LEDs, Plexiglas, metal brackets: SED Enseignes

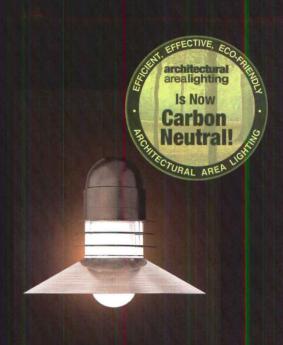
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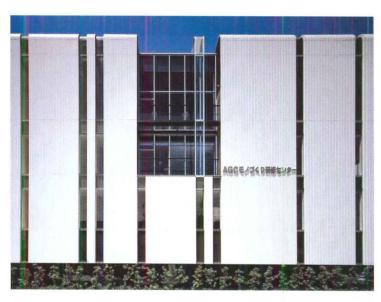


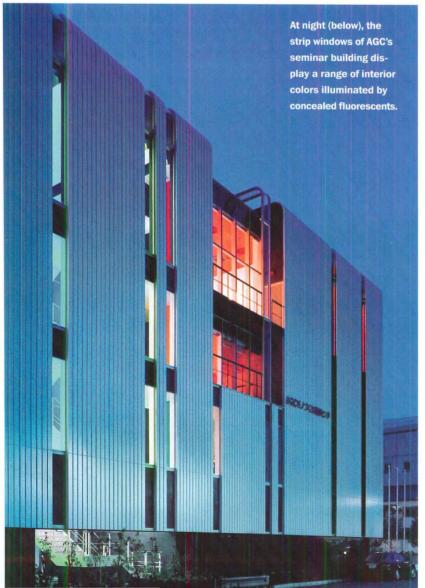






Takenaka Corporation's design for the **AGC Training Center** transforms a building into a nighttime rainbow











By Naomi R. Pollock, AIA

quiet collection of aging factories and outdated manufacturing plants, the Keihin industrial district of Tokyo seems lightyears away from the city's eye-popping, neon-clad commercial centers. But against this monochromatic backdrop, the AGC Quality Manufacturing Training Center, designed by Takenaka Corporation, positively glows. During the day, the building's prominent, bullet-shaped south elevation reads as a series of concrete planes rhythmically interspersed with narrow strips of glass. But at night, when the building is illuminated from within, the masonry recedes and the transparent panels change the four-story structure into a graphic display of the color spectrum.

The center belongs to Japan's largest glass manufacturer, Asahi Glass Company (AGC), a major supplier to the automotive, architecture, and electronics industries, as well as a producer of glass-related chemicals. Located in different parts of the country, AGC's various sectors are physically isolated and fairly independent entities. But all of the organization's companies anticipate the retirement of their highly skilled, baby-boomer workforce in the near future. This pressing reality generated a need for a joint facility where technical know-how could be transmitted to the next generation of employees. In 2005, AGC conducted an invited design competition for a training center on the grounds of its Keihin factory and

Naomi R. Pollock is RECORD's special international correspondent based in Tokyo and the author of Modern Japanese House.

awarded the commission to the building design department of Takenaka, one of Japan's five major construction companies.

Linked by a covered walkway and a shared parking lot, Takenaka's center consists of two parts. One is a 19,736-square-foot, metal-clad volume containing a variety of workshops on

The colors of the AGC facade inform the interior design, where these hues bathe walls as well as upholstery (above two).

three floors. The other is the concrete-skinned, 70,455-square-foot structure designated for conferences and classroom-style learning. Organized around an enclosed courtyard that admits daylight into the middle of the interior, the larger building holds the entrance hall, exhibition area, and a variety of meeting rooms on the ground floor; a practical training room and seminar rooms on the second floor; then two floors of additional seminar and meeting rooms, as well as a lounge and a terrace on the fourth floor.

The no-nonsense plan of the seminar building practically designed itself: Hugging the perimeter walls, the various rooms are strung together by circulation spines running the building's length. On the other hand, creating a distinct character for this facility required careful consideration. "We needed a concept for expressing the company ideas through the building," explains Hirotsugu Yamaguchi, manager of Takenaka's architectural design section. The architects' solution lay in the relationship between light and glass itself.

Borrowing a concept from physics, the Takenaka team used the spectrograph of glass, or graphic representation of the light waves emitted





by glass, as its model for painting and positioning thin bands of 17 different colors on interior corridor walls and ceilings. The rainbow stripes range from dark red to deep purple with selected shades of orange, yellow, green, and blue in between. Each one aligns perfectly with an exterior, 2-foot-wide slit window that extends the height of the south elevation and bends over to become a skylight. Punctuating the long corridors, the painted stripes are concentrated in wall recesses where fluorescent lamps hidden in vertical cove fixtures bounce light off the tinted surfaces, resulting in the brilliant, reflected hues that both animate the interior during the day and brighten up the exterior at night.

In order not to detract from the colored walls, overhead luminaires were omitted from the circulation spaces. But individual room interiors were another matter. Here the designers used ceiling-mounted fluorescent lights made from ½-inch-diameter glass tubes earmarked for convenience-store display cases. While room light is normally one consistent color temperature measured in kelvins, the architects hoped to awaken the senses and improve working conditions by blending lights of different temperatures together. In the lounge, for example, the 15-foot-high ceiling is lined with 100 red, white, blue, and yellow lamps intended to infuse the room with a relaxed atmosphere and to stimulate communication.

"We tried to introduce company products as much as possible," explains Yamaguchi. Indeed, while the largely opaque south elevation helped keep costs down, the east-facing facade is made entirely of the heat-absorbing sheets that AGC produces as windshields for its carmaker clients. Tinted like privacy glass, the wall comprises 450 3-foot-square panels that effectively block out the early morning sun.

In 1916, when Asahi Glass first opened its factory on this site, Japan was in the throes of rapid Westernization and modernization. Today, AGC is on the brink of another major transition. And with 25,000 people passing through its doors yearly, its training center is doing its share to light the way. ■

Project: AGC Quality Manufacturing Training Center, Tokyo

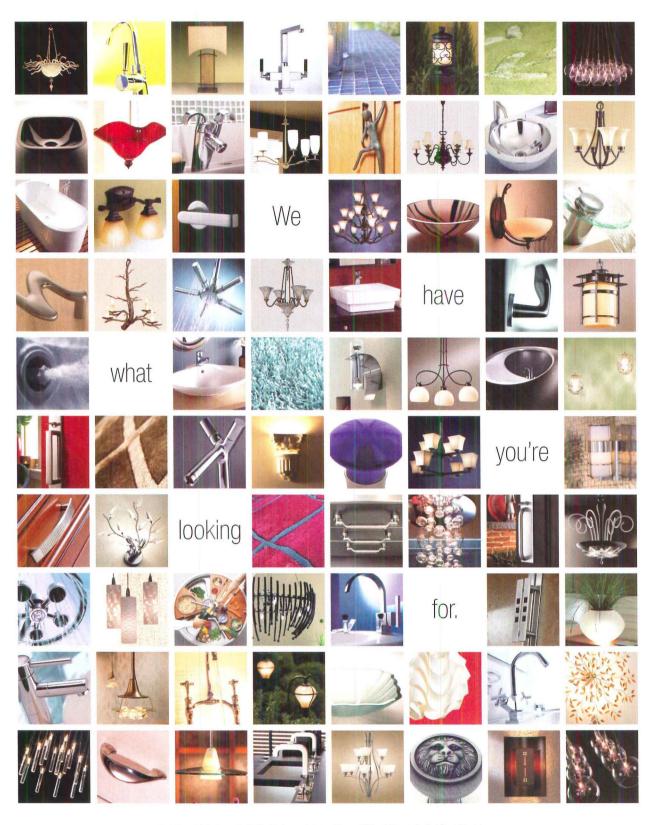
Architect: Takenaka Corporation—Hirotsugu Yamaguchi, Nobuaki Miyashita, Seiko Tanaka, project designers

Lighting consultant: Masahide Kakudate Lighting Architect & Associates

Engineer (m/e/p): Takenaka Corporation—Takao Odajima, Yasuyuki Kanebako

Sources

Interior fluorescent lamps: Prince Electronics



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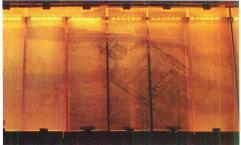


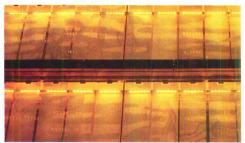
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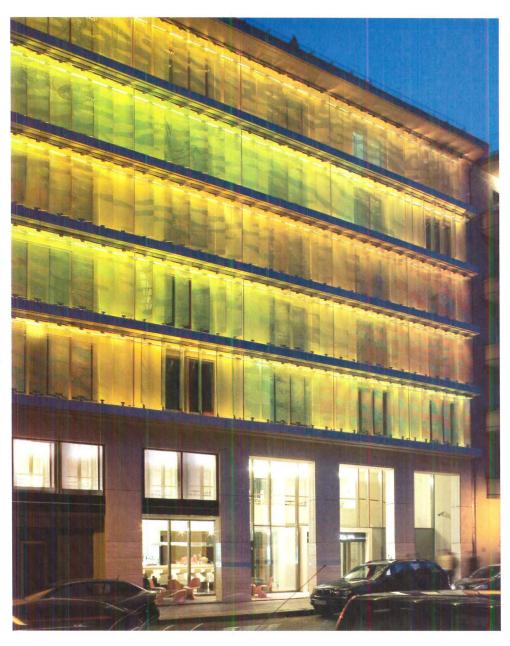








The glass panels' screen-printed pixels form larger images when viewed from a distance (above). Embedded LEDs change color according to temperature (right).



Homo Lumens moves, inviting many interpretations

By Michael Dumiak

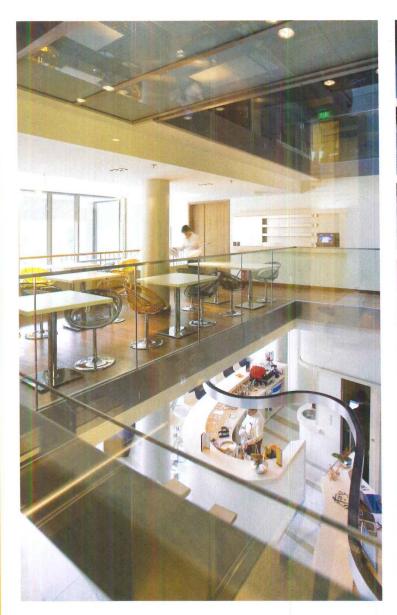
ike moonlight on the water, Lánchíd 19 captures the shimmer of the Danube coursing through Budapest. Tucked at the base of the hill below Buda Castle on a leafy avenue overlooking the river, the six-month-old hotel evokes the famous waterway with a dynamic facade of 150 rectangular glass lamellas. Arranged six to a window, the lamellas rotate on chain-driven servomechanisms. Each lamella is screen printed with multicolored pixelated patterns and sandblasted on the opposite side for texture, and reflects a panel of six LEDs embedded in the window sill.

A large, integrated design team treated the river-facing elevation as a single surface, with each lamella wired into a central network

Michael Dumiak writes about design, science, and technology from Berlin. He most recently covered heliostats for RECORD.

that responds to temperature and wind signals from roof-mounted sensors, says member architect László Benczúr. "The whole facade moves slowly when the weather is quiet, and faster when it is windy." Color patterns and shades of each hue are programmed to change subtly with time and temperature. Guests can control their rooms' six panels, and after 2 hours the sensor system overrides the signal, moving back to a unified windowpane choreography.

Duna Resort, a Hungarian property developer, initiated the \$10 million Lánchíd 19 project in 2004. Benczúr competed against architects Péter Sugár and four others; in the end, the competition committee recommended that Benczúr and Sugár work together. The pair, along with architect László Kara, then assembled an ad hoc team, including local studios Szövetség 39, Hidromatic, and Nextlab, to design, engineer, and program the interactive facade. Fashion designers USE supplied the hotel





uniforms, and the client commissioned DEFO to decorate the room interiors.

The result is a compelling, sevenstory, 45-room building characterized, like its facade, by an extensive deployment of glass and light, with a glass atrium bringing daylight to the interior, glass bridges leading to guest rooms, and a glass-and-steel staircase linking the foyer to the hotel restaurant. Glass floors in the lobby expose the Roman-era foundation ruins found and left untouched during the

building's excavation, and in the guest rooms, glass partitions separate living spaces from the bathroom.

"The functional structure of the public spaces is the most important and spectacular element of the building," Benczúr says. "The atrium rises the full height of the building, connecting the ground floor, the entrance lobby, the garden, the restaurant bar, and the corridors with the glass roof."

In that spirit of forging connections, the interactive facade, which the architects call *Homo Lumens*, expresses the communication between the structure and its surroundings. The pixels on the glass lamel-

Homo Lumens comprises 150 rectangular glass lamellas that pivot along the facade of Lánchíd 19 by electronic command (above right). Glass is an equally pervasive material in the hotel lobby (above left). las are actually small images of butterflies, fish, and plankton that interlock into larger patterns as these panels shift. Passersby see multiple objects at once: knights or bottles when looking closely, or moving water or clouds when they soften their focus. "The idea was motion controlled by the weather," Benczúr says. And like the currents of the Danube moving in concert, so these representations move across the building in the same downstream motion as the river.

The programming, done by Nextlab, recalls the sophisticated lighting programs now used by big nightclubs, where every light can be adjusted and directed against an overarching program. Each set of six glass panels is controlled separately by two chain-driven servos, which arrange the lamellas into bigger pictures. In a similar way, the whole structure fits together with disparate pieces receiving and sending multiple signals, delighting different viewers and points of view.

Project: Homo Lumens, Lánchíd 19 Design Hotel, Budapest Architect: László Benczúr, KBDesign; László Kara;

Péter Sugár

Glass design: Szövetség 39

Interactive design/programming: Nextlab

Robotics (lamella chain systems/servos): *Hidromatic* **Lighting consultant:** *MES*— *András Eperjessy*



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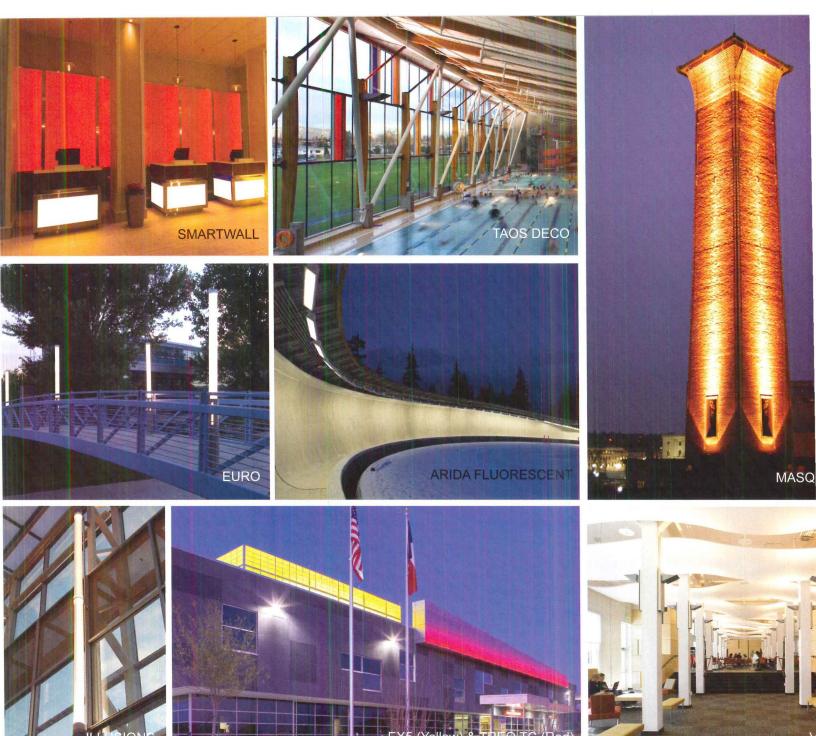
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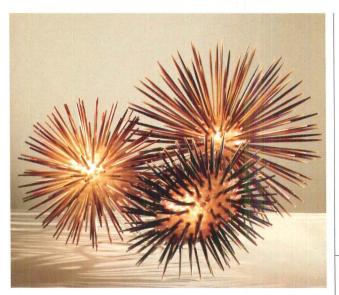
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Insight Lighting offers high performance architectural lighting in classical lamp and LED products for a myriad of lighting venues. An array of instruments including SmartWall (illuminated digital led wall systems), Illusions (linear luminous lighting), Masque (exterior facade lighting), Euro (exterior vertical luminous columns) and Vas (decorative high performance indirect lighting) are representative of our innovative products.

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Lighting Products Whether for work, play, display, or sheer ambience, this innovative selection of light sources offers an exciting glimmer of things to come, combining art and technology with a growing concern for sustainability and function. Linda C. Lentz



▲ Variations on sustainability

With designs on the hospitality industry, LaCor crafts contract-quality furnishings with an environmental point of view, in both its use of nontoxic materials and natural motifs. The Sea Urchin Lamps are an artful repurposing of chopsticks (that would have been tossed at the factory). Set in resin, they become the perfect foil for low-voltage lamping intended to gently illuminate the likes of intimate restaurants, bars, and reception areas. Available in 20" and 14" round, and 18" by 14" forms, these playful creatures can be used on tables or as pendants. LaCor Furniture Industries, Garden Grove, Calif. www.lacorfurniture.com cIRCLE 205



A cut above

An ostensible weave of polished aluminum, polished brass, polished nickel, and Strass Swarovski Crystal beads, the Oriana luminaire, designed by Todd Rugee, spirals from its ceiling-mount base in couturelike fashion. Measuring 12%" wide by 171/4" long and weighing 34 pounds, this dazzling chandelier sparkles due to its brilliant halogen lamping. Kentfield, San Francisco, Calif. www.kentfieldcollection.com circle 208

▶ Serpentine links

Designer Kevin Kolanowski has been turning out sculptural chandeliers, sconces, and lamps for Fuse Lighting since he founded the company in 2000. The best incorporate luxurious materials such as semiprecious gems and iridescent shells that interact beautifully with light. The Boa chandelier comprises an adjustable stainless-steel chain-mail sleeve (up to 84") that falls gracefully from its canopy, enveloping or draped atop a 5½", 40-watt G40 globe. The effect is a gentle glow from within or direct illumination from below. Fuse Lighting, West Hollywood, Calif. www.fuselighting.com CIRCLE 206





■ Verdant illusion

The simplicity of the Nervure Collection's silkscreened leaf motif on a glass diffuser that rests on a chrome base makes it a natural

for the likes of urbane, yet Zen-inspired corridors and dining rooms in hotels and restaurants, as well as residences. Measuring 10" square, with a 4.4" extension from the wall, this line of sconces is available in red, green, and white, and accommodates a 1x60 watt E12 incandescent candelabra lamp. Hampstead Lighting, Tucker, Ga. www.hampsteadlighting.com CIRCLE 207

► Movin' on out

After 85 years of illuminating elegant interiors, Boyd is tackling the outdoors with its new Lantern Series. The Grande Lantern for Pier or Post measures 18" high by 12" in diameter. The similar Grande Lantern Sconce is 22%" high by 12" in diameter with a projection of 14½" from the wall. Both are available in antiqued copper, satin nickel, satin copper, satin aluminum, black granite, cinnamon bronze, and matte white. Both can accommodate incandescent, fluorescent, and ceramic-metal-halide lamping. Boyd Lighting, San Francisco, Calif. www.boydlighting.com circle 209



additional colors and fixture types from the entire barcode collection available online.

HAMPSTEAD LIGHTING www.hampsteadlighting.com

Lighting Products

► Picture perfect

Beat the heat of typical accent lighting with the Ledra Display 3-watt LED light. Its lamp life is said to be more than 70,000 hours, and it produces no art-damaging ultraviolet (UV) rays. Plus, it is easily installed with no visible screws and is offered in a bronze or matte chrome finish, with a 10-, 30-, or 45-degree beam spreads. Bruck Lighting Systems, Tustin, Calif. www.brucklighting.com CIRCLE 210





▲ Less begets more

With wider spacing options and glare-free illumination, Verge with MesoOptics by Ledalite provides direct/indirect performance without a louver and no direct view of the lamping—at a slim 1% high. Additionally, the system's suspended and wall-mount luminaires can accommodate the company's Response Daylight sensors to save more energy in window-adjacent locations. Ledalite Architectural Products, Vancouver, B.C. www.ledalite.com CIRCLE 211

► Keeping a low profile

Available in a choice of lengths, the Solana indirect/direct, disklike pendant features adjustable optics to allow for a wide variety of applications. Made of 20-gauge spun steel with a white opal acrylic or perforated-steel diffuser, it is available in standard as well as custom colors and accommodates several compact fluorescents or biaxial fluorescent lamps. Lam Lighting, Santa Ana, Calif. www.LamLighting.com CIRCLE 212



For more information, circle item numbers on Reader Service Card or go to architecturalrecord.com/products/



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Lighting Products

► The glow of Minimalism

Made of 60 percent recycled aluminum, the Alight Accolade5 direct-recessed luminaire cuts a flush silhouette in a range of ceilings and walls, from gypsum board to concrete slab. Engineered to accommodate numerous mounting and lamping possibilities—T5, T5 H.O., MR16 halogen, or Ministar Axial metal halidewith or without shielding, this stylish yet functional fixture can be installed as a direct, ambient, or accent light source, either individually, in rows, at right angles to one another, or in patterns. Standard lengths include 2, 3, 4, 6, 8, 9, and 12 feet. Alight, Vista, Calif. www.alights.com. CIRCLE 213

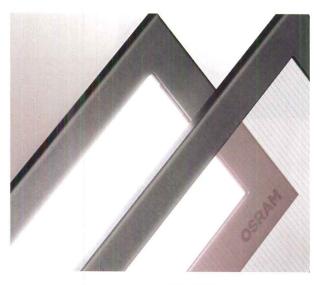


■ Architectural lighting

Designed by New York City—based architect Page Goolrick, Nessen's solid brass Cylinder pendant comes with either a steel-mesh or white-linen shade that measures 22" in diameter by 18½" high for a total ceiling drop of 40". Finishes include polished, brushed, or antique brass; polished or satin chrome; and polished or satin nickel. Nessen Lighting, Mamaroneck, N.Y. www.nesssenlighting.com CIRCLE 214

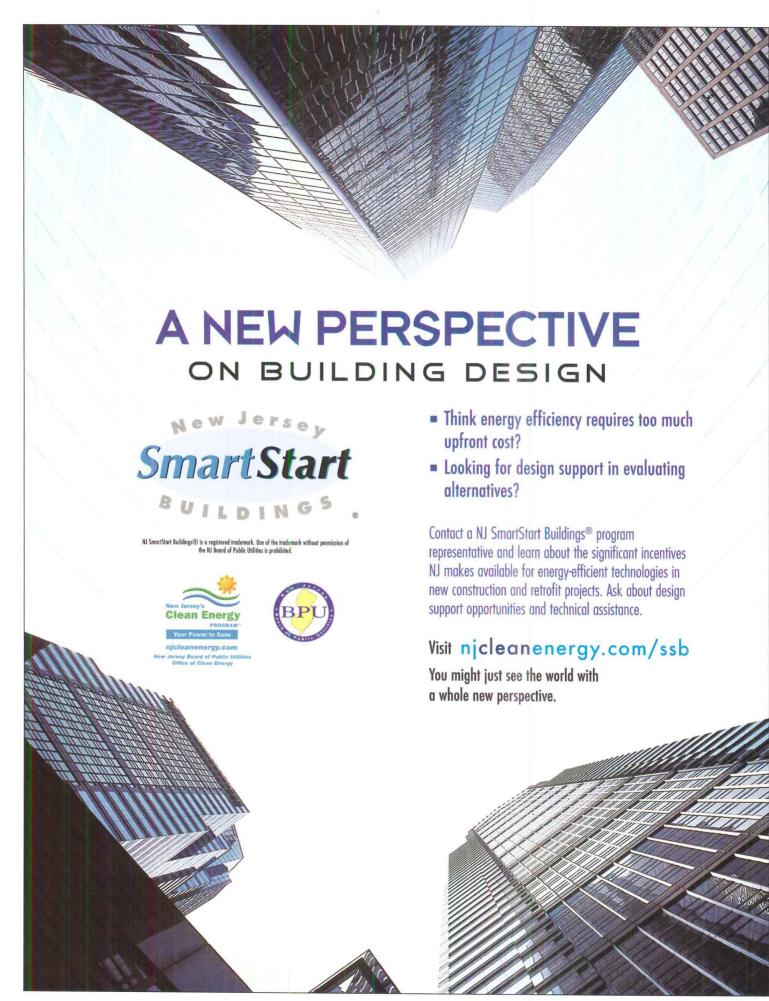
► The best is yet to come

OLEDs (organic light-emitting diodes) are complementary to most existing light sources. Osram Opto Semiconductors' pioneering transparent white OLED tile is still in development, but the firm claims it will offer outstanding performance, as compared to the quality and capabilities of standard LEDs, with beams adjustable within a wide range. The tile's transparency and format, too, invite innovative applications such as partitions—near invisible by day with a soft diffused light by night. Osram Opto Semiconductors, Santa Clara, Calif. www.osram-os.com CIRCLE 215



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Taiwan Centers for Disease Control Complex International Competition

行政院衛生署防疫中心興建工程



The government of the R.O.C. (Taiwan) cordially invites innovative architects from all over the world to participate in an international competition to design the Taiwan Center for Disease Control Complex located in the Hsinchu Biomedical Science Park in Hsinchu County. The complex will include: an Administration Center, a National Health Command Center, and a Laboratory & Research Center. In order to keep up with global health trends better and to provide optimal facilities for disease control research, we aim to create a world-class architectural landmark. We are convinced that a superior custom-built structure will expedite Taiwan's enthusiastic effort in international disease control, and promote close and cooperative relationship with the international community. We warmly welcome you to join in this competition!

Total Construction Budget

Phase One: NT\$1.58 billion (Approximately US\$ 52 million)

Phase Two: NT\$703 million (Approximately US\$ 23 million)

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- 2. Any licensed architect (or Consultant / Corporation) of foreign country is qualified to tender.
- 3. Joint tender is available for licensed architects of the R.O.C. (Taiwan) and licensed architects (or Consultants / Corporations) of foreign countries.

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Timeline / Important Date

Stage One Material Submission Deadline Stage One Judging Announcement of Stage One Finalists Stage Two Judging Announcement of Final Winner August 18th, 2008 August 21st & 22nd, 2008 Please visit our web site November 27th & 28th, 2008 Please visit our web site

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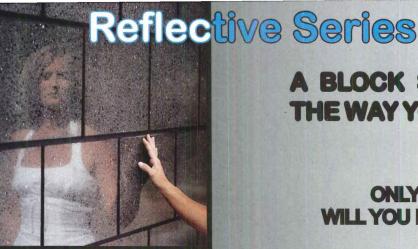
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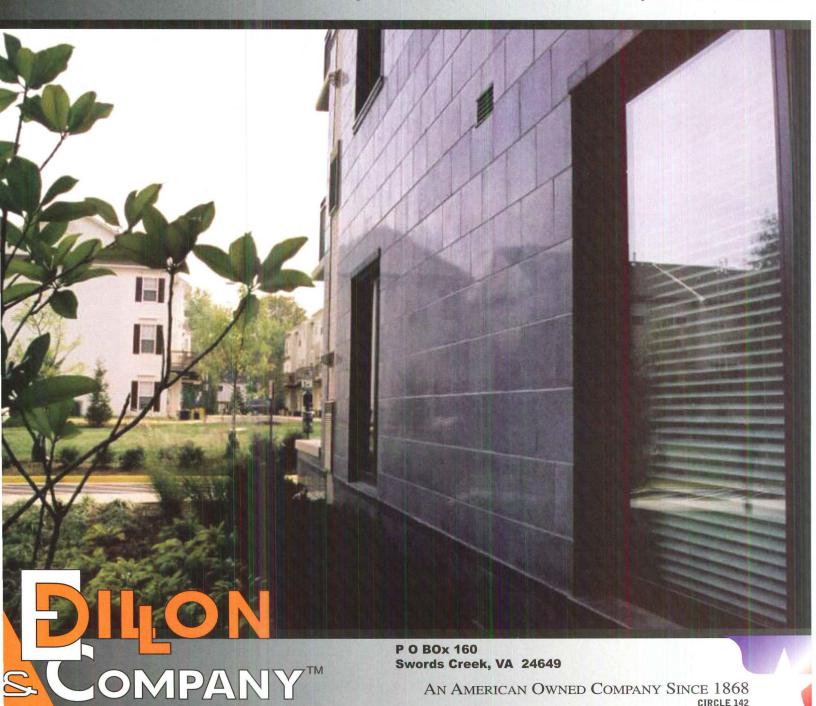


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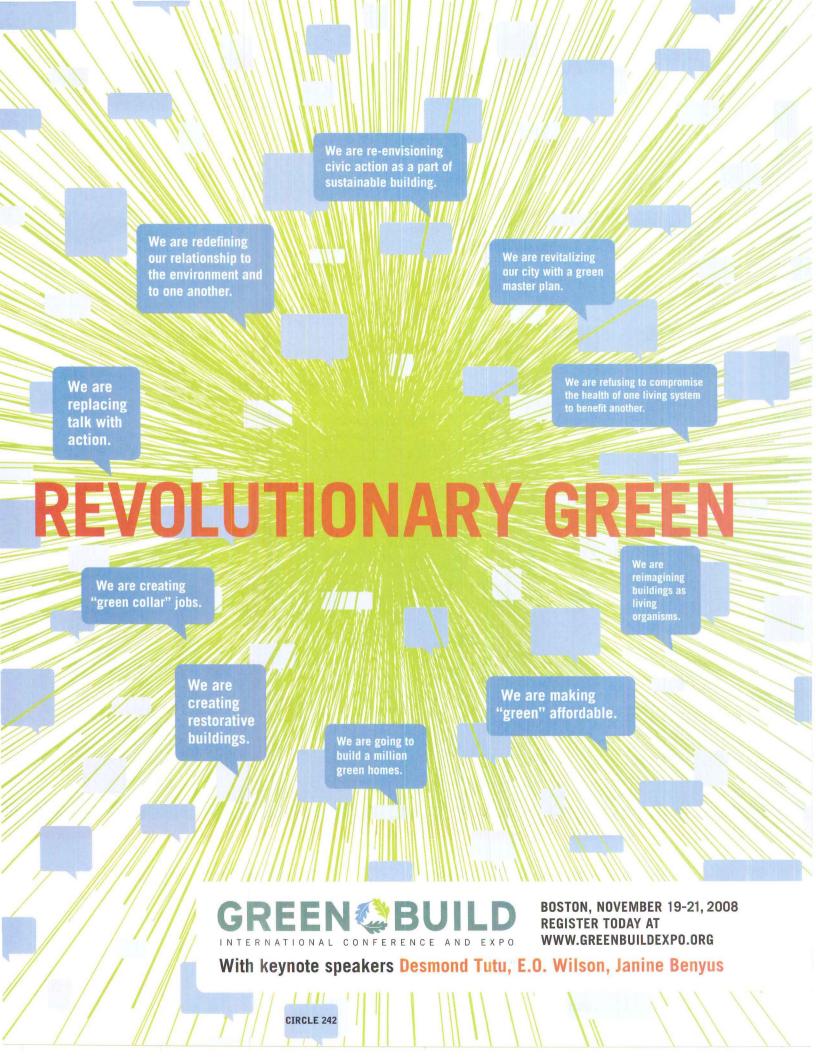


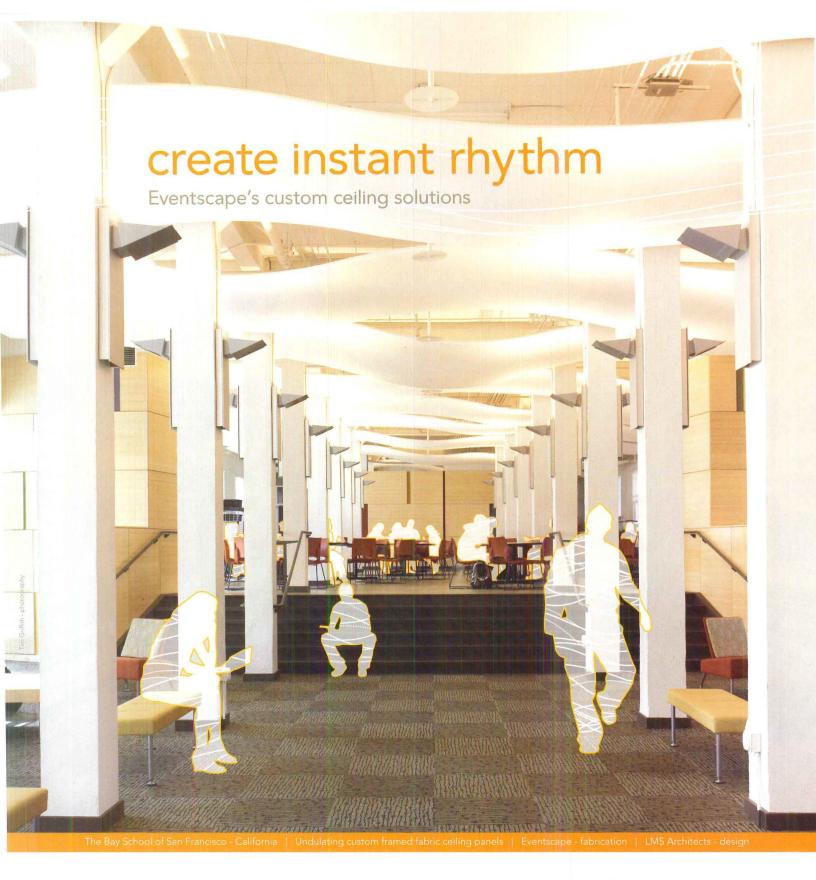


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Product Focus Doors

Beyond addressing the obvious function of allowing passage from one environment or room to another, these new door designs meet such rigid requirements as accessibility, weather-, impact-, and smoke-resistance, and energy efficiency—all the while keeping up appearances. Linda C. Lentz





Launched at the 2008 International Builder's Show, Kolbe Window & Door's Universal Design Program stemmed from the company's participation in the Wausau, Wisconsin, Chairs and Cares Model Accessible Home, for which it modified existing products and developed new ones.

Independent living makes headway in the realm of residential and light commercial doors

While The Americans with Disabilities Act (ADA) has gained significant ground in reaching the architects and developers of public and commercial environments, little has been done to enforce the same standards for residential settings.

It was this fact that motivated Wayne Geurink, founder of a nonprofit spinal-injury support group, Chairs and Cares, to develop a model accessible house in his base of Wausau, Wisconsin. Working with a local team, including Keller Builders, architectural designer Roger Plamann, and Midstate Independent Living Consultants, Geurink also tapped Kolbe, a nearby manufacturer of windows and doors, to provide the fenestration. This was

because, according to Geurink, navigating doors and doorways are among the biggest challenges for people with liminted mobility.

"We were very excited about the project," says Lance Premeau, Kolbe's product manager for the project. "We recognized the emerging trend of [aging] baby boomers and the awareness of the disabled, as well as the limitations of window and door products on the market."

Indeed, when the Chairs and Cares Model Accessible Home opened in October 2007, it featured 51 Kolbe windows and 21 interior and entry doors-all modified from standard products. "The way our products were designed originally allowed us to take them to a level for accessibility

rather easily," says Premeau. "We already offered a low-profile handicap sill and lever door handles."

Thus encouraged. Kolbe went the distance and transformed the line extensions and modifications developed for the Chairs and Cares venture into an actual Universal Design Program. Moreover, this new grouping, launched at the 2008 International Builder's Show (IBS), provides an aesthetic appropriate for private homes as well as assisted living and nursing facilities, small medical offices, and light commercial or retail locations.

Using the company's Heritage wood series and the Ultra series with its extruded aluminum exterior, the Universal Design Program's accessible door selections feature wider interior and exterior door sizes to help provide enough space for those using mobility aids such as wheelchairs: bronze anodized handicap sills (thermal break and nonthermal break) for maneuvering through swinging doors; aluminum sill ramp kits for sliding patio doors; lever handles for swinging doors available in variety of styles and finishes; even an optional second lever for interior doors to abet opening and closing from a seated position.

Kolbe Windows & Doors, Wausau, Wis. www.kolbe-kolbe.com

For more information, circle item numbers on Reader Service Card or go to architecturalrecord.com/products/.

Products Doors



■ Let it rain

Simpson Door has reinforced select Performance Series wood French exterior doors with WaterBarrier technology. On the outside, the doors are protected with a one-piece primed medium density overlay and PVC glazed bead for durability as well as resistance to damage and absorption from drenching, wind-driven rain. On the inside, an architect can specify just about any wood species to coordinate with a building's interior finishes. Simpson Door Company, McCleary, Wash. www.simpsondoor.com cIRCLE 217



◄ Top-notch performers

Having completed 5 million cycles under the Window & Door Manufacturers Associations's NWWDA T.M. 7-90 cycleslam test, Special-Lite's SL-17 FRP Flush Doors have successfully proved to be capable of withstanding the rigors of such high-use installations as sports venues and educational facilities. In addition, these doors have earned the **GREENGUARD Indoor Air Quality** Certification. Special-Lite, Decatur, Mich. www.special-lite.com cIRCLE 218

► Faux realism

Mimicking the textural grain of true Alder, Peachtree's Rustic Collection of entrydoor systems are actually made of fiberglass—a well-priced material valued for being easy to maintain and energy efficient. Available in several styles, with optional retractable screens and wood or aluminum- or vinyl-clad frames, the doors can be prestained in Moorish teak, rose wood, dark mahogany, and provincial or golden oak. Peachtree Doors and Windows, Mosinee, Wis. www.peachtreedoor.com circle 219



► Protective barrier

Smoke seals—a requirement for many hospital applications—help protect against the infiltration of smoke and flames in the event of a fire. Besam now offers smoke seals for its Unislide automatic ICU/CUU Sliding Door System. This also greatly reduces the potential passage of positive or negative air pressures and airborne infectious diseases, and provides an additional level of insulation. Besam Entrance Solutions, Monroe, N.C. www.besam.com circle 220



A Bringing the outdoors in

The aluminum-clad Legacy Series bifold patio door by Weather Shield opens an exterior wall by stacking one panel on top of the next, accordion style, as it slides on the overhead track. It is available in widths ranging from two 3' panels up to eight for an opening as large as 23' with bottom rails of 10" or 12" and 5" top rails. Hardware finish options include oil-rubbed bronze, brushed chrome, and bright brass. Weather Shield, Medford, Wis. www.weathershield.com CIRCLE 221

▼ Grand Entrance

Made of the finest quality woods such as mahogany, rustic walnut (shown), American white oak, and cherry, Pella's new line of wood entry doors are finished with furniturelike craftsmanship. Options include beveled insulated glass, metal caming in satin nickel and copper, forged iron accents, and decorative hardware. The company only sources its materials from environmentally certified suppliers. Pella, Pella, Iowa. www.pella.com circle 222



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Product Briefs

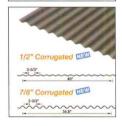
► Spare housing

Designed to accommodate 42", 50", and 60" flat-panel televisions, the Kabé by TV2ART floats a mere 8½" from the wall and measures 89" x 42", 98" x 44", or 108" by 48", respectively. Made of sustainable woods and available in custom finishes, veneers, and materials, this Zen-inspired media center features a small niche next to the television opening, as well as a sliding Lightascope that shifts from side to side, covering either the TV or the niche. Additionally, this uniquely fabricated screen can also provide a subtle light show of abstract or artlike patterns fed by the glow of the television. TV2ART, San Francisco, Calif. www.tv2art.com CIRCLE 226









▲ Textured metal

Engineered for numerous vertical cladding configurations such as wall, equipment-screen, linear-panel, and parapet-panel applications, Petersen's 7.2 (7.2" on center) rib (right top) and %"- and ½"-high (2½" on center) corrugated exposed fastener panels (right bottom) are available in 22- or 24-gauge steel, .032 or .040 aluminum, and up to 36 Kynar Colors. They range in width from 34.6" to 40" and can be specified with closure strips, as well as matching screws and rivets. Precut short lengths, with a 2'0" minimum, are also an option. Petersen Aluminum Corporation, Elk Grove, Ill. www.pac-clad.com CIRCLE 227

► Terra forma

Formulated specifically for the commercial and multiunit residential markets, American Clay's Enjarre (pronounced *n-har-ray*), is a spray-on, single-coat plaster that contains zero VOCs. A blend of postindustrial aggregates, clays, and pigments, this nontoxic plaster finish is hard, durable, mold-resistant, and comes pre-tinted in eight colors. It can be applied to multiple substrates, and covers CMU blocks in one pass. Additionally, it can contribute up to seven LEED points (five in most areas) at a very competitive price. American Clay Enterprises, Albuquerque, N.M. www.americanclay.com CIRCLE 228



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Product Resources On the Web



www.richardfrinier.com

This new Web site features the indoor/outdoor furniture, fabric, and lighting of Richard Frinier for Century, Dedon, Sunbrella, Curry & Company, and others. A favorite among designers and specifiers of luxury residences and resorts, this former chief creative officer of Brown Jordan (a post he held for more than 20 years) is highly regarded for the timeless quality of his contemporary designs and innovative use of materials.

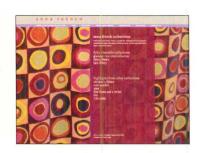


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www.annafrench.co.ukThis visually dynamic new Web site is a

This visually dynamic new Web site is a virtual resource library of the Scotland-based British textile artist Anna French's extensive collections of wall coverings, fabric, and lace, including a high-end children's line. Detailed product and room shots clearly illustrate the colors, textures, and patterns of the offerings. Plus, a list of to-the-trade showrooms provides all the appropriate contacts for information, samples, and orders.



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From the maker of furniture and wall systems for education, health-care, government, and corporate installations, this site enables A&D professionals with such efficient interactive design tools as "See It...Spec It," an area where they can customize from a variety of fabrics and finish options, then view high-quality product details; "Click 2 Zoom," which allows them to see fabrics at thread-level detail; and online price lists.



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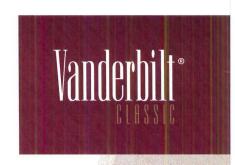






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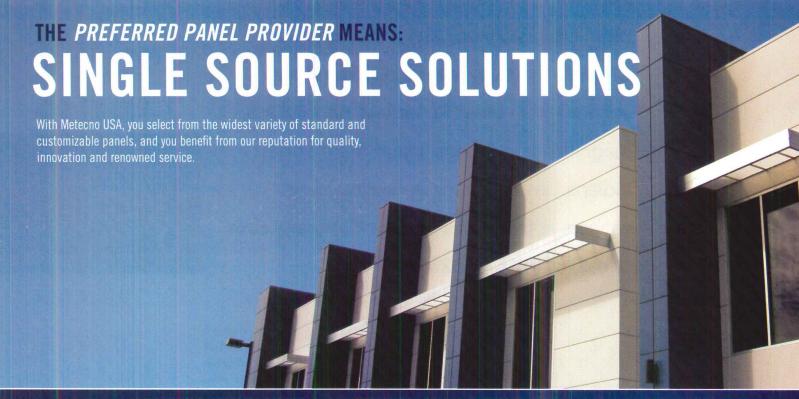
This notable source of residential and commercial A/V mounting and furniture solutions has launched an online database that provides a comprehensive lineup of current downloadable product information with an easy-to-use interface. For product solutions and information specifically regarding the gamut of commercial installations, visit www.omnimountpro.com.



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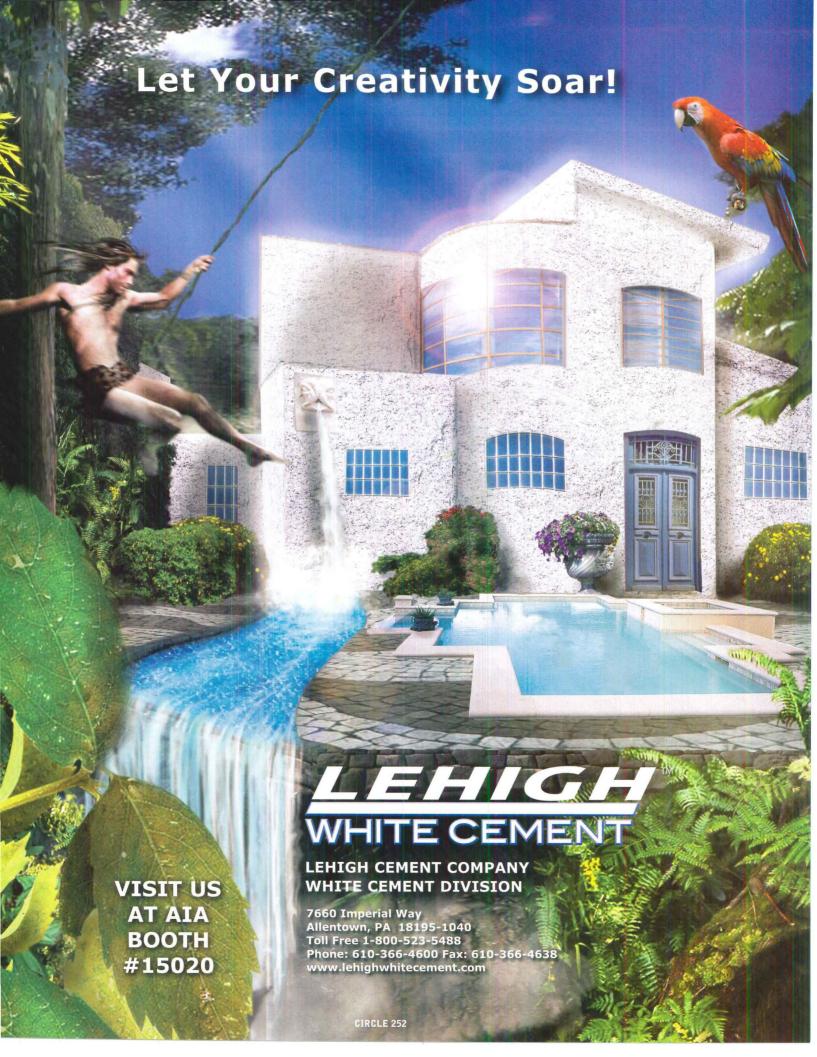


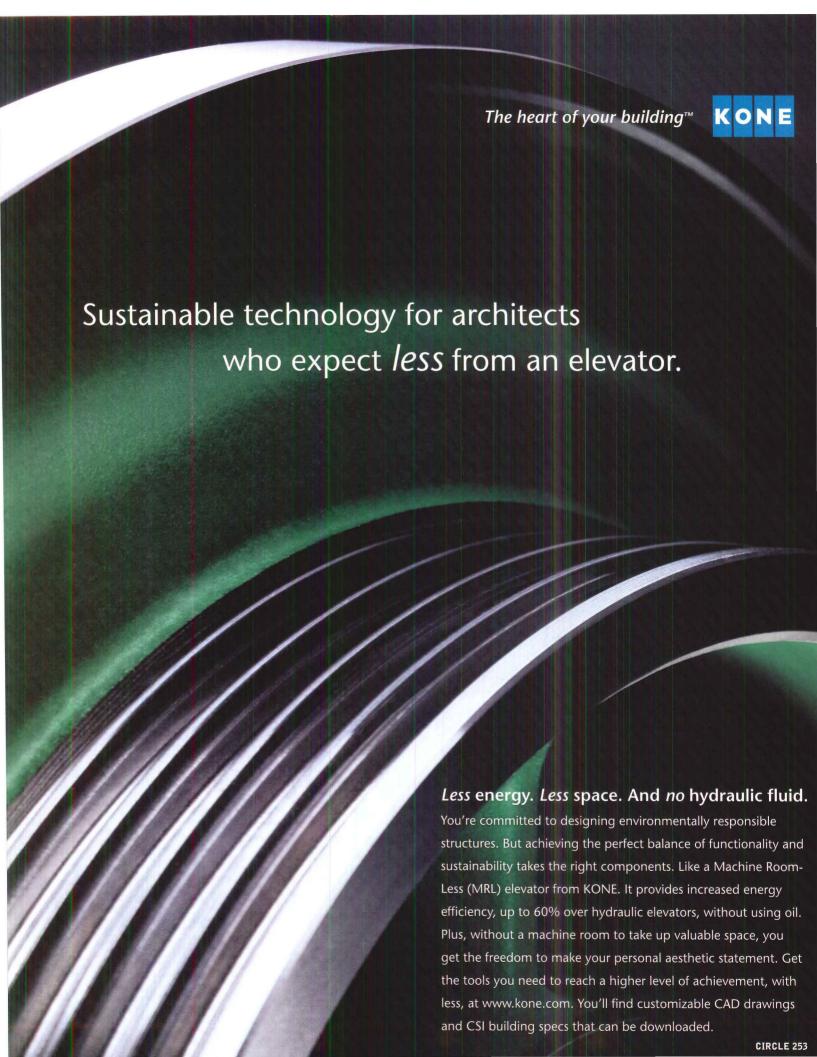
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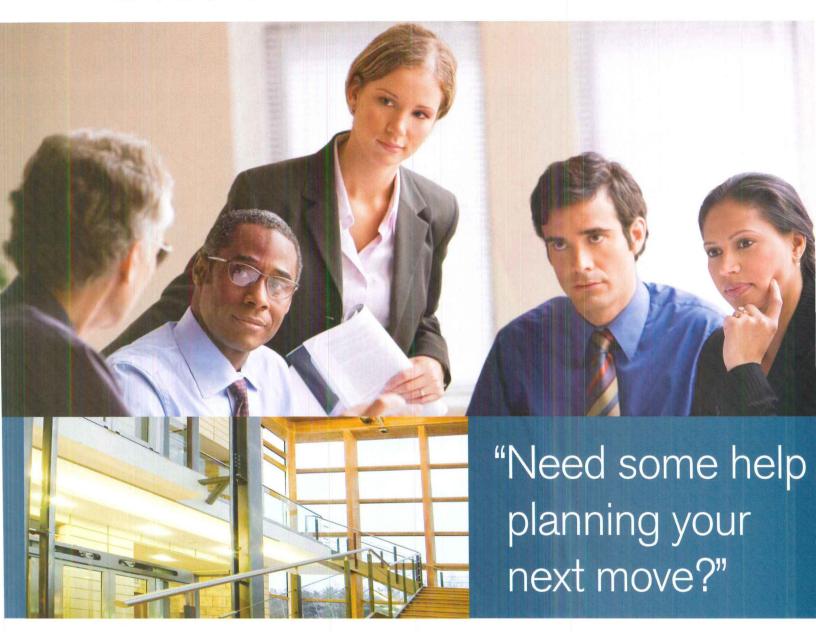
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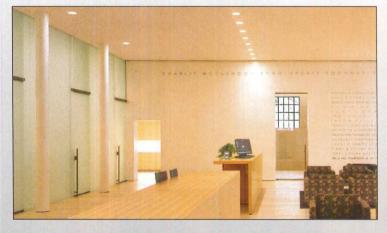


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Dates & Events

New and Upcoming Exhibitions

Chicago Architecture Foundation River Cruise Chicago

Opens May 3, 2008

CAF-certified volunteer docents provide this 90-minute tour and offer an entertaining and fact-filled commentary on Chicago's architecture from the unique vantage point of the river. The cruise highlights 53 historic and architecturally significant sites, including the Trump Tower, Merchandise Mart, 333 W. Wacker, the Wrigley Building, the Tribune Tower, the Sears Tower, River City, Marina City, and the site of the Spire. The cruise also includes significant buildings, sites, and developments along the North Branch of the Chicago River, such as The Montgomery; the Chicago Tribune printing press plant; Goose Island; Kinzie Park development; Riverbend and the clustered glass River Cottages. All CAF cruises depart from the lower level and southeast corner of the Michigan Avenue Bridge at Wacker Drive. Call 312.922.3432 or visit www.architecture.org.

Common Boston 2008 Community & Architecture Festival Boston

May 9-11, 2008

Celebrating the city of Boston, its neighborhoods, and its design, this weekend-long series focuses on six "Common Points"—Dudley Square, the Fenway, Fort Point Channel, Jackson Square, Maverick Square, and Peabody Square. It includes open buildings, tours, seminars, and displays bringing together residents, designers, public officials, and community groups to learn about, experience, and imagine Boston's built environment. All events are free and open to the public. For more information, visit www.commonboston.org.

Newhouse Program and Architecture Competition Exhibition Chicago

May 22-June 6, 2008

This competition is part of a year-long program that includes the Saturday in the Studio skill-building workshop series, school visits by professional architects, and paid summer intern-

ships in Chicago-area architecture and construction firms. At the Chicago Architecture Foundation. Call 312/922-3432 or visit www.architecture.org.

Finland: The Classical Roots of its Architecture and Design Helsinki, Finland

May 17-24, 2008

During this weeklong tour of Finland participants will experience the beauty of the elegant and restrained 18th-century Sweden, and 19th-century Imperial Russia, culminating with Finland's own unique, romantic, 20th-century national aesthetic, which is an architectural celebration of restraint and context. Participants will enjoy five nights in Helsinki along with two nights in historic villages in southwestern



Dates & Events

Finland's coastal region. For information, call 800/390-5536, visit www.classicist.org, or contact@classicalexcursions.com.

Shreddings 3: defuragu Los Angeles

May 29-June 29, 2008

ah'bé landscape architects is an award-winning, Culver City, California-based landscape architecture firm known for creating artful and vibrant urban spaces that engage ideas of sustainability and ecological responsibility as they interact with the natural and constructed environment. Defuragu is ah'bé's third and final installation that calls attention to the amount of resources used by a design firm through the creation of an expressive landscape made from the office's recycled and shredded materials. In the past two installations, the firm interrupted paper's typical cycle, shredding several months' worth of discarded diagrams and transforming them into one more state before returning them to the recycle process. This installation will incorporate additional recyclable materials. At the

Japanese American Cultural and Community Center (JACCC). Call 213/628-2725 or visit www.jaccc.org.

Prestige or Paradise—Museum Architecture in the 21st Century Humblebaek, Denmark

June 18–September 14, 2008
Why has the building of museums all over the world taken on the character of prestige projects? Which tendencies in museum architecture are the most important right now?
Where are museums heading in the coming decades? These are some of the themes this exhibition attempts to illustrate by presenting a great number of the world's ongoing or future museum projects—as told through assemblages, models, photographs, films, animations, and other visual media. At Louisiana Museum of Modern Art. Call 45 4919 0719 or visit www.louisiana.dk.

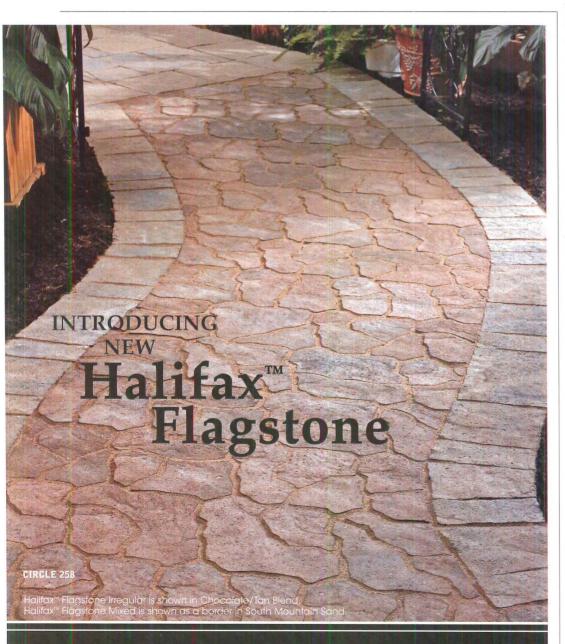
Archop Exhibition: Student Work Archop Panel Discussion: Design Education Fresno, Calif.

July 3, 2008

Besides Interior design and construction management programs at CSUF and the Architecture transfer program at Fresno City College, Fresno has no institution for the study of environmental design. All of its best and brightest design students study at CalPoly, UCB, UCLA, CCA, SCI-Arc, The New School, Woodbury, Academy of Art University, and other out-of-state schools. We invite these students to exhibit their work. This exhibition has two goals: to keep us plugged into studio culture and cutting-edge design, and to show these students that there are promising careers and a dynamic culture awaiting them. The panel discussion will address what is entailed in design education and consider the feasibility of a premiere design school in Fresno. For more information, call 559/437-0887 or visit www.openarchitecturenetwork.org/node/942.

Home Delivery: Fabricating the Modern Dwelling New York City

July 20–October 20, 2008
As part of this exhibition five architects have been selected to display full-scale, prefabricated houses in the outdoor space to the west of the Museum of Modern Art. The houses are



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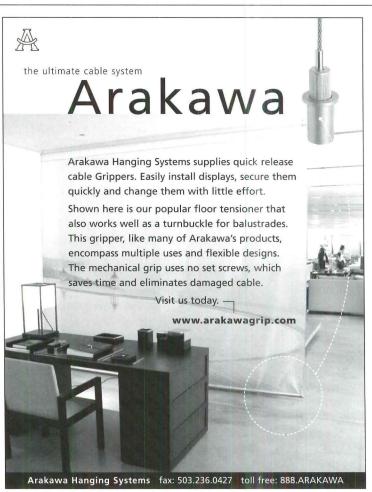
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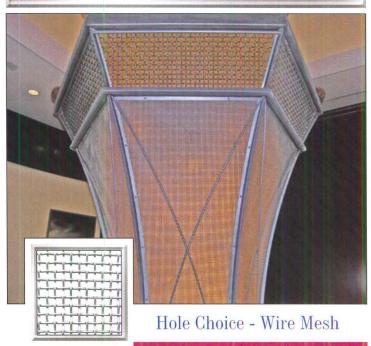
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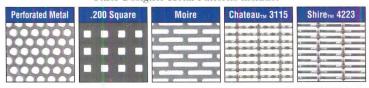
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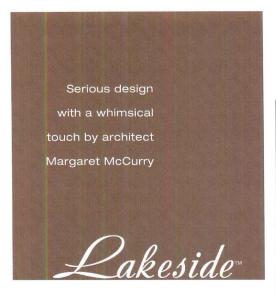
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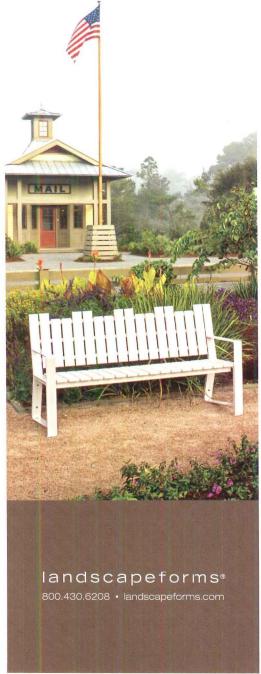
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Dates & Events

designed by KieranTimberlake Architects (Philadelphia), Lawrence Sass (Cambridge, Massachusetts), Jeremy Edmiston and Douglas Gauthier (New York City), Oskar Leo Kaufmann and Albert Rüf of Oskar Leo Kaufmann Architects (Dornbirn, Austria), and Richard Horden (London, England, and Munich, Germany). At the Museum of Modern Art. For more information call 212/708-9400 or visit www.moma.org.

Between Earth and Heaven: The Architecture of John Lautner Los Angeles

July 21-October 12, 2008

An exhibition of an aesthetic, philosophical, and social visionary, Lautner made buildings that continue to amaze architects and patrons alike with their formal variety and freedom, their structural originality, and their sculptural force. Lautner's work represents some of the most important examples of architecture in Southern California, including private residences such as Elrod House (1968), in Palm Springs, and Malin House (1960), in Los Angeles (also known as the "Chemosphere," it hovers high over a canyon balanced on a single support)—all iconic examples of his work and vision. Lautner is often referred to as an architect's architect and many renowned practitioners have cited him as an abiding influence. One can see the influence and legacy of his vision time and again in the work of architects who have followed him. At the Hammer Museum. For more information, call 310/443-7000 or visit www.hammer.ucla.edu

Atelier Bow-Wow Los Angeles

February 5-April 5, 2009

This Tokyo-based architecture studio explores the use and function of space within urban environments. As working architects in Tokyo, Atelier Bow-Wow developed the term "pet architecture," a style of small, ad hoc, multifunctional structures that make the most of limited space. For more than 10 years, they have also created "micro public spaces" within the framework of art exhibitions. The project will expand on the possibilities of a gallery space to relate to its surroundings and the urban environment. This is Bow-wow's first solo exhibition in the U.S. At the Gallery at Redcat. For more information, visit www.redcat.org or call 213/237-2800.

Ongoing Exhibitions

Do We Dare Squander Chicago's Great Architectural Heritage? Chicago

Through May 9, 2008

This exhibition examines the role of historic preservation in Chicago and the motivation of its proponents. At the Chicago Architecture Foundation. Call 312/922-3432 or visit www.architecture.org.

Lee Friedlander: A Ramble in Olmstead Parks New York City

Through May 11, 2008

On the occasion of the 150th anniversary of the design of New York's Central Park, this exhibition features 40 photographs made by Lee Friedlander in the public parks and private estates designed by Frederick Law Olmstead, North America's premier landscape architect. At the Metropolitan Museum of Art. Call 212/535-7710 or visit www.metmuseum.org.

Elena Manferdini: Merletti Los Angeles

Through May 11, 2008

Los Angeles—based Italian architect Elena Manferdini's installation explores the intricacies of lace at a scale far beyond the intimate size commonly associated with the material. Made by knotting and intertwining multiple threads, the dynamic dance of lacemaking is brought to the scale of the gallery. At SCI-Arc Gallery. Call 213/613-2200 or visit www.sciarc.edu.

Design and the Elastic Mind New York City

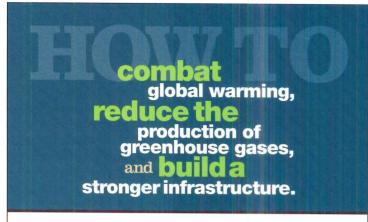
Through May 12, 2008

An exhibition with more than 200 objects, including four special commissions, highlights how design is the bridge between research and everyday life. At the Museum of Modern Art. Call 212/708-9400 or visit www.moma.org.

Color Chart: Reinventing Color, 1950 to Today New York City

Through May 12, 2008

Color Chart: Reinventing Color, 1950 to Today celebrates a paradox: the lush beauty that results when contemporary artists assign color decisions to chance, a ready-made source, or an arbitrary system. Midway through the 20th



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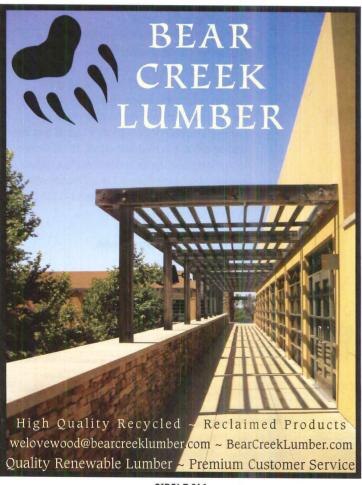
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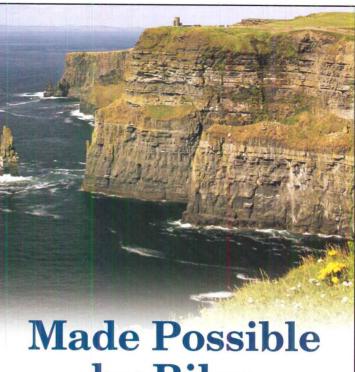


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CIRCLE 263





by Bilco Visited by nearly 1 million tourists each year, Ireland's Cliffs of Moher are one of the most beautiful sights in the world. Constructed in a hillside approaching the cliffs.

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this Irish countryside, we did play an important role in the design of the visitor center. Bilco worked with the architects on this project to design a custom fire vent to solve this design problem and to ensure the safety of the center and its occupants.



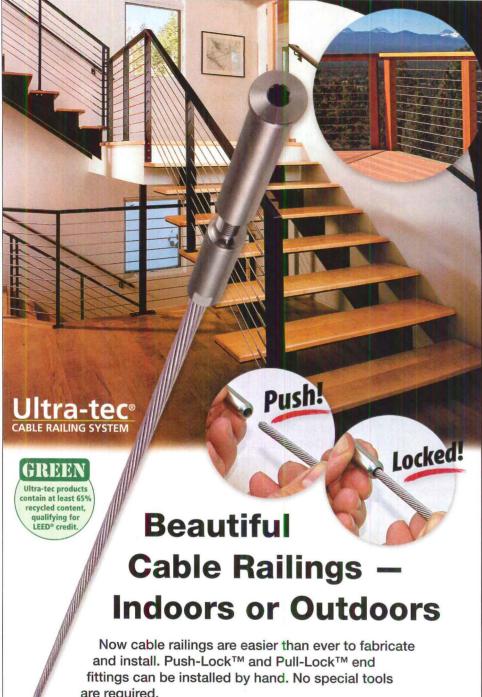
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Dates & Events

century, long-held convictions regarding the spiritual truth or scientific validity of particular colors gave way to an interest in color as a mass-produced and standardized commercial product. At the Museum of Modern Art. Call 212/708-9400 or visit www.moma.org.

Affordable Housing: Designing an American Asset College Park, M.D.

Through May 14, 2008 At the Kibel Gallery, University of Maryland. Call 301/405-8000 or visit www.arch.umd.edu.

CCCP: Cosmic Communist Constructions Photographed Los Angeles

Through May 17, 2008

A photographic exhibition documenting obscure Soviet architecture by French photographer Frédéric Chaubin. At Pop-Up Storefront at Paperchase Printing. Call 212/431-5795 or visit www.storefrontnews.org.

Building China: Five Projects, Five Stories New York City

Through May 31, 2008 Created by curator Wei Wei Shannon of People's Architecture and cocurator Shi Jian, this exhibition examines the exploratory work of five emerging architects in China. Revealing the process behind the country's building practices, the exhibition includes information about the architects' relationships with their clients and the bidding process in their homeland. At the Center for Architecture's Judith and Walter Hunt Gallery and the Mezzanine Gallery. For additional information about the show, call 212/683-0023 or visit www.aiany.org.

SANAA: Works 1998-2008 **New York City**

Through June 15, 2008

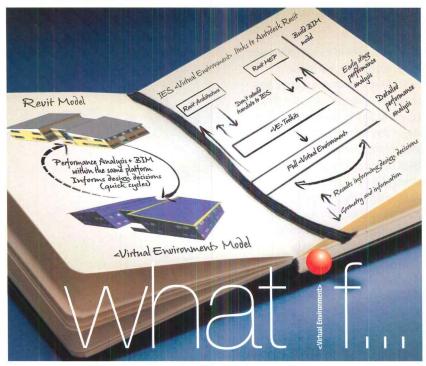
This exhibition will present commissions and projects of the highly regarded firm Kazuyo Sejima + Ryue Nishizawa/SANAA, spanning the past decade, a highly productive period when their projects such as The 21st Century Museum of Contemporary Art, Kanazawa; the Glass Pavilion at the Toledo Museum of Art; and the New Museum in New York City won them considerable critical acclaim and public recognition. At the New Museum. Call 212/219-1222 or visit www.newmuseum.org.

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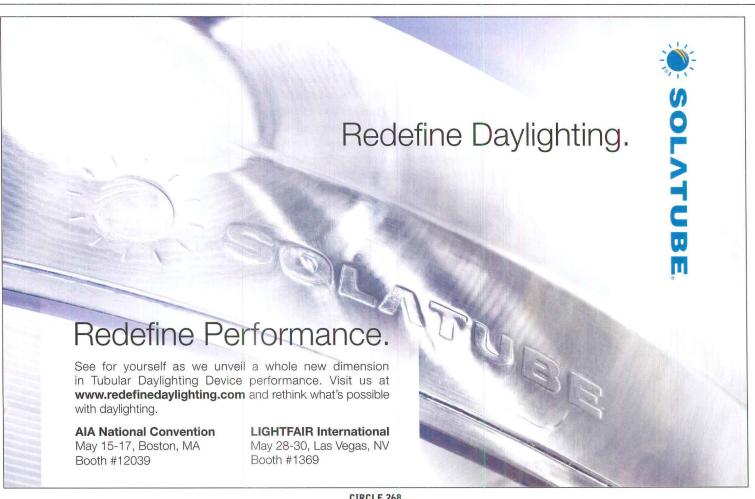
The plug-in for Revit architecture is free. Contact IES to trial or purchase the <VE> Toolkits or full <VE> Suite.

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CIRCLE 269

Dates & Events

Home Delivery: Fabricating the Modern Dwelling New York City

July 20, 2008

Launching in advance of the July 20 opening of Home Delivery: Fabricating the Modern Dwelling—an exhibition exploring factory-produced architecture—is a special online project documenting the planning, fabrication, delivery, and assembly of five architectural works specially commissioned for the exhibition. The five houses will be installed one at a time on MoMA's vacant west lot beginning in early June. This process will continue until the exhibition's public opening and will be visible to the public from the city streets. Beginning March 14, visitors to www.moma.org will be able to access an online journal that features daily updates-through text, photos, and video—on each architect's process and progress. At the Museum of Modern Art. Call 212/708-9400 or visit www.moma.org.

Berlin/New York Dialogues Berlin, Germany

Through June 2008

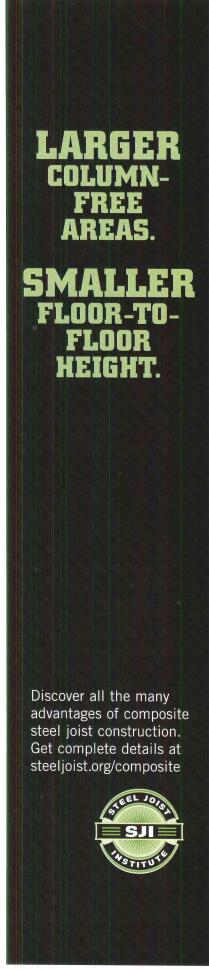
The exhibition explores lessons learned through the cross-fertilization of ideas among citizens, policy makers, institutions, and design professionals in Berlin and New York, focusing on exemplary practices and strategies affecting city planning and new building. Using imagery, illustration, and drawings, the exhibition describes social, political, economic, and cultural processes through current works of architecture and urban planning. The exhibition highlights themes such as the artist as a pioneer/culture as a catalyst, communitybased activism, gentrification, the greening of open space, and social engineering/governmentbased interventions. Projects to be featured in the program include public spaces, housing, neighborhood revitalization, cultural initiatives. waterfront developments, and temporary interventions. At the German Center for Architecture (Deutsches Architektur Zentrum DAZ), Call 49 30 27 87 99 28 or visit www.daz.de.

Rococo:

The Continuing Curve, 1730°2008 New York City

Through July 6, 2008

A groundbreaking exhibition that fully explores Rococo style and its continuing revivals up to the present day in multiple fields, including furniture, decorative arts, textiles, prints, and drawings. The exhibition will chart the progress of







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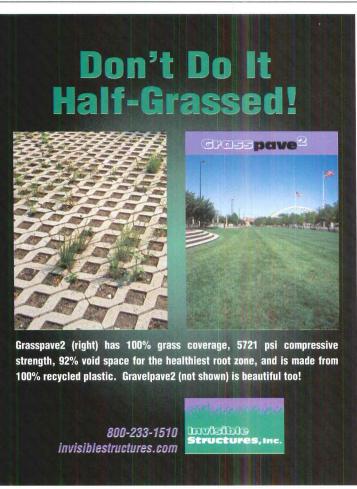
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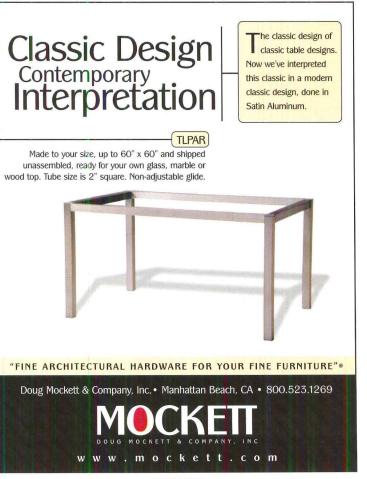
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Dates & Events

Rococo as it radiates out from Paris, travels to the French provinces, migrates to other European countries, and later crosses over to the United States. At Cooper-Hewitt, National Design Museum. Call 212/849-8400 or visit www.cooperhewitt.org.

Brick Award 2008

Through July 10, 2008

Founded in 2004, the Brick Award is bestowed on the best European brickwork architecture every two years. An international jury judges the projects, and the awards were presented in Vienna in April. This exhibition presents this year's prizewinning projects and documents the submitted Swiss contributions, which evidence a good deal of skill and enthusiasm in dealing with coarse ceramic. At the ETH Zurich. Call 41 44 633 2936 or visit www.gta.arch.ethz.ch.

Italy Now? Country Positions in Architecture Zurich

Through July 10, 2008

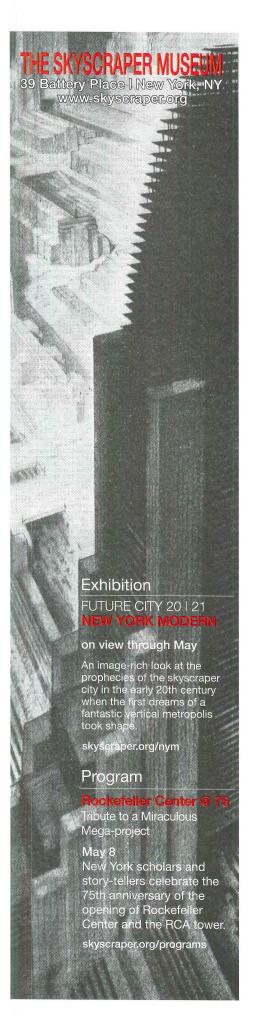
This exhibition introduces buildings by 20 architectural firms from different parts of Italy. In thematic dialogues, architects and critics discuss specific positions and the situation of Italian architecture. At Institute GTA, in the Architekturfoyer of ETH Zurich (the Swiss Federal Institute of Technology). Call 41 44 633 2936 or visit www.gta.arch.ethz.ch.

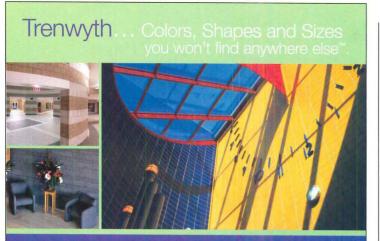
Lectures, Conferences, and Symposia

Lecture with Eric Owen Moss Los Angeles

May 5, 2008

A UCLA faculty member since 1974 and director of the Southern California Institute of Architecture (SCI-Arc) since 2002, Moss founded Eric Owen Moss Architects in 1973 in Los Angeles. The recipient of more than 60 design awards from Progressive Architecture magazine and the American Institute of Architects (AIA), Moss won the Los Angeles AIA Gold Medal for Design in 2001 and the 2007 Arnold Brunner Memorial Prize from the American Academy of Arts and Letters for his "significant contribution to architecture as an art." At UCLA's Perloff Hall, Decafe (Room 1302). For more information, call 310/267-4704 or visit www.aud.ucla.edu.





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Dates & Events

BKLYN DESIGNS 2008 New York City

May 9-11, 2008

As the opening to Design Week in New York City, the three-day Brooklyn show will feature a record-breaking lineup of 68 exhibitors—including 30 newcomers and 38 show veterans—and for the first time has expanded to four DUMBO, Brooklyn venues. For more information, visit www.bklyndesigns.com.

Change the World: Harnessing BIM Technology and Integrated Practice Delivery for Sustainable Design Boston

May 12-13, 2008

Our industry is changing swiftly in response to natural, cultural, and economic forces. Trends in design tools, building technology, construction delivery methods, and sustainable practice are converging toward a common path. This two-day conference will provide a well-rounded exploration of the application of building information modeling (BIM)—related technologies, integrated project delivery, advanced design, and building technologies to achieve sustainable practice. At the Boston Convention & Exhibition Center. Visit www.aia.org.

Public Architects Training Workshop Boston

May 14, 2008

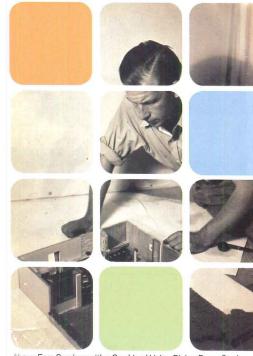
The American Institute of Architects Public Architects Committee presents a workshop exploring the roles and responsibilities of architects who are involved in the design of public buildings, as well as some of the latest ideas in public architecture. Featuring a full agenda of keynote addresses, sessions, and discussions, the workshop will benefit public-sector architects who work with all levels of federal, state, and local governments. Concurrent sessions allow attendees to customize their learning experience by focusing on two main themes: green building design practices and practice management within the public sphere. For more information, visit www.aia.org/pa.

The AIA 2008 National Convention and Design Exposition Boston

May 15-17, 2008

This year's theme, "We the People," calls upon the attendees to exchange ideas with peers and industry leaders on the architect's role in society and the power of architecture on behalf of all people. At the Boston Convention and May 3-August 23, 2008

eero saarinen shaping the future



Above: Eero Saarinen with a Combined Living-Dining-Room-Study pr model, created for Architectural Forum magazine, circa 1937. Courte Eero Saarinen Collection. Manuscripts and Archives, Yale University.

growing up saarinen: life and legacy of an architect may 4

In collaboration with the Finlandia Foundation, landscape archited Susan Saarinen will discuss what it was like to grow up in this talented family and Mark Coir, director of the Cranbrook Archives will examine Saarinen's architectural legacy.

tour: dulles international airport may 10

This tour will explore the architecture of Saarinen's design and vis the "air side" of the current expansion project, referred to as D2: Dulles Development.

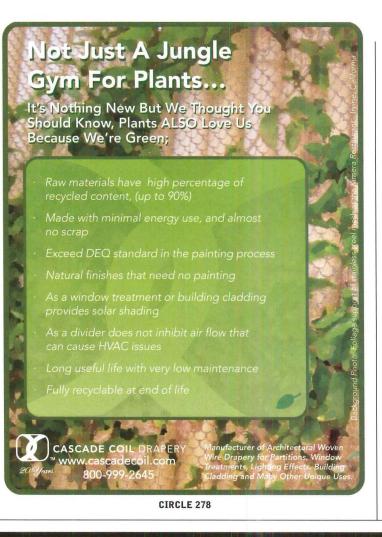
visit www.nbm.org for more information about the exhibition and these special programs.

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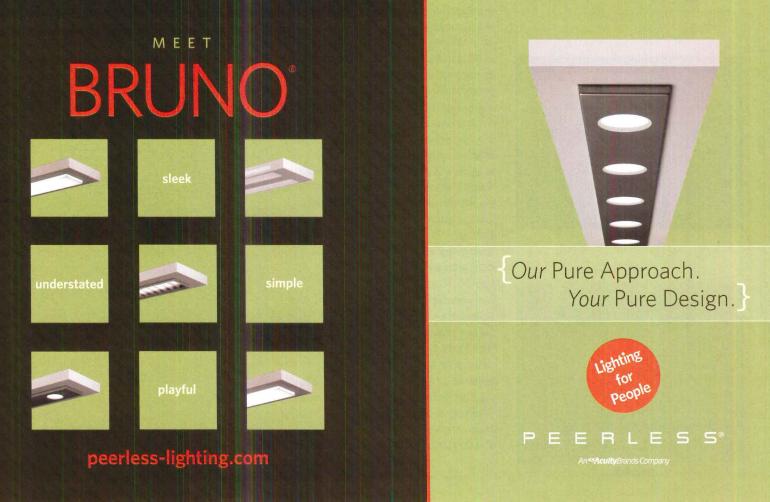
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CIRCLE 281

Dates & Events

Exhibition Center. For further information, visit www.aiaconvention.com.

Architectural Drawing Tour Newport, R.I.

May 16-18, 2008

The first architectural drawing tour of Newport, Rhode Island, led by the experienced faculty of the Institute of Classical Architecture.

Participants are instructed in drawing exercises that include analytical drawing and pictorial sketching. The tour provides instruction in the observation and representation of Classical architecture, allowing participants at all levels to gain direct knowledge of the Classical models, improve their drawing skills, and discover the vitality of Newport. While the drawing tour is designed for professionals in the design fields at all levels, anyone with an interest in study and drawing is welcome to apply. Some drawing proficiency is required. For further information, e-mail Victor Deupi at vdeupi@classicist.org.

Lecture with Jean-Philippe Vassal Los Angeles

May 19, 2008

Vassal is director of Lacaton and Vassal Architects in Paris, which he founded in 1987 with Anne Lacaton. Openly proclaiming to be a reflection of and search for architectural economy, the work undertaken by the pair focuses on reduced-cost constructions in order to rejuvenate the dialogue with contracting authorities. Research on hybridizations—between a contemporary building concept and the use of the most diversified techniques—produces projects that make the most of construction programs by altering building contractors' standard usages. At UCLA's Perloff Hall, Decafe (Room 1302). Call 310/267-4704 or visit www.aud.ucla.edu.

Designing the Parks Conference Charlottesville, V.A.

May 20-22, 2008

Keynote speakers include John Dixon Hunt, professor, University of Pennsylvania School of Design; Elizabeth Barlow Rogers, president, Foundation for Landscape Studies, New York City; Daniel N. Wenk, deputy director for operations, National Park Service, Washington, D.C.; and Ethan Carr, associate professor, University of Virginia. To be held at the Omni Charlottesville Hotel. For information, call 434/924-7019 or visit www.arch.virginia.edu.



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CIRCLE 284







channel glass

PROJECT: The Nelson-Atkins Museum of Art, the Bloch Building, Kansas City, MO

OBJECTIVE: Construct a bold museum addition complimenting the original classical, columned building. Allow an unobstructed view of the stately main entrance and the expansive Kansas City Sculpture Park. Provide underground galleries suffused with natural light.

SOLUTION: Over 100,000 sqft of custom Lamberts LINIT channel glass form five lenses that punctuate the hills, pouring daylight into the galleries below. LINIT's exclusive Solar® texture, low iron channels diffuse the sunlight, enhance the galleries' interior lighting, and form immense glowing night sculptures. Soaring to heights of 22', every channel is SGCC certified tempered and heat-soak tested. Successful execution of architecture as art; immediately one of the most recognizable buildings in the world.

ARCHITECT: Steven Holl Architects, New York, NY with BNIM Architects, Kansas City, MO GLAZIER: Carter Glass, Co., Inc., Kansas City, MO

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Dates & Events

Corporations and Cities: Envisioning Corporate Real Estate in the Urban Future Brussels

May 26-28, 2008

This event brings together international professionals, policy makers, researchers, and scholars in the fields of corporate accommodation, real estate, organizational management, urban planning, architecture, and other disciplines related to the urban environment, to consider the relations between urban planning and the accommodation of large-scale organizations, such as corporate headquarters, governmental institutions, and educational facilities. For further information, visit www.corporationsandcities.org.

Integrated Project Delivery San Francisco

May 27, June 24, September 23, and October 22, 2008
This series continues to examine the different facets of Integrated Project Delivery, highlighting how architects can be leaders during project delivery. At AIA San Francisco. Visit www.aiasf.org.

Lecture with Lars Spuybroek Los Angeles

May 28, 2008

Spuybroek, principal of the architecture office NOX, located in Rotterdam, the Netherlands, is the Ventulett Distinguished Professor of Architectural Design at the Georgia Institute of Technology College of Architecture in Atlanta. Since the early 1990s, he has led the architectural profession in new directions of sensualist and rigorous applications of computer technology. At UCLA's Perloff Hall, Decafe (Room 1302). Call 310/267-4704 or visit www.aud.ucla.edu.

New York Designs 2008 Lectures: Threshold New York City

May 29 and June 5, 2008
Fifteen-minute presentations of this

year's jury-selected individuals and firms. The theme, "Threshold," focuses on projects whose design mediates distinct conditions. At the Urban Center. For further information, call 212/753-1722 or visit www.archleague.org.

46th International Making Cities Livable Conference Santa Fe

June 1-5, 2008

An international conference for city officials, practitioners, and scholars in architecture, urban design, planning, landscape architecture, transportation planning, health policy, and social sciences from many parts of the world. Its purpose is to engage in a dialogue on the relationship between the built environment and livability, health, and sustainability; to learn from the best models; and to establish working relationships to effect change. Architects, planners, developers, and cities are invited to submit proposals for an exhibition of mixed-use urban fabric projects, already constructed, or in design. At La Fonda Hotel. For more information, visit www.livablecities.org.

Competitions

Campus Planning

Deadline: May 14, 2008
Any campus plan anywhere in the world prepared by a New England design or planning professional or firm during the past decade is eligible, and any design or planning professional anywhere in the world may submit campus plans prepared during the past decade for institutions located in New England. Visit www.architects.org.

New Practices New York/2008

Registration Deadline: May 16, 2008 Submission Deadline: May 30, 2008 The second juried portfolio competition serves as a platform to recognize and promote new, innovative, and



Rakks wall-mounted shelving at Sweet & Associates Modern Furnishings, Cleveland, OH Fixture Design: Christopher Hixson

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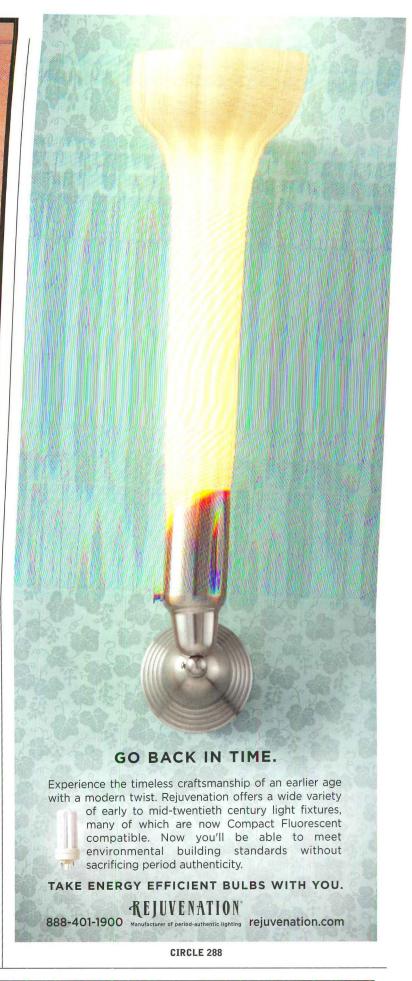


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Dates & Events

emerging architecture firms within New York City that have undertaken unique and commendable strategies—both in the projects they have undertaken and in their practices. For further information, contact Jesse Lazar at jlazar@aiany.org or visit www.aiany.org.

2008 National Student Steel Bridge Competition

May 23–24, 2008
This competition will take place at the University of Florida in Gainesville, Florida. Visit www.2008steelbridge.com for more information.

New York City Green Building Competition

Deadline: May 30, 2008
This national competition seeks projects and ideas that promote
New York City as the preeminent cultural and sustainable urban epi-

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center. Design projects are encouraged that integrate whole-building principles, employ the tenets of green building construction and end-of-life considerations, anticipate postoccupancy concerns, and complement the community in which they reside. For more information, visit www.nyc.gov/html/planyc2030/html/news/competition.shtml.

International Design Competition for the Magok Waterfront, Seoul, Korea

Project Design Submission Period: June 5, 2008

The goal of the competition is to transform the area of Magok into a tourist, commerce, and environmentally friendly waterfront area, in line with Seoul's Han River Renaissance Project, through the participation and input of various professionals and experts from Korea and abroad. To learn more

about the competition, visit www.magokwaterfront.org.

Kokuyo Design Award 2008 Call for Entries

Deadline: June 30, 2008 The goal of this competition is to develop great ideas into commercial products-objects used in the office, home, or public spaces. The theme of the competition is "Carbon, Building Block of Life." All materials containing carbon, such as paper, cloth, various plastic products, wood, and gas or gasoline are acceptable. The design should incorporate carbon, provoking thought about where the carbon came from and where it will go after its use. For more information, visit http://www.kokuyo.co.jp/award/.

LIVE the BOX: A National Architectural Design Competition Registration deadline: June 24, 2008 Exhibition: October 2008 Thousands of unwanted shipping containers clog our ports and the land around them. This competition invites the nation's most innovative thinkers and designers to reinvent the box with their most visionary and creative utilizations of shipping containers as the primary construct of an urban multifamily mixed-use project. The selected site is adjacent to a major train station and walking distance to the downtown and major cultural centers of Newark, N.J. Visit www.livethebox.org.

E-mail our event and competition information two months in advance to elisabeth_broome@mcgraw-hill.com.

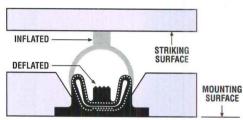


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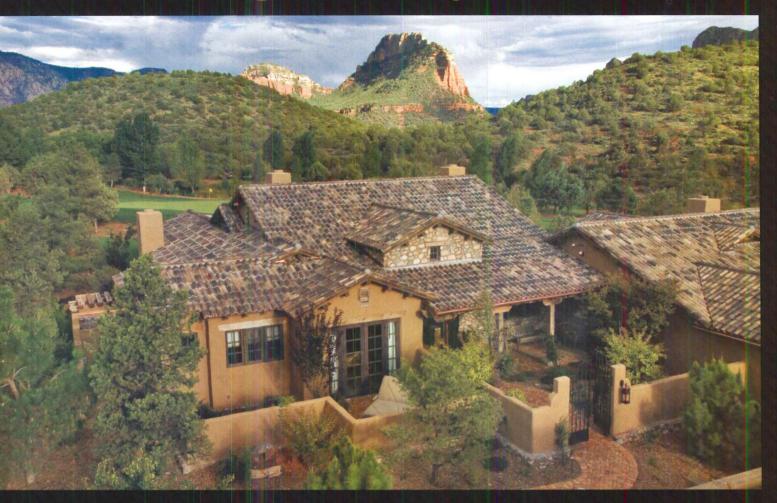
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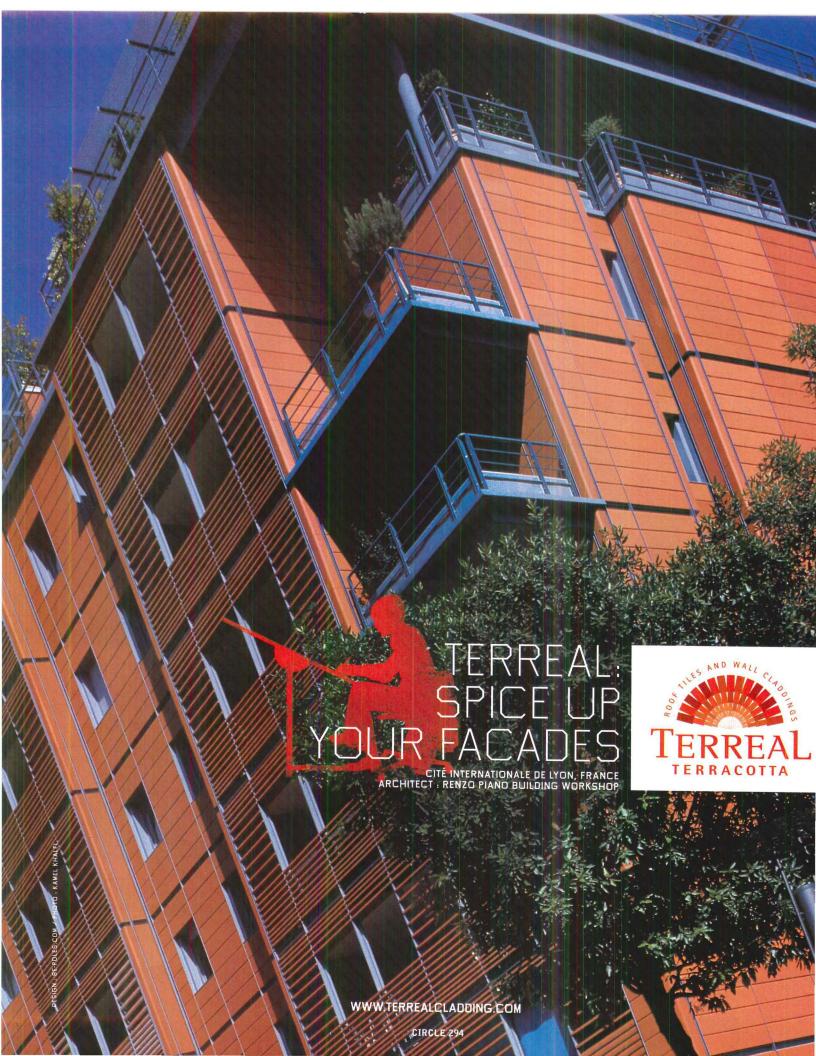
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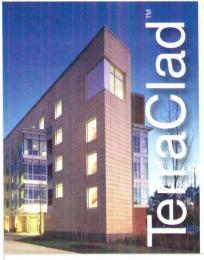


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Genesis Studios has provided architectural presentations for architects, developers, owners, and homebuilders around the world for 23 years. They create everything from conceptual graphics to formal marketing material in ink, watercolor, digital media, animations, scale models, and more. Their portfolio ranges from small intimate rooms and gardens to major cities. 800-933-9380 www.genesisstudios.com

Circle 150

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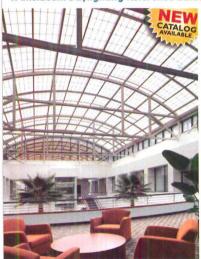


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Circle 151

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Circle 154

Circle 155

Floor & Roof System



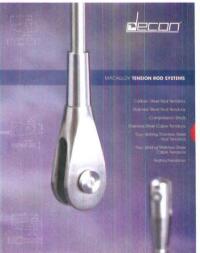
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AIA Booth #18136



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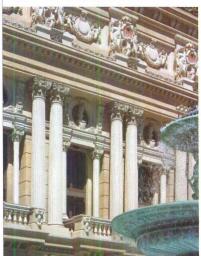


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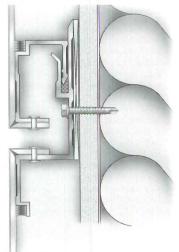
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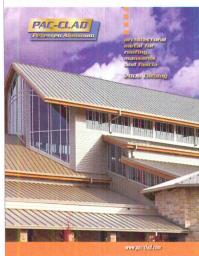


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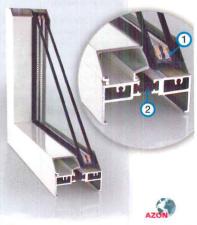


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AIA Booth #23194

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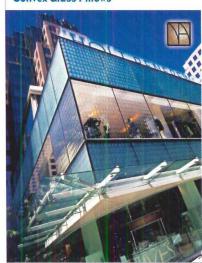


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Circle 168

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Circle 171

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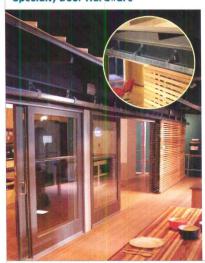
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Circle 172

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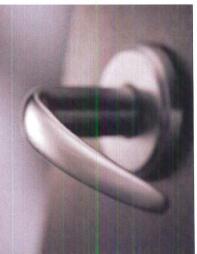


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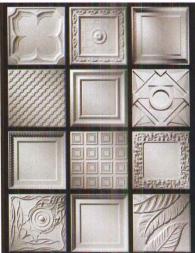


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Circle 174

Ornamental Plaster Ceiling Tiles



Above View Mfg., By Tiles, Inc.

Above View ornamental plaster ceiling tiles are fabricated from a non-toxic, non-combustible, proprietary composition. They drop into any standard 15/16-in. T-Bar grid system. There are more than 50 standard designs, custom design work, and 1,300 custom colors and faux finishes available upon request. 414-744-7118 www.aboveview.com

Circle 177

Doors for Interior Architecture



Woodfold Mfg., Inc.

Some will say that nothing is more beautiful than wood. Woodfold Mfg., Inc. custom made accordion and roll-up doors (available in hardwood and non-hardwood finishes as well) are both functional and beautiful. Woodfold Mfg., Inc. has models available for use as sight, security, and acoustic applications. Its solid hardwood roll-up doors coil conveniently overhead. And, to assure on time completion of your projects, Woodfold Mfg., Inc. has an excellent production cycle. 503-357-7181 Fax number 503-357-7185 www.woodfold.com/AR

Circle 175

Ceiling Medallions



Architectural Products by Outwater

With a newly expanded collection of nearly 75 different Ceiling Medallions encompassing a vast selection of period correct historical and contemporary inspired motifs, patterns and sizes for a wide variety of residential and commercial decorative applications, Outwater's high-density polyurethane Ceiling Medallions not only offer unparalleled design flexibility with infinite potential, they can be used right out of the package as simple yet elegant ceiling ornamentation or can be adapted for use with chandeliers or other lighting fixtures by merely drilling through their centers. Free 1,000+ Page Master Catalog. 800-835-4400; www.Outwater.com

Circle 178

Edge Seals for Category B Fire Doors



Zero International, Inc.

Zero International's #188S compression seal and #8144S gasket are UL-approved for use as Category G edge sealing systems and as Category H smoke and draft control gasketing for 20-min. Category B fire doors. These silicone systems are surface-applied with pressure-sensitive adhesive and eliminate the need for intumescence in the door assembly. Category G and Category H are testingagency classifications used to standardize the testing and labeling of doors and gasketing under positive-pressure code requirements for fire-rating and smoke control, respectively. 800-635-5335 www.zerointernational.com

Circle 176

Acoustic Plaster System



Pyrok, Inc.

Pyrok StarSilent is a smooth, seamless sound absorbing plaster system. This unique system, consisting of a rigid sound board made of 96% post consumer recycled crushed glass, combines the look of monolithic gypsum board with high acoustical performance. 914-777-7070 Email info@starsilent.com www.starsilent.com

Edge Grain Coconut Palm Flooring



Smith & Fong Plyboo

Now available in edge grain design, Durapalm® is made from 100% reclaimed plantation-grown coconut palms that no longer produce coconuts. Ranging in color from dark to medium-red mahogany and containing no added formaldehyde, these durable and uniquely beautiful products are available in tongue-and-groove planks as well as architectural grade sheet goods. 866-835-9859 www.plyboo.com

Circle 180

Custom Is Their Name



C.H.M.I. Custom Hardware Manufacturing, Inc

C.H.M.I. specializes in the manufacture of high quality Architectural handles, Smart Touch egress control devices, bath and shower hardware and custom corporate entrance hardware. C.H.M.I. also manufacturers custom canopies, interior & exterior architectural hardware for use with tempered/laminated glass. 800-262-2464 www.chmi.com

Circle 183

Wall Tile Collection

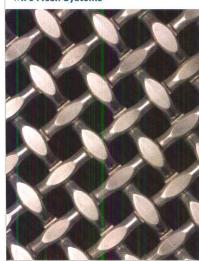


Viva Ceramica

"This is my first wall tile collection completely designed by another person. But what a person! Ulf Moritz, who is synonymous to the nicest wallpaper and the most sensual home textiles. Also for him this is his first tile collection. With its sophisticated, elegant simplicity it will be difficult to forget. Good in choosing Viva and an avant-garde material as the big (50x100cm) porcelain slabs highly innovative, state of the art new line. Only 3mm thick, it guarantees a weight of 7kg per square meter; however, the 15,000 tons of pressure that produced it means that it obtains a high bending resistance. A touch of 'glamour' to use not only in the bathroom."-Fabrizio Zanfi www.cerviva.it

Circle 181

Wire Mesh Systems



Gage Corporation, Int.

GageWoven® is an innovative collection of 23 designs suitable for elevator lobbies and cab interiors, feature walls, ceilings, plus other architectural fabrication and consumer products. GageWoven also features 5 unique patterns designed for in-fill panels. Custom sizes and made to order panel systems are available. Custom designs are also encouraged. Contact the factory for literature and sample requests. 800-786-4243 www.gagecorp.net

Circle 184

Filing & Storage



Aurora Storage Products

Aurora™ eco-friendly filing and storage products can help you store more in less space. Aurora is a mainstay of companies that want versatile, sturdy, and beautiful storage. Their products include easy-to-assemble Aurora Quik-Lok® Shelving, versatile Aurora Mobile, elegant Wood-Tek™ wood-clad shelving, and Times-2™, the unique rotary storage system. Call their toll-free number today or visit their web site. 800-877-8456 www.aurorastorage.com

Circle 182

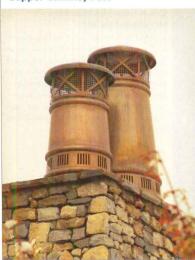
Fantastic Display Systems



Cyford Productions

Gyford Production's makes many fantastic display systems for themed graphics, educational storyboards, directories, fine art collections and more. Using StandOff Systems™ StructureLite profile extrusion and hardware they can create an image gallery customized to your design needs. They're Green from recycledcontent raw materials to finished product so you can specify with confidence. StandOff Systems™ over 450 interchangable components and assemblies are creatively designed so that 'If you can Think It, you can Build It'. For a free catalog contact them. 775-829-7272 Email info@standoffsystems.com www.standoffsystems.com

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Jack Arnold — European Copper

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Circle 186

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Circle 189

Aluminum Canopies

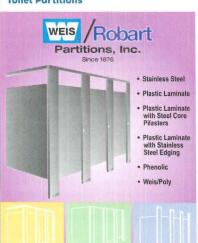


Mapes Industries, Inc.

Mapes Architectural Canopies has developed a complete line of roll formed and extruded canopies for any retail, branding, or lifestyle center application. The all aluminum canopies are modular and can be finished to match any corporate logo, signage or roofing color palette. Custom fascia, hanger rods and escutcheons create an unlimited variety of design options. Standard profiles include both flat and curved styles. Complete details are available at their web site or toll-free number. 888-273-1132 www.mapes.com

Circle 187

Toilet Partitions

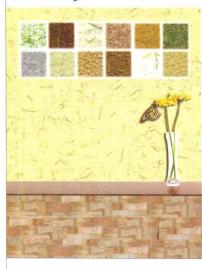


Weis/Robart Partitions, Inc.

Since 1876, Weis/Robart Partitions, Inc. has been providing quality toilet partitions for the building industry. Weis/Robart stocks a large inventory of toilet partitions in stainless steel, phenolic, plastic laminate and polyethylene. Weis/Robart Partitions is concerned about the environment. They now provide materials that are recyclable and materials that contain post consumer content. Coming this summer, they will introduce their new line of toilet accessories. 734-467-8711 www.weisrobart.com

Circle 190

Wall Coverings



Mardero, LLC

Mardero, LLC specializes in green and environmentally friendly decorative products. Their newest line of Japanese Wall Coverings is made with Diatomaceous Earth, sand and straw. Free of VOC. It has a natural ability to remove foul smells, and maintain room humidity. They also offer granite, marble, limestone and lami-stone. 650-625-1887 www.mardero.com

Circle 188

Seating Solutions



Irwin Telescopic Seating Company

Irwin Telescopic Seating manufactures a complete line of quality constructed seating solutions, from innovative seating accessories such as the Irwin Folding Back Support (featured photograph) for use on their gym seating product, to the most complex chair platform designs found in major university and NBA/NHIL arenas. In addition to their standard telescopic systems, they offer complete custom designs. Call or visit their web site for complete product information. 877-597-1122 www.irwintelescopicseating.com

Fine Cast Concrete Site Furnishings



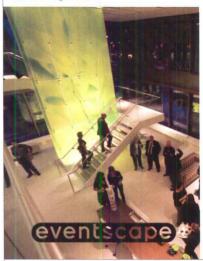


Kornegay Design, LLC

Kornegay Design provides fine cast concrete site furnishings. The product line of planters, benches, and receptacles combine beautiful design with long-term structural integrity. All products are manufactured to withstand cold weather environments and high-traffic public spaces. A wide range of integral concrete pigments is available. Site-specific design and fabrication is available for projects requiring multiple objects. 877-252-6323 www.kornegaydesign.com

Circle 192

Custom Light Wall



Eventscape Inc.

The 20-ft. tall printed polycarbonate glow wall fabricated by Eventscape for the new Haworth Showroom in Toronto creates a powerful anchor element and a high profile street presence. Just one example of the numerous custom wall and partition solutions fabricated in any material, any form and any scale to meet your specifications. Contact them to discuss your next creative idea. 416-231-8855 www.eventscape.net

Circle 195

Daylighting Program



MechoShade

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Circle 193

Saunas



Finlandia Sauna Products, Inc.

Finlandia Sauna has manufactured exclusive and authentic saunas (no infrareds) since 1964. Finlandia offers precut sauna packages and modular sauna rooms as an affordable luxury that can be included in any remodel or new construction. The company markets four all-clear western softwoods and is the only manufacturer to use 1-in. by 4-in. paneling, instead of the cheaper 1/2-in. by 4-in. material used by others. The complete package includes a choice of electric sauna heater with optional AV EverReady, the exclusive new energy saving heater which is always on-no heat up necessary. 800-354-3342 www.finlandiasauna.com

Circle 196

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Modern Outdoor

Commercial grade construction + residential aesthetics, made in the U.S.A., short lead times, and environmentally conscious materials. These qualities are at the core of Modern Outdoor—fine outdoor furniture for those interested in the clean simple lines of the modern aesthetic. They offer four complete lines that encompass all of your outdoor needs—chairs, tables, benches, settees, club chairs, sofas, ottomans, daybeds, chaise lounges, planters, bar-height products, tea carts, and many accent pieces as well. 818-785-0171 www.modernoutdoor.com

Circle 194

Architectural Ceiling Fans & Lighting

G Squared Art

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Circle 198

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Eurocobble

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Circle 378

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Luraline

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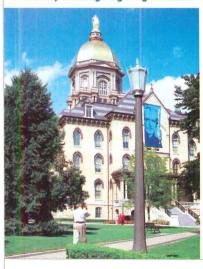


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FAAC is the world's largest specialized manufacturer of operators for swing, slide and barrier gate systems. The Model 400 heavy-duty hydraulic swing gate operator is UL 325 compliant and designed for applications needing maximum versatility, such as subdivisions and apartments. Its power and reliability also make it ideal for large, ornate gates. 800-221-8278 www.faacusa.com

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University & College Lighting Products

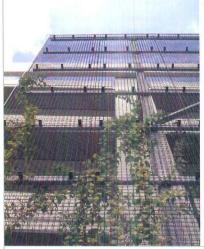


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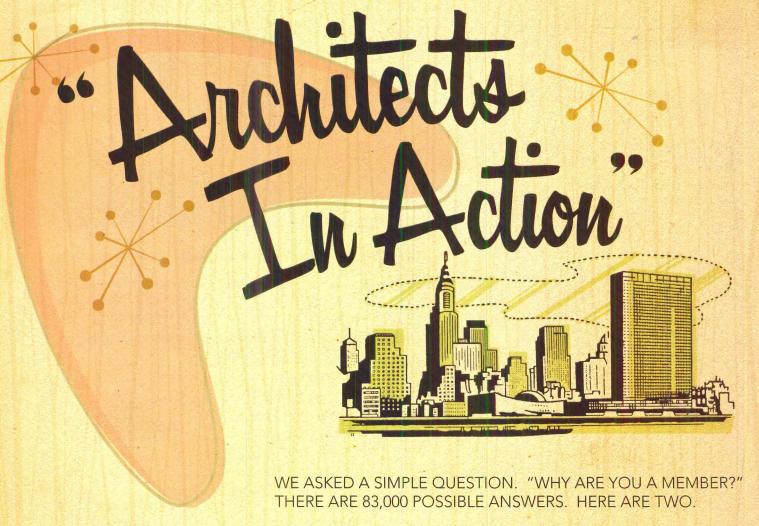
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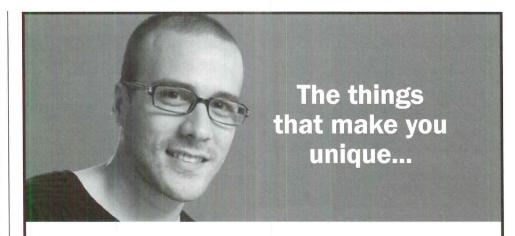
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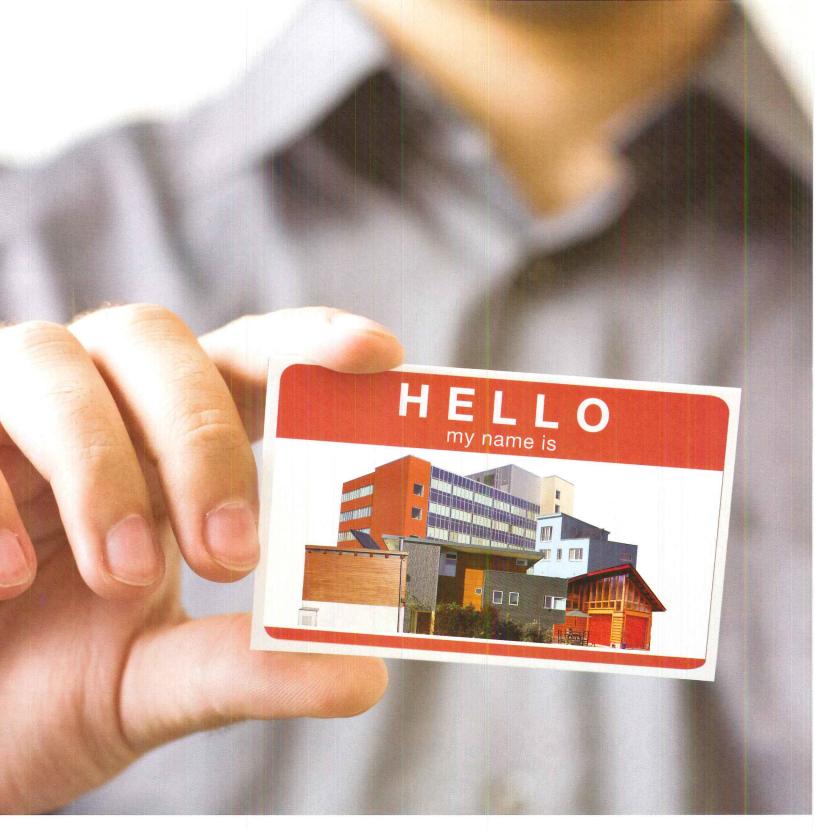
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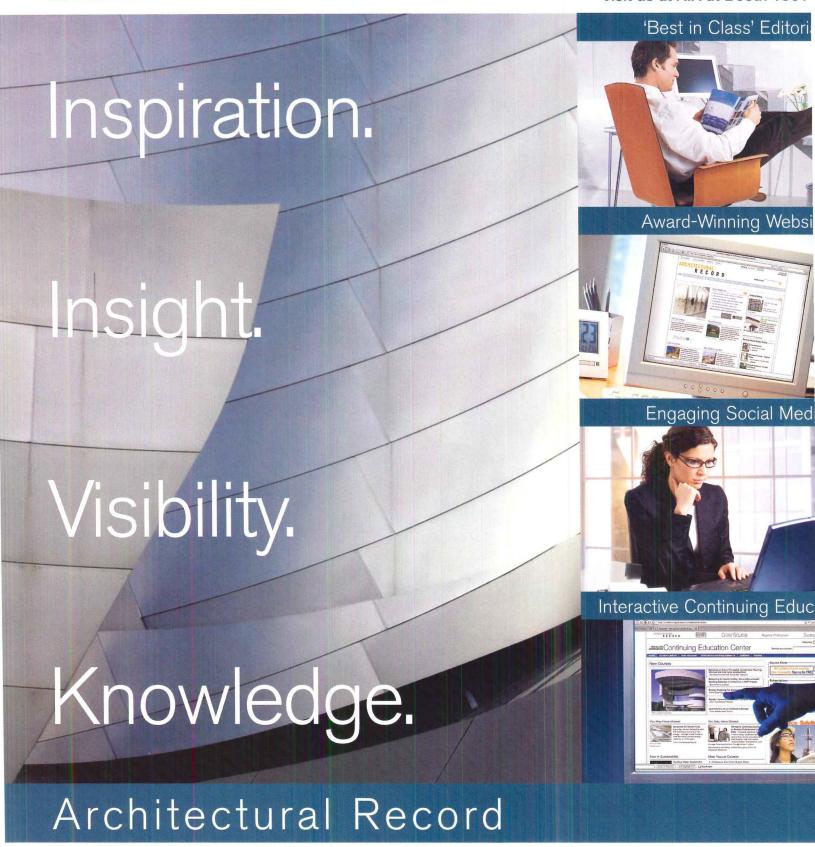


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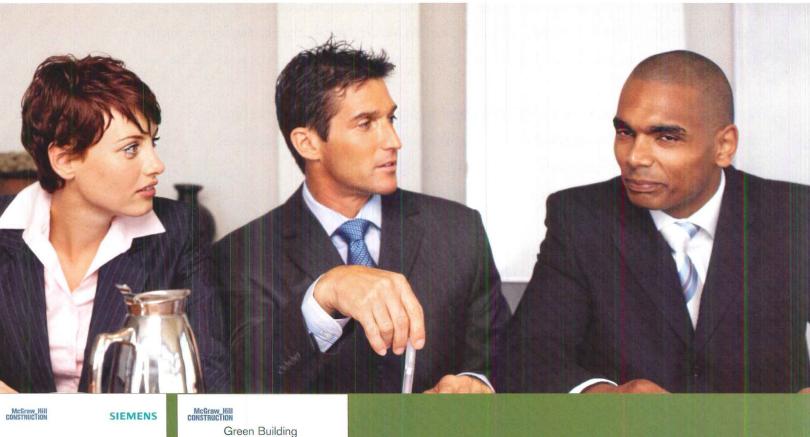
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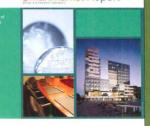
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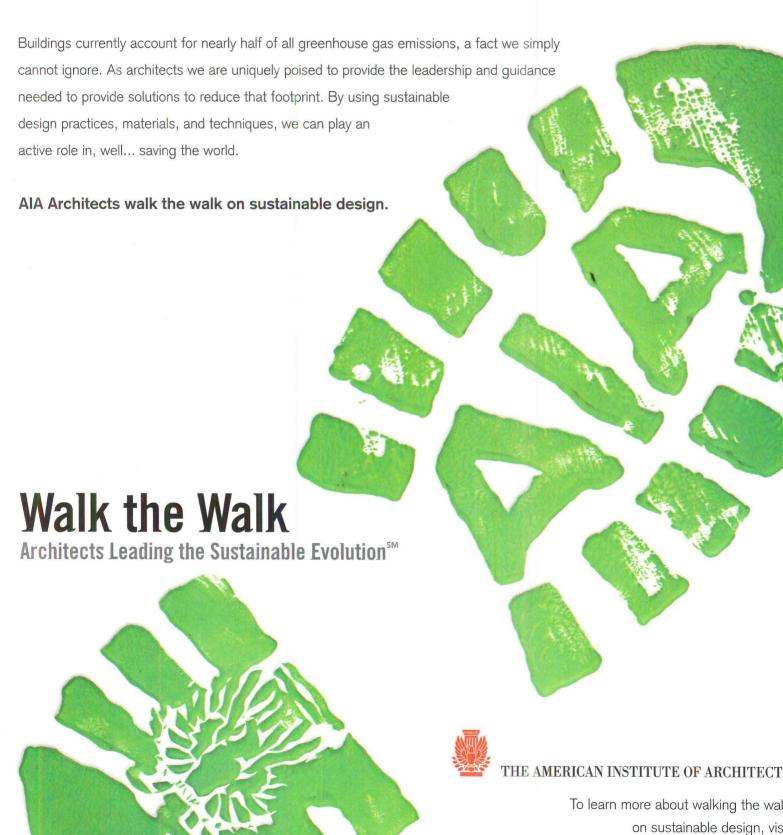
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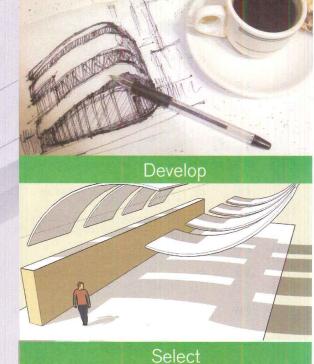
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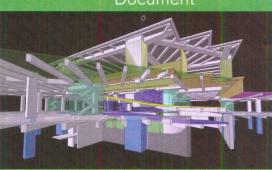
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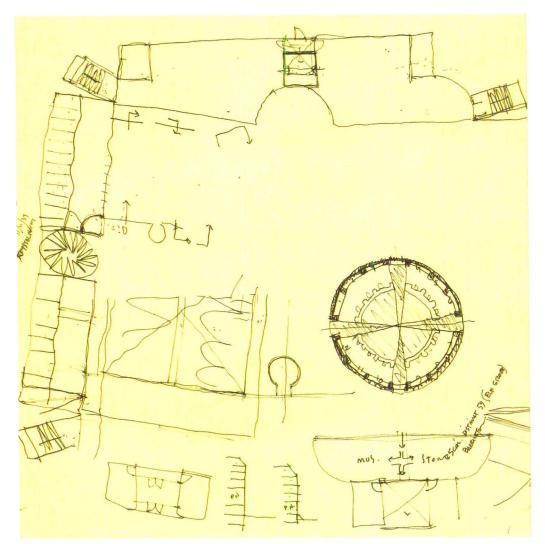
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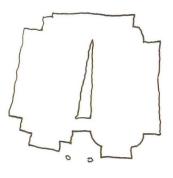
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The Architect's Hand







Working on Details (left), ink on yellow trace, 174" x 18", c. 2006. Conceptual Sketch (top right), ink on white trace, 5\%" x 61/4", c. 2005, Ground-Floor Plan (above), CAD, 30" x 42", 2006.

Drawing as process, drawing as practice

"The diagram," says Stanley Tigerman, "is the key" to a building. That Tigerman holds the diagram in such high regard is no surprise, given his background—for him, drawing has always come first. He came out of the working-drawing tradition under the tutelage of Chicago architect George Fred Keck, who told his then-19-year-old apprentice to "stick with working drawings. Leave design for later." Tigerman did just that, and he didn't design a single building for eight years. By that time, his mastery of fundamentals had paid off: "I knew how to make a building. I became an architect that way."

Tigerman gives a qualified endorsement to computer-aided design, which he uses for final plans, as seen on this page. CAD represents "fabulous instrumentation," but he thinks that ultimately, every building begins as a freehand sketch, with "the mind going to the hand." CAD, by contrast, "has nothing to do with the development of thought."

Diagrams for the Holocaust Museum & Education Center in Skokie, Illinois, led to Tigerman's plan for the symbolically charged building. He says that the idea for a hinged structure representing a "Book of Remembrance hit me before the sketches," which he didn't begin until he was in the airplane en route to his interview with the museum's selection committee. His vision is clear in Conceptual Sketch (top right), which outlines the footprint and clearly shows the cleft between the museum's wings. In the second sketch (above left), Tigerman works out the details of the program, adding stairs, entrances, and a circular auditorium that would make it into the finished design. Both drawings helped formulate the final CAD iteration (above right) of the building's ground-floor plan. Sebastian Howard

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— Doug Pasma, Design Principle, Goss Pasma Blomquist Architects



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"We were somewhat given a palette of material," said Doug Pasma, design principal with Goss Pasma Blomquist Architects. "The existing pre-engineered building had lots of metal with a brick package at ground level. While we wanted to stay within the family of material for the expansion, we clearly sought to integrate an inviting, contemporary design. The lapped TCS panels added nice texture and provided a very forward-thinking look."

The wall panels fabricated from TCS were complemented with the Musket Grey Tite-Loc Plus panels on the roof. Petersen's Tite-Loc panels provide structural panel performance with architectural panel aesthetics.

Installation of the wall panels was completed by A-1 Roofing Company, Elk Grove Village, IL. James Mansfield & Sons, Inc., Lyons, IL was the metal roofing contractor.

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