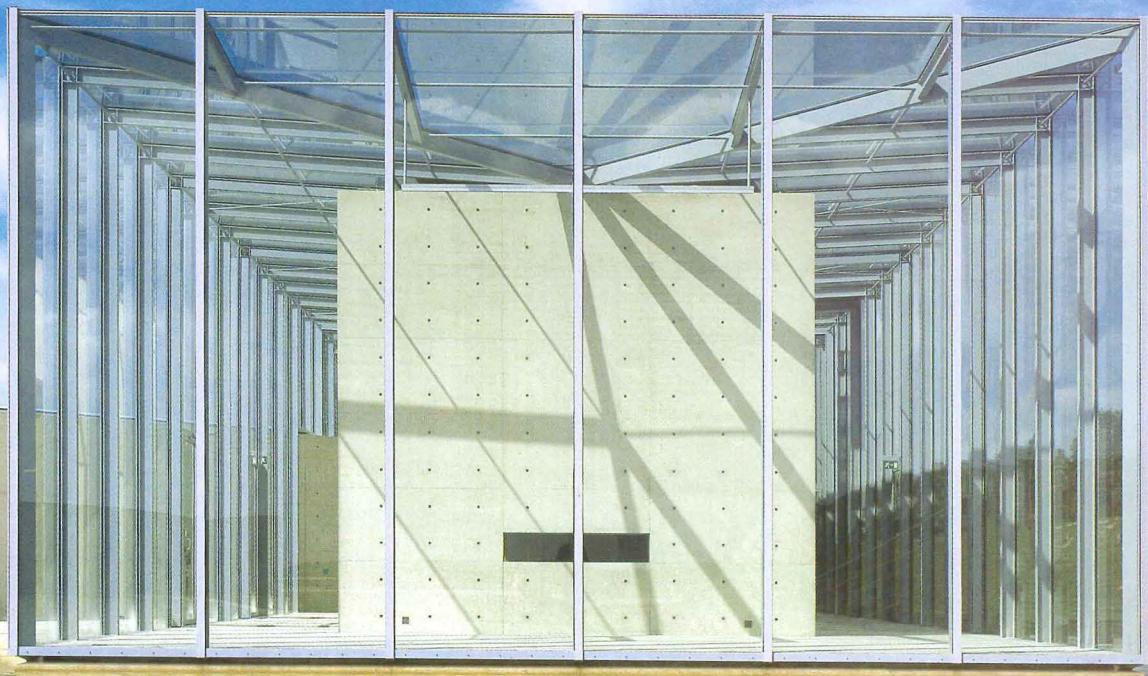


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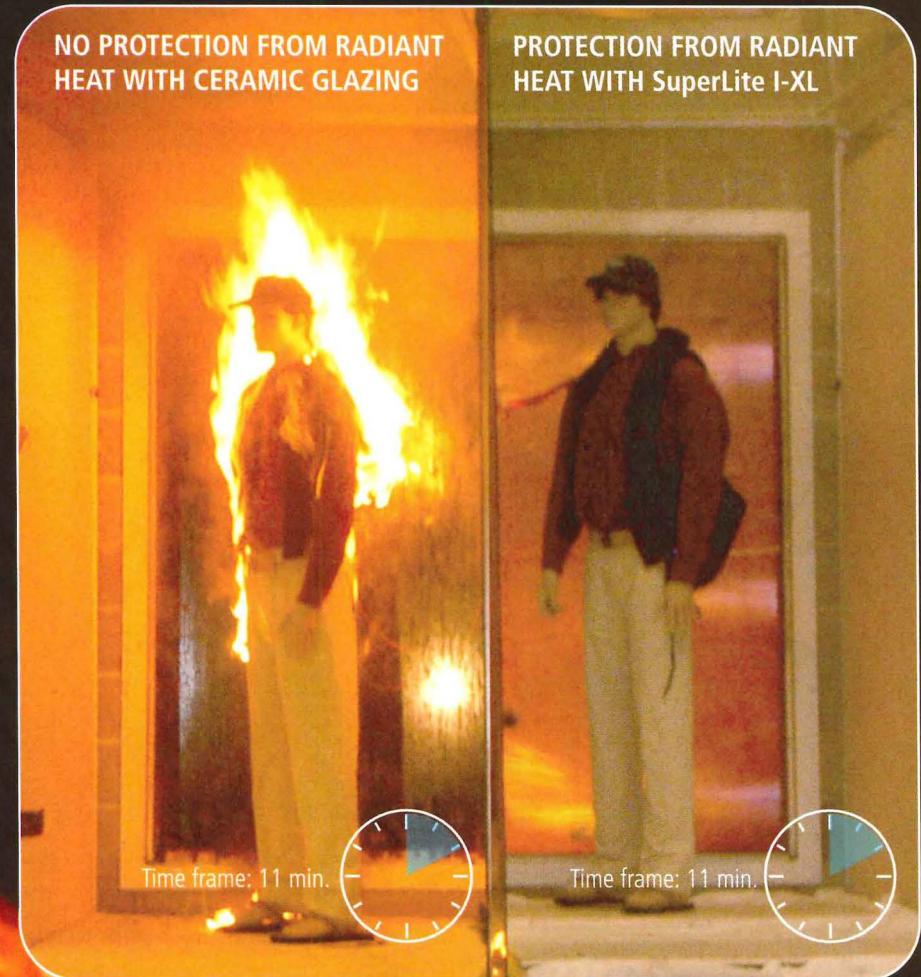
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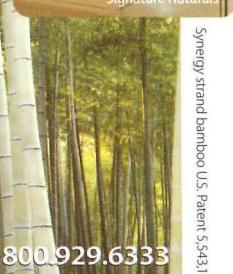
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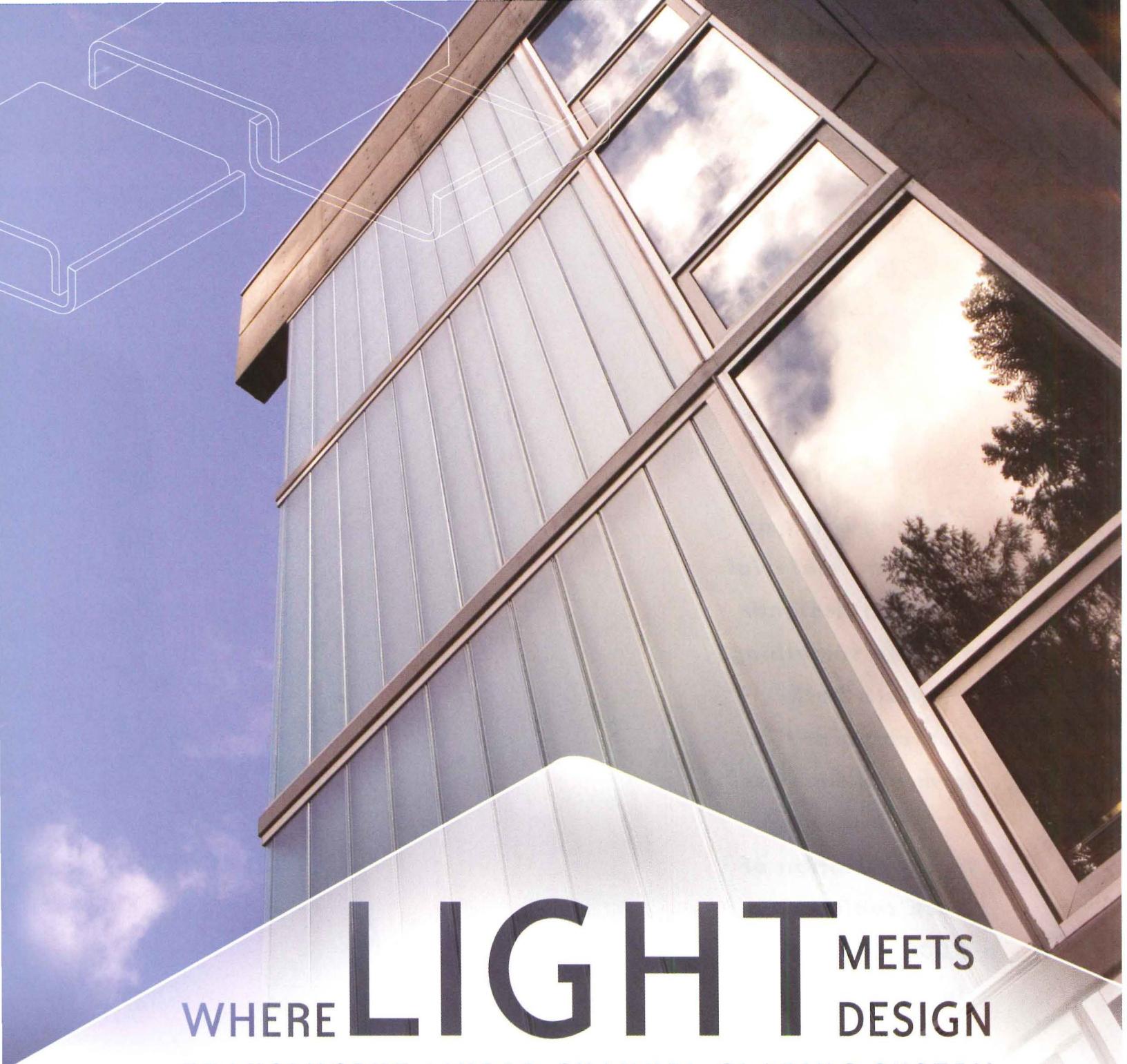
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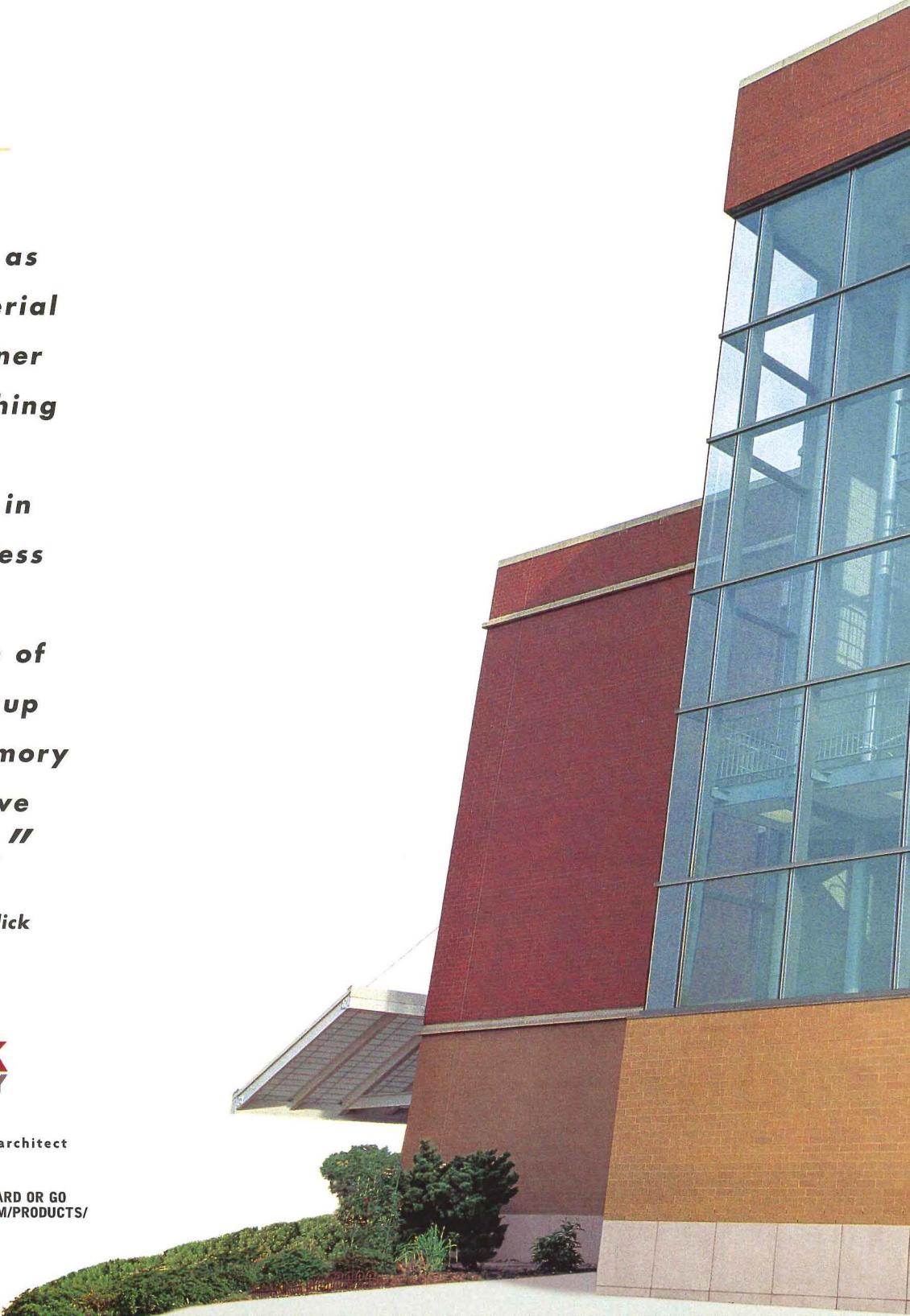
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in our collective  
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*– Joshua Burdick*



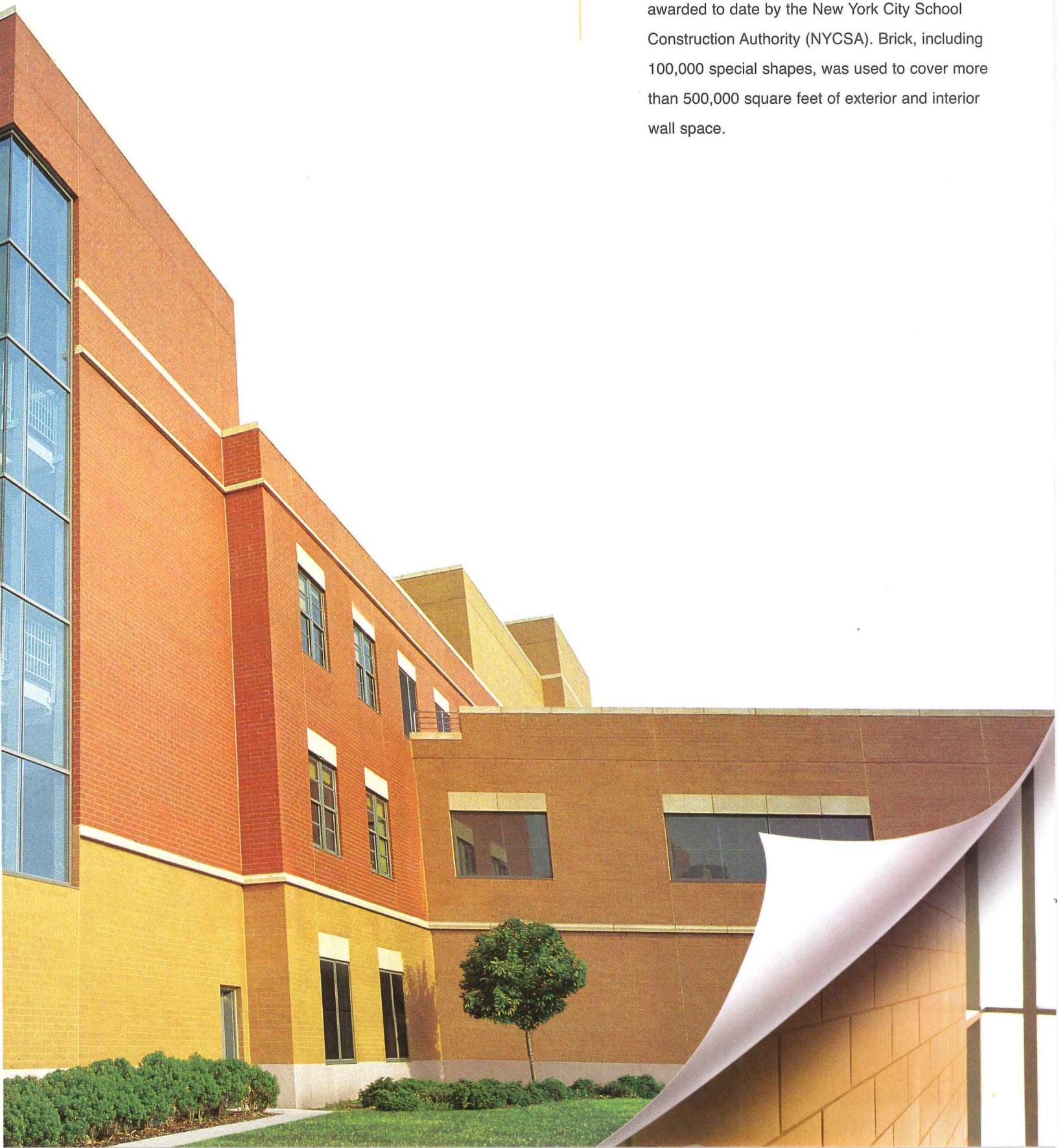
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Architect: SBLM Architects  
Design Partner: Raza Ali  
Client: New York City School Construction Authority  
Completed: 2003

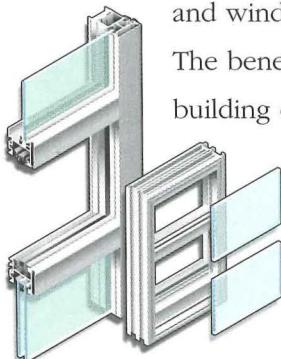
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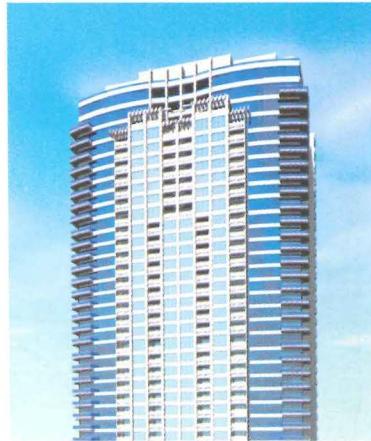


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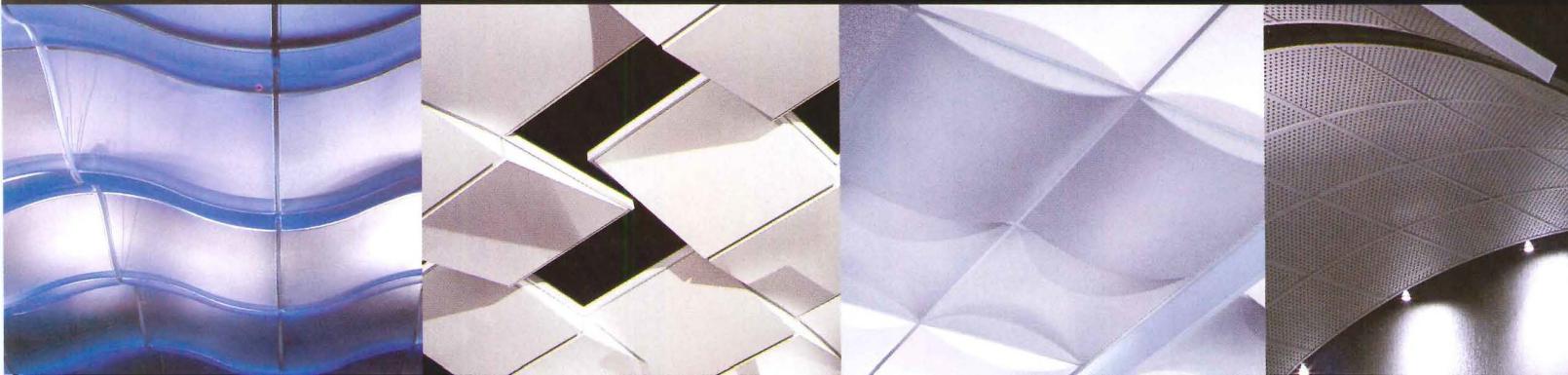
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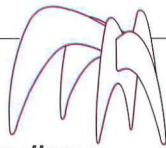
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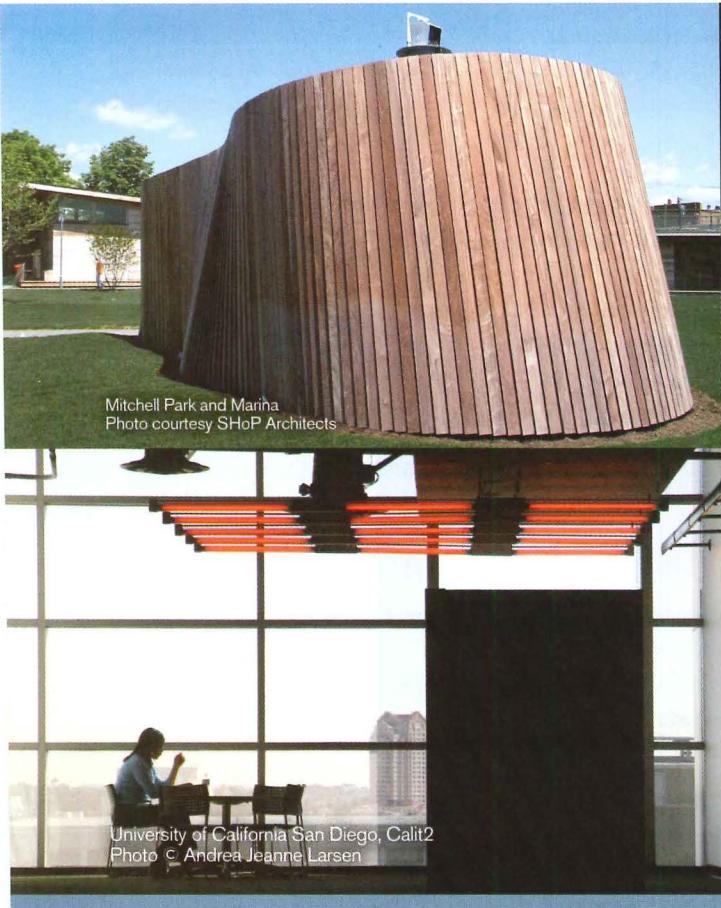
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## Projects

It's a fine feast of projects this month, as place, light, materials, and program move architects to create beautiful buildings. The abundance includes museums in Madrid, Spain, and Düsseldorf, Germany, a ranch in Montana, a campus center in Massachusetts and a park in Long Island that has helped revitalized a village.

## Building Types Studies: University Labs

In new laboratory research facilities rising on many college and university campuses, architects are challenging traditional models, and designing open, flexible laboratories that are shared, easily adapted for specialized equipment, and offer facilities for interdisciplinary research.

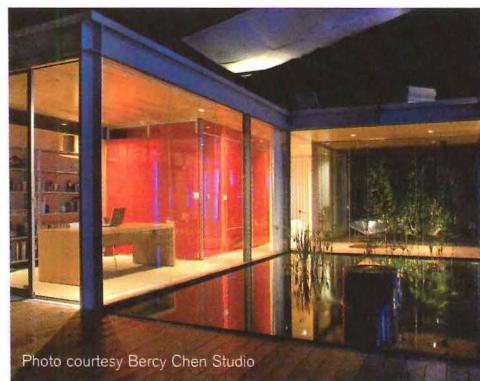
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## Residential Section: Modern Barns

An evolving building type, the barn, remains a reminder of our rural past, and continues to provide a fertile source for modern interpretations, as these projects demonstrate.

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## Katrina Design Competition Winners

Both students and professionals offered a wealth of design solutions in the 544 entries for two competitions initiated by *Architectural Record* in a partnership with Tulane University's School of Architecture. We're proud to present the seven award winners and eight citations here.



## Archrecord2

In Design this month we feature Bercy Chen Studio, an emerging firm in Austin, Texas, that brings a global and contextual sensitivity to every project. Our Work section focuses on architect Grace Kim and her new book, *The Survival Guide to Architectural Internship and Career Development*.

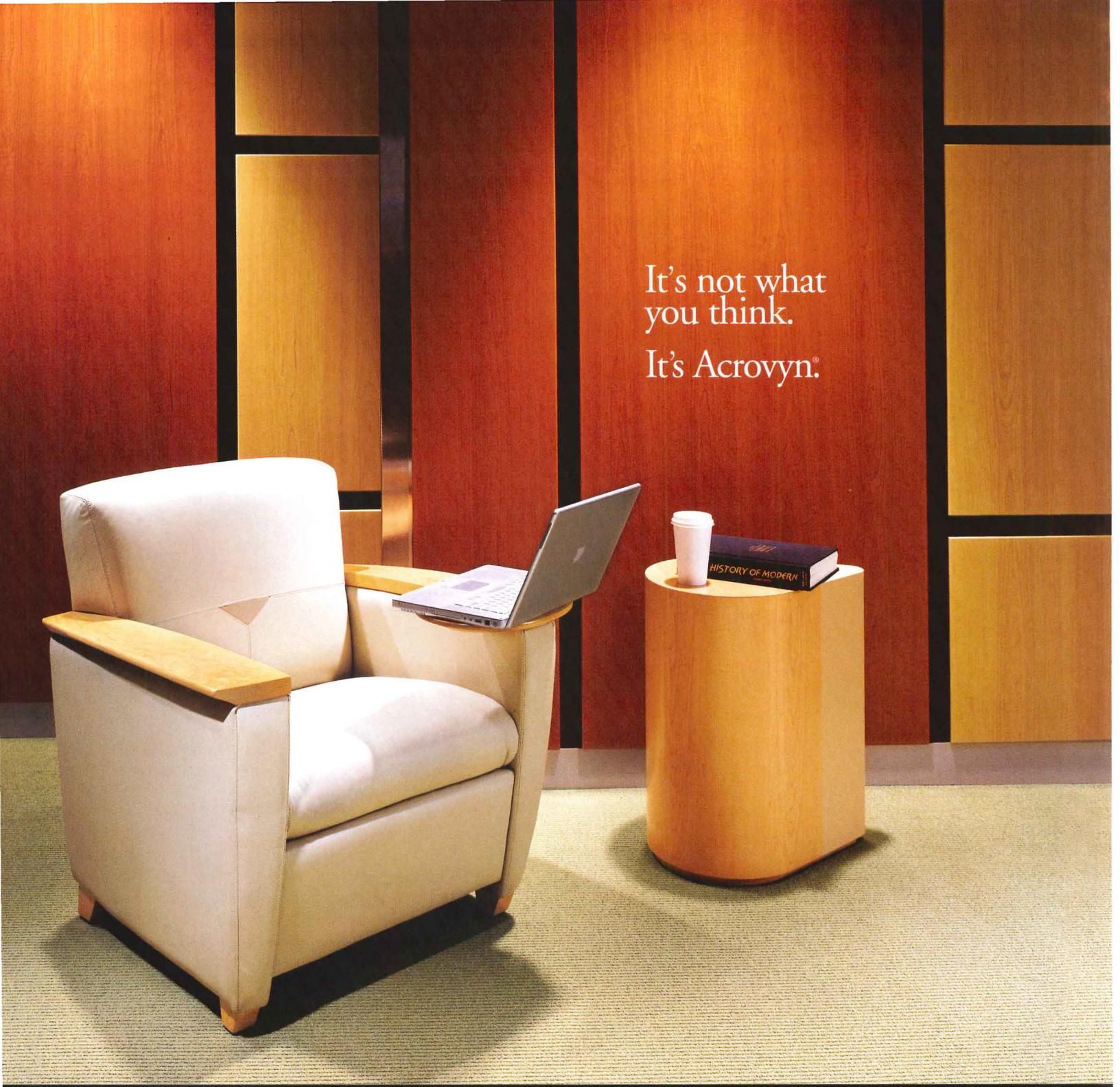
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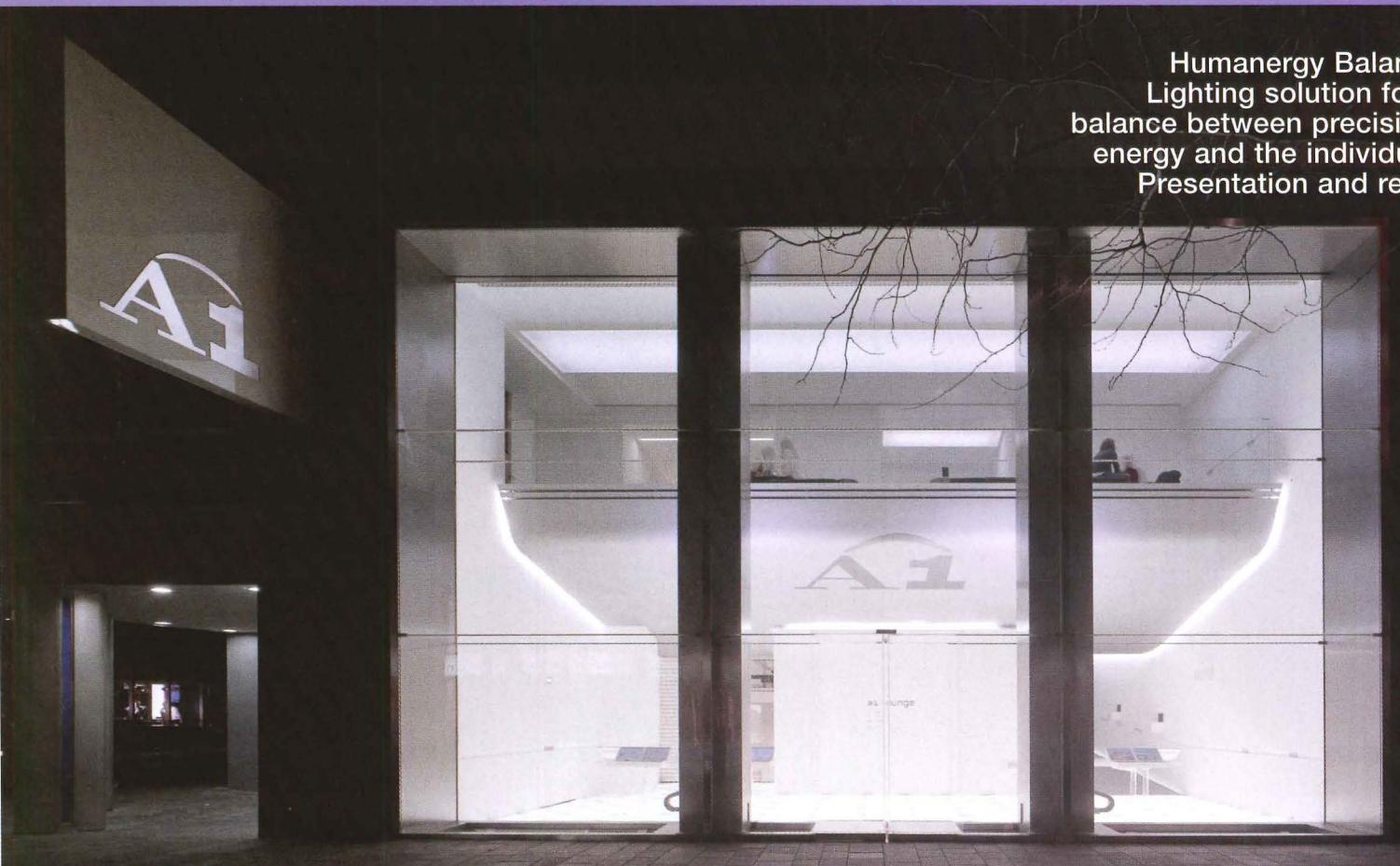


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# The Essence of Education

## Editorial

By Robert Ivy, FAIA

**T**he AIA convention in Los Angeles exceeded the record books, with more than 25,000 attendees enjoying the cool California air. Members packed the trade show floor, gathered for continuing education sessions, and jammed the Art Mile and other social and artistic venues. Yet when the halls had closed, and the debris had been swept into piles for the landfill, what remains? From this perspective, one person stood out.

On the final Saturday afternoon, the spotlight fell center stage on William McMinn, FAIA, winner of the current Topaz Medallion given jointly by the American Institute of Architects and the Association of Collegiate Schools of Architecture. First, we recognize the importance of his award. The Topaz deserves greater visibility, given to someone who has "made outstanding contributions to architecture education for at least 10 years, whose teaching has influenced a broad range of students, and who has helped shape the minds of those who will shape our environment."

Bill richly deserved the Topaz for his unusual accomplishments in architectural education: At one time he was known as a "founding dean." He earned the title by launching two schools of architecture: one at Mississippi State University (a first-rate school in the nation's poorest state), and the other at Florida International University (a fast-growing institution with a diverse, commuter population). In addition, he spent a 13-year tenure at Cornell, inaugurating its undergraduate planning program and strengthening its graduate program. Along the way, Auburn and LSU also benefited from his oversight. Bill McMinn has espoused excellence wherever he has set his sights.

On June 10, Bill took the podium on the convention's last afternoon, and reminded us all why we entered architecture in the first place. For days we had been learning how to better manage our practices, and were kept busy, busy, busy earning education credits, polishing our analytical skills in sustainability, and networking with our peers. It all seemed so important, and certainly it mattered. Then Bill spoke.

In the simplest terms, he recounted the tale of a student who had accompanied him on an educational trip to Rome. Separated from the group of student travelers, the young man stood alone, prompting the dean to quiz him about his absence. The student admitted that, panicked that he might

miss admission to a hallowed space, he had been waiting at the Pantheon since sunrise. He described how he had first seen images of the fabled building in his grandfather's study as a child, had studied the structure throughout his education, and now "here he was." Bill then quoted the student verbatim:

"I never believed that I would actually be in this place. It is so awesome ... more than I ever believed it would be ... the sphere, the cylinder, the enclosure, the fantastic space, and that amazing column of light."

The dean then knew that the student had discovered the "power and passion" of architecture that the educator describes as "the essence of architectural education," a discovery that comes personally, even intimately, and can never be taken away. "If we are good guides, it will be with them forever." Bill's own words.

That storytelling took many of us in the audience back to our own moments of recognition—the fortunate, transcendent instant when the universe clicked into adjustment and we understood the power of architecture. For some in the audience, the moment of architectural recognition might have occurred at the Salk Institute; for another, at Ronchamp. Not everyone has experienced an "Aha!": Some find a ripening of appreciation over time. The route is an individual, inevitable one.

As McMinn articulated, "Each person discovers it in their own way and their own time." The architectural experience then continues for a lifetime, deepening in appreciation, widening in scope, and never failing to amaze us. Architecture fuels our careers and our lives, as well. It's not for business reasons that we do what we do, though professionalism and economic good sense matter; nor is it for the improvement of society, or for health, or for any of a dozen other good reasons that earnest seminars and conventions promote. Bill made that perfectly clear. Instead, we make architecture because we love it. Beside that intuitive understanding, all learning pales and the lights go dim.



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# Letters

## Modern, boxy, soulless places

With an architectural heritage as rich as New Orleans's, I find it interesting that in all of the entries for ARCHITECTURAL RECORD's/Tulane's Designing the Future of New Orleans competition ["Building a Better Gulf South," June 2006, page 112] there was not one winning submission that addressed the traditional typology of the city. Is the typology of New Orleans that vacant of worthy translation? If so, why is this a city that had (prior to Katrina's devastating blow) the largest demographic that did not relocate of any other American city? I find it architectural corruption not to identify with the existing building typology in some way.

Take photos of the places that must be demolished and attempt to re-ignite their spirit, but why squash the culture in Modern, boxy, soulless places? Modular companies are quite capable of building gable roofs and tilting them up on-site, pieces and parts do not have to be only linear cubes.

Across the Gulf Coast there are insensitive examples of homes that have simply been lifted up in the air thoughtlessly on piles with no attempt to "connect" to the ground. I urge all those involved to understand, and then reach beyond, the FEMA guidelines for flood-proofing buildings to find ideologies that address the most pressing issues: keeping the soul, and the front porch, alive with a "real" interpretive understanding of what made this city so outrageously unique. Otherwise, creating boxes like the award-winning schemes presented last month is concomitant to telling Wynton Marsalis, "After the flood, brother, play a new kind of jazz."

—P. Blackall  
Via e-mail

## Heroic and insane efforts

Thanks for a great job covering the details of this insane effort on the Gulf Coast and for capturing the big picture, as well. Good reporting. Beautifully written. Thanks for sticking with this complicated story. Stay tuned—it ain't over yet.

—Ben Brown  
Franklin, N.C.

## Viva Brazil!

To have another Brazilian architect awarded the top honor of Pritzker Prize [Record News, May 2006, page 27] makes all of us very proud. However, as usual, the Brazilian press can be counted on to ignore or downplay the importance of this honor, considered the Nobel Prize of architecture. For this press, it is much more important to trumpet that a Brazilian movie is nominated for an Oscar, or that a Brazilian athlete took 35th place in the winter Olympic Games.

The lack of an architectural culture and, consequently, the depreciation of our profession not only have their roots in Brazil's economic problems, but also in the ignorance of the nation's press.

—Alan Quintella Mendes  
Salvador-Bahia, Brazil

## Exurban exile

There is something that has been bothering me about your annual Record Houses issue for some time, but when I read the quotation from Monica Ponce de Leon in this year's issue calling her New England House [April 2006, page 115] "the opposite of sprawl," I just lost it. My frustration is not at Ms. Ponce de Leon or her firm, Office dA (whose expressive and innovative work I greatly admire). Rather, I place the blame on ARCHITECTURAL RECORD for exclusively showcasing single-family homes, photographed to give the

impression that each dwelling is sited on at least a dozen acres. While each house you show is far more aesthetically pleasing than the typical McMansion that has sprouted across the American exurban landscape, it is your images that suggest a condition of sprawl taken to the next level.

The cruel irony is that your annual survey of the best in residential design is published as the April issue—the month in which Earth Day is celebrated. Though the sustainable design movement has progressed to the point where commercial office developers are asking architects about their LEED credentials, the wider issue of sustainable communities has been lost on your editors. Robert Ivy's editorial ["Lightning Strike," page 21] sidesteps the issue by asking the urban dwellers among us to acknowledge and consider the "worldview" (however insular) of the more exurban. Only Robert Campbell's piece ["A Neighborhood Lives On," page 63] saves the issue from totally divorcing urban planning concerns from the realm of residential design. After all, the production of housing has an enormous impact on the demand side of our national energy equation, from home heating to miles driven.

Are there really no examples of multifamily home construction worthy of gracing your glossy pages? No residential building of any kind that helps define a neighborhood—or, better yet, stitches together a broken fabric? Many architects today are trying to respond to the enormous environmental challenges of our time. I wish ARCHITECTURAL RECORD could see a way to take a leadership stance and celebrate this important work.

—Evan Yassky, AIA  
Princeton, N.J.

## Corrections:

A News story entitled "Renovating L.A. Mainstays" [May 2006, page 38] incorrectly labeled the material pictured on part of the roof of the new L.A. Farmer's market as Teflon Coated Glass. The material is PVDF coated PVC from Ferrari Textiles. The May Exhibitions item on "On-Site: New Architecture in Spain" misattributed some of the show's featured projects. The correct attributions are as follows: a shelter for Roman ruins by J. Mayer H. and a house of 11 small pavilions by RCR Arquitectes. The reference to Plantation Place in the article "Robo Buildings, Pursuing the Interactive Envelope" [April 2006, page 152] was incorrect. The building that the writer was referring to is Aurora Place. An incorrect caption appeared in June's Archrecord2 item on Joshua Galloway [page 68]. The caption should have read, "Infill housing in Richmond's Carver neighborhood, by BHC, with Walter Parks Architects." Additionally, it should be noted that Galloway was a recipient of a Frederick P. Rose Architectural Fellowship. In June's story on AIA Gold Medal recipient, Antoine Predock, the photographer for Venice House [page 216] should have been listed as Timothy Hursley. In the same article, two text blocks for Indian Community School and Canadian Museum for Human Rights [page 223] were transposed and did not correspond with the accompanying images. Selwyn Ting should have been listed as a project architect, instead of a member of the project team for the Science Center School in L.A. by Morphosis [May 2006, page 132].

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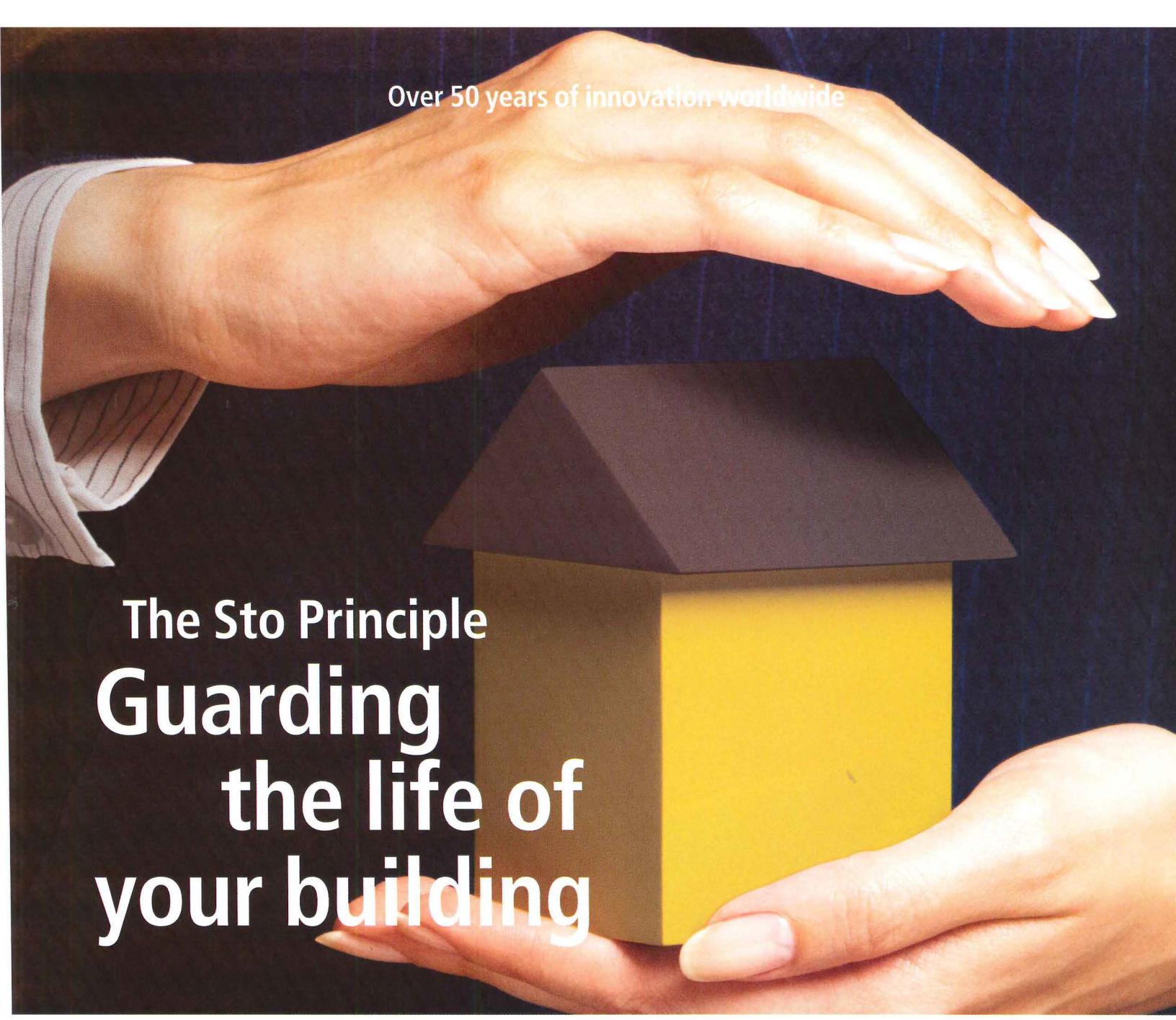


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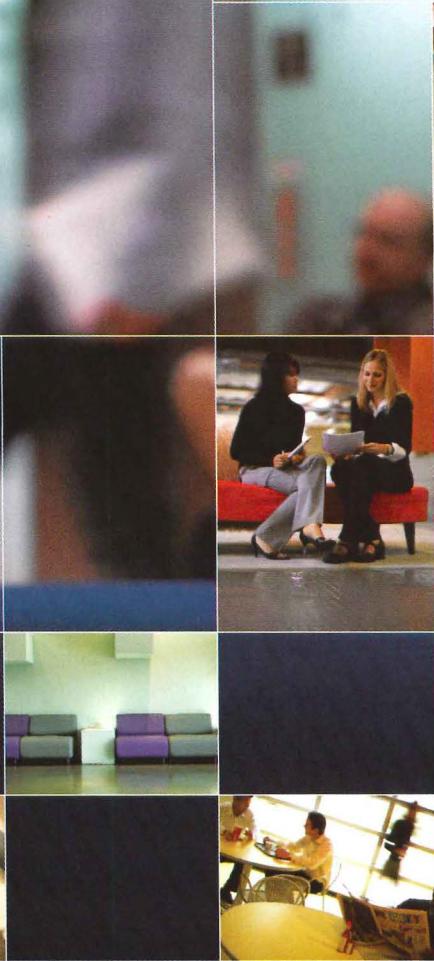
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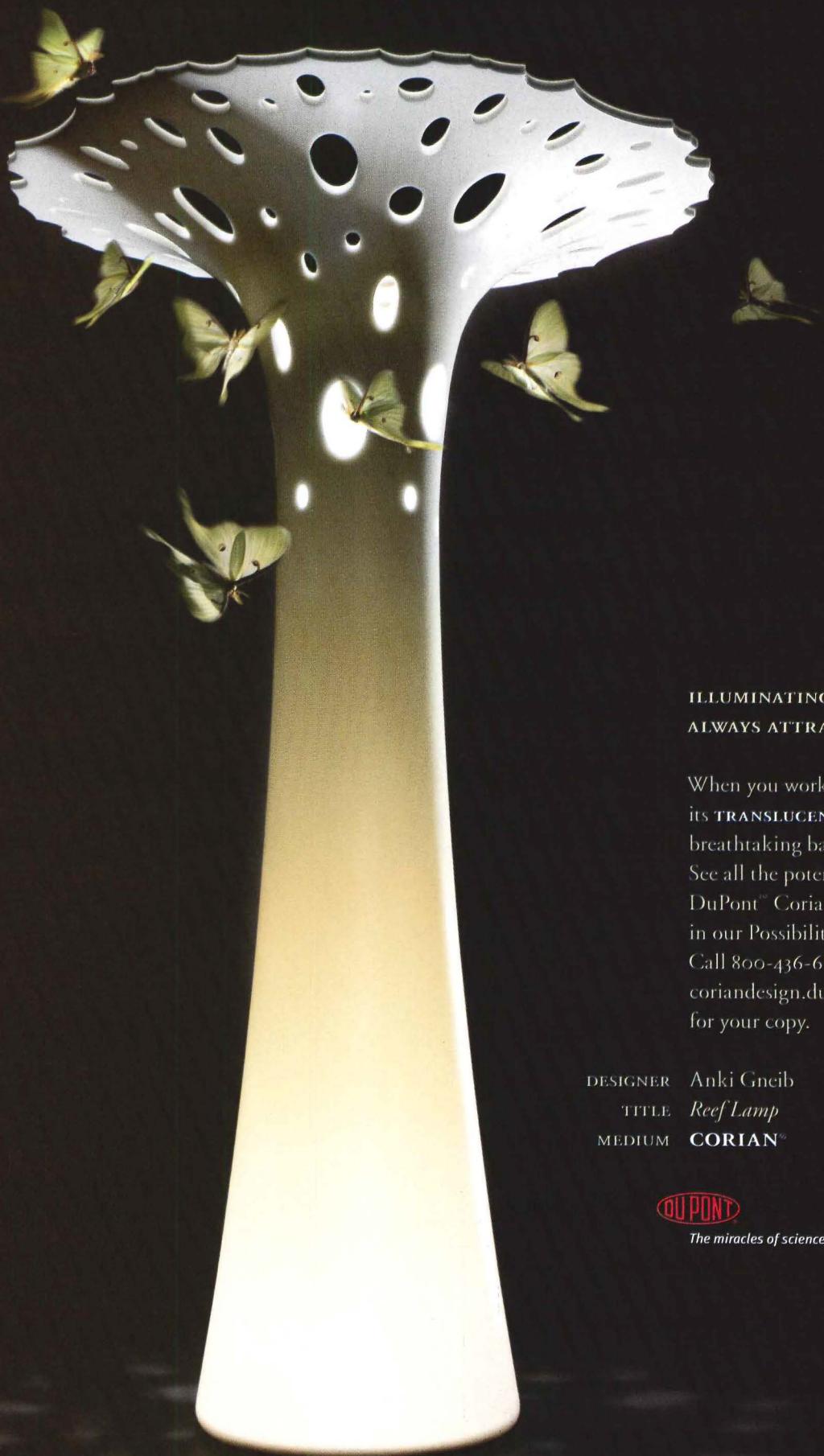
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- p.26 WTC Memorial update
- p.28 New designs for border living
- p.32 Wild skyscraper designs planned
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## Morphosis unveils plan for downtown New Orleans

In a quandary over what to do with the Katrina-devastated Hyatt Regency New Orleans Hotel, Laurence Geller, C.E.O. of Strategic Hotels, the Chicago-based owner sought the help of Pritzker-winning architect Thom Mayne, FAIA. Instead of just rehabilitating the building, he has created plans for a \$715 million, 20-acre multiuse center and park that will include a refurbished Hyatt Hotel, the National Jazz Center, a new city hall, civic courthouse, amphitheater, and residential buildings.

Plans were unveiled in New Orleans on May 30. It is the first major redevelopment announced since Hurricane Katrina.

"I am not prepared to give up on New Orleans," says Geller. "We have a \$200 million asset there, and it can't be ignored or moved to another city." The surrounding neighborhood includes the Louisiana Superdome, City Hall, and a shopping center.

Mayne will design the National Jazz Center, which will be home to the New Orleans Jazz Orchestra, and also include performance spaces, studios, classrooms, a library, and offices.

Designs are still preliminary, but initial renderings of the projects reveal the use of bulky, sculptural forms, silvery steel mesh, cantilevered building elements, and folded and curved planes. Throughout the park, interactive art, gardens, and fountains will reflect Southern culture. Details of most of the building projects have not been decided. "I would imagine that next year will be spent in planning," says New Orleans architect Ray Manning, AIA, the lead local architect for the district. "Then we will have a groundbreaking ceremony for the park."

Geller says he chose Mayne because "we wanted an architect with a global view, and one who would command respect from constituent components. We looked at the work they were doing in cities rather than individual buildings. His designs are dramatic, not trite, not repeating designs like some of the household-name architects."

The plans were created with the Hyatt District Rebirth Advisory Board, funded by Strategic. Experts from fields like architecture and planning, the arts, economics, and hospitality



The plan includes a civil courthouse (left), a jazz center and museum (center, small building) and the existing Dominion Tower (center, tall building).

also participated in forming the plans. The project is expected to generate 6,500 permanent jobs and bring in \$6 billion over the next 20 years.

The post-Katrina environment presents the prime opportunity to create a new district, says Manning. "Before Katrina, this kind of project might have encountered a lot more resistance. We have the opportunity to reenvision ourselves, and try to create a catalytic project that will help move the city forward."

The new Hyatt Jazz District will be a public/private project. Hyatt has

already invested nearly \$3 million on planning and has identified about \$450 million in funding, Geller says. The district will be linked to areas of the city like the French Quarter, convention center, and waterfront.

It will be another month before the Hyatt's interior demolition is complete. Then, the hotel's owners will begin external demolition and reskinning. Its entrance will be relocated to the east side of the building, its interior updated, new ballroom space will be built, and a rooftop restaurant will be added. *Angelle Bergeron*

## Los Angeles hosts busy AIA convention

Like Los Angeles itself, the 2006 AIA National Convention, held in downtown Los Angeles from June 8 through June 10, was wide-reaching.

The theme of the event was innovation, reflected in the convention's title, "Architecture on the Edge." Los Angeles Mayor Antonio Villaraigosa spoke about fighting the city's dominant automobile culture, and the opening session closed with a panel discussion on the issue of

sprawl, featuring Craig Webb, AIA, principal at Gehry Partners, and Pritzker Prize winners Rafael Moneo and Thom Mayne, FAIA.

Introducing another major topic, green architecture, AIA President Kate Schwennsen, FAIA, announced that the U.S. Conference of Mayors had adopted the AIA's resolution that all new and renovated U.S. buildings reduce their energy consumption to half the national average. Keynote

speaker William McDonough, FAIA, also focused on sustainability, and the effects of overdevelopment.

Antoine Predock and Moore Ruble Yudell were honored for their 2006 AIA Gold Medal and Architecture Firm Awards, while Marshall Purnell, FAIA, was elected 2008 AIA president, becoming the first African-American to hold that position. A record 24,600 people registered for the convention. They attended hundreds of seminars with topics as diverse as building in

China, condominium liability, working in design-build, and getting projects in L.A. The AIA Expo trade show portion of the convention showcased products from over 750 companies. In many ways, the convention was a coming out party for the Los Angeles area's numerous firms, many of which are now among the elite in the country. "L.A. is and will remain a place of innovation," said Mayne at the opening panel. "We'll do the best we can to advance the culture." *Sam Lubell and Charles Linn*

## Proposed World Trade Center memorial is slated to undergo major changes to reduce cost

New York officials on June 20 announced a plan to reduce the size and scope of the World Trade Center Memorial. According to a recent cost estimate by the project's contractor, Bovis Lend Lease, the project's original budget had almost doubled, approaching \$1 billion.

The report, led by New York developer Frank Sciamè, suggests eliminating several elements of the memorial scheme, bringing its cost to \$510 million. The report will be available for public comment until June 27, and will be presented to the LMDC board by the end of June.

The 14-page document suggests removing the memorial's entry pavilion and portions of its below-grade galleries, such as those surrounding the scheme's waterfalls. The total size of the memorial museum would be shrunk from 150,000 square feet to 120,000 square feet. It also recommends modifying plans to preserve the

original Twin Towers' slurry wall, and eliminating the planned relocation of the Hudson River water line. The plan does preserve many of the memorial's key elements, such as its voids, waterfalls, pools, and the underground passage to the memorial museum.

The report concludes a month-long process headed by Sciamè, whose companies, FJ Sciamè Construction and Sciamè Development, are two of the largest in the New York area. Sciamè's committee was appointed in mid-May by New York's Governor George Pataki and Mayor Michael Bloomberg. The group included structural engineer Richard Tomasetti, architects Thom Mayne, FAIA, and Rick Cook, FAIA, and AIA New York Chapter executive director Rick Bell.



Rendering of the memorial's waterfalls (left) and Memorial Hall (above).

design," particularly the underground memorial galleries near the reflecting pools. Still, he seemed pleased that the proposal kept much of his scheme intact.

Arad's initial memorial plan did not include underground galleries or an underground welcome center. The galleries were added when Arad proposed moving much of the memorial's plaza to street level. Bovis estimated the new scheme to cost \$972 million, a figure that was questioned by some officials. Foundation president Gretchen Dkystra stepped down in late May amid criticisms over cost overruns and fund-raising shortfalls.

The memorial is now set to open by September 11, 2009. Sam Lubell

## More hurricane relief approved for Gulf

On June 16, President Bush approved spending \$19.8 billion in disaster relief funds that will help restore hurricane-damaged buildings and create new low-cost housing options in the Gulf Region. The legislation is part of a \$94.5 billion supplemental spending measure.

The plan will include \$5.2 billion in Housing and Urban Development Department Community Development Block grants, of which

\$4.2 billion is slated for Louisiana. Norman Francis, chairman of the Louisiana Recovery Authority, says FEMA will give residents as much as \$150,000 to fix, reconstruct, or sell houses damaged or destroyed by hurricanes Katrina and Rita.

The legislation also creates a \$400 million "alternative housing pilot program" in Mississippi and Louisiana to help create modular housing that is cheaper than tem-

The report also suggests that the Port Authority of New York and New Jersey take responsibility for building the memorial, a role now entrusted to the World Trade Center Memorial Foundation. Acting foundation president Joe Daniels, who praised the entire Sciamè report, said in a statement that this idea "can best serve the interests of the project."

Memorial architect Michael Arad said in a statement that he would accept the committee's proposals, although not without regret about "some painful cuts to the original

porary FEMA trailers. The housing would be built with waterproof cement-plank siding and sealed wall panels, and could be expanded easily. The AIA has aggressively supported such housing.

Another allotment includes \$40 million in grants to be awarded by the National Park Service to state historic preservation officers, who are to submit plans for using the funds. Preference would be given to proposals that include buildings in National Heritage Areas

as well as owner-occupied dwellings. No individual state can receive more than 65 percent of the \$40 million total.

Richard Moe, president of the National Trust for Historic Preservation, says the new money "will go a long way toward helping restore the shotgun houses and Creole cottages that represent the heart and soul of New Orleans's historic neighborhoods, as well as the hundreds of significant houses on the Mississippi coast." Tom Ichniowski

## New York office of OMA breaks away to form new firm

In an amicable split, Office for Metropolitan Architecture (OMA)'s New York office, led by principal Joshua Prince-Ramus, has spun off into a new firm. Unlike OMA's other offices, which are owned collabora-

tively by six other partners, the New York office was owned by Ramus and firm founder Rem Koolhaas.

In May, Ramus, with former OMA colleague Erez Ella, bought out Koolhaas and retained the 35-mem-

ber staff to form REX, which stands for Ramus Ella Architecture. Ramus also keeps high-profile projects like Museum Plaza in Louisville, Kentucky, and the Annenberg Center for Information Science and Technology

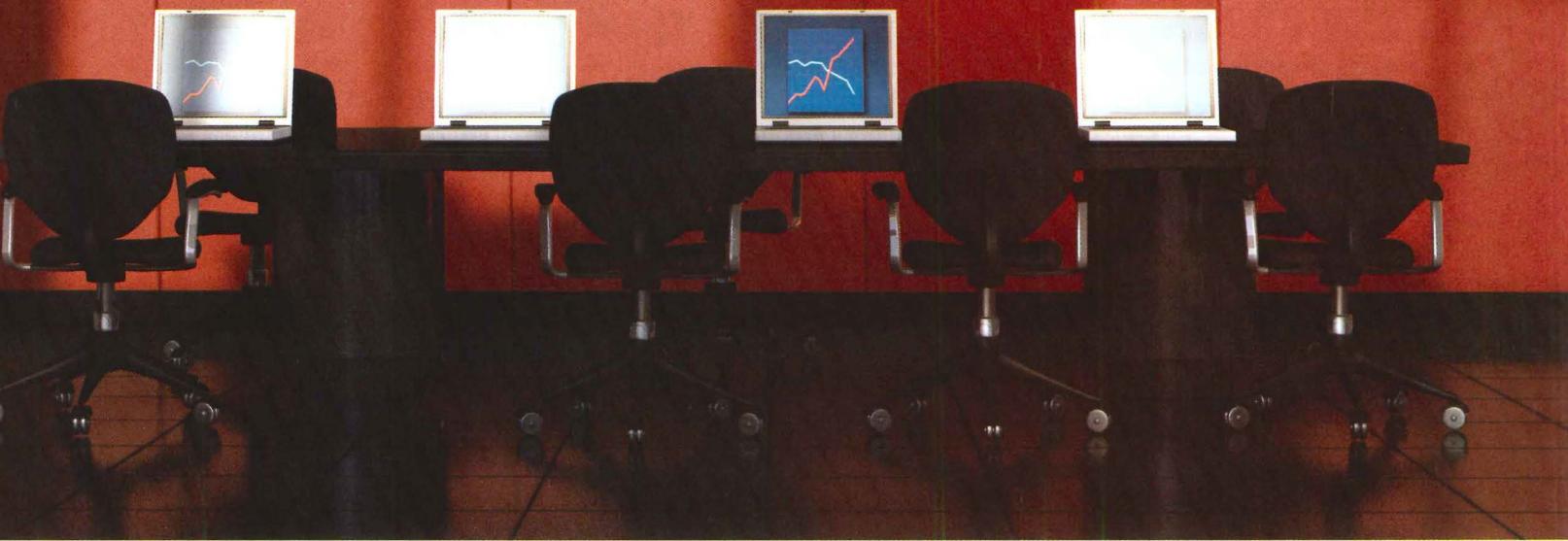
in Pasadena, California. OMA and REX will collaborate, and OMA is planning to open a new office in the U.S.

"It's really been unremarkable, no revolution, no crisis," says Ramus. "The biggest challenge now is going to be building our own identity." Alan G. Brake

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## Cruz finding new solutions for border living

San Diego architect Teddy Cruz and his firm, Estudio Teddy Cruz, have been working near the Mexican border for years. Cruz's newest design is for two affordable housing and community center schemes for immigrants in the border town of San Ysidro, California. The plan was developed with a nonprofit community center, Casa Familiar, whose client base is mostly Spanish-speaking.

Cruz's inspiration came first from discussions and brainstorming sessions led by Casa Familiar. It also came from a critical approach to the trends in new urbanism, which he says "only address aesthetics, creating a fake facade of difference without considering the lifestyle of the community." He says the downtown redevelopment of San Diego is an example of this kind of "suburban planning," meaning that he feels it is dressed up in high-end urban aesthetics without addressing zoning policy for higher density or affordable housing options.

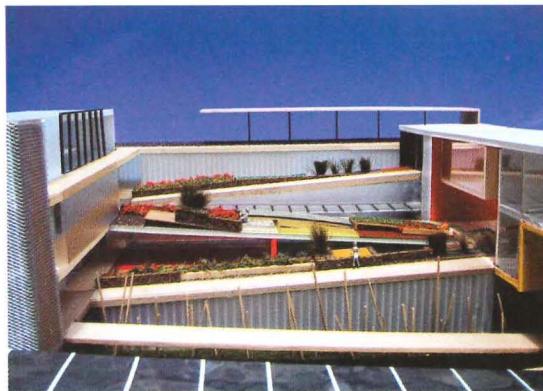
The pilot projects, whose rezoning needs were approved by the city last year, will begin construction this summer. The first, "Living Rooms at the Border," is a mixed-use, high-

density, 14,000-square-foot plan built around an old church. It will be transformed into a community center, including an office for Casa Familiar in the attic. There will also be 12 housing units, a community garden, and a central market. The second, for senior housing and child care, is connected by an alleyway and includes a semi-public lobby, a restaurant counter, and small private living spaces.

All units will be made up of a series of Minimalist, geometric parcels. Roofs will be made of metal and will have an alternating rhythm to their shape in order to supply ventilation and natural light. Interlocking housing units will be made of poured concrete and wood framing. Inside each unit will be an open 12-foot, cube-shaped space centered around a kitchen or bathroom which can be subdivided with prefab wooden or



All units, placed in an alternating rhythm, will be made up of a series of Minimalist, geometric parcels.



sheer walls. The senior housing portion of the project will be a repetitive series of masonry concrete walls and wood framing with the lobby walls made of a system of stackable aluminum windows. The existing church space will become a "building within a building," with steel-frame reinforcement inside the wooden structure.

The development gardens and alley pathways are connected by a promenade, and the traditional Mexican plaza in the center is

meant to be the focus of public life. The senior center's food counter, built into its front facade, will allow seniors to sell food to locals to earn extra income. Its child center will cater to the many children who are cared for by their grandparents.

Cruz hopes that the approach being used in this project can be a way to think about all border towns. "We should be turning our attention away from the wall and toward the landscape, the ecology, and the communities," he says. His ultimate goal would be to create a number of urban planning nonprofits like Casa Familiar, which speak to the needs of each individual community. His plans for the future are to improve zoning laws to better address the needs of those who need affordable housing. *Dianna Dilworth*

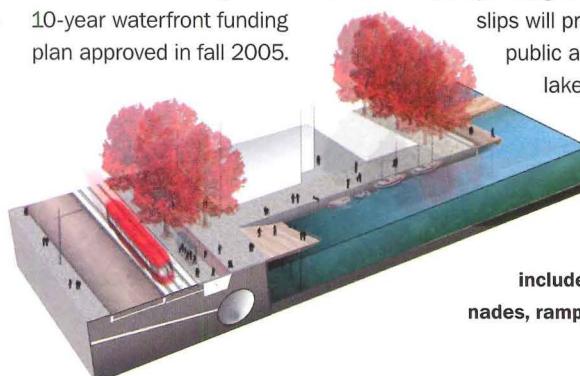
## Dutch firm to help rejuvenate Toronto's neglected waterfront

West 8, a Rotterdam-based urban design and architecture firm, has won a design competition to rejuvenate a 2.1-mile stretch of Toronto's long-neglected, much-debated central waterfront along Lake Ontario. The jury's choice was unanimous.

The plan will ultimately produce public promenades along the water's edge, flanked by trees, and lined with bridges and ramps. The \$18 million first phase is expected to get under way by next spring, with completion by 2008. The total project is expected to cost about \$54 million.

Toronto Waterfront

Revitalization Corp. (TWRC), a creation of municipal, provincial, and federal government, announced the winning team on June 2. It will also include Toronto firms du Toit Alsopp Hillier and Diamond and Schmitt Architects. Financing comes from a 10-year waterfront funding plan approved in fall 2005.



The West 8 design includes a 59-foot-wide promenade along the water, with a wooden boardwalk, floating piers, and a double row of large trees on its edges. Bridges rising from the boardwalk and spanning the ends of the slips will provide continuous public access to the lakeshore. The design incorporates sustainable features like

The plan will include tree-lined promenades, ramps, and bridges.

a new storm-water management system on Queens Quay and pontoons for the floating piers designed to enhance fish habitats and improve water quality.

"We made sure that the really interesting and doable parts were within the budget," says John Hillier, a partner at du Toit Alsopp Hillier.

Five years ago, local and national politicians pledged \$1.35 billion to redevelop the entire waterfront. There have been some modest improvements along the opposite ends of the waterfront, but political bickering among the governments who control pieces of the site has hampered progress.

*Albert Warson*



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## New and renovated museums opening in Paris

While Paris is home to many of the world's most famous museums, the list of available options rarely grows. But recently that has changed. In 2005, both the Petite and the Grand Palais reopened after renovations. This summer, a major new museum, Jean Nouvel's Musée Quai Branly, dedicated to indigenous arts, is opening, while two historic exhibition spaces are reopening their doors.



The entrance to the newly renovated Orangerie Museum in Paris.

### Musée de l'Orangerie

Reopened in May, the Orangerie, built in 1852, houses Monet's famous *Nymphéas* (*Water Lilies*). The \$35 million, six-year renovation by Bordeaux architects Brochet-Lajus-Pueyo removed an extra floor that had been added in the 1960s, opening the space up with skylights. The intervention also created 32,290 square feet of underground

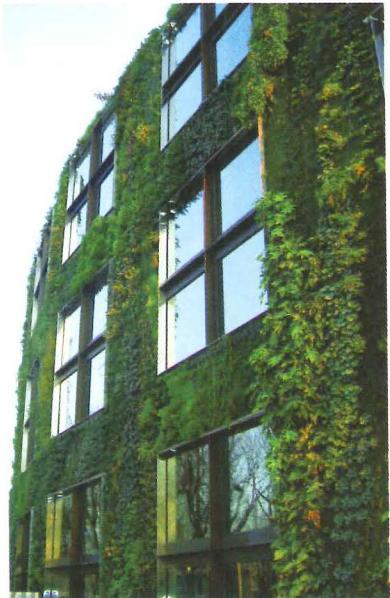
gallery space. Construction was slowed by the discovery of 16th-century foundation walls, of which only 32 feet were finally preserved. The *Water Lilies* are now accessed by a bridge, spanning a narrow atrium.

### Musée Quai Branly

Not without its own construction problems due to an unstable, riverside terrain, the \$270 million Musée Quai Branly, dedicated to indigenous art of Africa, the Americas, Oceania, and Asia, opens on June 20. Architect Jean Nouvel set out to hide from view "Western" concepts of construction, creating a 420,000-square foot partial treehouse, raised on pilotes and curved to follow the river. Galleries protrude from the aluminum frame, and a garden covers most of the street level, isolated from riverside traffic by a large wall of glass. The museum offices' vertical garden facade, designed by Patrick Blanc, contains over 15,000 plants, mostly from Asia, slipped into pockets in thick felt, which is in turn stapled to a PVC backing.

### Decorative Arts Museum

Across the river, in the Marsan wing of the Louvre, the galleries of France's Decorative Arts Museum



Quai Branly's vertical garden wall, designed by Patrick Blanc.

are being renovated by Oscar Tusquets and Bruno Moinard. The design gives a new transparency to the museum, opening up perspectives between the palatial rooms and views onto the Tuilleries gardens. Over 5,000 pieces are presented on two floors. Opening in September, the museum brings to a close the renovation of the Louvre complex begun in the 1980s by I.M. Pei, while new gallery additions are already being planned. Claire Downey

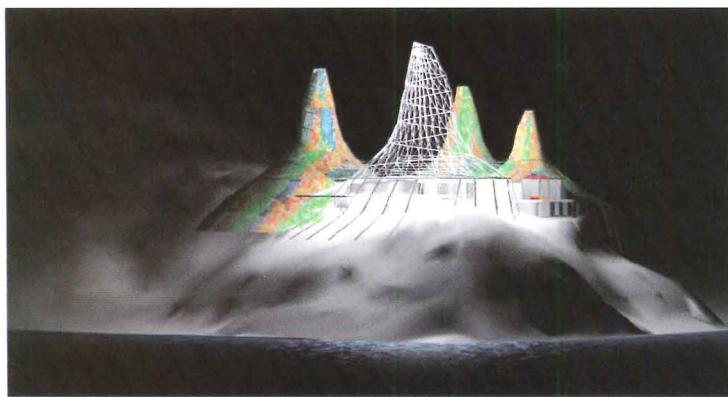
## "Mountains of Remembrance" chosen as Thai Tsunami Memorial

A competition for Thailand's Tsunami Memorial, dedicated to the victims of the devastating December 2004 earthquake and tidal wave, has been won by an unusual-looking

project called "Mountains of Remembrance." The plan's five conical towers are inspired by the natural landscape of Thailand's Phang Nga Bay, as well as tradi-

tional Asian stupa and pagoda forms. They will be located within the Khao-lak National Park on the southeastern coast, in a forested area overlooking the ocean beaches that were the hardest hit in Thailand by the tsunami. The scheme was presented by the young Spanish architects Ana Somoza and Juana Canet of Disc-o Architecture, Madrid, and their collaborators.

The competition was sponsored by the Thai government and managed by the Council of Architects, the nation's professional association. It attracted 680 entries. A jury selected the winning scheme from among five finalists, with second prize going to a Finnish



The towers are inspired by both natural and architectural forms.

team, Anu Puustinen and Ville Hara of Avanto Architects.

Somoza and Canet explained that their design seeks to "create an artificial piece of nature integrated in the park." Organized around a "Lagoon Square," the towers will be built of steel tubing and cable with ceramic skins whose characteristics will change according to their exposure to light. The Memorial Tower, covered in natural vegetation, will be the tallest, at 125 feet, with an open interior space for meditation. The other towers will contain a museum, a warning center or climate station, an amphitheater, and a restaurant and shop. Participating on the winning team were Tectum Engineers and Thai Architecture design firm Naga Concepts. David Cohn



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## Tower adds new twist to Dubai skyline

Skidmore, Owings & Merrill (SOM) has started construction on a 75-story helix-shaped tower in the Dubai Marina, one of the wealthy Emirate's prime residential neighborhoods.

The "dancing" skyscraper, to be named Infinity Tower, will rotate 90 degrees as it rises while maintaining a constant floor plate throughout its height. SOM Managing Partner George Efstathiou, AIA, predicts that the tower's winding shape will make

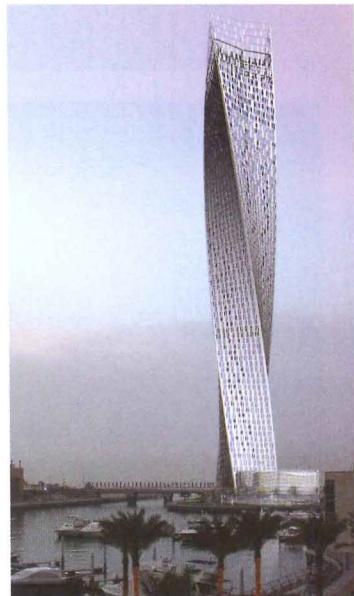
it the marina's principal landmark, and perhaps a symbol of Dubai itself. According to Efstathiou, the building's form will offer residents views of the waterfront without disrupting the vistas of neighboring buildings.

The 995-foot-high tower will comprise 456 residential units, ranging from studios to full-floor penthouses. It will include a street-level shopping arcade, conference centers, lounges, a child-care center, a health spa, exercise facilities,

and an outdoor pool.

The structure will be constructed of cast-in-place, high-strength concrete columns stepped 1 degree per floor in order to create the distinctive helix shape. The tower's architect, design partner Ross Wimer, AIA, says that while the building's form responds to its site, its articulated surface responds to the climate, making its architecture a derivative of the "interaction of natural forces."

SOM is also currently in the process of constructing Burj Dubai, a residential tower that is set to be the world's tallest building. Both projects are scheduled to be completed by 2009. *Seif El-Rashidi*



The design of the building comprises two intertwined bands.

## RMJM designing "sensuous" skyscraper for Moscow

The procession of planned high-rises for Moscow's nascent financial district continued in May with the announcement by British architects RMJM that they received Mayor Yury Luzhkov's approval for a 46-story "City Palace" tower. Drafted in collaboration with Scottish artist Karen Forbes, the building's spiraling form is arguably the most sculpturally exuberant proposal yet presented in Moscow.

Described by its creators as "sensuous" and "organic," the tower's structure, composed of two twisting bands whose entwined coils

evoke the joining of male and female halves, is intended as a metaphorical extension of the wedding motif. The rotating form plays off the more traditional massing that dominates the surrounding cluster of buildings. Stylistically it also responds to the sinuous structure of the retail and entertainment center at the central core of the district. The tower's two ribbons are locked in a gesture of tense but fluid ascent. A glazed screen draped between them follows the structure, coalescing into a lobby and an entrance canopy at the base while enveloping a ballroom space

atop the building.

The tower will serve as a prominent entryway into the Moscow-City district, occupying its southeastern plot, which connects to a completed pedestrian bridge. City Palace will contain about 1.8 million square feet of space, divided evenly between retail, administrative, and office functions, with a parking lot planned on three underground levels.

Commissioned by City Palace LLC and CSC INTECO, the building is anticipated to cost over \$1.5 billion. It is expected to be complete by 2009. *Paul Abelsky*

## Safdie's Singapore resort will include massive sky garden

Moshe Safdie and Associates has been selected to design one of its largest projects to date: a new resort in Singapore that will include three 50-story hotel towers and a 1,000-foot-long public sky garden. The project, backed by U.S. gaming company Las Vegas Sands, will be called the Marina Bay Sands resort. Safdie will master plan and design the \$3.6 billion undertaking, which will also include Singapore's first casino. The firm will partner with the Singapore office of U.K.-based Aedas.

Located on Marina Bay in downtown Singapore, the complex

will be sandwiched between a 2-acre garden and the waterfront. Near the base of the hotel towers, the walls will splay out to hold a continuous atrium and lobby that links the three towers at street level. The unique sky garden, atop a large platform, will cantilever out a minimum of 16 feet. To the north, the platform will have a 164-foot overhang. The architects are "treating the cantilever as an airplane wing," says project architect Trevor Thimm. They have consulted Canadian wind engineering spe-

cialists RWDI, and are now working with Arup on engineering.

The resort will also include two 2,000-seat theaters, a five-story convention center, and a metal-and-glass arts-and-science center taking the

form of a lotus flower. Extending out from the waterside promenade, the Bayfront Promontory will be built on hydraulic lifts that will allow it to change from a stepped seating area into a level stage for events.

Unveiled by government ministers at the end of May, the scheme joins other large-scale urban development projects now slated for construction around Marina Bay, an area being touted as a rapidly emerging downtown district. The resort is set to open in 2009. *Robert Such*



The towers will be linked by a 1,000-foot garden.

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## After closings, Boston churches getting new uses

The complex closing of many of the parishes in the Roman Catholic Archdiocese of Boston has given way to their perhaps more complex redevelopment. While many church buildings will see continued use, many have been marked for housing, retail, and office space.

As of this spring, the archdiocese had sold property associated with 21 of the 62 eastern Massachusetts parishes suppressed since 2004, taking in \$52.6 million.

Church officials attribute the parish closures to demographic changes, fewer clergy, and financial difficulties, often stemming from abuse-related court cases. The archdiocese in April reported a \$46 million deficit.

Many of the buildings are historically significant, and church officials contend that they have asked potential buyers to address issues of preservation and affordable housing.

Citywide, the parish closings will impact 11 neighborhoods, according

**Blessed Sacrament in Jamaica Plain is being converted into mixed-income housing.**

to Randi Lathrop, deputy director of community planning for the Boston Redevelopment Authority. "It can totally change the composition of a neighborhood. It affects traffic, parking. It's a totally different use," she says. Not all transformations will be radical, she notes. In East Boston, property belonging to St. Mary Star of the Sea Church is slated to become a photography studio and commercial office space, without any major physical changes. Northeastern University bought

St. Ann's church in the Fenway neighborhood to convert it into a nondenominational chapel.

Particular attention has been focused on the Blessed Sacrament parish in Boston's Jamaica Plain neighborhood. It is the first major property to enter the planning process. Bought by the Jamaica Plain Neighborhood Development Corporation and New Atlantic Development for roughly \$6 million, the site includes seven buildings,

including a 1917 Renaissance Revival basilica, schools, a convent and a rectory. The plan calls for mixed-income housing, commercial and educational uses, and affordable housing.

Allston, Massachusetts-based Elton & Hampton are attempting to convert the basilica, with its 85-foot dome, into financially viable housing without sacrificing its character. Other than punching large windows into the ornamental brickwork, the designers are following Boston Landmarks' guidelines to preserve the exterior. The plan preserves the entryway, the narthex, and part of the first floor as community space. A lobby atrium will reveal some of the soaring interior. An adjacent new mixed-use building will have a modern form, but its masonry structure will echo the church's.

Still, the placement and style of new buildings on the site has been controversial, according to firm principal Nick Elton. Community and preservation groups have lobbied to keep the space around the basilica open and to preserve views of the church from the surrounding area, and some have pressed for historical revival over contemporary design. *Ted Smalley Bowen*

## New York is hotel country

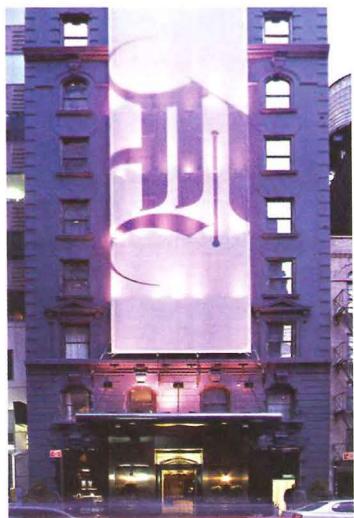
New York is undergoing a hotel construction boom. Already the most popular city for tourists in the country, its new hotel rooms are in particular

demand because so many older hotels, like the Plaza, the Wyndham, and the St. Regis are converting rooms to condominiums. And with the boutique hotel trend showing no sign of slowing down, it's the perfect place for designer architects to use their talents.

Many industry experts are anticipating this trend to continue. According to Pricewaterhouse Coopers, in the past two years, New York's hotel sector has seen a 4.5 percent increase in occupancy; an average daily room rate increase of 9.7 percent; and 80 percent mid-week occupancy average in 2005. These numbers and New York's place on the cultural map lead spec-

ulators to believe that Manhattan is the place to be for boutique hotels.

Hotels are being designed by Architects like Polshek Partnership, The Rockwell Group, John Pawson, Gene Kaufmann and Ed Rawlings. These new high-end design sites are being laid, built, and opened all over the city, from Times Square to downtown and extending their way into Brooklyn. *Dianna Dilworth*



Rockwell Group's Night Hotel.



Initial sketch of Standard NY Hotel.

### New and future hotels in the city:

#### The Loft Hotel Tribeca

Gene Kaufman: 130 Duane St.

#### Allen Street

Ed Rawlings: 200 Allen St.

#### The Gramercy Park Hotel

John Pawson: 50 Gramercy Park N.

#### The Lamb's Club (adaptive reuse)

Thierry Despont: 130 West 44th St.

#### The Standard NY

Polshek Partnership: 848 Washington St.

#### The Blue Moon Hotel

Jung Wor Chin: 100 Orchard St.

#### The Downtown Hotel

The Rockwell Group: 377 Greenwich

#### Columbus (renovation)

Steven Scarloff: 6 Columbus Circle

#### The Night Hotel

Mark Zeff/The Rockwell Group: 132 West 45th St.

#### Thor Tower

Kohn Pedersen Fox: Willowy Sq., Brooklyn

#### Hotel QT

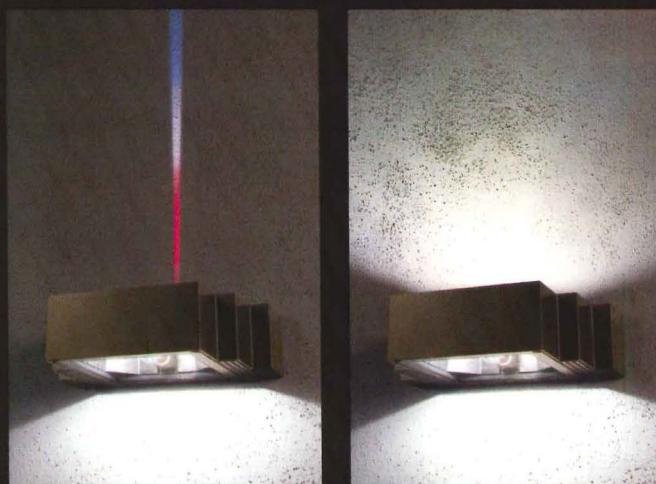
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## SOM's skyscraper innovation has moved to China

Skidmore, Owings & Merrill (SOM), architect of New York's planned 1,776-foot Freedom Tower, is known perhaps more than any other firm for its skyscraper design. SOM structures, such as the Sears Tower in Chicago and Lever House in New York greatly helped establish the U.S. as the world's leading tall-building innovator during the latter half of the 20th century. But, as critic Nicolai Ouroussoff recently wrote in *The New York Times*, the firm's recent domestic tall building work has been more formulaic. What he didn't mention was that the firm is still putting together groundbreaking work in China, which has become a laboratory of sorts for the firm's experimental skyscraper design work.

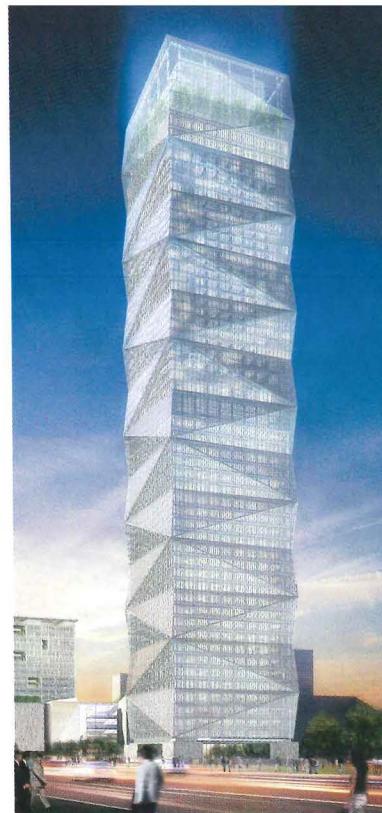
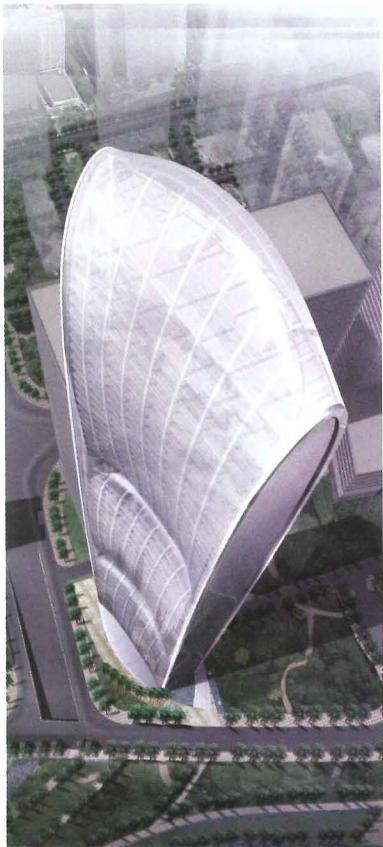
The company has over 50

buildings and planned projects in China, and more than 15 of them are skyscrapers. Most utilize the firm's own engineers. Firm partner Tom Kerwin says that Chinese clients are much more willing to embark on experimental work than their counterparts in the U.S., who are often hesitant to take commercial or security risks, or to upset neighbors or trade unions.

"There's a commitment to upgrading the quality of life in China," says Kerwin. "They take real pride in pushing the envelope." Lack of public dissent, cheaper building materials, a demand for urban density and green buildings, and an intense desire for international recognition also encourage such work.

The firm's most recent commission is the 1,000-foot-tall Pearl River

**The Pearl River Tower (left) in Guangzhou is designed to capture wind power. Poly International plaza (right) will have a large open-air terrace at its center.**



**Jiaoao Tower (left)'s exterior appears to have paper-like folds. The Nanjing Jinling Hotel will twist on its way up.**

Tower in Guangzhou, for the Guangdong Tobacco Company, which SOM says will be one of the greenest buildings in the world. The project's green elements include a water-retention area; basement fuel cells, which produce electricity by extracting hydrogen from natural gas; facade-integrated photovoltaics; a condensate-reclamation system that collects water and reuses it; and stack ventilation, which captures and uses heat caught between the building's double-layer facade. The tower's curved shape forms two apertures where air is directed into wind turbines.

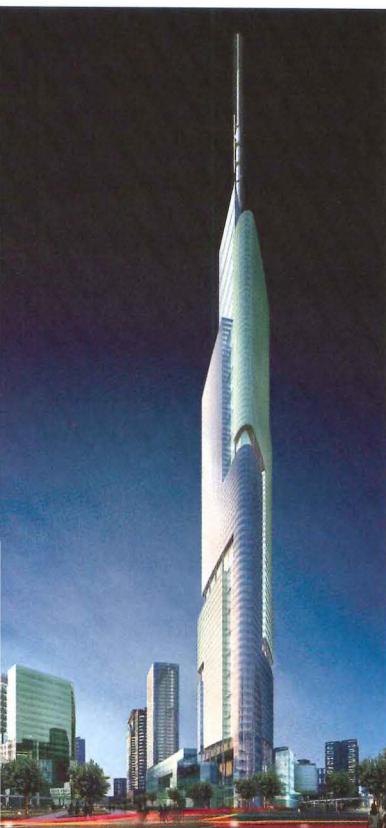
### Some of SOM's other towers in China:

- The 1,050-foot-tall Nanjing Jinling Hotel, which also features offices and apartments, is sited in the heart of Nanjing's commercial center. The building's skin forms a diagonal grid that functions like a twisting tube. It looks a lot like one of the firm's original designs for the Freedom Tower. Construction should wrap up in 2008.
- The 760-foot-tall Jiaoao Tower, an office and hotel complex in Nanjing, will feature a glass facade that alternately folds inward and outward, articulating a sense of movement. Like New York's new Hearst Tower, it is built around a diagonal-grid bracing system, an efficient support for lateral load that uses less steel than the typical skyscraper. The building's double-skinned surface will provide solar shading and create an insulating climate chamber to reduce temperatures inside the building. Completion is set for later this year.
- Nanjing Greenland, a complex of three steel-framed, concrete-core glass towers. The tallest building, at least 985 feet tall, will include a faceted-glass surface imbedded with irregularly spaced slots for green space that "march vertically up the facade," according to Kerwin. The other towers, about 100 meters tall, will include roof gardens and a sunken green square.
- The 990-foot China World Trade Center, in Beijing, will be the centerpiece of Beijing's developing business district when completed in 2007. The glass-and-steel tower gradually steps back as it rises, looking a bit like a giant square telescope. Its facade is layered with a series of faceted, vertical glass-and-metal fins,

creating a texture that the firm says will look somewhat like a waterfall.

• Poly International Plaza, in Guangzhou, will feature a glass curtain wall, and will be built with metal cross bracing, allowing for column-free space for office floors, and letting light to enter all areas of the building. A large opening halfway up the building will reduce wind loads, and also serve as an outdoor terrace. Completion is planned for 2007.

Meanwhile, progress on the Freedom Tower has languished due to a lack of tenants, and its original design was compromised due to security concerns. Perhaps it's a



Nanjing Greenland's facade will include slots for green space.

symbol of America's lack of innovation, even complacency? "There are some places in the world that have this optimism and can-do attitude. Sometimes I wonder if we've lost that," says SOM engineer Bill Baker. The Empire State Building, for example, was built in 18 months. S.L.

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## Architects to transform two museums into National Museum of China



The People's Revolutionary Museum and the Chinese National History Museum, which both occupy a vast Stalinist building on the eastern side of Tiananmen Square in Beijing, will soon merge into a single National Museum of China. The new museum will remain in the same home, but von Gerkan, Marg und Partner (GMP), from Hamburg, Germany, will design a comprehensive renovation.

GMP's design is a careful study in deference to context. It preserves the building's eastern facade (which faces Tiananmen), and the northern and southern wings, which are built in the Socialist Realist style typical of grand, civic projects of 1950s China. These spaces will house the bulk of the museum's galleries and will undergo refurbishment.

The existing core will be



**The museum, with a cantilevered roof, will be located on Tiananmen Square.**

replaced with a large public space crowned by a large

cantilevered roof that contains exhibition spaces punctured by an intricate series of rectangular openings, evoking the hutong layout of old Beijing. Access for passersby will be allowed in the area below, creating an interior public plaza.

The large addition alludes to traditional Chinese temple architecture, found in the Forbidden City, opposite the museum on the northern side of

the Avenue of Eternal Peace. In addition, it brings the museum to the height of the Great Hall of the People, which faces it from across the square.

GMP was awarded the project after an international competition that included Foster and Partners, Herzog & de Meuron, the Cox Group, OMA, RTKL, and KPF.

"Our design was focused more than the others on Tiananmen Square," says GMP's Stephan Rewolle. "We did something that comes natural [for the setting]."

Completion is expected in time for the 2008 Olympic Games. In addition to the museum, GMP is designing developments in Beijing, Dalian, Shanghai, Guangzhou, Fushan, and Shenzhen.

"We didn't plan to come to China. It was a coincidence that we did an entry for the German School in 1998," says Rewolle, who nearly seven years later now heads an 18-person Beijing office. The firm recently opened offices in Shanghai and in Hanoi, Vietnam. *Daniel Elsea*

## Chinese cities compete for dynamic opera houses

To some extent, China's construction boom has become an exercise in architectural one-upmanship, with cities competing with one another to erect high-profile buildings by famous architects. For many years, skyscrapers have been the most popular way of attracting attention.

Now opera houses are taking center stage.

Beijing and Shanghai are both capping recent growth with extravagant opera houses designed by French architect Paul Andreu. The Beijing project, the elliptical-shaped National Grand Theater (often likened to an egg), measures 1.6 million square feet and should be completed at the end of this year. Following their lead, other fast-developing cities are

building grand performance facilities that express a level of cultural achievement. The Guangzhou Opera House, designed by Zaha Hadid, for example, broke ground in mid-



**Carlos Ott's Wenzhou Grand Theater.**

January and is part of the city's plans for urban redevelopment that will cost \$22 billion. Sitting on the banks of the Zhu Jiang River, the fluidly designed Opera House will include

an "organic twin-boulder design," made up of two separate but connected buildings. Located at the foot of a major boulevard as well as on the waterfront, it will provide open access to the water and a strong connection to the cityscape.

Uruguayan architect Carlos Ott, who designed the Bastille Opera in Paris (1989), is now busy on four opera houses in China. Working with

the Canadian firm Petroff Partnership, Ott has designed projects in Hangzhou, Wenzhou, Zhengdong New Town, and Dongguan, all awarded through competitions.

Ott's Hangzhou Grand Theater—which includes a 1,600-seat opera hall, a 600-seat concert hall, and a 400-seat theater—opened near the end of 2004. The architect describes the moon-shaped building as "a pearl in its oyster shell."

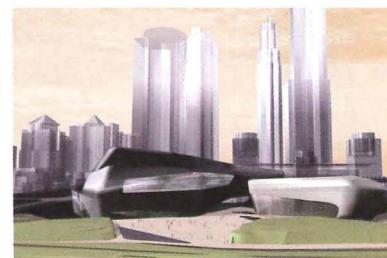
Nearing completion in Guangdong Province, Ott's Dongguan Grand Theater will feature a 1,600-



**Rendering of now-complete Hangzhou theater.**

seat opera house and a 400-seat multipurpose hall, designed with Tongji University. In Zhejiang Province, Ott's accordion-shaped Wenzhou Grand Theater is scheduled to be completed this year. The building will house a 1,550-seat opera house, a 650-seat concert hall, and a 200-seat theater. And in the new town of Zhengdong, Ott has designed the 680,000-square-foot Henan Art Centre, which will include an opera house, concert hall, multipurpose hall, folk art museum, and fine art gallery.

With so many new opera houses opening or under way, it remains to be seen if the public will come and fill all the seats. *Aamir Wyne*



**Zaha Hadid's Guangzhou Opera House.**



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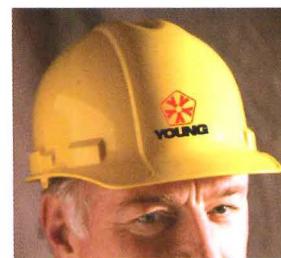
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## Tadao Ando creating bold design center for Shanghai

To commemorate the 100th anniversary of its founding, Tongji University in Shanghai will establish the Shanghai Design Center. The facility, which will be the first of its kind in China, will serve as both a research center and exhibition venue for architecture and design. It is being designed by the Japanese architect Tadao Ando.

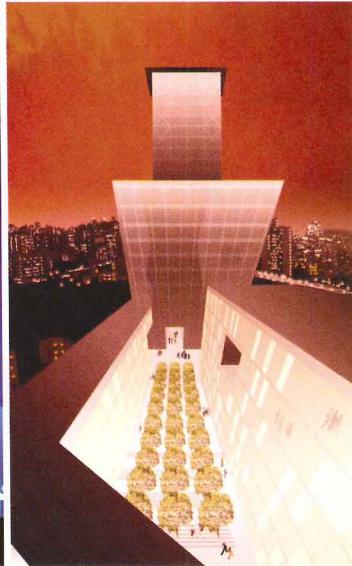
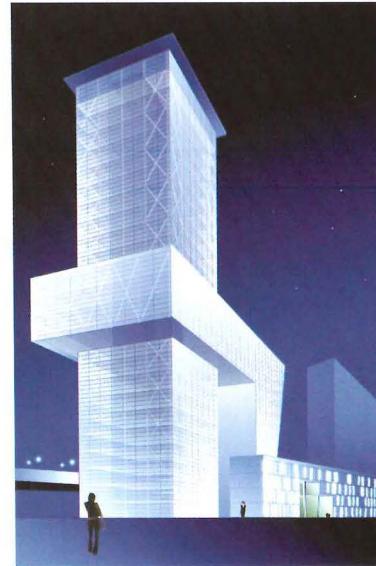
Scheduled to open in late 2007, the Shanghai Design Center represents a departure from Ando's trademark Zen-like Minimalism and his sensuous use of concrete.

The project consists of two major buildings: a 25-story tower containing exhibition rooms, offices, and studio space for design companies and local design professionals, and a four-story structure to the south, which will help frame a courtyard surrounded by galleries, show rooms, and restaurants. The court-

yard will act as a central public space for the center, serving as a venue for public events. Ando designed the tower as a "powerful symbolic shape" and conceived of the whole project "as a building [that] captures the city of Shanghai as it is, powerful and dynamic, without yielding to the enormous energy that the city radiates." His design shows a group of striking, angular blocks clad in glass curtain wall.

Designing a tall building is a relatively new challenge for Ando, who is best known for spiritual buildings, museums, and cultural facilities that are usually low-to-the-ground and often placed in picturesque natural settings.

"In every project, I seek to stimulate the place through its connection to diverse things such as the city, history, society, and nature," notes Ando. "At times, the aim is to



**The project will be a departure from Ando's traditional low, concrete structures. A courtyard will be surrounded by galleries and a restaurant (right).**

uncover the memory of place retained by the site and make it manifest through architecture," adds the architect.

Ando's commission in Shanghai points to his increasingly international stature. Before winning the Pritzker Prize in 1995, he worked mostly in his native Japan. But today, he is not only realizing work elsewhere in Asia, but

also in Europe and the Americas. His Modern Art Museum in Fort Worth, Texas, opened to acclaim at the end of 2002, and he is currently designing a new wing for the Clark Art Institute in Massachusetts. He also just completed converting the Palazzo Grassi in Venice into a contemporary art museum for the Fondation François Pinault. *Daniel Elsea*

## New city in Korea will utilize other cities' successful designs

Korea is about to implement an architectural and cultural experiment on a grand scale—a planned city.

The billion-dollar, 1,500-acre city of Songdo, built on landfill near Seoul, began in the mid-1990s. It was recently revitalized when the International Monetary Fund passed legislation allowing foreign real estate investment in Incheon, a district that includes the future Songdo. The hope is that Songdo will serve as an international trade hub.

Historically, planned cities have not lived up to expectations as vital centers of commerce. But several key factors make Sogndo's start auspicious. The Korean government has created a Free Economic Zone for the area, and there is growing financial support from international governments and private investors. The Gale Company, a leading U.S. real estate



**The new city, near Seoul, will include canals, a large rectangular park, and dynamic architecture.**



than in nearby (and over-crowded) Seoul.

The developers selected Kohn Pedersen Fox (KPF) to be the master planner for the project. Its design works like a collage of other cities' successful features.

The city will have a series of canals and utilize water taxis, like Venice. A long rectangular park like New York City's Central Park will be located in the center of the city with an adjacent museum. The hierarchy of space will be a radial sector like Vienna and Paris.

Among incentives for investors are cheap land, which can be bought at 25 percent to 50 percent of fair market value, and lower taxes, which will be 17 percent lower

in the city center, and gradually spread out like a tent, ending finally in a garden that surrounds the city. Congestion will be avoided by the relaxation of building density. Thirty percent of the development will be open space, which will allow for the overall site to be divided into rings of living space: pedestrian in the middle, green space at the edge, hospital and cultural centers on the outside. The site will function as a "fully diversified organic whole like an ocean liner," says James Von Klemperer, a principal at KPF.

Another goal of the plan, he adds, is to create a World's Fair of architectural building types by inviting other international designers to contribute to the new city. Inviting other architects will also prevent the city from becoming overplanned or too closely controlled. *Karen Lindskog*



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## Record News

### Integrated firms dominate architecture practice ranking

Just a fraction of U.S. architecture firms are truly large businesses. According to an American Institute of Architects Firms Survey, last conducted in 2003, sole-practitioner offices make up almost one-third of architecture practices. Firms with more than 100 seats make up just 2 percent.

Despite these demographics, RECORD thought its readers would be interested in which firms are the biggest of the big. As we did last year, we have ranked architectural practices on the basis of annual revenue using data gathered by our sister publication, *Engineering News-Record*, for its own Top 500 Design Firms list.

The chart below is somewhat different from our 2005 list of the largest architect-led firms [RECORD, July 2005, page 78]. Last year's table included only "pure" architecture firms or architec-

ture-prime firms, and we ordered those firms on the basis of total design revenue. Therefore, firms were ranked on the basis of revenue generated not only from architecture, but also from services like engineering, planning, and construction.

By contrast, the 2006 list ranks firms on the basis of revenue derived from architectural services only. However, the table captures many integrated firms with sizable architecture practices. Several of these classify themselves principally as engineering companies.

*Joann Gonchar, AIA*

To participate in the ENR survey, which serves as the basis for this ranking, contact Virgilio Mendoza at (212) 904-6371, or [virgilio\\_mendoza@mcgraw-hill.com](mailto:virgilio_mendoza@mcgraw-hill.com). To view the ENR Top 500 Design Firms list, go to [www.enr.com](http://www.enr.com).

#### HOW TO USE THE TABLE

Companies are ranked according to revenue for architectural services performed in 2005 in \$ millions. Firms that responded to *Engineering News-Record's* annual Top Design Firms survey submitted these revenue figures. For an extended list see [www.architecturalrecord.com/people/](http://www.architecturalrecord.com/people/)

Some markets may not add up to 100 percent due to the omission of other market categories, and rounding. The McGraw-Hill Companies publishes both ARCHITECTURAL RECORD and ENR.

#### Key to how firms classify themselves:

A = Architect   AE = Architect-Engineer  
P = Planner   AEC = Architect-Engineer-Contractor  
EA = Engineer-Architect   Other combinations possible

**General building:** Commercial buildings, offices, stores, educational facilities, government buildings, medical facilities, hotels, apartments, housing, etc.

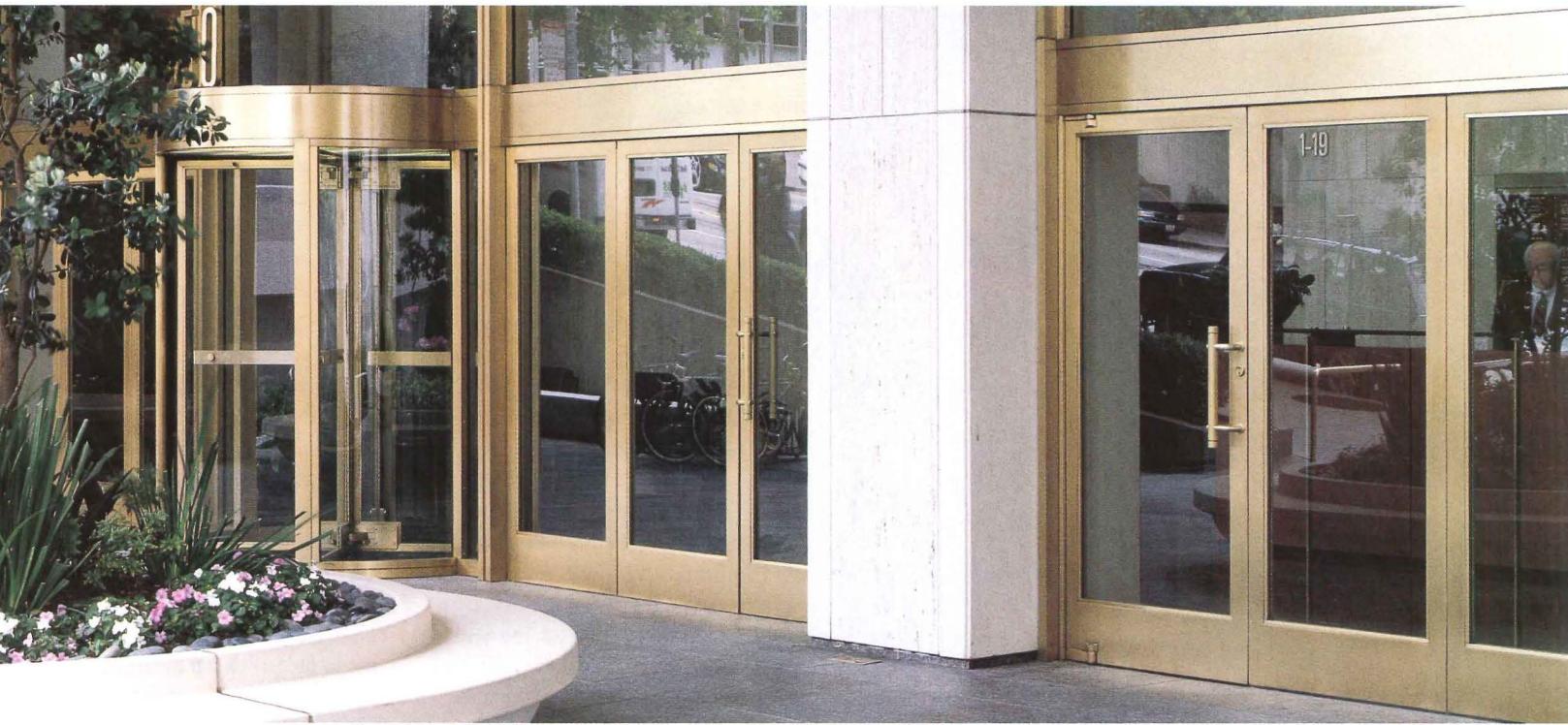
**Manufacturing:** Auto, electronic assembly, textile plants, etc.

**Transportation:** Airports, bridges, marine facilities, railroads, etc.

#### 2006 LARGEST ARCHITECTURE PRACTICES

FIRMS LISTED BY 2005 ARCHITECTURE REVENUES AS REPORTED TO ENR IN ITS TOP 500 DESIGN FIRMS SURVEY	FIRM TYPE	ARCHITECTURE REV. TOTAL	INT'L	TOTAL REV. DESIGN	GENERAL BLDG.	MANUF.	TRANSP.
<b>1 AECOM TECHNOLOGY CORP.</b> , Los Angeles, Calif.	EA	\$407.4	\$0	\$2,588.0	21%	0%	46%
<b>2 GENSLER</b> , San Francisco, Calif.	A	\$398.2	\$35.1	\$406.4	89%	0%	11%
<b>3 URS</b> , San Francisco, Calif.	EAC	\$348.0	\$56.0	\$3,303.0	16%	3%	32%
<b>4 HOK</b> , St. Louis, Mo.	AE	\$278.3	\$90.3	\$396.2	93%	0%	7%
<b>5 PERKINS+WILL</b> , Atlanta, Ga.	A	\$182.8	\$21.9	\$182.8	100%	0%	0%
<b>6 SKIDMORE, OWINGS &amp; MERRILL LLP</b> , New York, N.Y.	AE	\$172.0	\$81.0	\$223.0	91%	0%	9%
<b>7 HDR</b> , Omaha, Neb.	EA	\$139.3	\$4.3	\$670.3	20%	1%	44%
<b>8 HKS, Inc.</b> , Dallas, Texas	AE	\$133.4	\$7.4	\$219.8	100%	0%	0%
<b>9 RTKL ASSOCIATES INC.</b> , Baltimore, Md.	AE	\$120.4	\$32.5	\$173.3	97%	0%	0%
<b>10 CALLISON</b> , Seattle, Wash.	A	\$114.0	\$31.0	\$114.0	100%	0%	0%
<b>11 HEERY INTERNATIONAL INC.</b> , Atlanta, Ga.	AE	\$109.5	\$4.7	\$130.9	92%	2%	6%
<b>12 LEO A DALY</b> , Omaha, Neb.	AE	\$106.5	\$1.7	\$162.1	100%	0%	0%
<b>13 SMITHGROUP</b> , Detroit, Mich.	AE	\$105.9	\$1.0	\$131.7	100%	0%	0%
<b>14 PERKINS EASTMAN ARCHITECTS</b> , New York, N.Y.	A	\$91.0	\$8.0	\$91.0	100%	0%	0%
<b>15 CANNON DESIGN</b> , Grand Island, N.Y.	AE	\$78.9	\$8.4	\$102.4	100%	0%	0%
<b>16 ZIMMER GUNSUL FRASCA PARTNERSHIP</b> , Portland, Ore.	AP	\$77.2	\$2.2	\$84.0	92%	0%	0%
<b>17 KOHN PEDERSEN FOX ASSOCIATES</b> , New York, N.Y.	A	\$68.0	\$42.0	\$88.0	85%	0%	15%
<b>18 HMC ARCHITECTS</b> , Ontario, Calif.	A	\$64.0	\$0	\$64.0	100%	0%	0%
<b>19 HILLIER ARCHITECTURE</b> , Princeton, N.J.	A	\$62.3	\$4.3	\$62.3	100%	0%	0%
<b>20 ARQUITECTONICA</b> , Miami, Fla.	A	\$61.2	\$18.9	\$61.2	100%	0%	0%
<b>21 CORGAN ASSOCIATES</b> , Dallas, Texas	A	\$58.3	\$0.3	\$62.4	44%	0%	44%
<b>22 BURT HILL</b> , Butler, Pa.	AE	\$55.6	\$6.9	\$55.6	100%	0%	0%
<b>23 WIMBERLY ALLISON TONG &amp; GOO</b> , Honolulu, Hawaii	A	\$51.7	\$34.3	\$65.9	100%	0%	0%
<b>24 STV GROUP</b> , New York, N.Y.	EA	\$50.6	\$0	\$215.9	17%	0%	83%
<b>25 GRESHAM, SMITH AND PARTNERS</b> , Nashville, Tenn.	AE	\$49.3	\$0.3	\$90.5	52%	1%	29%

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## Record News On the Boards

### Fuksas designing urban complex in Marseilles

Massimiliano Fuksas has won the Marseilles-Euroméditerranée Development Agency's competition to design Euromed Center, a multi-

Joliette, is not intended to be "an isolated and introverted block next to the city, but a real urban generator," says Fuksas.

The project also has a poetic dimension," he says. Its design brings to mind sailing ships, harbor quays, and marine life. A series of folded structures beside the park is planned to provide a sheltered area for public exhibitions. Influencing the design was the surrounding urban fabric's "layering and complexity," says Fuksas.

Fuksas joins other architects, notably Zaha Hadid, whose design for shipping company CMA CGM's high-rise headquarters won over a selection panel last year, in the \$3.7 billion, 15-year urban renewal scheme of Marseilles. Construction on the \$380 million project is set to be completed by 2009.

Robert Such

This exhibition structure is part of the plan.

purpose urban complex in the Mediterranean port city of Marseilles, France.

Covering 18.5 acres, Euromed Center includes a park and pedestrian-only street, bordered by offices, retail space, a conference center, a movie theater multiplex, and a 210-room hotel. The \$364 million project, located in the dockside redevelopment area of La

### Norten in South Beach

Mexican architect Enrique Norten of Ten Arquitectos has designed a \$70 million mixed-use development called Lincoln East, which will be located next to Miami Beach's popular Lincoln Road pedestrian promenade.

The project, the first contemporary building on Lincoln Road, is part of Lincoln East Development Group's efforts to restore the eastern section of Morris Lapidus's Lincoln Road Mall. Norten's concrete, steel-and-glass structure will be woven into the shopping area's historic context. BEA International Architects are architects of record for the project.

The building will have a dramatic 54-foot-long cantilever and will include about 150 residential units ranging from 800 to 1200 square feet. The project will also include 10,000 square feet of retail

space, 500 parking spaces, and a rooftop pool.

Glenn Boyer, director of development for Lincoln East Development, points to a wealth of architecture on the road, including Frank Gehry's New



The building will have a 54-foot-long cantilever.

World Symphony Theater, Norten's new development, and the restoration of Lapidus's mall. He says the area will become the "cultural and architectural center of Miami Beach." Norton was recently chosen to design the Guggenheim Museum branch in Guadalajara, Mexico [RECORD, July 2005, page 28]. Jennifer LeClaire

## News Briefs

### New street furniture for New York

The New York City Department of Transportation recently signed a contract ordering thousands of bus shelters, newsstands, and public toilets designed by Grimshaw Industrial Design, a division of London-based Nicholas Grimshaw and Partners, produced for the Spanish company, Cemusa. The deal is worth about \$1 billion. The line includes 3,300 bus shelters, 330 newsstands, and 20 automatic toilets, all made of stainless steel, anodized aluminum, and tempered glass.

"Working in New York, you are able to achieve a greater economy of scale with a large production run," says Duncan Jackson, head of industrial design for Grimshaw. "We're able to work with better materials and have stronger quality controls."

The new structures balance

robustness with lightness, such as in the bus shelter, which has a cantilevered design with just 2 feet on the ground, thanks to a large plate anchored underneath the pavement. The firm eliminated painted finishes



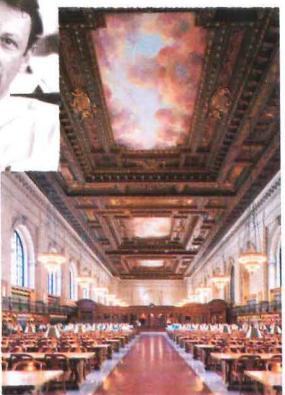
New bathrooms and newsstands.

and plastics, which are less durable over the long term. According to Jackson, the goal is to have a "neutral impact regardless of the site," a welcome relief for New York's cluttered streetscapes. *Alan G. Brake*

Appalled by the formulaic public projects that segregated residents in sterile apartment towers cut off from the surrounding neighborhood, Davis and his associates proposed ways to integrate affordable housing into the city fabric. The firm's first opportunity

to realize its vision was Riverbend, a 628-unit, state-funded housing development on a triangular plot in Harlem. Waterside, a rental housing project, followed in 1974. In the 1980s, after funding for subsidized housing all but disappeared, private sector projects took cen-

ter stage. Davis's firm, then known as Davis, Brody & Associates, won the AIA's Architecture Firm Award in 1975. Davis also received the Thomas Jefferson Award for Public Architecture and the American Institute of Arts and Letters Arnold W. Brunner Prize. *Naomi Pollock*



Davis (left), and the renovation of the NYPL Reading Room.

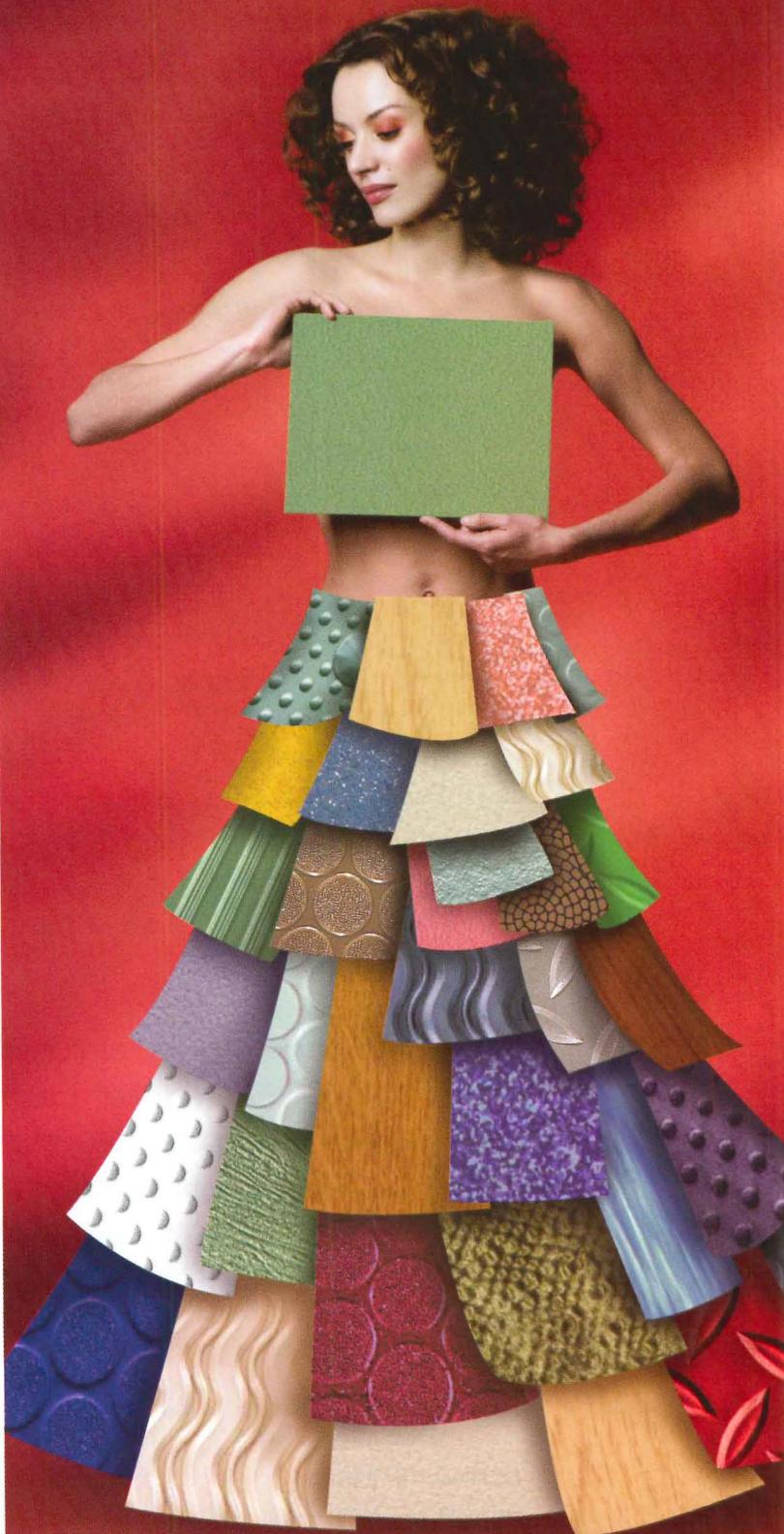
### Architect Lew Davis dies

Architect Lewis Davis, FAIA, passed away on May 21 at the Mount Sinai Medical Center in New York City. He was 80. Together with Samuel Brody, Davis cofounded the Manhattan firm known today as Davis Brody Bond.

Davis's firm is well regarded for its contributions to New York City, including the Samuel B. and David Rose Building at Lincoln Center for the Performing Arts; the restoration of several spaces inside the New York Public Library's main branch; and an addition to the Harvard Club of New York. The firm is the associate architect for the World Trade Center Memorial, and the design architect for the Memorial Museum.

The firm initially gained prominence by redefining subsidized housing in the 1960s and '70s.

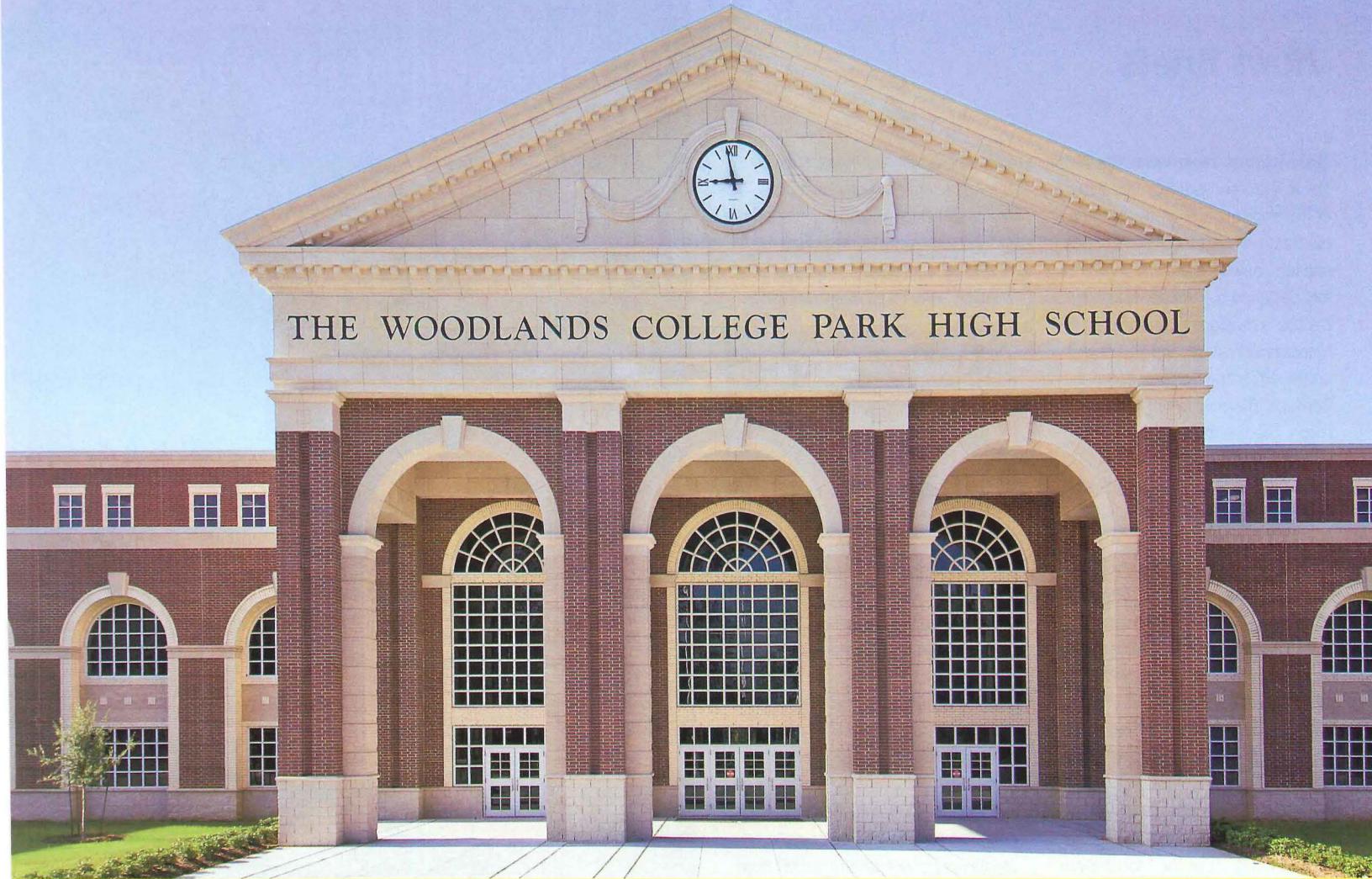
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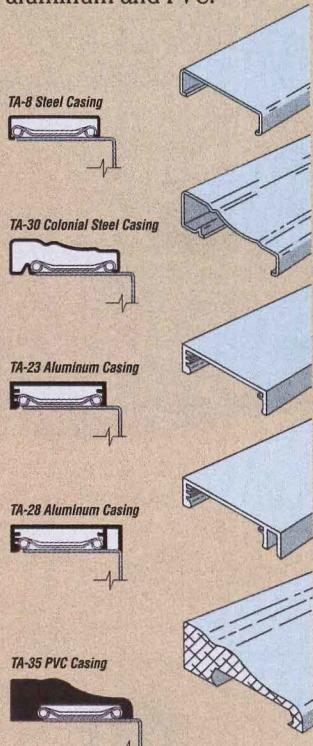
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## Design

### Bercy Chen Studio: Seeing through and beyond



It seems strange that two very international young architects would find Austin, Texas, to be the right place to practice architecture, but Thomas Bercy and Calvin Chen (top left and center, respectively), partners in Bercy Chen Studio, have found the capital of Texas to be neutral ground for their particular approach to the craft.

Bercy grew up in Belgium and Chen in Taiwan and Australia. The two met while attending the University of Texas at Austin, where both received degrees in architecture (Bercy also has an engineering degree). "Austin couldn't be any more opposite a place as where we're both from," says Bercy. Chen agrees. "Because it's so different from either Brussels or Taipei, where space is so rare and precious, Texas is a good place bring in our influences and start from scratch in a place with room to do that. We have a third approach to architecture, neither Modern nor Postmodern."

Taking projects from schematics to construction, the six-person firm has billed itself as a design-build studio since it began in 2001. "We found that we could accomplish more interesting things with small budgets if we just did them ourselves," says Bercy. According to the architects, simple touches like incorporating a clear plastic pipe into the ceiling of a house to introduce a visible water element and display part of a rainwater-collection system confused contractors, who came back with an exorbitant price to follow through. "The pipe was just clear instead of opaque," says Bercy, "and it's those sorts of small things that we find we can complete without having to explain to someone else."

Completing several residences in and around Austin has given Bercy Chen Studio a reputation as innovative architects willing to give clients more than the expected, even if the materials they use are ordinary. Chen and Bercy admittedly reference the architecture of Asia, Europe, North Africa, and South America in their work, but they also bring a sensitivity to the immediate environment to their projects. "Designing in a hot climate like Austin, we try to incorporate water features as much as possible," says Bercy.



Annie Residence, Austin, Texas, 2003

This 2,000-square-foot home for two related families was separated into two pavilions connected by a glass corridor, with a central reflecting pool between the two volumes. Each pavilion contains a central service core clad in red or blue acrylic panels over a metal frame.



Skybridge Apartments, Austin, Texas (ongoing)

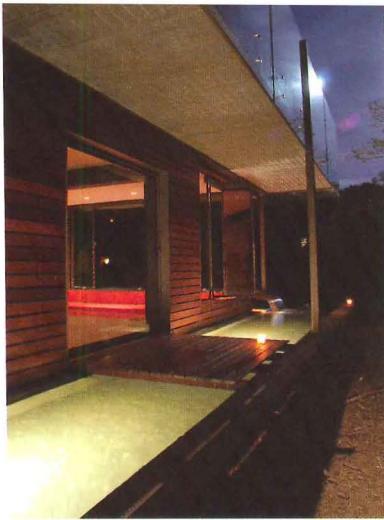
A 120-unit town-house development, Skybridge's two- and three-bedroom units will surround a park. The project includes a clubhouse, fitness center, basketball and volleyball courts, a pool, and outdoor amphitheater. The first and second stories will be interrupted to allow for views and circulation.

Reflecting pools, common in Taiwan or North Africa, often find their way into the firm's designs. "We like the reflective quality of surfaces like water," he says. "Surfaces such as glass, acrylic, water—it reminds us of the roof gardens in Casablanca or Marrakesh. And it literally cools the space."

Reflective surfaces; connections with the site, such as using architecture as a frame for outside views; and the concept of "borrowed landscape" are a few of the design tools that Bercy Chen Studio applies to create unique spaces. "We love the idea of situating a building so that it frames a view through and beyond," says Chen, describing how architecture can create private areas that look beyond a confined space. "It's layering and an awareness of the environment," he says.

While Bercy Chen Studio continues to explore its craft, the world seems to be more aware of the firm. It was one of New York's Architectural League Emerging Voices in 2006 and has been commissioned to create both a 120-unit condo complex and a spa retreat near Mexico City. "We know we'll have to make compromises to build commercial buildings," says Bercy, "but we'll continue to respond to the environment, take the essence of history, and make it new." *Ingrid Spencer*

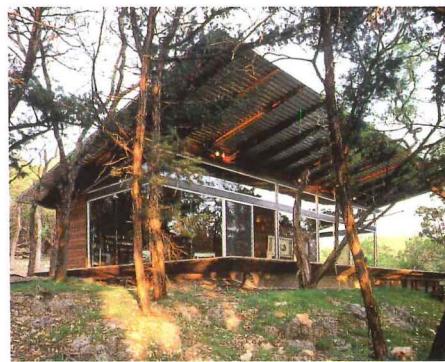
For more photos and projects by Bercy Chen Studio, go to [archrecord.com/archrecord2/](http://archrecord.com/archrecord2/).



**Beverley Skyline Residence,**  
**Austin, Texas, 2004**

An extensive remodel of a 3,500-square-foot 1970s home, this project entailed reconnecting the house to

the steep topography of its site and using windows as a frame for expansive hill-country views. Glass was also used to seemingly dissolve corners and as railings for decks.



**Lago Vista Residence,**  
**Lago Vista, Texas, 2004**

This vacation home has 900 square feet of interior space and 600 square feet of outdoor porch. A simple shed structure with a cantilevered roof, the house appears to float above the land because of its cantilevered concrete structure.

## Work

### Surviving internships takes planning—and mentors



Schemata Workshop, from left:  
Peggy Heim; Mike Denlinger;  
Mike Mariano; Grace Kim.

Negotiating a fair salary and benefits is a thorny subject that many architecture interns would rather avoid—school leaves them largely unprepared for it, and woe is the person who seeks guidance from friends or coworkers. One young architect broached the compensation question on a Seattle-area listserv recently, says Grace Kim, AIA, and was admonished for straying too close to the "taboo" area of fees. What's an intern to do?

Kim, who was the first recipient of the American Institute of Architects' Emerging

Professionals Mentor Award in 2004, says that compensation is among the top concerns she's encountered during the 13 years that she's been counseling architects. She's dealt with it so many times that writing her book, *The Survival Guide to Architectural Internship and Career Development*, published this spring by John Wiley, flowed like a stream of consciousness, she says.

Tackling compensation, Kim advises interns to value themselves more highly: In some respects, recent graduates have an edge on established professionals. "They're coming out of school knowing new technologies like Building Information Modeling," she explains. "That's a knowledge base that we would have to pay a lot of money to learn."

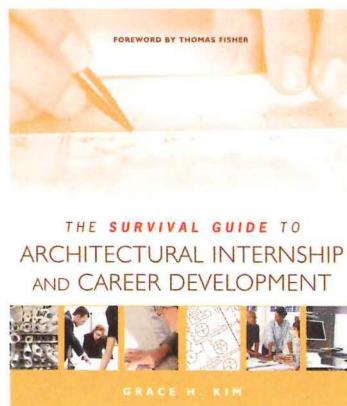
While Kim's book is mainly aimed at students and first- or second-year interns, it contains something for every architect, including chapters on nontraditional career paths

and how to start a practice. This is a topic that Kim knows well, since she wrote *The Survival Guide* while she and her husband, Mike Mariano, were founding their own Seattle-based firm, called Schemata Workshop.

For those who don't have time to read the book, Kim's vocational advice is twofold: Younger architects, in particular, should set career goals and revisit them regularly, and everyone should seek the counsel of multiple mentors. The benefits of mentoring run both ways. "I get a lot back when I do it," Kim explains. "Sometimes it's just personal satisfaction, which is plenty, but other things also come of it, whether it's job leads or meeting people I wouldn't have normally met."

Giving is something of a way of life for Kim and Mariano. Their practice participates in the "1% Solution," a program that encourages architects to work pro bono for nonprofits and other needy community groups. And, in a case of practicing what they preach when it comes to designing pedestrian-friendly environments, the couple refuses to own a car—opting, instead, to share one through a system called Flexcar.

While the 37-year-old Kim has no regrets about her career, she admits, ironically, that she wishes she'd completed her Intern Development Program requirements faster. Her delay wasn't a result of bad mentoring, Kim observes, but was due to her lack of a larger career plan: something she hopes that *The Survival Guide* will encourage young architects to take seriously. *James Murdock*



For an excerpt from Grace Kim's book *The Survival Guide to Architectural Internship and Career Development*, visit [archrecord.com/archrecord2/](http://archrecord.com/archrecord2/).

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# Guilt by association: political expression and architecture

## Critique

By Michael Sorkin

I felt a certain disquiet at ARCHITECTURAL RECORD's recent coverage of the Richard Rogers flap [April 2006, page 33]. As the magazine reported, Rogers was threatened with the loss of two giant commissions in New York—the \$1.7 billion expansion of the Jacob K. Javits Convention Center and the \$1 billion Silvercup Studios project (sound stages, offices, and apartments on the Queens waterfront)—for his (guilt by) association with Architects and Planners for Justice in Palestine (APJP), a small British organization that had its first meeting in Rogers' London office in early February.

Convened by his old friend architect Abe Hayem, the group (around 60 people, many of them Jewish and Israeli) agreed on the following statement of principles: "We share the international condemnation of the continuing annexation and fragmentation of Palestinian land through the expansion of illegal settlements and outposts and the construction of the Separation Wall in defiance of international law. We hold all design and construction professionals involved in projects that appropriate land and natural resources from Palestinian territory to be complicit in social, political, and economic oppression, and to be in violation of their professional ethics."

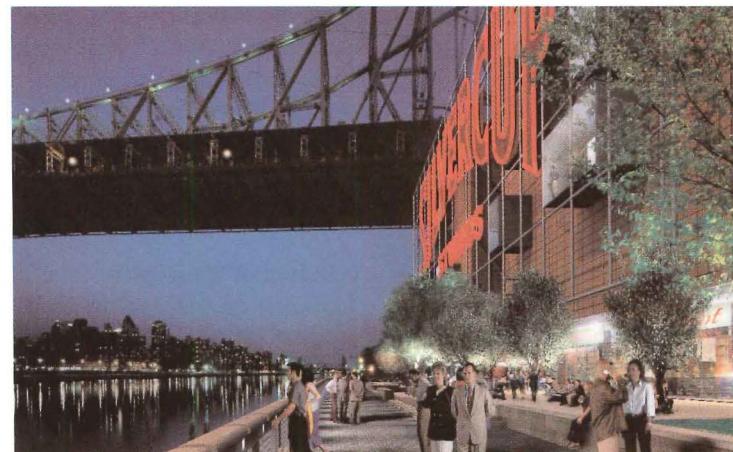
Contributing editor Michael Sorkin is the director of the graduate program in urban design at the City College of New York and the principal of Michael Sorkin Studio in New York.

### Boycotts as a tool

Although it has not yet adopted a specific course of action, APJP has been discussing a variety of targeted moves—including boycotts—aimed at the design and construction communities.

Boycotts—embargoes or sanctions, as they're called when governments apply them, as the U.S. currently does against the Palestinian Authority (also embargoed by Israel) and Cuba, among others—are a widespread and often effective means of political expression. Most of us have probably participated in a boycott at one time or another, forgoing trips to apartheid South Africa, eschewing grapes on behalf of California farm workers, or skipping Dixie Chicks concerts in support of Bush. The risk in the tactic is that the brush can be too broad, leading to unanticipated downside consequences; there was, for example, much discussion during the South Africa boycott of its potential economic effects on ordinary people.

In the case of Israel, such actions are especially fraught. For years, the country was the object of an Arab boycott that extended to companies doing business with it. The craven acquiescence of many American corporations in this ban is a sorry, if scarcely unusual, chapter in the history of big-business ethics and one of the reasons that legislation was passed in the 1970s to stop such collusion in assaulting Israel's fundamental right to exist. And it is true that disproportionate opprobrium is directed at Israel by



One of the projects caught up in the controversy over Rogers's political activities is a \$1 billion mixed-use complex for Silvercup Studios in Queens that will include apartment towers, an office tower, retail, and video studios.

groups and media that take far less interest in the behavior of other regimes in the area—which include some of the vilest on the planet. A current attempt to organize a general academic boycott of Israel by British academics is being resisted both for being undiscriminating in its target and an affront to academic freedom, feelings I share. (I find

Israel's repeated closing of Palestinian universities repugnant for similar reasons.) None of this, however, contravenes either the right or the duty of people of conscience to act against injustice via nonviolent, democratic means, including boycotts.

Although the idea of some form of directed boycott was simply



Rogers was hired to design a \$1.7 billion expansion of the Javits Convention Center (above).

discussed by the APJP, it was enough to generate a chorus of outraged calls from New York officials, including State Assembly Speaker Sheldon Silver, Comptroller Alan Hevesi, and New York Congressman (and recent mayoral candidate) Anthony Wiener, among others, to dismiss Rogers from the Javits Center job and withdraw tax credits from Silvercup should Rogers continue as its architect. At the same time, he was hastily summoned to New York by his client, Charles Gargano, chair of the Empire State Development Corporation, to account for himself. The reason offered in public for this extraordinary step was that Rogers, by hosting the meeting of APJP, had supported an "illegal" economic boycott of Israel. Lurking behind this charge was a much uglier one, the thinly veiled suggestion that Rogers, by lending his weight to "bigoted" criticism of Israeli policy, was anti-Semitic, an especially pathetic accusation given the fact that Rogers's Jewish father was forced to flee fascist Italy to escape persecution and that his wife is Jewish.

In the third paragraph of the RECORD story, several names—including mine—are listed as belonging to the suspect "group." Although I have not attended any meetings or paid any dues, I have been in regular contact with Hayeem, a British Iraqi Jew who

lived some years in both South Africa and Israel before settling in London. Hayeem and Rogers have a history of shared activism and had campaigned together against apartheid, advocating the widely supported boycott (perhaps the origin of the reflexive assumption that Rogers was simply at it again). If sympathy can be conflated with membership, then I am clearly a "member" (no cards have yet been issued to be carried). APJP is an affinity group, and I have deep affinity with its point of view, which is neither unusual nor extreme: The route of the separation barrier has been declared illegal by the International Court of Justice and the United Nations, among other bodies. These are positions I've expressed in a book, *Against the Wall*, published last year. Still, seeing my name in print as a member of a group considered so dangerous that having anything to do with it would disqualify an architect from public projects in New York, gave me a chill, and I began to hear faint echoes of certain phrases in my mind's ear. "I have in my hand a list of names ... Are you now or have you ever been ...?"

### Museum of Tolerance

And not for the first time. The issue of RECORD covering the Rogers matter also contained an item about the Frank Gehry-designed Museum of Tolerance in Jerusalem [April 2006, page 43], which reported that the project's construction had been delayed because of the discovery of graves during the excavation of the site, part of an ancient Muslim cemetery. I had written skeptically about what I felt were the museum's hypocritical politics in this column some time ago [June 2004, page 117] and was vehemently attacked in a subsequent issue [August 2004, page 67] by the project's sponsor, who said my position "reeks of McCarthyism" for wondering about Gehry's thoughts on the

undertaking. He claimed that I was proposing a political litmus test as a precondition for selecting an architect. Of course, this smear entirely missed the point. I was not asking about Frank Gehry's politics in general nor his opinion on any matter unrelated to the meaning of that particular building—a project that embodied, I thought, a deeply problematic message.

The difference in the two situations is fundamental. Rogers's commissions are not in Israel or Palestine but in New York City, and the two projects have nothing to do with Middle Eastern politics, nor has anyone suggested that Rogers has in any way attempted to politicize them. Rogers has been subjected to an obscene piling-on by grandstanding local politicians—playing to New York's "sixth borough"—who have attempted to disqualify him from the two jobs for his alleged connection to positions that have absolutely no relevance to the work, save the shabby accusation that the man for whom the convention center is named, the late Senator Jacob Javits, a strong supporter of Israel (and, one might add, of the First Amendment) would have been affronted.

Where does the logic of this witch hunt stop? Will everyone in Rogers's office be obliged to sign an oath? How about the contractor? The caterer? This chain of phantom associations is the very essence of McCarthyism.

It is also part of an increasingly pervasive assault on free expression and association in the city. Performances at a local theater of a play about the young American peace activist Rachel Corrie—who was crushed in 2003 by an Israeli bulldozer while attempting to defend a Palestinian house from demolition—have been canceled under pressure. The Freedom Museum and Drawing Center have been banished from the reconstruction of Ground Zero out of fear that, in the exercise of their expressive rights, these institutions might sometime in the future support articulations offensive to our self-proclaimed

guardians of political correctness. Such actions are more worthy of the Taliban than American democracy. And the growing fortification and surveillance of both public and private realms—whether through ubiquitous security cameras, unwarranted wiretaps, or the insane bollardization of the cityscape—represent a dramatic and growing threat to the freedoms of association and assembly that are the main expressions of a democratic polity in physical space.

### First Law of Architecture

To save his commissions, Rogers, admired by many both for his remarkable buildings and his previously forthright politics, launched into a monumental grovel, orchestrated by New York master flack Howard Rubenstein, whose defense of Rogers (referred to in press releases as "Architect"—never "Lord"—Rogers) included publicizing the tidbit that he had honeymooned in Israel with his first wife and trumpeting his readiness to accept commissions there. Rogers immediately denounced the group he had recently hosted ("I am not now nor have I ever been a member"), declared himself against boycotts "of any kind" (never mind his vocal support of the anti-apartheid boycott), called a press conference to denounce Hamas, offered his ringing support for the separation barrier, and generally did what it took to obey H.H. Richardson's famous First Law of Architecture: get the job. While there may be no shame in saying what one must to escape an inquisition, Richard Rogers had the power and prestige to stand up to it, and his lightning cave-in has bolstered the enemies of free speech. Rogers isn't quite in the Elia Kazan league—though he did "give up" the APJP—but the disgrace is real.

Good career move, though. Rogers has just been hired by Larry Silverstein to design one of the new office buildings at Ground Zero. It should generate enormous fees and will offer excellent views of the Freedom Tower. ■

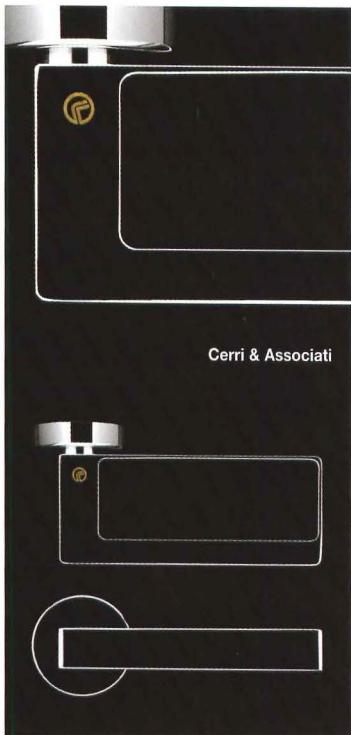
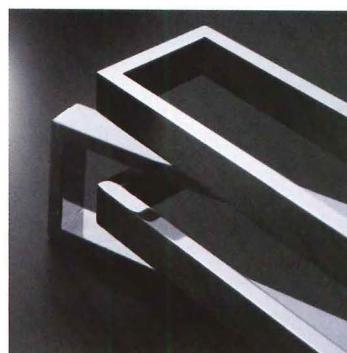


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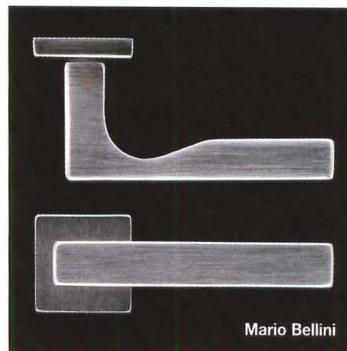
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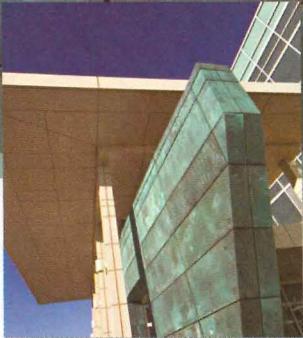
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# Besides Mendes da Rocha: What the younger São Paulo architects are up to

## Correspondent's File

By David Morton

DEPARTMENTS

In April, Brazilian architect Paulo Mendes da Rocha, long renowned in his homeland for the delicacy and technical elegance of his Brutalist architecture, was awarded the Pritzker Prize for Architecture. But one of the most common responses to the award, outside of excitement, was bewilderment. Who was this guy? Why did he win the biggest prize of all? Others saw an excellent architect who had worked outside of the international star system finally getting his due. Either way, his name was now common knowledge.

Mendes da Rocha has been the leading figure of the São Paulo, or Paulista, school of architecture for many years. But for about the past decade, a younger generation of Paulistas has been scoring achievements of its own. Many of them were Mendes da Rocha's students at the University of São Paulo, and now they are his frequent collaborators. Rarely do they work solo; they group themselves in teams, to form offices located within 5 minutes of each other near the Praça da República.

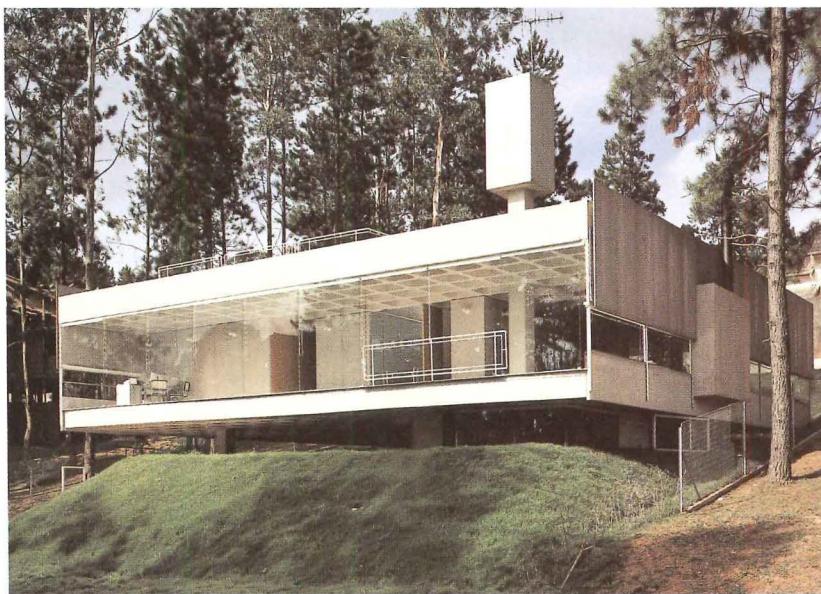
As with his own projects, Mendes da Rocha doesn't like to comment on his colleagues' work; the friendships are too close. Yet the affinities are obvious. The Paulistas seek honesty in materials, and that usually means lots of unfinished concrete. They favor monumentality, even at a domestic scale. They admire an economy of

*David Morton is a Washington, D.C.-based freelance writer who contributes regularly to RECORD.*



means and technical simplicity over computer-aided theatrics. For instance, the 2002 Mariante House (right), designed by São Paulo firm MMBB, is just two square, reinforced-concrete slabs, each 2,825 square feet, supported on four concrete pillars. The glass panels have no frames. Prefab components, such as the thin concrete-and-wood panels above the glass, are used when possible. The structure is nearly naked. "Once the concrete does what you want it to do, there's no reason to dress it up," says Angelo Bucci, formerly with MMBB, and now with the firm SPBR.

The Paulistas profess a distaste for mere formalism, when architecture is "only about language, where everything's a game," says Luciano Margotto, an architect with Núcleo de Arquitetura. "It costs a lot." For some reason, Frank Gehry



**Una Arquitetos' FDE Public School (top) replaced an ineffective facility with a luminous, open-feeling one. MMBB's Mariante House (above) employs concrete as a delicate, non-load-bearing element.**

## Correspondent's File

is a favorite target for criticism, while the Rio de Janeiro arch formalist Oscar Niemeyer receives the Paulista seal of approval. The Paulistas are conflicted: contemptuous of what they see as gratuitous trickery, but wide-eyed admirers of

the grand gesture. When a technical solution offers the opportunity for showmanship, they'll take it.

### Designs: residential, educational, transportation

A good example of such bold struc-

tural showmanship on a residential scale is the Morato House in São Roque on the outskirts of São Paulo, by the firm Andrade Morettin. It sits on a natural amphitheater of land facing a luxuriant forest. The main body of the house is a concrete box projecting over a smaller box. In the initial design, a wall of the larger box cut off views from the master bedroom to the northeast.

So the architects removed a section of the wall and used a steel brace to bolster the structure. Instead of minimizing this imposition on the purity of the box, Vinicius Andrade and Marcelo Morettin decided to enhance the visual contrast of the "strange object," as they cheerily call it. They made the brace brawny and exposed—without interrupting the view—and they painted it red.

Another project is the aforementioned Mariante House, which glows with serenity, technical finesse, and modern elegance. Yet, according to Bucci, one of the building's designers, its roots can be traced back at least 40 years, to the residence of Mendes da Rocha himself. In the Mariante House, one sees Mendes da Rocha's massing, and the same use of concrete as a delicate, non-load-bearing element—so delicate in some instances that it appears no thicker than the glass panels just below it.

For a recent pilot program, the state of São Paulo called on several Paulista firms—MMBBA, SPBR, Andrade Morettin, and UNA Arquitetos—to build schools. The 2003 commission played to the architects' strengths, providing them with a kit of prefab concrete parts and instructing them to assemble buildings on the cheap in otherwise nondescript housing projects in Campinas, a city in the state's interior. The new buildings were supposed to feel like they belonged to the commu-



The roof of Nucleo de Arquitetura's Lapa Bus Terminal expels exhaust while filtering sun.

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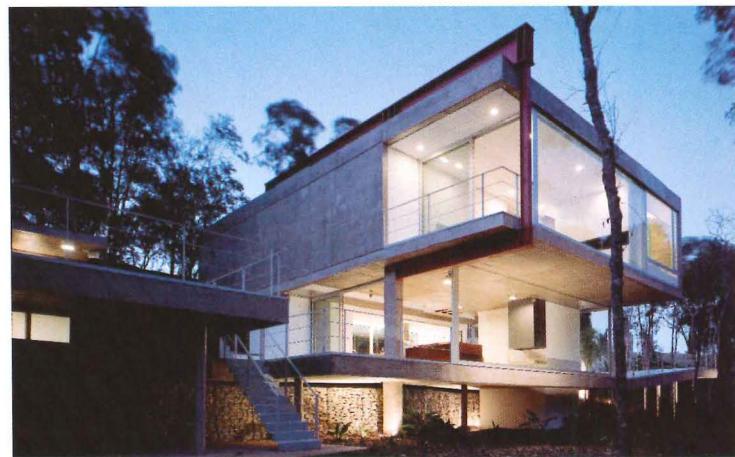
nities where they were built—not imposed, like the bunker-style schools the government usually turns out.

The previous schools shut out the community with thick walls that not only closed off students but even stopped local residents from getting to nearby community centers. In the new facilities, this will not be a problem, since all the architects made the ground floors nearly completely open to public access. The project by UNA is particularly loud about its inclusiveness. Its open, four-story stairwells function as billboard-size welcoming signals.

The late João Batista Vilanova Artigas, the first of the Paulistas, said that architecture ought to confront reality with a critical attitude, and the reality of São Paulo doesn't allow for small statements. If the schools in Campinas tower over the neighborhoods where they are built, it is because the neighborhoods will

otherwise have no distinctive identity. Behind the Paulista project is a sense that the metropolitan region around São Paulo is fundamentally broken, unsound, inequitable, but that an architect, with some heavy lifting, can help change that.

Although such commissions are rare, it's the big projects that really unleash the Paulista instincts for muscular intervention. Specifically, that means the suspension of great masses over voids. At the 71,000-square-foot Lapa Bus Terminal, completed in 2003, Núcleo de Arquitetura raised four huge concrete beams onto relatively slender pillars. This maneuver left the pedestrian level an open, uncluttered field, while above, a dramatic interplay of heavy beams alternating with delicate vaults of glass occurs. The roof, which echoes the look of a trolley shed previously on the site, was designed to expel bus exhaust while



**The central portion of Andrade Morettin Arquitetos' Morato House in São Roque is a concrete box projecting over a smaller box.**

filtering the strong Brazilian sun. Light bounces off the white beams before reaching the waiting areas.

Mendes da Rocha himself offers little guidance in describing the movement he leads. He resists any firm definition of the Paulistas or what they are trying to achieve. "Everything is in motion," he says. The response is itself typical Paulista—emblematic of an unwillingness to be labeled for

wider consumption, and a not-so-subtle disdain for the simplifications of critics and magazines. Mendes da Rocha's younger colleagues were ecstatic that their mentor was rewarded the Pritzker, but as for the attention it might grab for their own work, they were studiously indifferent. "At the moment, this is not the point," says MMBB's Fernando de Mello Franco. ■



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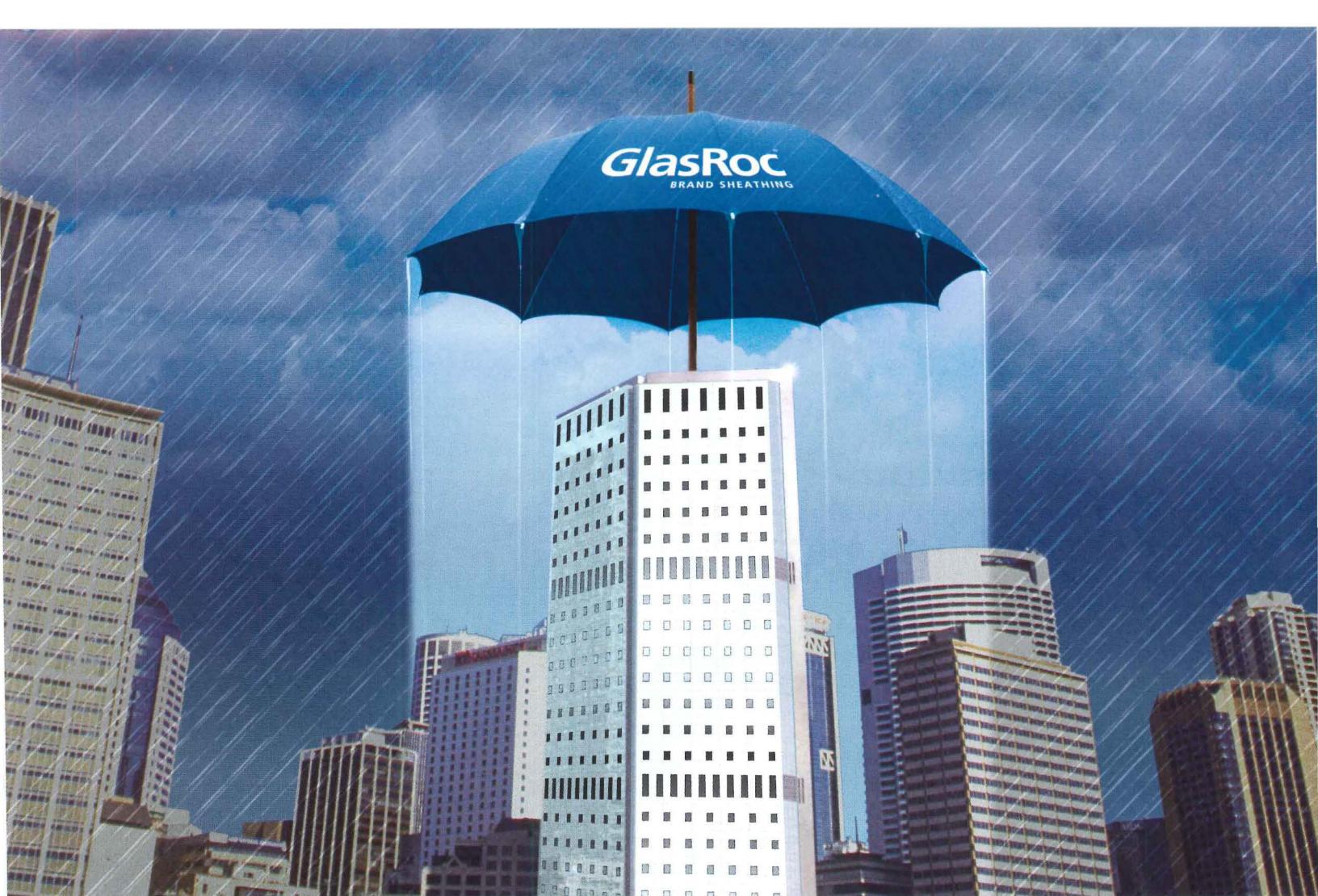
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# Zaha Hadid's retrospective summers at the Guggenheim

## Exhibitions

By Russell Fortmeyer

**Zaha Hadid.** Curated by Germano Celant and Monica Ramirez-Montagut. At the Solomon R. Guggenheim Museum, New York, through October 25, 2006.

After feting Frank Gehry with a retrospective in 2001, the Guggenheim Museum in New York City has turned its sights on another Pritzker Prize-winning celebrity architect, Zaha Hadid. She joins the exclusive company of Gehry and Frank Lloyd Wright, among the few, if not the only, architects ever given solo exhibitions at the museum.

Hadid's retrospective, which opened on June 2 with an installation by the architect, chaotically fills the museum's spiraling atrium galleries (as well as an accompanying catalog) with a comprehensive overview of her 30-year career thus far, presented through early paintings and drawings, models, photographs, renderings, products, and videos of interviews and projects. Like all retrospectives, the staggering quantity of output is the point, with no larger ambition or justification persuasively established. It's not the architect's first time at the museum—she designed the installation for the Guggenheim's 1992 exhibition of Russian and Soviet avant-garde art, which included her still-unrealized proposal to reconstitute in the museum's atrium a model of Vladimir Tatlin's *Monument to the Third International*.

After the first few galleries, which afford a rare opportunity to



The Guggenheim's atrium, with its ramp displaying the work of Zaha Hadid.

### Not just "any" symposium at the Guggenheim

Coinciding with the opening of the Zaha Hadid retrospective at the Guggenheim Museum in New York, *Log* magazine editor Cynthia Davidson hosted an architecture symposium featuring an array of architects, theorists, and critics. Calling it "Contamination: Impure Architecture," Davidson cautioned the audience not to confuse the symposium with the *Any* magazine conferences she had staged in the 1990s, but rather to see it as an opportunity to discuss the global state of architecture and its influences. There seemed to be some confusion as to whether the symposium was about contamination or Hadid, herself a presenter in the second half of the day-long event.

Among the participants in the sold-out event were architects Hadid, Greg Lynn, Peter Eisenman, Kunle Adeyemi, and Farshid Moussavi, as well as theorist Sanford Kwinter and film production designer Alex McDowell. While most of the presentations reviewed each practitioner's oeuvre, which left little time for concluding discussion among the panelists, a few architects attempted to address larger issues. Lynn, in particular, underscored the fact that so many architects are building prolifically when public recognition of architecture is at an all-time high, despite the profession's lack of serious internal dialogue. One need only venture outside the Guggenheim long enough to see the scaffolding and cranes putting up banal buildings citywide to get his point. *R.F.*

# Exhibitions

see the abstract, stealthlike paintings that brought Hadid her much-deserved early acclaim, the show confusingly devolves as it spirals up into a mishmash lacking any unified organizational strategy or clear distinctions between built and unbuilt work. While architecture cognoscenti may have no difficulty sorting through the projects, it's hard to imagine how the half of the show on the upper levels will be anything

ings—with her signature angular striations, warped tectonics, and multiperspectival spaces.

But after you've seen the hand-drawn and painted renderings, opportunities for any unified appraisal of her work diminish. The arrangement of the models, drawings, and photographs becomes progressively jumbled and chronologically displaced; models for a single project may appear on one

construction throughout the world. Included here are large models and supporting documents for her most recent, high-profile built work, including the Phaeno Science Center in Wolfsburg, Germany [RECORD, February 2006, page 70] and the BMW Plant Central Building in Leipzig [RECORD, August 2005, page 82], as well as examples of her product design, such as a tea service, the three-wheel Z-Car, furniture, lighting, and a gorgeously sensuous set of all-in-one kitchen utility units formed out of white Corian.

Hadid's first well-known built project, the 1993 Vitra Fire Station in Weil am Rhein, Germany, is featured in the show and remains a bellwether for the architect, if not necessarily one of her best-constructed designs. Vitra represents a translation of the twisted field conditions of her paintings, which owe a genealogical nod to Piet Mondrian and Kazimir Malevich (and the whole of Russian Suprematism), into a fixed set of elements coalescing around a new idea of space. The fire house's solid concrete and soaring metal components—

ramp, with drawings on another. This retrospective suffers a "kitchen sink" affliction frequent in architecture exhibitions—architects work with models, and therefore flaunt as many as possible. The result is a claustrophobic arrangement, where the excess of models incites a quickened pace that produces a general state of confusion as these maquettes become reduced to scale-challenged objects scattered in dead-end traps along the ramp edge.

If the incredible quantity of artifacts on display attests to anything, it's the ongoing prodigious output of Hadid's firm, with projects in various stages of concept, design, and con-

struction throughout the world. Included here are large models and supporting documents for her most recent, high-profile built work, including the Phaeno Science Center in Wolfsburg, Germany [RECORD, February 2006, page 70] and the BMW Plant Central Building in Leipzig [RECORD, August 2005, page 82], as well as examples of her product design, such as a tea service, the three-wheel Z-Car, furniture, lighting, and a gorgeously sensuous set of all-in-one kitchen utility units formed out of white Corian.

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In light of the museum's reputation for self-promotion and at-times questionable curatorial motivation, it is noteworthy that at a press conference on June 2, neither Guggenheim Foundation director Thomas Krens nor the architect would elaborate, aside from coy gestures, on any plans for a Hadid-designed Guggenheim project. On June 3, however, at an all-day symposium, she did show images of her unrealized proposal for a Guggenheim in Singapore and let on that the globally ambitious museum might offer future opportunities for collaboration. ■



The installation includes many models, but stops short of engaging the Guggenheim atrium in a spatial dialogue.

other than baffling to most visitors.

The painting galleries include Hadid's work dating from the late 1970s to the 1990s, all generously hung to allow for a full appreciation of the theoretical foundations of her career. The chief highlight is *The Peak*, the landmark, skewed-perspective paintings and drawings undertaken in 1982 and 1983 for a hotel on a steep slope in Hong Kong. *The Peak*, endlessly published and discussed over the years, remains arguably one of the most significant series of architectural renderings, if not paintings, produced in the past 50 years. Aspects of it materialize in Hadid's other paintings—as well as later build-

ramp, with drawings on another. This retrospective suffers a "kitchen sink" affliction frequent in architecture exhibitions—architects work with models, and therefore flaunt as many as possible. The result is a claustrophobic arrangement, where the excess of models incites a quickened pace that produces a general state of confusion as these maquettes become reduced to scale-challenged objects scattered in dead-end traps along the ramp edge.

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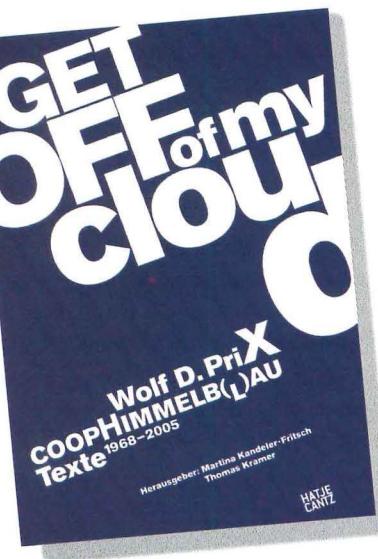
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# Cheeky words from architects both in and outside the modern fold

## Books



**Get Off of My Cloud: Wolf D. Prix, Coop Himmelb(l)au Texts 1968–2005**, edited by Martina Kandeler-Fritsch and Thomas Kramer. Stuttgart: Hatje Cantz Publishers, 2006, 528 pages, \$50.

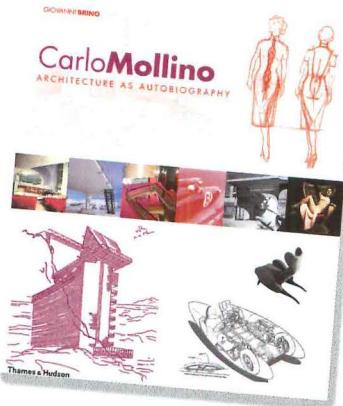
We live in conservative times, but our traditional institutions and even our governments revel in radical architecture. Take Coop Himmelb(l)au: Founded in 1968 in Vienna, it still has a reputation as a firm of iconoclastic artistes, yet it has recently won major international commissions. Among them is the Akron Art Museum, set to open next spring; the European Central Bank in Munich, to open in 2010; and the Central Los Angeles Area High School #9, due to be finished in 2007. And in this first collection of his lectures, interviews, and project discussions, cofounder Wolf D. Prix's ideas and language are often militant and brazen.

Then there's the defiant title, *Get Off My Cloud*, from a Rolling Stones' song, described by Mick Jagger as "a stop-bugging-me, post-teenage-alienation song." You'd think the title alone would discomfit the commissioning classes. During their youth, Prix and his partner Helmut Swiczinsky listened obsessively to rock music and looked to the creative autonomy and collective conscience of groups like the Stones when shaping their firm. More important, perhaps, is the role of clouds in the firm's mythology. Their Web site opens with the words, "Coop Himmelb(l)au is not a color, but an idea of creating architecture with fantasy, as variable and buoyant as clouds." Prix writes, "Clouds are symbols for rapidly changing states. They form and transform themselves ... Viewed in slow motion, the architecture of urban development could be compared to patches of clouds." The name Coop Himmelb(l)au translates from German as "Co-op Blue Sky." Drop out the "l," as the firm has by wrapping it in parentheses, and you have Himmelbau, or "sky build."

Two themes reveal themselves in the book's texts, presented chronologically. One is a plea to stamp out complacency in architecture, especially in Prix's home country, which, he says, "urgently needs a unique sign of high-quality, future-oriented architecture." Another speaks to the value of urbanity and urban life, which he describes as being "variable as clouds." He says his firm's work reflects "the variety and vivacity, tension, and complexity of our cities."

Prix divides his book into what he calls programmatic texts, project texts, lectures, interviews, and a section called "On Friends and Foes." In each, he expresses himself clearly and without pretension or theory-babble. *Andrea Oppenheimer Dean*

**Carlo Mollino: Architecture as Autobiography**, by Giovanni Brino. New York: Thames & Hudson, 2006, 176 pages, \$45.



The first words in this book are Mollino's: "Every work of art reveals its creator; an exact image and likeness of the person who made it ..." During his lifetime, Mollino (1905–73) was an outsider among Modernists, refused alliance with any credo or group, and was largely ignored by the architectural establishment.

Death transformed Molino's reputation. The distinguished Italian critic and historian Bruno Zevi wrote a moving obituary in the popular weekly *L'Espresso*, organized the first retrospective of Mollino's work in 1982, and four years later fought to save his only surviving building, the 1947 cableway station and ski

lodge at Lago Nero. Appropriately, a collage of writings by the impassioned Zevi, who had promised to write an introduction but died suddenly in 2000, forms the introduction to this book.

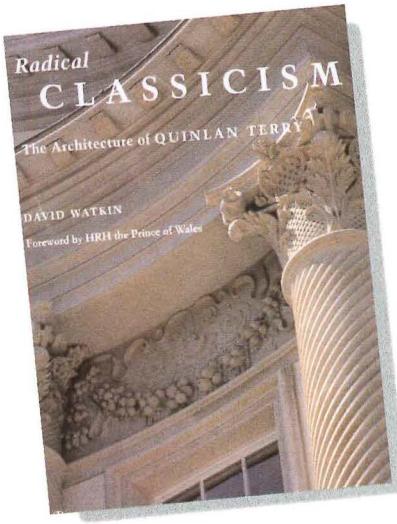
Zevi begins: "Carlo Mollino? A man surely in league with the Devil. When he opens his mouth and speaks, out come ... razors, scimitars, and splinters of glass, but also enchanted gardens and monstrous flowers in colors nobody has ever seen." Like Zevi himself, Mollino was, in Zevi's words, "a heretic equipped with a creative courage that is intolerable for all conservatives."

Mollino's reemergence is mainly as a furniture designer, since only this work survives and has found its way into auction houses and galleries. The author says his book is a "warts-and-all critical view, the best and most respectful homage I can pay." His chapters are named for the "obsessions" that shaped Mollino's designs: flying, Alpine architecture and skiing, photography, theater design, fashion and frivolities, literature and decadence, the arts and the art world, inventions and patents, aesthetics and theory, teaching, the erotic, travels, the esoteric and occult, and—finally—architecture. A.O.D.

**Radical Classicism: The Architecture of Quinlan Terry**, by David Watkin. New York: Rizzoli, 2006, 256 pages, \$60.

The one startling thing in this sumptuously detailed monograph on English architect Quinlan Terry is the

# Books



tone. Here's an architect who has won the \$100,000 Richard H. Driehaus Prize for Classical Architecture, who designed the largest house built in Britain in 200 years, who redid the state rooms at 10 Downing Street, and who has no less exalted a personage than

Prince Charles penning the forward. Yet the text presents Terry as a sort of lonely rebel battling, as HRH the Prince of Wales would have it, "the architectural mainstream, whose theory—Modernism—necessitates the ruthless negation of the past."

The prince's enthusiasm for Terry and his "sincere concern for the nature of beauty" is tepid compared to the heroic image conjured up by *Morality in Architecture* author David Watkin: "Terry's life and career have had to be a continuous and sometimes almost solitary battle against the architectural establishment," which Watkin later describes as "like the Taliban, a puritanical religion ... [whose] most permanent enemy is the past." By contrast, we're told, Terry "understands the human joy in ornament that Modernism has outlawed."

To simply state the obvious, Terry has made a career out of

catering to conservative tastes. Not that there's anything wrong with that: Such commercial buildings as his neo-Georgian office block on London's Baker Street have a refined depth that is likely to endure, and such country estates as Gloucester's Waverton House are wonderfully crafted. But this isn't radical; it's more of the same. And as long as there are clients who seek to put on airs, architects like Terry will do just fine. *John King*

**Railway Stations: From the Gare de l'Est to Penn Station,** by Alessia Ferrarini, translated by Jeremy Scott. Milan: Electa, 2005, 220 pages, \$50.

**The Stadium: Architecture for the New Global Culture,** by Rod Sheard, Robert Powell, and Patrick Bingham-Hall; introduction by Peter Cook. London: Periplus Editions, 2005. 208 pages, \$45.

Here are two handsome monographs devoted to grand structures of public accommodation. Railroad stations

may be a moribund building type in the U.S., but they flourish in Europe and Asia, nourished by high-speed trains and high-density cultures that are less auto-dependent than ours. Stadiums, on the other hand, are proliferating globally in response to expanding demand for sporting events, fueled largely by television.

*Railway Stations*, by Alessia Ferrarini, opens with a fine but inadequately illustrated historical overview. Such important and visually stunning examples as Sant'Elia's 1913 design for Milan station and Rome's Stazione Termini cry out for photos.

Next, Ferrarini presents 16 stations in depth. Twelve are in six contiguous western European nations, and 13 were completed since 1990. But three are from the 1852–1935 period, including New York's Grand Central Terminal, a building that proves Classical eclecticism and seven underground levels of complex circulation can happily coexist.

This book celebrates the primary requirement of all rail stations: the efficient movement of

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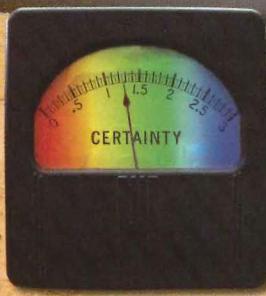
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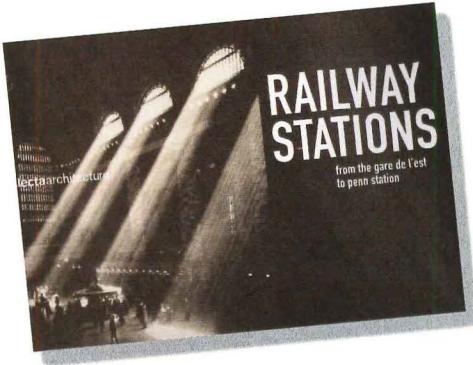


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## Books



large numbers of people and railcars. Detailed plans, sections, and isometrics reveal these buildings' underlying organizational beauty.

Daylight is a recurring theme in these projects, a welcome holdover from the 19th-century need to illuminate and vent tracks and waiting areas naturally. New York's present Penn Station is perhaps the only major rail facility totally bereft of daylight, and the final chapter reveals a Skidmore, Owings & Merrill proposal to introduce a dramatic, glass light

scoop there. Its elegance puts Santiago Calatrava to shame.

While *Railroad Stations* is visually sumptuous, Ferrarini's prose (or her translator's) is dry and academic, and the sans-serif type is small and faint, making the book a chore to read.

Miller Park, Milwaukee's baseball palace, should link these books nicely, since it's a stadium resembling an old railroad station. However, it's not in Sheard's book. The dust jacket flap suggests why: "Through the work of HOK Sport, the world's leading stadium architects, *The Stadium* examines the increased significance and value of the stadium as an architectural icon."

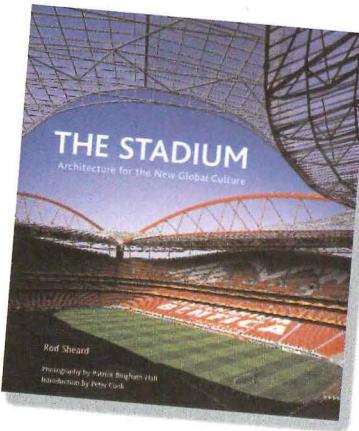
Miller Park isn't a HOK work, thus its absence. So *The Stadium* isn't actually a stadium monograph;

it's a monograph on the work of one stadium firm, written by one of its principals. Nothing wrong with that, except that this key fact isn't mentioned within the book (except on the jacket). This is deft marketing: Rather than selling the firm itself, the book sells the building type that constitutes the firm's practice. As the industry's market-share leader, HOK can benefit from this approach while not seeming to toot its own horn.

If Ferrarini's writing is on the dry side, *The Stadium*'s errs in the opposite direction, saying, "Sport is the new Rock 'n' Roll," and is prone to such overstatements as "a stadium, more than any other building type in history, has the ability to shape a town or city," and "the best stadia are the true monuments of our time." The writing is also riddled with factual errors, such as placing Brooklyn's Ebbets Field in Boston, missing Yankee Stadium's opening date by four years, and dating the advent of televised sports more than a decade late.

Hyperbole aside, HOK Sport's

body of work is immense, and usually of high quality. *The Stadium* documents 18 venues in depth, and six others in less detail. The photography and drawings are outstanding, and the seating plans have a special beauty. American readers will see that the firm's European and Asian work is more architecturally refined, structurally imaginative, and less nostalgic than its U.S. siblings. If you can get past the cheerleading, there's real architectural substance lurking in these pages. John Pastier



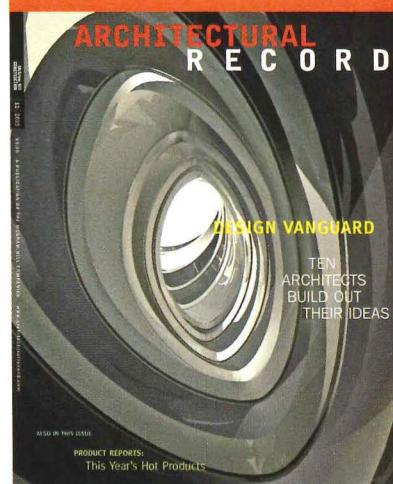
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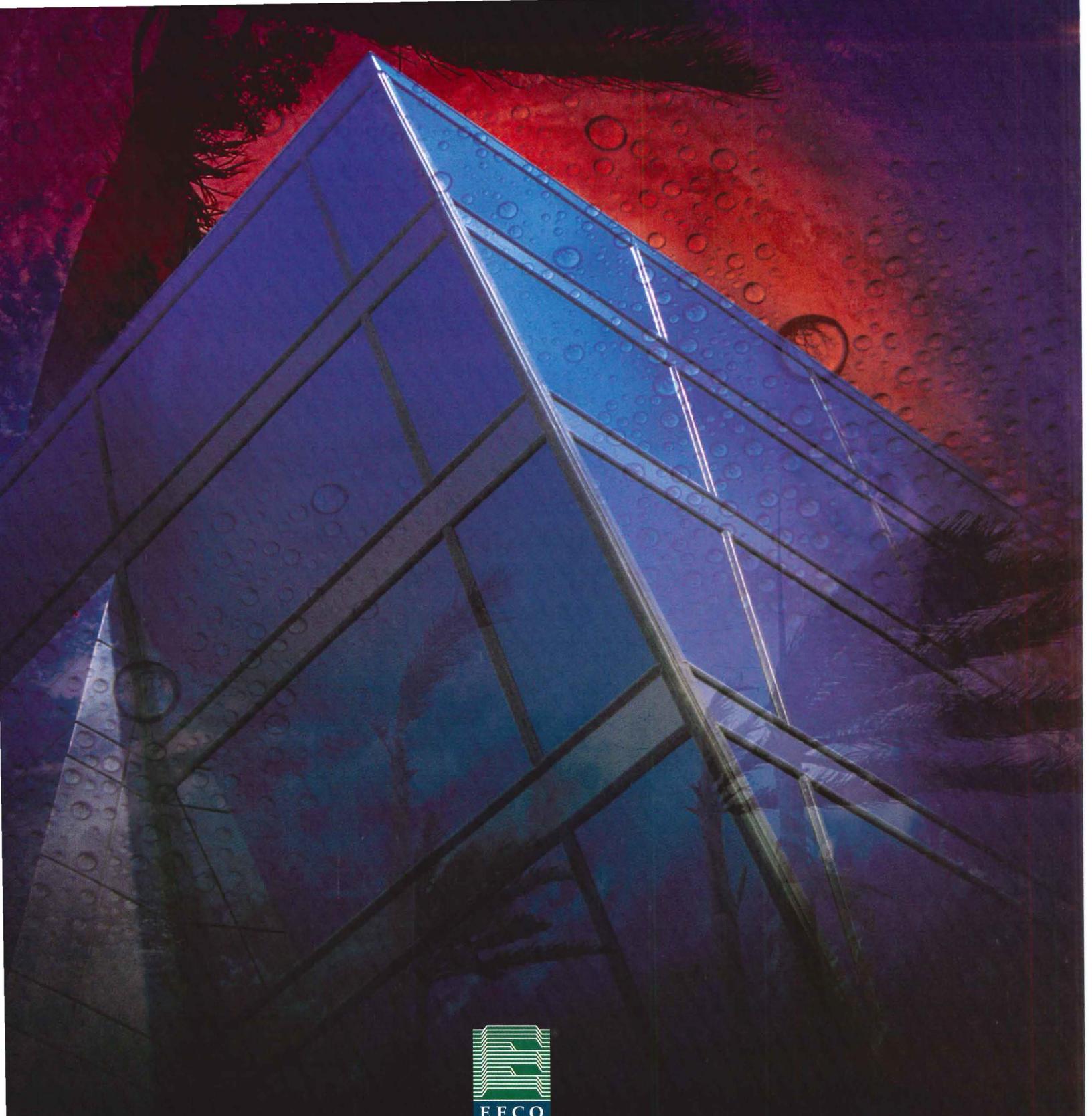
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By Rita Catinella Orrell

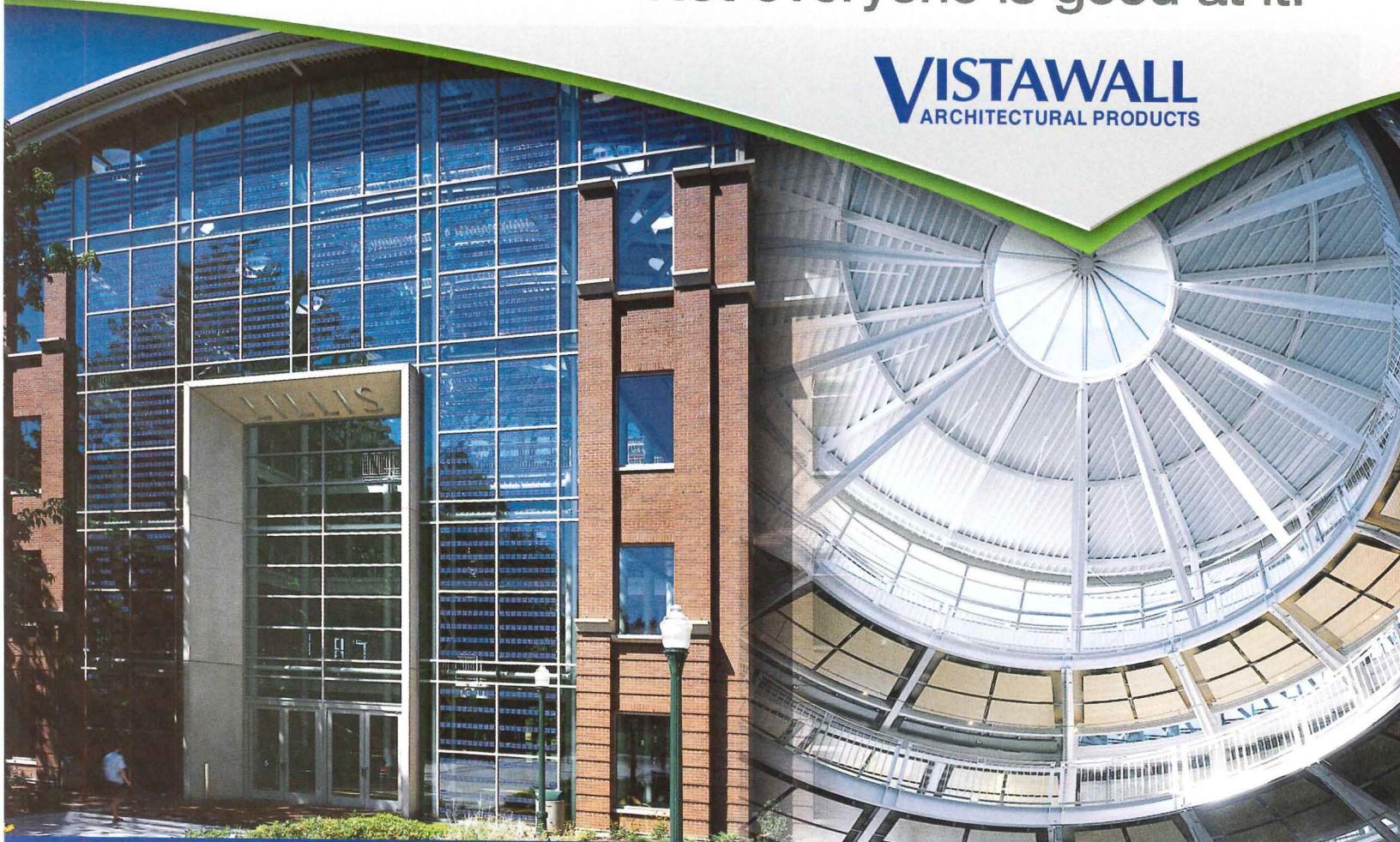
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# Snapshot



By Beth Broome

Against the backdrop of Rome's magnificent and enduring architecture, a collection of miniature portable prayer spaces has sprouted.

American architect Michael Herrman designed the Nomadic Prayer Spaces, which can be transported in a compact car and erected in less than an hour, to serve as an amalgamating force for the city's burgeoning and fractured migrant communities.

A Rome Prize fellowship in architecture at the American Academy brought Herrman to Rome to continue his research on the relationship between migration and architecture and the nontraditional ways transient populations use city spaces. Observing the impromptu Sunday gatherings of Romanians in parking lots, public squares, and the like underscored for the architect the powerful unifying force of religious activities for scattered communities and served as the genesis for this project.

Finding religion  
in a shoe-box sanctuary

With a goal of preserving the gatherings' simplicity, visibility, and accessibility, Herrman set about creating a form

## Snapshot

**Prayer Space #2 at Parco Appia Antica (previous page). Illuminated Prayer Space #1 set in front of Sant'Anastasia basilica (right). A close-up of Prayer Space #2's resin and fiberglass panels (below).**



that could be deployed as needed in various meeting places across the city, adapting to the particular requirements of site and population, and then removed. Lightweight and inexpensive, these sacred spaces would help the “congregation” demarcate a gathering area and protect them from the elements while remaining connected to the city around them. “There was something beautiful about the fact that the gatherings were outside,” says Herrman. “I wanted to intervene as little as possible.”

Nomadic Space #1 was constructed specifically for the Romanian community. In the tradition of Christian places of worship, the church is cruciform in shape, though as a twist, the form sits vertically. Made of interchangeable aluminum angle and T extrusions covered with a translucent stretchable-polyurethane high-strength fabric, the space, which can be illuminated with video projections by night, can adapt in size and form according to the community’s needs. Longer or shorter angles can be substituted according to the number of congregants, and the arms of the cross can also open and close as needed. “I didn’t want to make a space that imposed itself on the audience,” says Herrman, “Instead, I wanted a space that responded to them.”

Nomadic Space #2 evolved as other communities became interested in the project. Herrman responded with a space that was not linked to any specific religion. The size of the aluminum frame for Nomadic Space #2 is variable, and the flexibility of the flat aluminum extrusions suspended within the frame allows the users to create a form with the most meaning for them: the semicircular dome of a church, the flat dome of a mosque, an apse, or the rectilinear shape of a Buddhist temple. Handmade polyester resin and fiberglass panels (which can be illuminated) are bolted together in a chain formation and manipulated to fit the selected configuration.

There are currently three Nomadic Prayer Spaces scattered about Rome (with two more now in Paris). In parking lots or beside iconic buildings and ruins, newcomers to the city can be found assembling in these small shelters that have reduced the place of worship to its most basic elements, connecting the congregants to their origins while firmly rooting them in their new environment. ■



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# Is there life after LMDC?

A talk with **Alex Garvin**, former head of planning and design for Ground Zero

**A**s the vice president for planning, design, and development at the Lower Manhattan Development Corporation (LMDC) in 2002 and 2003, Alex Garvin had to juggle state and local politics and economics, plus deal with public emotion in the rebuilding of the World Trade Center site in Lower Manhattan. It was not an easy task, and, as is all too evident today, not an easily resolved situation. Although Garvin left a position that had placed him continually in the unremitting glare of the media spotlight, since then he has undertaken a number of other large redevelopment schemes and transformative urban plans. From 1996 to 2005, he was managing director of planning of NYC2012, New York City's committee for the 2012 Olympic bid. In 2004, his newly formed planning and consulting firm specializing in the public realm, Alex Garvin & Associates, produced a report for the Georgia office of the Trust for Public Land. It outlines a plan for creating Atlanta's Beltline Emerald Necklace, 23 miles of parks, trails, and transit that will link 46 Atlanta neighborhoods.

Garvin is author of *American City: What Works, What Doesn't* (McGraw-Hill, 2002) and *Parks, Recreation, and Open Space: A 21st-Century Agenda* (American Planning Association, 2001). A lifelong New Yorker, Garvin served as both a New York City planning commissioner (1995–2004) and

the city's deputy commissioner of housing (1974–78). He has taught urban planning and management at Yale as an adjunct professor for almost 40 years, and has been a consultant to the cities of Baton Rouge, Louisiana; Charlotte; Toronto; Pittsburgh; St. Louis; Stamford, Connecticut; Palm Beach, Florida; and Memphis.

When Garvin recently talked with RECORD editor in chief Robert Ivy and contributing editor Andrea Oppenheimer Dean, he reflected on trends that he believes are changing America's urban landscape, and on some of the results and lessons of his work for Atlanta's Beltline project, NYC2012, and the LMDC.



**ARCHITECTURAL RECORD:** We can't avoid beginning with the elephant in the living room in terms of your career—your work at Ground Zero, and specifically for the LMDC, where you were responsible for the design competition that led to the master plan by Daniel Libeskind. Today, everything seems to be in chaos there. Just as the Freedom Tower was finally breaking ground in June, the chairman of the Port Authority of New York and New Jersey, Anthony Coscia, announced that the tower would be in jeopardy if it couldn't attract at least a million square feet in leases by September. Could you foresee this mess?

**ALEX GARVIN:** There has always been a problem with staging the development on the site, since the process depends so much on the real estate market. As the developer of the Freedom Tower, the Port Authority needs to be sure it has the leases. That's reasonable. But I have no idea if it can get them. You can't conjecture on the outcome of something like Ground Zero if you're not in the middle of it.

**AR:** It doesn't look like that much is going on, though. Everything seems to be hitting the skids—the memorial may be redesigned and is over budget; the performing arts and museum spaces are floundering.

**AG:** I'm disappointed that the cultural institutions are being slowly killed off. And the design of the Freedom Tower has changed; most recently it looks like a concrete bunker set back from the street. If that stays, it's appalling.

But look at what has happened down there. When I left, I hoped we would get a railroad station, and we will soon have one [the Transportation Hub], by [Santiago] Calatrava, at the World Trade Center site. I thought we could get Greenwich Street as a right of way, and that has happened. The damaged tower at

**I AM DISAPPOINTED THAT THE CULTURAL INSTITUTIONS AT THE WTC SITE ARE BEING KILLED OFF.**

90 West Street, designed by Cass Gilbert in 1907, is moving ahead as a residential building, and Skidmore, Owings & Merrill's 7 WTC is finished. It seems that Larry Silverstein is now filling it. The retail plan for Fulton Street is proceeding, with RFQs sent out by the city's Economic Development Corporation. However, I do

find that it is awful that the Deutsche Bank on Liberty Street is still standing because no one can figure out how to tear down this particular heavily contaminated structure.

**AR:** Would you ever consider returning to the LMDC? It still sounds like they could use some help down there.

**AG:** No. I've started my own business—with six people in my office. But I would be willing to be hired as consultant.

**AR:** Your office has been attracting a lot of work that involves the public realm. Yet any discussion of the public realm in America usually concludes that it's become a lost cause. How do you find the situation?

**AG:** There are several good signs. First, we have been reclaiming waterfronts for the public. This has been going on for a quarter century—everything from renovating the C&O Canal in Washington, D.C., to removing a highway along the Willamette River in Portland, Oregon, to creating the Tom McCall Waterfront Park there.

Furthermore, cities are increasingly investing in park systems, a practice abandoned during the last quarter of the 20th century. In New York, we added more than 1,400 acres during the years of the Giuliani administration [1993–2001] alone.

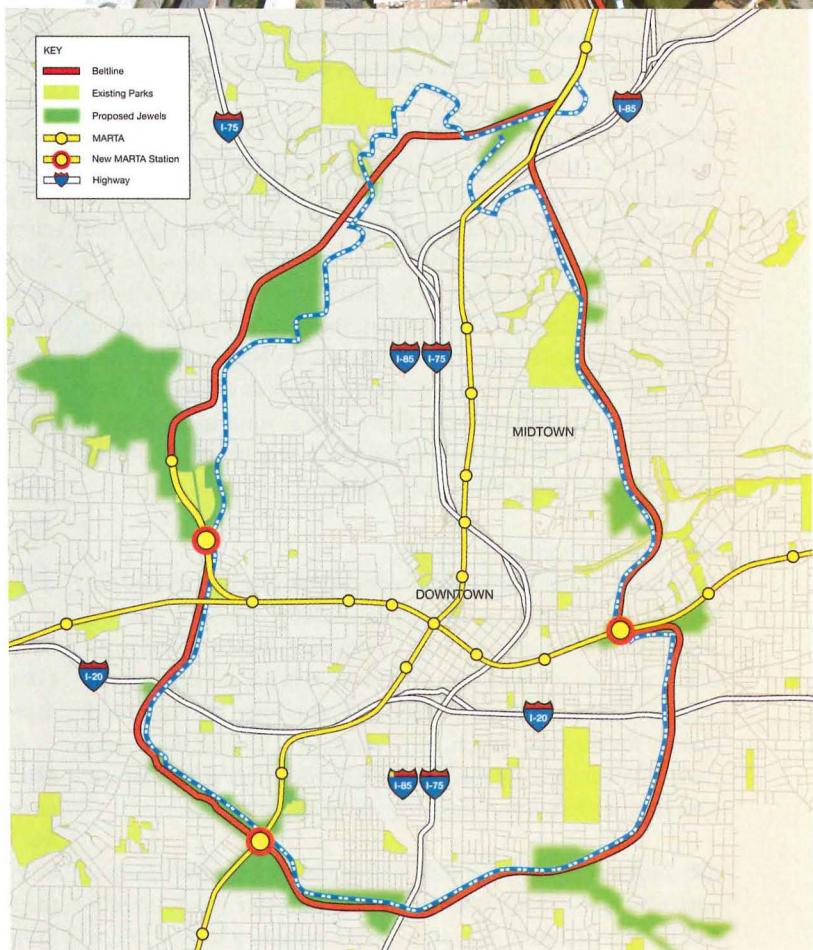
**AR:** Has the move back to the cities by the middle class increased the reinvestment in public space?

**AG:** This move back to the cities is the key issue needing attention in the 21st century. A growing part of our population consists of people over 50 for whom driving is not as convenient as walking—who find intensely packed, varied neighborhoods friendlier than suburbs. Also we have a growing population of younger singles who need to meet people. That's easy to do in cities. And when these people come, they come with money. Gentrification is bringing reinvestment and demand for public space. But gentrification also has terrible effects on people who can no longer afford to live in the neighborhoods where they work. That's a major issue of the future.

**AR:** Where is the money for public space coming from?

**AG:** The Hudson River Park Trust in New York is typical. It's a \$300 million joint venture of the state and the city, with a citizens' committee involved in its planning. It began with citizens demanding that the West Side Highway be something better than just a roadway. Private entities, many modeled on New York City's Central Park Conservancy, have formed and created master plans in response to the postwar disinvestment in the public realm.

**AR:** Do you see this reclamation and expansion of public space as a nationwide trend, or only restricted to cities like New York,



**Garvin's proposal for the Atlanta Beltline Emerald Necklace integrates open space and transit along a 23-mile loop of underused train tracks. The scheme draws on past concepts, including Frederick Olmsted's, for parks.**

San Francisco, and Washington, D.C.?

**AG:** This trend exists in cities across the country. My experience at the moment in Atlanta is a good example. I worked with the Path Foundation—which promotes bicycle riding—and a number of remarkable park advocacy groups. The back-to-the-city movement spurred me to propose the creation of 2,500



**Alex Garvin & Associates has drawn up a design for transforming Atlanta's Bellwood Quarry, 2.5 miles from downtown, into a park.**

acres of open space, including 1,400 acres of new green space and parks, to the Trust for Public Land, a national land conservation group. The Beltline Emerald Necklace, loosely modeled on Olmsted's Emerald Necklace in Boston, transforms a 23-mile loop of an old rail corridor into a trail and bikeway along with a light rail system that will link to MARTA at three new stations and at an existing one. In addition, the plan calls for building new housing on 530 acres. The Beltline is the biggest addition to an urban park system in the country, and it will reach into Atlanta's most economically starved area, west and south of downtown, dramatically enhancing the lives of people who have been excluded from recreation facilities.

**AR:** *Is this project going ahead?*

**AG:** Mayor Shirley Franklin has endorsed the plan and created the Beltline Partnership. In December of 2005, the City Council approved a tax increment district to generate from \$1 billion to \$2 billion in bond revenues over 25 years to help pay for this project. Then in April, the mayor endorsed acquiring the Bellwood Quarry for the park, which, at 579 acres, will make it the largest park in Atlanta. We are working with the Beltline Partnership on a conceptual design and feasibility study for the quarry.

**AR:** *You've compared the Beltline concept to Olmsted's Boston park plan of the 1870s. What's so new or different about Atlanta?*

**AG:** It's the first time ever that a park system, a transit line, a trail, and bike path have been rolled into one. We have light rail going up in many cities—San Diego, Portland, Denver, Minneapolis. The conversion of rails to trails has been underway in more than 1,000 cities around the country, but never on this scale, and never where it encircles an entire city within 1.5 miles of downtown and midtown. A student at Georgia Tech originally conceived the idea for a transit loop here in his master's thesis in 1999. The Beltline, once developed, will reorient Atlanta from a city framed by highways to a city framed by a magnificent public realm. It will allow people to live and work in Atlanta without getting on choked highways.

**AR:** *That leads us to the problem of sprawl: Did you really say that sprawl is not a huge issue anymore?*

**AG:** It's not the burning issue. It's almost beginning to reach the limits of what we can serve with our highway systems. And there's not much support for building new highways. We're going to need to reinvest in existing neighborhoods. And that is what my plan for Atlanta's Beltline Emerald Necklace does. It provides a public realm around which the population can grow.

**AR:** *On another note, New York City lost its bid for the Olympics, but did the effort have lasting consequences?*

**AG:** The park we planned for Brooklyn's Williamsburg neighborhood is going forward, as is the building of 4,500 apartments in what would have been the Olympic Village in Queens West. Other important things came out of the Olympics, most important, a change of psychology in the city. When I started working for a New York bid, people were sick and tired of redevelopment, of Robert Moses's ideas. We came out with a plan that said, "You can do things within the existing framework of the city without wiping it out." Our plan placed all the properties within walking distance of the subway, so we could move half a million spectators each day without their setting foot in automobile traffic. Second, the Bloomberg administration took many of the lessons of what we did and ran with them, including the idea of redeveloping the Hudson Yards on the West Side and rezoning the area, extending

## ATLANTA'S BELTLINE IS THE BIGGEST ADDITION TO AN URBAN PARK SYSTEM IN THE COUNTRY.

the Number 7 subway line, and expanding the Javits Convention Center. The refocus of Midtown westward also became city policy in large measure because of work we had done.

**AR:** *These projects are long-term, but the politicians who underwrite them usually last only eight years. Isn't this a problem?*

**AG:** You get continuity from the permanent government, which everyone forgets about. Tupper Thomas has been in charge of the Prospect Park Alliance in Brooklyn since 1980, and Robert Moses, New York's park commissioner from 1934 to 1960, was an appointed official. We have a lot of very dedicated people in government who don't get the credit they're due.

**AR:** *Are there trends you picked up on when planning the Olympics?*

**AG:** Yes, one is that sports facilities don't have to be enormous monuments. Coors' Field in Denver and Jacobs Field in Cleveland represent something other than the enormous sports stadium in the middle of a green field. And when it comes to cultural centers that generate activity, I think Cincinnati shows the way. Just look at the Aronoff Center for the Arts, designed by Cesar Pelli in 1995,

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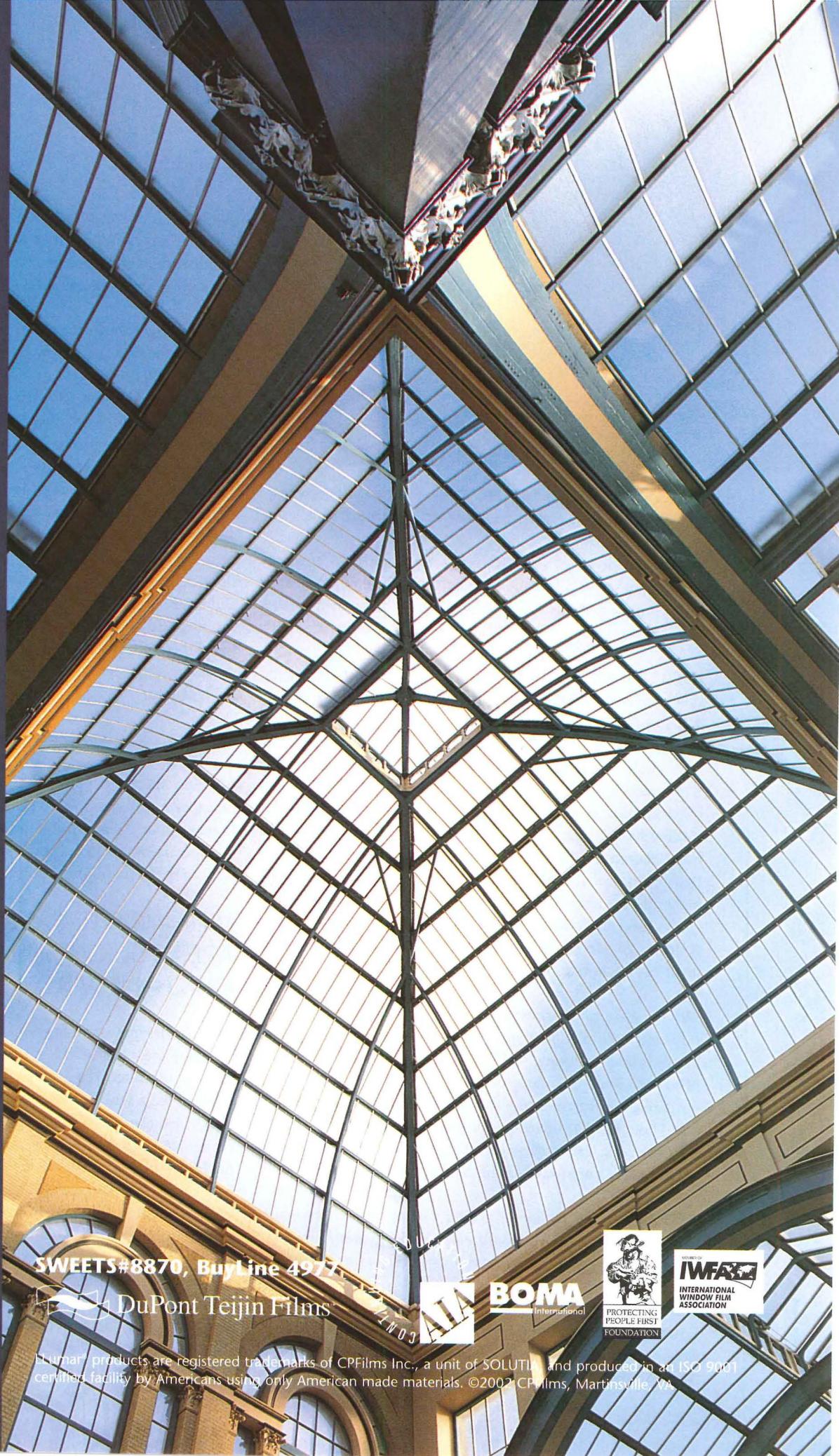
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**As part of the Atlanta Beltline, Alex Garvin has proposed incorporating Waterworks reservoirs on Howell Mill Road into a park.**

and across the street Zaha Hadid's new Rosenthal Center for Contemporary Arts [RECORD, August 2003, page 86]. And they didn't build a garage. People park in existing downtown garages that would otherwise be empty at night and on weekends.

**AR:** *We can see how a cultural center, however you define the term, could provide a steady stream of visitors, but a sports center?*

**AG:** You have to distinguish among different kinds. A baseball stadium operates 200 days a year, a football stadium, nine or 10 days a year, but you can turn a football stadium into something that is more than a nine-day affair. Arenas can host concerts and other kinds of events. In cities like Atlanta and New York, we're putting stadiums on rail yards. Why? Because when you create a huge stadium, you take out everything that was there and kill that portion of the city. But if you start with a vacuum, you bring in customers. I think when we allow the owner of the sports team to determine what it's going to be and where it's going to go, we run into problems. When the community is involved, we tend to make better choices.

**AR:** *You have consistently introduced high-profile architecture into large-scale planning projects in a way that we have not seen in traditional planning.*

**AG:** I don't want to produce something that's not high quality, and the public wants architecture that will be an asset to their community. Thom Mayne's mixed-use project at Queens West centers on a 43-acre park. It started as a gathering place for Olympic athletes, but in fact it's a new way of doing a whole neighborhood.

**AR:** *You stress what Mayne's project will do rather than how it will look. Conversations about employing top designers often focus on their celebrity value and its ability to attract public attention and investment.*

**AG:** Yes, and in the plan for the World Trade Center site in Lower Manhattan, I think people have been mesmerized by the wrong thing, by the "wedge of light" instead of the piazza in front of the Calatrava's new transportation hub. In Lower

Manhattan, known for its dark canyons, we created a public square. That is a major bit of planning. To capture the public's imagination, a high-profile architect needs to grab onto ideas that resonate with the public.

**AR:** *Speaking of ideas the public likes, what do you think about the ones that the Congress for New Urbanism has espoused? Are we making many new places that achieve urban amenity?*

**AG:** Yes. It is absolutely happening, but it's not necessarily coming from the New Urbanists. I admire Duany Plater-Zyberk, but its small-town vision is not appropriate to high density. You need very high densities to support public transit and transit-centered suburban development. My favorite two communities are in suburban Columbus, Ohio. They are New Albany and Easton. Both have residences mixed with retail at high-density levels. New Albany, designed by Jaq Robertson [of Cooper Robertson & Partners], is 35 percent open space. Unlike other golf course communities, it has a roadway for running and bicycling, so that the public realm is enhanced by the golf course. It's a cul de sac, but what a charming one, and it's doing very well. Easton is the Wexlers trying to create a town square.

**AR:** *What advice do you have for young planners or architects working on large urban projects?*

**AG:** Since the 1960s, planners have moved away from the physical aspects of design toward policy. But we elect public officials to make policy. The planner has to be able to provide expertise that the mayor and local council members don't have. When you want to fit the stadium in here or the velodrome there, you need

## MY FAVORITE TWO COMMUNITIES ARE IN SUBURBAN COLUMBUS, OHIO—NEW ALBANY AND EASTON.

to do the design work that goes with it. I believe architecture and planning must be interrelated.

Architects have naïve, if any, notions of politics. If you want to see a truly effective public presentation, watch Hugh Hardy. He can have everybody eating out of his hand. That's politics, but politics also means understanding why the governor or the council member views things a certain way. The major problem is that both architects and planners think in terms of projects—not of the city as a whole or of how that project can benefit the surrounding community.

We don't have enough good planning or good architecture, and that troubles me, but who would have thought that Atlanta would adopt an antisprawl plan in the form of a park system? Who would have thought the Port Authority would hire Santiago Calatrava? Those are real results. We need this in every city in the country. ■



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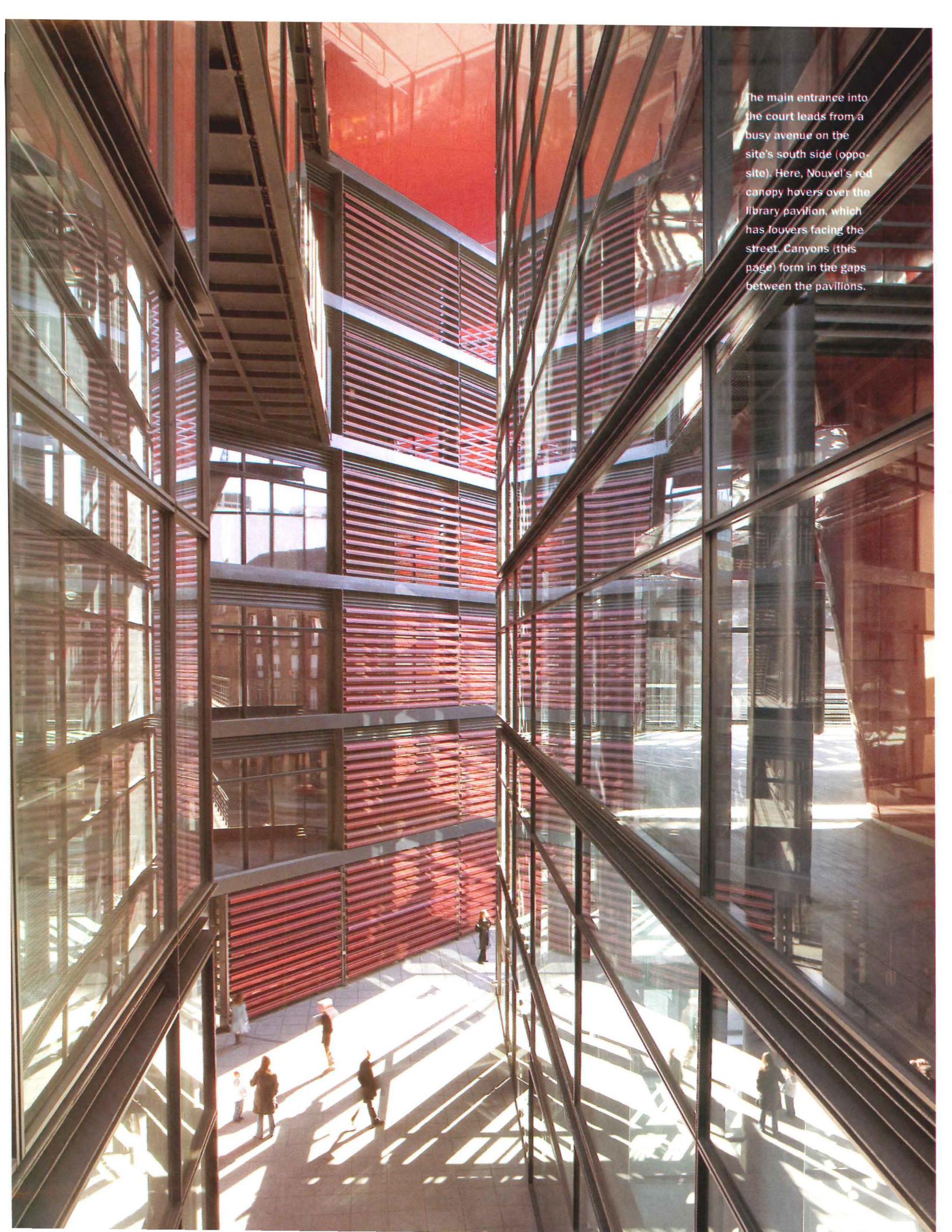
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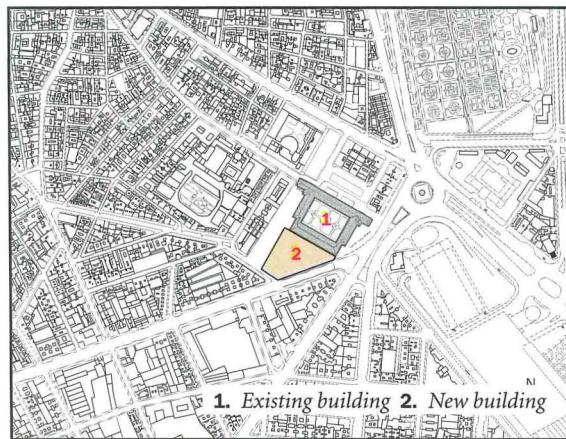
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A wide-angle photograph looking down into a modern architectural space. The building features a complex steel frame with large glass panels. A prominent feature is a red, slatted canopy or screen that spans across the upper levels. The floor is a light-colored polished concrete. Several people are visible walking through the space, which is filled with strong sunlight and deep shadows from the building's geometry.

The main entrance into the court leads from a busy avenue on the site's south side (opposite). Here, Nouvel's red canopy hovers over the library pavilion, which has louvers facing the street. Canyons (this page) form in the gaps between the pavilions.

# Jean Nouvel adds three freestanding pavilions to Madrid's REINA SOFÍA MUSEUM and then floats a winglike canopy above them



By David Cohn

With his addition to the Reina Sofía National Museum Art Center in Madrid, Jean Nouvel has set himself the challenge of working in shadow, defying the idea that architecture, as Le Corbusier famously wrote in *Toward a New Architecture*, is "the masterly, correct, and magnificent play of forms brought together in light." Nouvel has completely covered his project—three independent pavilions arranged around a central court—with a hovering plane of polished, lacquered aluminum, which extends from the museum's existing building "like a shadow," as he puts it. The 86,000-square-foot canopy offers welcoming shade on Madrid's hot and cloudless summer days, at the cost of throwing the project into gloom during the long winter months—although Nouvel has punctured the roof in places to reveal patches of sky and admit shafts of light into the court. "It's a lightweight wing the color of red roof tiles," the architect elaborates, "a wing that is friendly and protective, showing visitors that it is watching over them."

Without the play of light and shadow, Nouvel had to turn to alternative modeling strategies, capturing reflections and indirect light through the use of painted metal, glass, and other shiny or transparent surfaces, as well as color and night lighting. The exterior materials include bright red polyester tiles on the auditorium pavilion, galvanized metal grilles, and custom-extruded, red aluminum louvers. This mechanistic construction, typical of Nouvel's work, is closer in spirit to the contemporary city's caravan of cars and buses than to Madrid's traditional masonry buildings, including the original museum, an immense mass of granite and stucco-finished brick.

First opened in 1986, the Reina Sofía occupies an 18th-century hospital, a forbidding 265,000-square-foot structure, designed in 1769 by Francesco Sabatini, the court architect to King Charles III. Just a few

blocks from the Prado Museum, it houses a comprehensive collection of 20th-century Spanish art (including Picasso's *Guernica*), which attracts 1.5 million visitors a year. In 1990, as part of an intervention directed by Spanish architects José Luis Iñiguez de Onzoño and Antonio Vázquez de Castro, British architect Ian Ritchie memorably added frameless glass elevator towers to the entry facade. Nine years later, the museum held a limited competition with the goal of drawing secondary activities out of the main building to free up space there for the permanent collection. Among the twelve competing architects, Nouvel won first prize, Dominique Perrault second, and Juan Navarro Baldewig third.

The addition's triangular site, to the southwest of the existing museum, faces a congested avenue. (The city plans to extend a tunnel that will bury this artery and permit the creation of a new pedestrian forecourt, which will shield the museum from traffic and noise.) Access to all three of Nouvel's structures is from the central plaza, which opens to the

**Project:** Addition to Reina Sofía National Museum Art Center, Madrid

**Architect:** Ateliers Jean Nouvel—Jean Nouvel, principal; Alberto Medem, project architect; David Fagard, Gian-Luca Ferrarini, Jérémie Lebarillec, Sergio Noero, Florence Rabiet, Sophie Thullier, Mounie El Hawat, competi-

tion team; Gian-Luca Ferrarini, Anne Lamiable, Augustin Miranda, Carlos Noguiera, Adelino Magalhaes, Eloisa Siles, Marcos Velasco, Fermina Garrido, Antonia Garcia, Rafael Cañizares, Barbara Bellosio, Higinio Esteban, Javier Piedra, Raul Pleite, Camila Campo, project team



**At the site's southwest end, stairs act as a brise-soleil for the auditorium lobby (below). Reflections of street traffic and the original building flash across the underside of the canopy (right and below).**

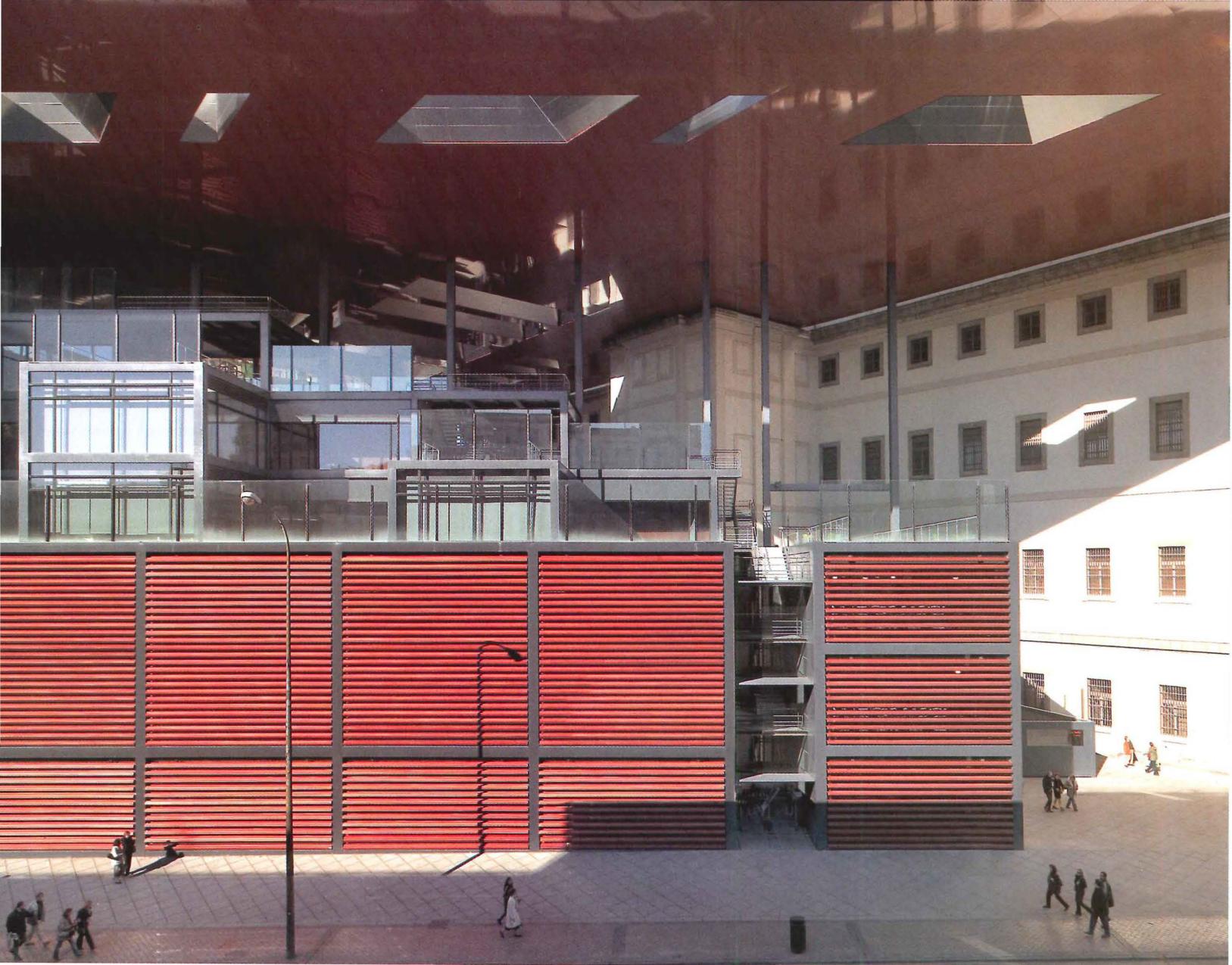


street on either end. Distinct from one another in program and personality, the three pavilions contain, respectively: the library and bookshop; the temporary exhibition galleries; and the restaurant and café, rising to two auditoriums above.

The 24,000-square-foot library and 6,000-square-foot bookshop occupy a volume designed to buffer the museum precinct from the boulevard. The library's soaring main reading room extends one story below grade, with ground-level windows on either side, establishing a visual connection between street and court, reminiscent of views through an aquarium. Four mezzanines of backlit book stacks and built-in desks ring the space, finished entirely in dark jatoba, a Brazilian cherry wood. An oval lens made up of cubic glass "dice," especially designed by Nouvel and fabricated by Spain's Royal Glass Factory of La Granja, floats below the ceiling, filtering electric illumination as well as daylight seeping in under the roof wing. Project Architect Alberto Medem calls this abstract chandelier "the medusa," as if it were a great jellyfish, observed from an underwater depth.

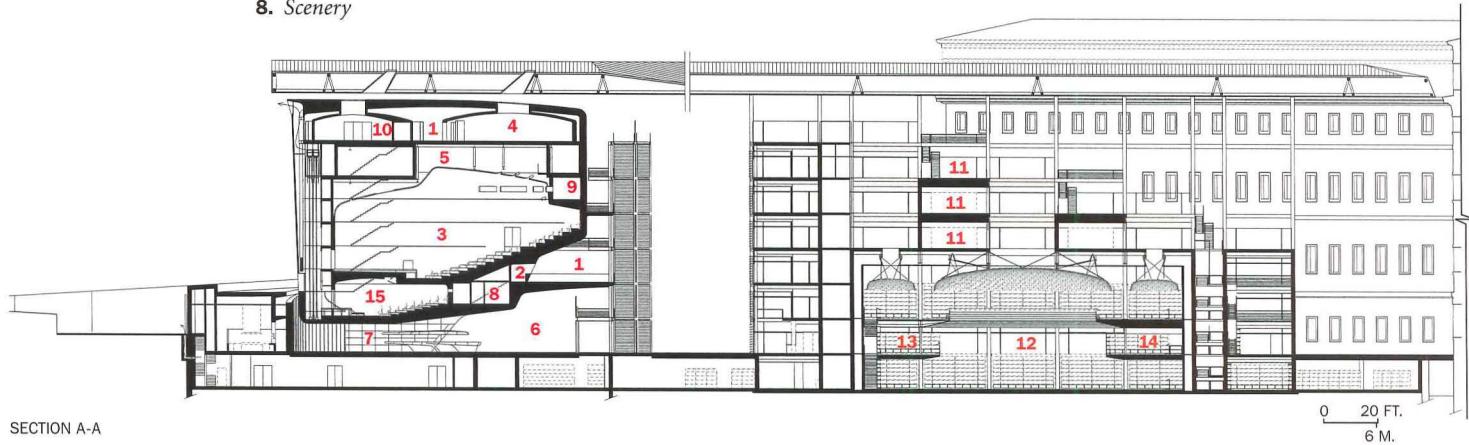
The 65,000-square-foot pavilion on the north side of Nouvel's site includes two floors of temporary exhibition galleries, with an upper-level public connection to the original building. This volume also houses offices, basement art storage, and art handling facilities. In the galleries, Nouvel offers the kind of neutral, diaphanous spaces curators demand, with proportions more generous than the typical 50-foot-wide, barrel-vaulted masonry bays of the original hospital building. He opened the galleries to the court through a continuous wall of glass, protected by motorized aluminum louvers and wide interior shades of plastic fabric, though the curators routinely keep these blinds closed. A sophisticated membrane of V-shaped extruded aluminum slats on the gallery ceilings covers the structural beams and incorporates lighting, ventilation, and acoustic absorption. Evoking Ritchie's graceful towers, Nouvel has included glass elevators and stairs sheathed in industrial-textured steel, providing access to the galleries.

The third pavilion's 78,900 square feet include the restaurant and café with the two auditoriums upstairs. In contrast to the exposed steel structure of the other pavilions, this one is encased in a concrete shell supported by two powerful molded-concrete pylons. The concrete is finished inside and out in hard-polished polyester fiberglass in a brilliant red (like the curvy, injected-plastic casing of a vacuum cleaner), with jazzy



The temporary exhibitions are entered from the court, through a gap between red louvered panels (above). Blocks of glazed offices rise above these galleries.

- 1. Vestibule
- 2. Coat check
- 3. 441-seat auditorium
- 4. VIP reception
- 5. Technical walkways
- 6. Cafeteria
- 7. Restaurant
- 8. Scenery
- 9. Control booth
- 10. Patrons' room
- 11. Office
- 12. Reading room
- 13. Book exhibition
- 14. Bookstore
- 15. Reception

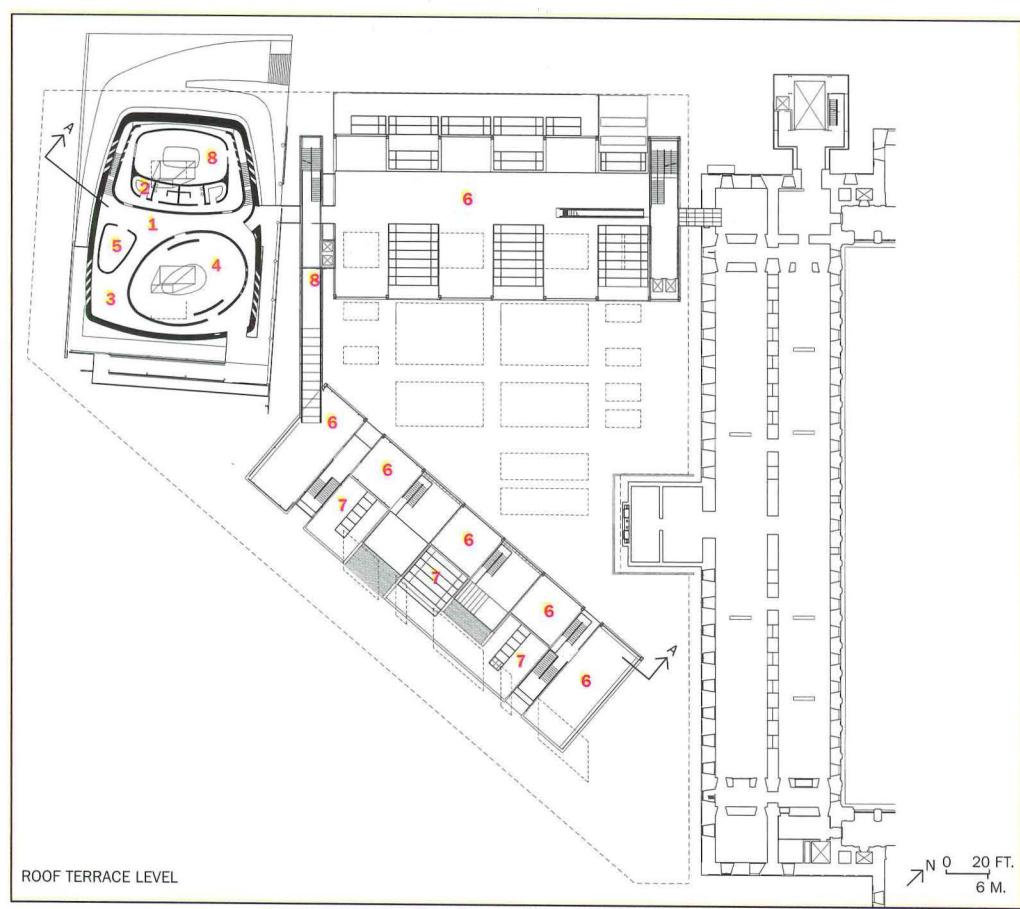


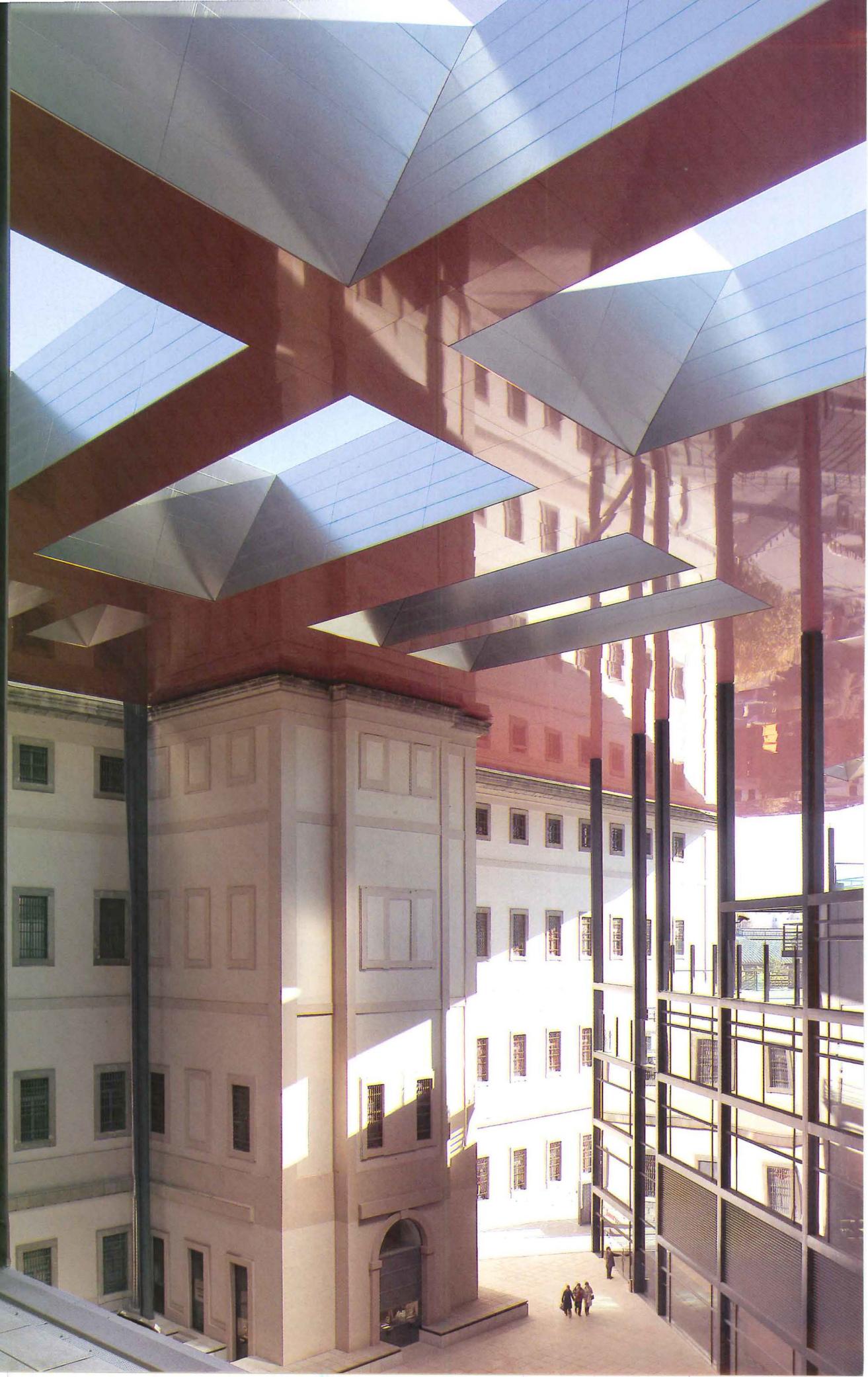
SECTION A-A



From within the courtyard (left two and opposite), the original masonry building appears juxtaposed against Nouvel's new pavilions and great canopy. Beneath the cutouts in the roof, which bring in light and allow for upward views, the courtyard lies open to the elements. The canopy varies in depth, tapering down to a thin plane at its edges, while elsewhere it becomes thick enough to house mechanicals and large trusses.

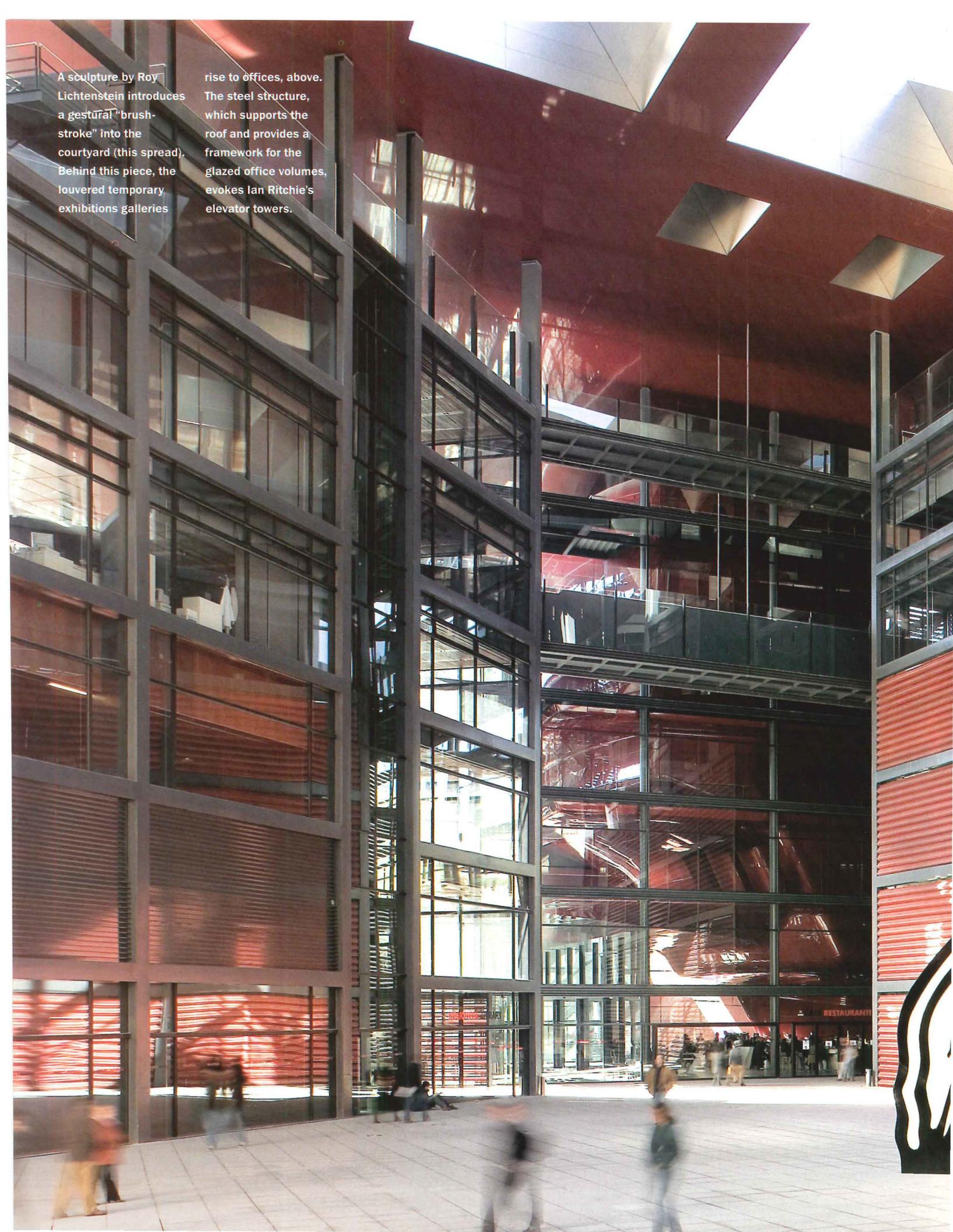
1. Vestibule
2. Coat check
3. Connection to library
4. VIP reception
5. Meeting
6. Terrace
7. Skylight
8. Reception



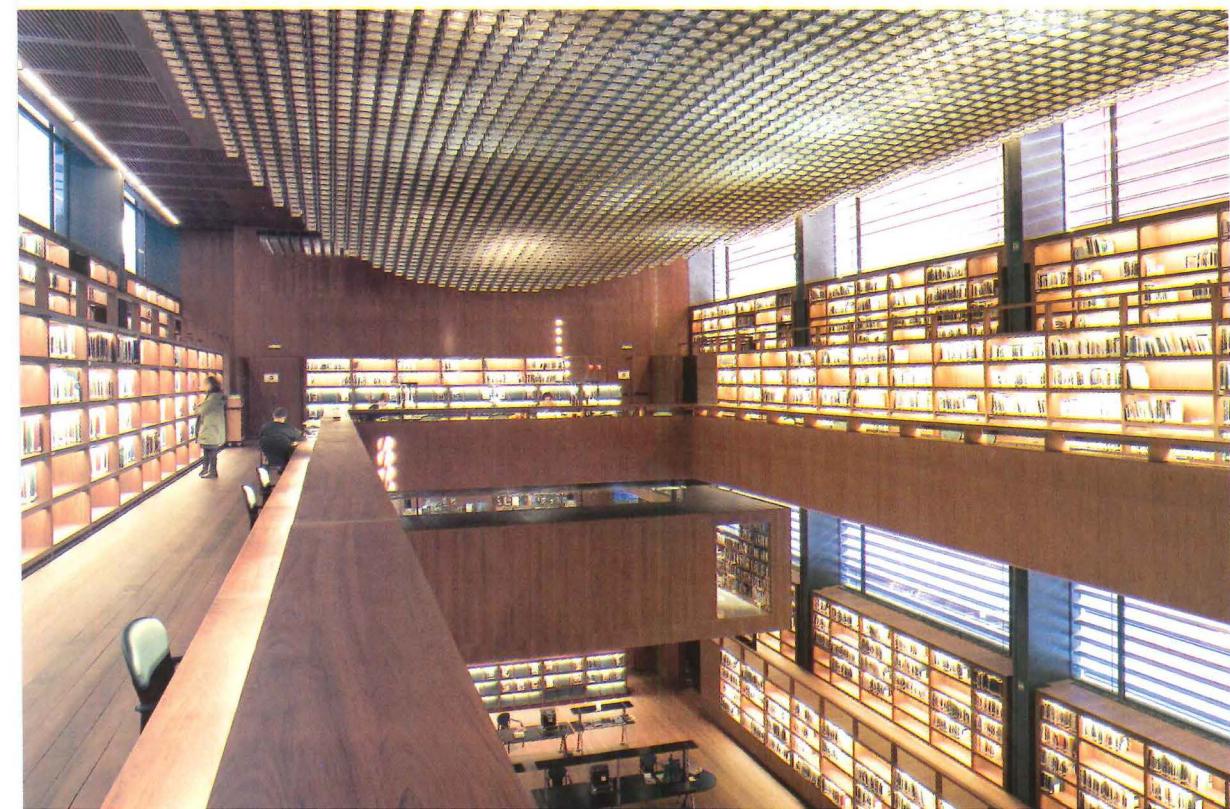
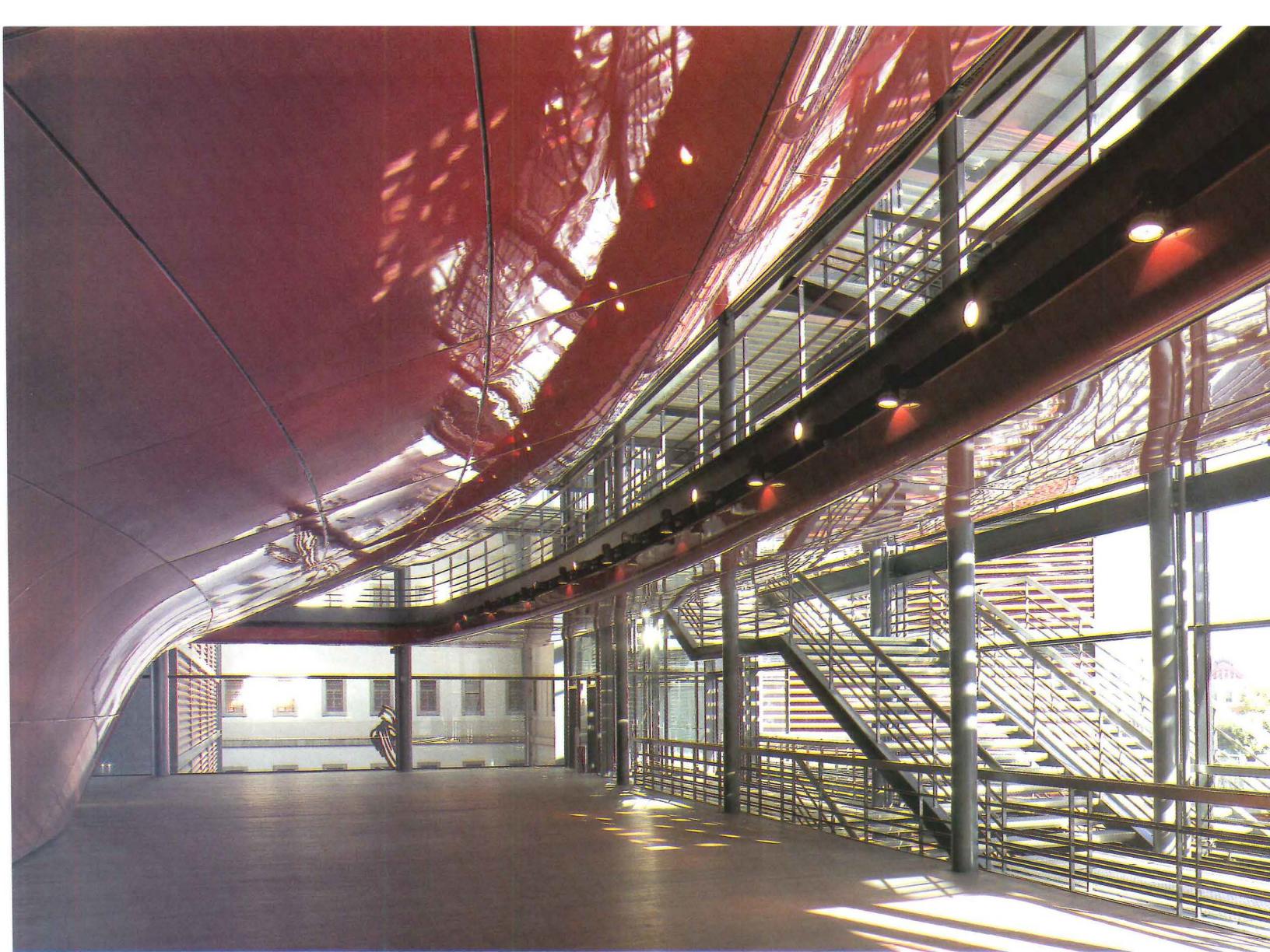


A sculpture by Roy Lichtenstein introduces a gestural "brush-stroke" into the courtyard (this spread). Behind this piece, the louvered temporary exhibitions galleries

rise to offices, above. The steel structure, which supports the roof and provides a framework for the glazed office volumes, evokes Ian Ritchie's elevator towers.







The red, polyester-tile-clad underbelly of raked seating bulges into the auditorium lobby (above and opposite, bottom). Here, stairs run on either side of the glass window. In the *jotoba*-wood-lined library (left), a "medusa" made of blocky glass lenses diffuses light into the reading room. The terraces just under the roof (opposite, top) were originally intended to display sculpture, but a last-minute change in paving rendered it unsuitable for that purpose.



aerodynamic slits for ventilation grilles and skylights. On the pavilion's south facade, stairs on either side of the glazing double as brise-soleils. In contrast to the sober neutrality of the galleries and dark wood of the library, the red polyester gives this pavilion the slick flair of a nightclub.

The most spectacular spatial experience of the complex, though not yet accessible to the public, requires an ascent to the pavilions' roof terraces, just beneath the hovering wing. From here, panoramic views of Madrid unfurl. Nouvel had envisioned filling these terraces with sculpture, but that idea became impractical when a last-minute change introduced a membrane system with fragile, floating granite tiles instead of the originally intended, solid granite paving. The museum director had ordered this modification after a construction accident allowed water to penetrate the galleries, scandalously damaging a painting by Juan Gris.

From the hovering roof, an escalator will take visitors down to the terraces (an experience that evokes disembarking from a UFO), where they will cross a bridge over the courtyard and ultimately reach the ground through a series of staggered decks over the library. Reminiscent of the Hanging Gardens of Babylon, these terraces offer marvelous perches for observing the city. The full impact of the coppery red undersurface of the wing becomes apparent here, as reflections of passing traffic flow across the glossy form of breathtaking, 125-foot cantilevers. Only 86 square feet of column area support the vast roof: a ratio of 1,000 to one.

The wing's unseen zinc upper surface rises from the thin edge of the cantilever to 10-foot-deep section at the back of the site, enclosing steel trusses and mechanical equipment.

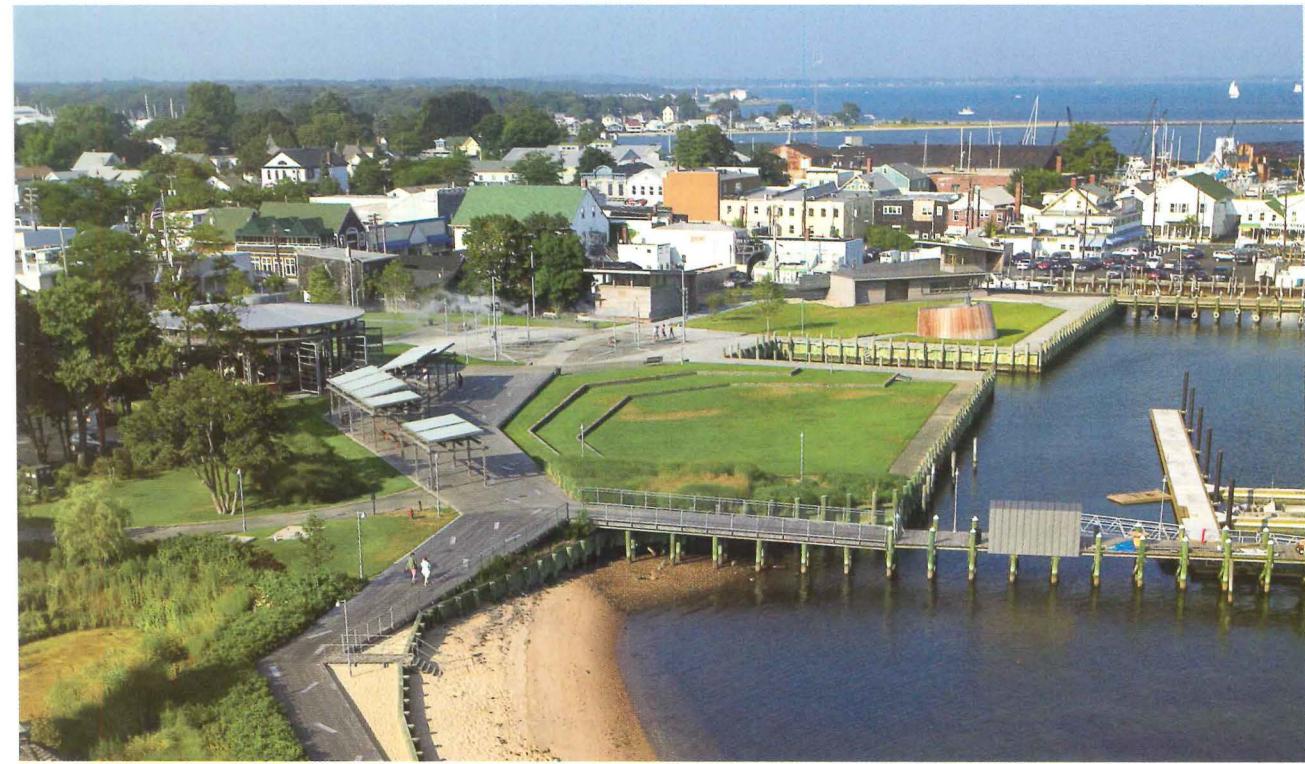
Nouvel has set the floating canopy 98 feet above the street and just below the top floor of the original building in deference to Sabatini's work. Nevertheless, the meeting between old and new seems schematic: a rude gap between the thin blade of aluminum and the museum's fortresslike rear wall. Perhaps a more aggressive intervention in the Sabatini building would have been more effective, though the competition guidelines explicitly forbade it. The original structure, inwardly focused around a large central courtyard, turns its back on Nouvel's efforts, while the new addition, in response, opens its arms to the bustle of the surrounding city. ■

#### Sources

**Curtain wall:** Folcra & Estrumaher  
**Lighting:** Erco



For more information on this project, go to Projects at [www.archrecord.com](http://www.archrecord.com).



Aerial views show how the competition design changed over the years. The carousel house moved from the center of the plan to one side, to frame the harbor view from Front Street (top). The elevation of the wooden boardwalk, calculated to rise above periodic floods, also blocked the view, so SHoP terminated it next to the carousel (left), continuing the path with a grade-level plaza and sidewalk to the commercial pier beyond.

# PROJECT DIARY It took three phases and 12 years, but SHoP shepherded MITCHELL PARK into the revitalization of a once-despondent town

James S. Russell, AIA

**W**hite-clapboard saltboxes, temple-fronted Greek Revivals, and bracketed, frilled, and bay-windowed Victorians have made Greenport, a tiny, 168-year-old seaport at the easternmost reach of New York's Long Island, an idiosyncratic barometer of architectural style. But the years after World War II, when shipbuilding died, were not kind to the 1-square-mile town of just 2,100 people. By the mid 1990s, its scandal-prone police department caught the notice of London's *Daily Mirror*: "Vice Cop Had Sex on Chief's Desk," a headline screamed. The hulk of a burned restaurant was "a cancer" growing in the village's core, according to Mayor David E. Kapell.

It is hard to find a more clear-cut case of a work of civic architecture catalyzing urban regeneration than Mitchell Park. Yes, it removed a blighting presence at the village's core, but its design—assertive and magnetic, yet sensitive to Greenport's history and personality—could not have happened without leadership and teamwork that overcame 12 years' worth of obstacles.

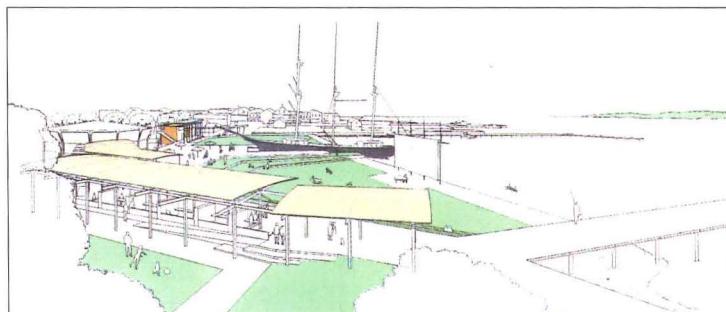
## 1994–1996: A competition replaces despondency with hope

Mayor Kapell made a name by firing the "world's worst police force," but he knew that renovating downtown's derelict 5 acres was a critical next step. After several commercial schemes foundered, Kapell was able to obtain much of the site from an owner in receivership. He met New York City architect Wendy Evans Joseph, and she proposed to organize a competition for the park Kapell envisioned. He immediately saw its possibilities. "In a profoundly depressed place like Greenport, people are preoccupied by what you can't do rather than what's possible. We had to break out of that insular thinking."

Joseph assembled a distinguished jury, including artist Mary Miss, architects Billie Tsien and James S. Polshek, urban designer Sandro Marpiller, landscape architect Nicholas Quennell, and environmentalist Erik Kriviat. With a successful outreach effort, the open competition attracted a spectacular response: 500 entries from all over the world. A drafty American Legion Hall was pressed into service as a jury space, and the citizens of Greenport, dazed at the extraordinary outpouring and international press coverage, streamed into the hall to view the designs. "I trace the change in psychology in the town to that day," said Kapell in an interview in his combination mayor's office, real estate business, and antique shop. "Greenport became the place where things could happen, instead of the place where nothing could ever happen."



Ice skaters now spin where floodwaters lingered in the 1990s (left). Though much changed, the competition's harborwalk idea (below) guided the project throughout.



Competitors were asked to make a place for a vintage carnival carousel that had been donated to Greenport, as well as a majestic but dilapidated clipper ship. The jury chose a scheme by Philadelphia landscape architect James Corner (now a partner in the firm Field Operations), which capitalized on the town's shipbuilding past by proposing a kind of ramped drydock for both ship and carousel. Townspeople were skeptical of Corner's austere drawn boards, and Kapell found he could not build support for the plan. The third-prize winner, by Manhattan-based Sharples design—at that time a young firm comprising William, Christopher, and Coren Sharples—offered a more readily grasped vision by uniting the program elements with a harborwalk—an armature of boardwalk, shelters, and benches that stretched along the

**Project:** Mitchell Park and Marina, Greenport, New York

**Owner:** Village of Greenport

**Architect:** SHoP Architects—William Sharples, Coren Sharples, Christopher Sharples, Gregg Pasquarelli, Kimberly Holden, Mark Ours, Reese Campbell, Keith Kaseman, Shigeru Kuwahara,

Jason Anderson, Leo Chang

**Marina architect:** Hastings Design Group/BJLA

**Engineers:** Buro Happold (structural); H2M Group (civil, mechanical, environmental)

**Consultant:** Quennell Rothschild + Partners (landscape)



water from a car-ferry terminal and train station at one end of downtown to a pier lined with stores and restaurants at the other.

In defending the decision to choose the Sharples scheme over Corner's, Kapell explained that "the park was a huge undertaking for the village, and it was an enormous challenge for me and the Village Board to help the community become comfortable with outside designers. Any one of the entries was mindblowingly avant-garde for Greenport."

#### 1997-1999: Design evolves with arsenic and a sinking ship

Though the Sharples got the job, their scheme came under immediate challenge. The tall ship sank. It was deemed unsalvageable and dropped from the plan. Once the town bulldozed the site's derelict structures, people fell in love with the long-obscured vista that opened from Front Street to Greenport Harbor, with its bustle of ferries and pleasure boats. The view spurred a change in position for the carousel (photo, opposite, bottom). By this time, the Sharples had formed SHoP architects with Kim Holden and Gregg Pasquarelli, and they took these adjustments in stride: "The scheme was not so image-based that it couldn't absorb change," explained Pasquarelli.

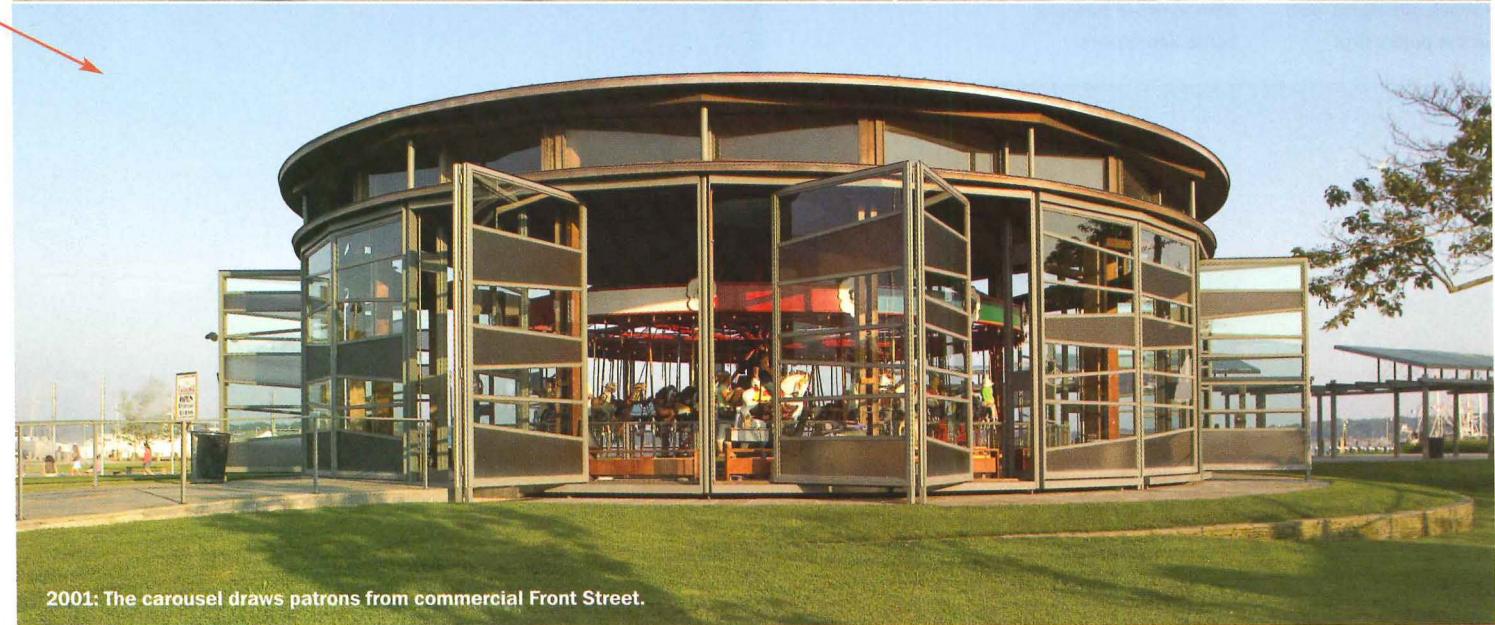
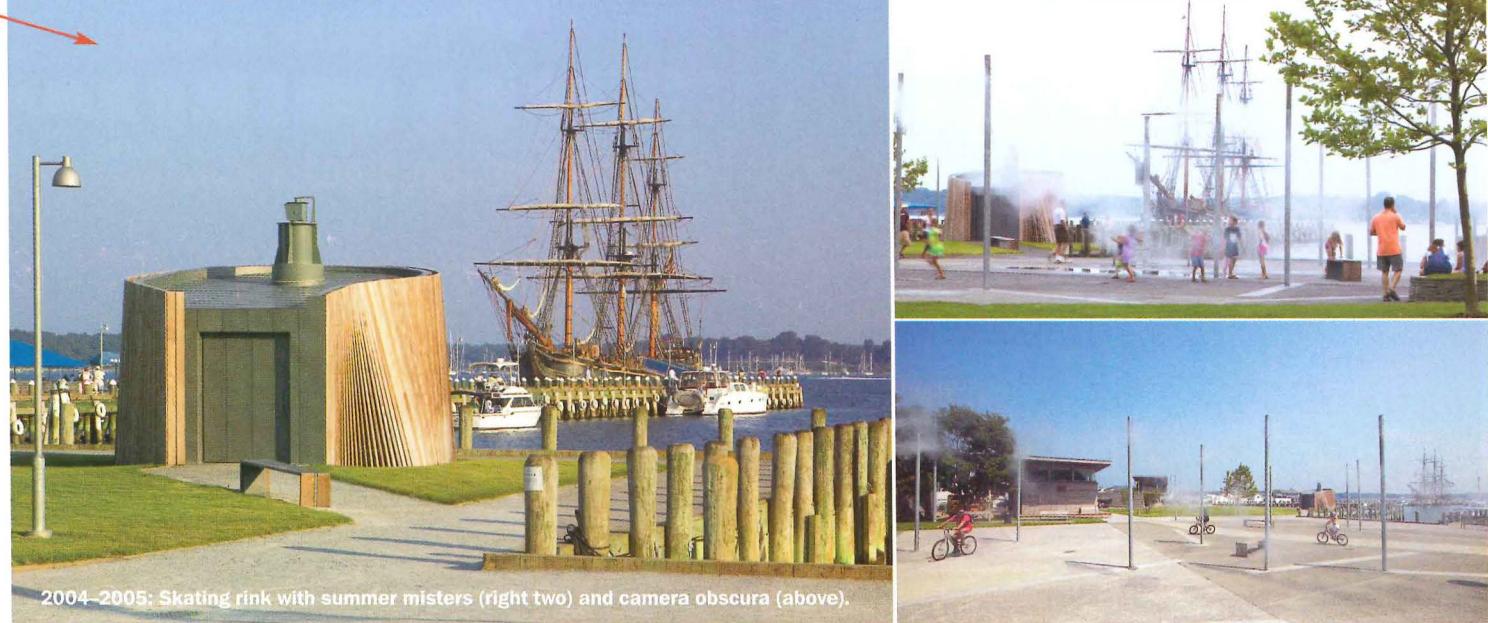
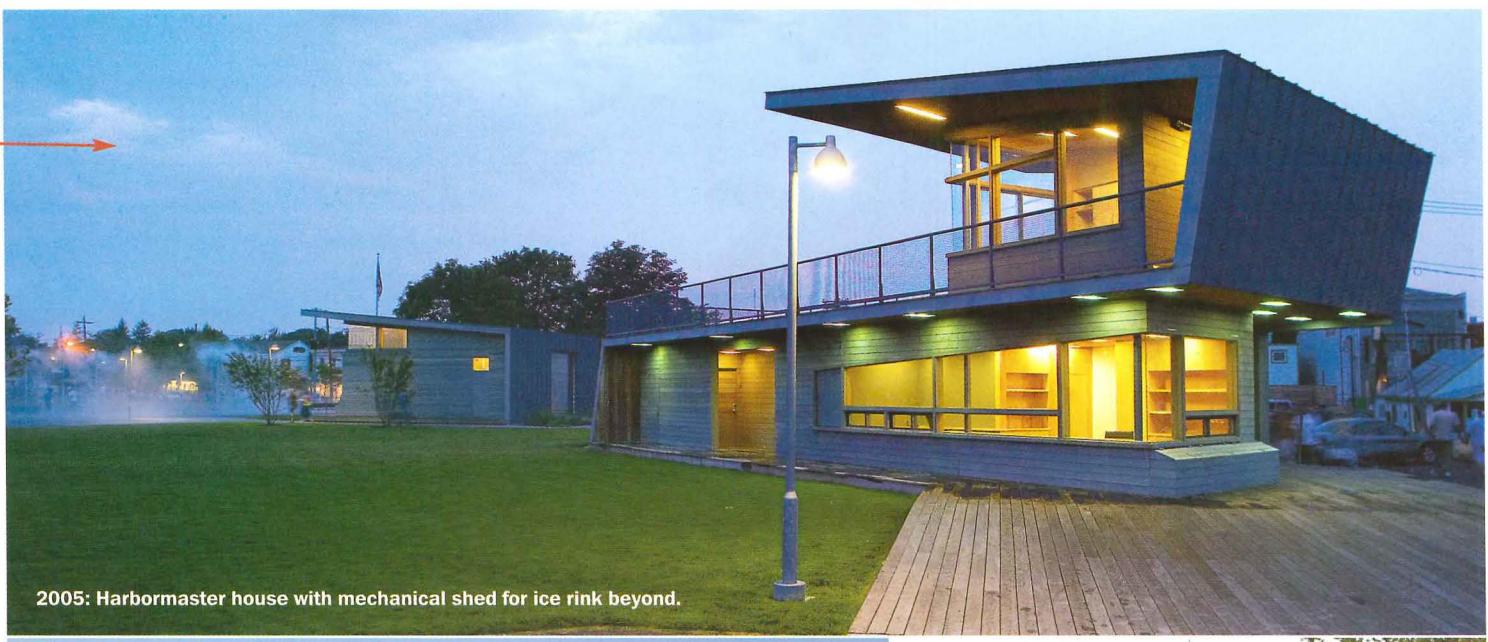
Though cleaning of petroleum-soaked soils had been anticipated as construction began in 1999, an earlier "gift" of fill turned out to be laced with arsenic. A year's cleanup delay and unknown extra costs were in the offing. "If you don't keep a project like this moving," explained

Kapell, "it can die a thousand deaths." There were renewed calls to abandon the park and sell the site to a developer. In a novel arrangement, SHoP stepped in to manage remediation, minimizing the delay by staging construction around the cleanup and capping polluted soils with the park structures to avoid costly and time-consuming soil replacement.

As the park came together, the area around Greenport, the narrow, 30-mile spit of land called the North Fork, was attracting an influx of second-home buyers and wineries—activity that mostly bypassed the village. That changed when the first phase opened on the July 4th weekend of 2001. Once the glass-and-steel doors of the carousel flapped open, children and parents flocked. The impact on local businesses was immediate as day-trippers lingered. It was not long before the village's paint-peeling old houses caught the eye of renovators.

#### 2002-2005: Success spurs momentum

The change in Greenport was so rapid that Governor Pataki took a personal interest in moving the second phase forward. Kapell convinced the New York Department of Transportation that storm-water retention basins, required to divert polluting road runoff from the bay, should be located on the waterfront parcel he needed to complete the park plan. The state agreed, bought the land, and not only dug natural ponds screened by filtering native plants, but built phase two, the western end of the harborwalk, in 2003. SHoP worked with government regulators (eight agencies





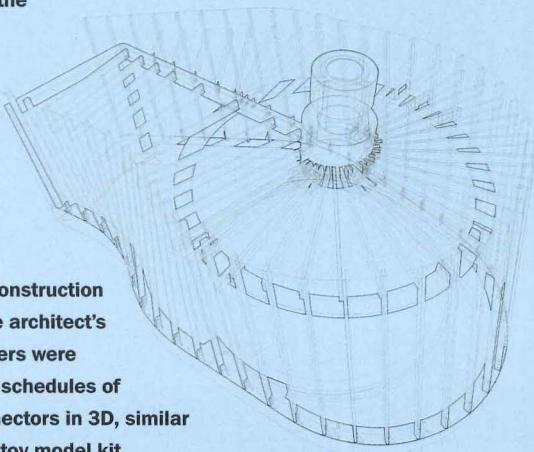
Massive steel-and-glass bifold doors protect the carousel (above and right), part of the park's first

phase, along with the boardwalk and wood shelters (below) that offer views of passing boats and ferries.





**"The bid set for the camera obscura focuses on the process of making rather than just describing," explains SHoP partner William Sharples. With construction simulated on the architect's computers, bidders were offered pictorial schedules of beams and connectors in 3D, similar to drawings in a toy model kit.**



were involved from the local to the federal level), taking ecologists' advice to angle the park's new waterfront bulkhead to guide drifting sand toward a tiny beach next to the boardwalk. It has rebuilt itself, adding long-legged egrets and skittering plovers to the park's visitors. Success allowed Kapell to expand the park's scope in the final phase. A provisional ice rink proved so successful that the mayor asked SHoP to add a permanent version. It sits atop a stone-paved plaza festooned with a field of masts that in summer emit wraithlike streamers of mist. John Serkin, a local enthusiast for the Renaissance camera obscura (a mirror-and-lens perisopic device that mysteriously heightens the effect of the view it captures), donated one to the park project.

SHoP's own sensibility evolved over the years. The harbormaster's house angles to give marina staff easy views of moored boats. Steel-framed within its wood cladding, it zigzags in section, with a ramp leading to an upper-level belvedere that offers panoramas to the harbor and the town's roofscape. To keep the small structures within a budget bid through New York's cumbersome multiple-prime-contractor system, SHoP devised contract documents that left no room for guesswork, especially in the unusual geometries of the camera obscura (above).

The ice rink opened on Christmas 2004, filling a void in a town that had few winter-recreation options. Merchants who had closed in the winter months began keeping their doors open as the clack of hockey sticks brought once-deserted streets back to life. The park officially

opened the following summer, hosting a full program of Shakespeare, movies, and music performances. Just last month, a 62-slip transient marina welcomed its first boaters.

The park's—and by extension Greenport's—success has been so great that Kapell now faces problems that he could not have dreamed of a decade ago. The new jobs the town now offers go begging because rising real estate values are making the town unaffordable.

Christopher and William Sharples compare the view framed by the buildings that line Front Street to a Piero della Francesca painting where architectural elements frame the human action. The reality feels more ambiguous. Though each structure asserts itself individually, together they seem to extend the pleasing hodgepodge of surrounding structures rather than act as the town's visual exclamation point. In its history, Greenport has embraced every architectural fashion. Mitchell Park—casual, informal, expressive—celebrates that tradition by being contemporary. ■

#### Sources/Materials

**Wood framing:** Engineered lumber; Ipe; Western Red Cedar

**Roofing:** VM Zinc (metal); Firestone (EPDM)

**Slate paving:** Pet-Mal

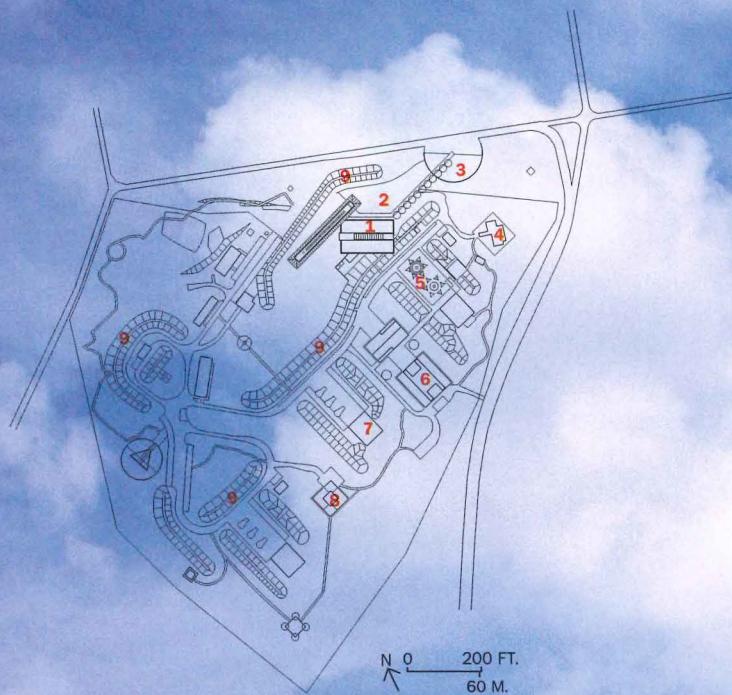
**Resilient flooring:** Forest Stewardship

Council certified Ipe (wood)

**Lighting:** Musco; Louis Poulsen; Bartco; Bega; safe-t-lite

For more information on this project, go to Projects at [www.archrecord.com](http://www.archrecord.com).

The museum (this page), located on a former NATO missile base, near Düsseldorf, is part of an art park. A stair (opposite) connects to half-buried galleries angled off the main glass-enclosed gallery.



1. Langen Foundation
2. Pond
3. Gateway
4. Sculpture (Erwin Heerich)
5. Sculpture (Katsuhito Nishikawa)
6. Seminar building
7. Lecture hall
8. Biophysical Institute
9. Earth berm



Tadao **Ando** explores the picturesque qualities of architecture and landscape in the **LANGEN FOUNDATION** outside Düsseldorf





At the entrance, the east end of the main gallery overlooks a man-made pond. The poured-concrete structure appears to float within a steel-and-glass vitrine, but the steel framing of the canopy slopes down to the roof's central section.

**The galleries for Modern art, angled off from the south side of the main pavilion (right), seem to erupt from the ground. The entrance path to the museum (below right) edges the man-made pond at the pavilion's east end.**



**By Suzanne Stephens**

**I**t may strike some as a bit ironic to speak of the picturesque in discussing a museum executed by a Japanese architect for a defunct NATO base in Germany. Yet that description easily comes to mind when first viewing the Langen Foundation, a small, 32,635-square-foot, concrete museum designed by Tadao Ando for an art park near Düsseldorf. Although several centuries have passed since the term *picturesque* came into usage in England, it can still be applied today.

In the latter part of the 18th century, architects adroitly placed follies and temples on the informal grounds of country houses in a manner that conjured up associations with idyllic landscapes in Renaissance paintings. Here, the Langen Foundation takes us back to that time by virtue of its placement within a renewed pastoral setting. The picturesque reemerges with a modern twist through Ando's deployment of geometric forms in nature, and his attention to the kinesthetic experience of the visitor moving through the varied spaces.

You discover the Langen Foundation almost by surprise, apprehending the museum as a series of fragments that come together in a unified whole as you proceed through it: Ando has separated two wings, slightly elevating one, which is 245 feet long, to appear like a Classical temple floating above a lawn. The other, a squared U-shaped structure, is embedded 20 feet into the earth as it angles off one side of the first wing. This secondary form, where long galleries are topped by glass skylights, appears to be a casual series of nesting concrete boxes that push up about 11 feet above grade. The circulation path through the two connected but discrete structures takes the visitor on an episodic procession that is as clear and direct as it is unexpected.

The physical environs of the museum in its location in Neuss, Germany, appears at first to be an irrational jumble: Roads and signage through the forests, pastures, and small villages in the area make it hard to find the museum itself, not to mention the 32-acre former missile base it occupies. Known as the Raketenstation, the missile launching facility



ceased operation in 1993. Two years later, it was annexed by the Hombroich Museum Island, an adjoining art park almost 200 acres in size, which was founded in 1982 by the real estate developer and collector Karl-Heinrich Müller. Over those years, Müller had commissioned sculptor Erwin Heerich to design a series of taut rectilinear brick pavilions to house the artworks on the island. More recently, Müller enlisted more artists and architects—14 in all, including Raimund Abraham, Alvaro Siza, and Daniel Libeskind—to contribute designs to the combined Museum Island and Raketenstation, now called the Hombroich Kulturraum (Hombroich Cultural Space). In fact, Siza is designing an architecture museum on the missile base, which will open in 2007, along with a music studio by Raimund Abraham. Already two sculptors, Katsuhito Nishikawa and Oliver Kruse, have designed sculptures and other facilities on the site, where former barracks and officers' quarters

**Project:** Langen Foundation, Neuss, Germany

**Architect:** Tadao Ando &

Associates—Tadao Ando, Masataka

Yano,

Antoine

Müller

Moriya,

design

team

**Architect of record:** Takenaka

Europe—Joachim Frey, Petra Sanden

Wolfram Fischer, German design team

**Owner's representative architect:**

Andreas Hitpass

**Engineers:** Horst R. Grün (physics);

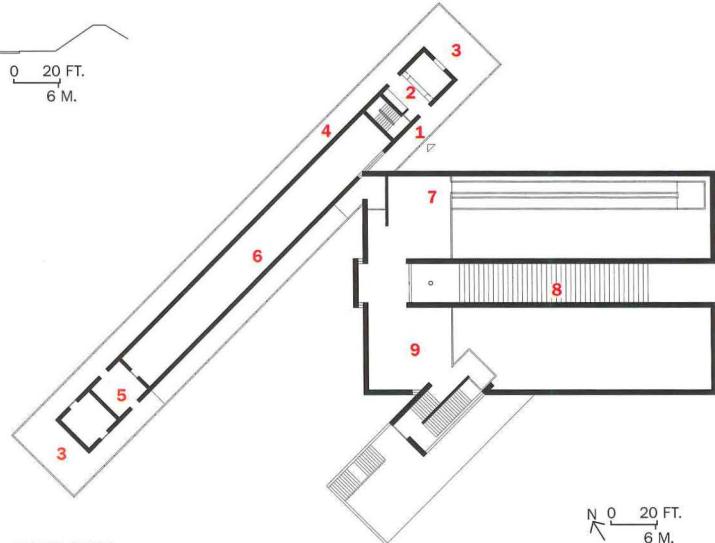
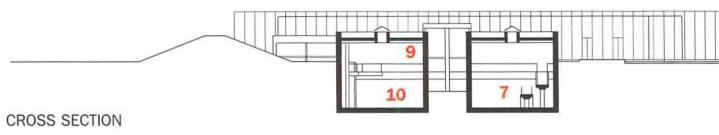
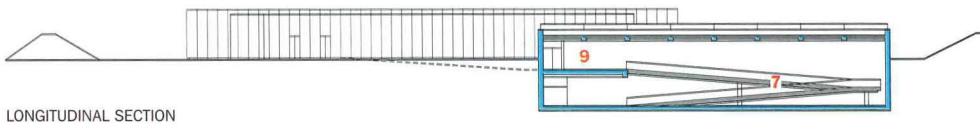
Ingenieurburo J. Heibjes (structural);

Ingenieurburo Bayr (mechanical

engineer)



- 1. Entrance
- 2. Admissions
- 3. Lounge
- 4. Walkway
- 5. Vestibule
- 6. Gallery for Asian art
- 7. Ramps
- 8. Exterior stair
- 9. Mezzanine/gallery
- 10. Galleries for Modern art

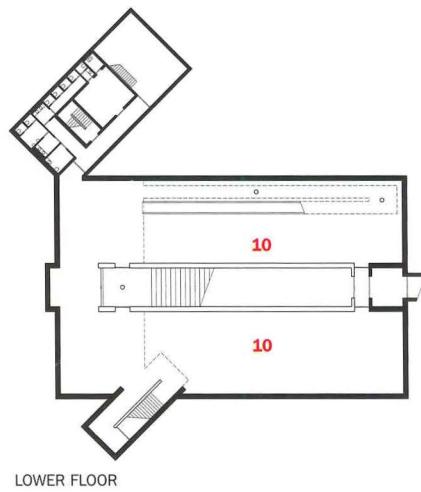


have been renovated for living accommodations, studios, residences, and research facilities for artists, musicians, and scientists.

In addition, another 1,040 acres of land is being planned for an experiment in living with nature, where architects and artists from this list each envision his or her own program and its accompanying design. This latter effort, coordinated by the Berlin architectural office of Hoidn Wang Partner, is known as the "Hombroich spaceplacelab," and requires that at least 90 percent of each site be left for nature.

Ando got involved with the art program at Hombroich through the instigation of Müller, who knew of Ando's museums in Japan and the United States [RECORD, March 2003, page 98; May 2002, page 171]. Ando's crafted concrete geometric forms interact compellingly with light, water, and earth in a manner that fits in with the Hombroich identity. In 1995, Ando designed an art pavilion for Müller on the former missile base; it appealed to another German art collector, Marianne Langen, who was searching for a home for the art that she had amassed with her late husband, Viktor, a businessman, which they had housed in Switzerland. In 2002, Ando revised his scheme to include 9,688 square feet of exhibition space for the Langens' 500 works of Japanese art, dating from the 12th to the 19th centuries, and about 300 works of Modern Western art by Cezanne, Warhol, and Rothko, among others.

Although the Langen Foundation, which opened in late 2004, abuts a cluster of buildings on the former base, it occupies its own precinct, surrounded by earth berms added by Ando, and is almost hidden from view. While the approach to the museum appears incidental, you soon find out it follows a clearly thought-out processional route: A





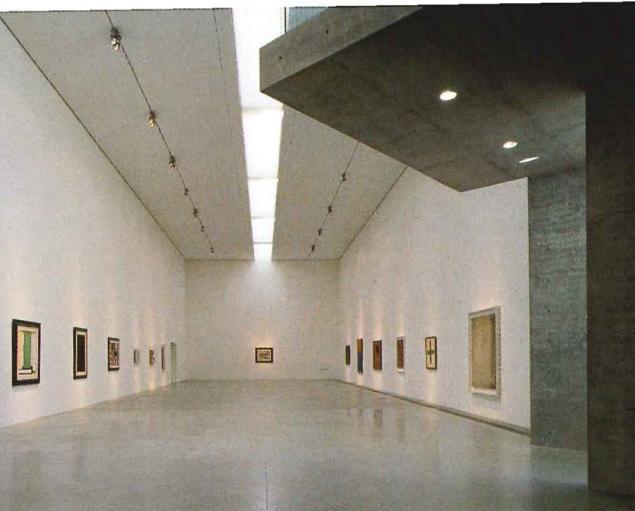
Beyond the earth berms surrounding the museum (above), visitors glimpse new and renovated structures of the former missile base, now part of an art park with living and research facilities. A path through the

curved, freestanding, poured-in-place concrete entrance wall (at center, right) leads around the pond to the main gallery, where a glass portico (opposite and above) displays sculpture by Mimmo Palladino.





The main entrance in the south portico leads to the admissions alcove (above), and beyond that to the north portico.



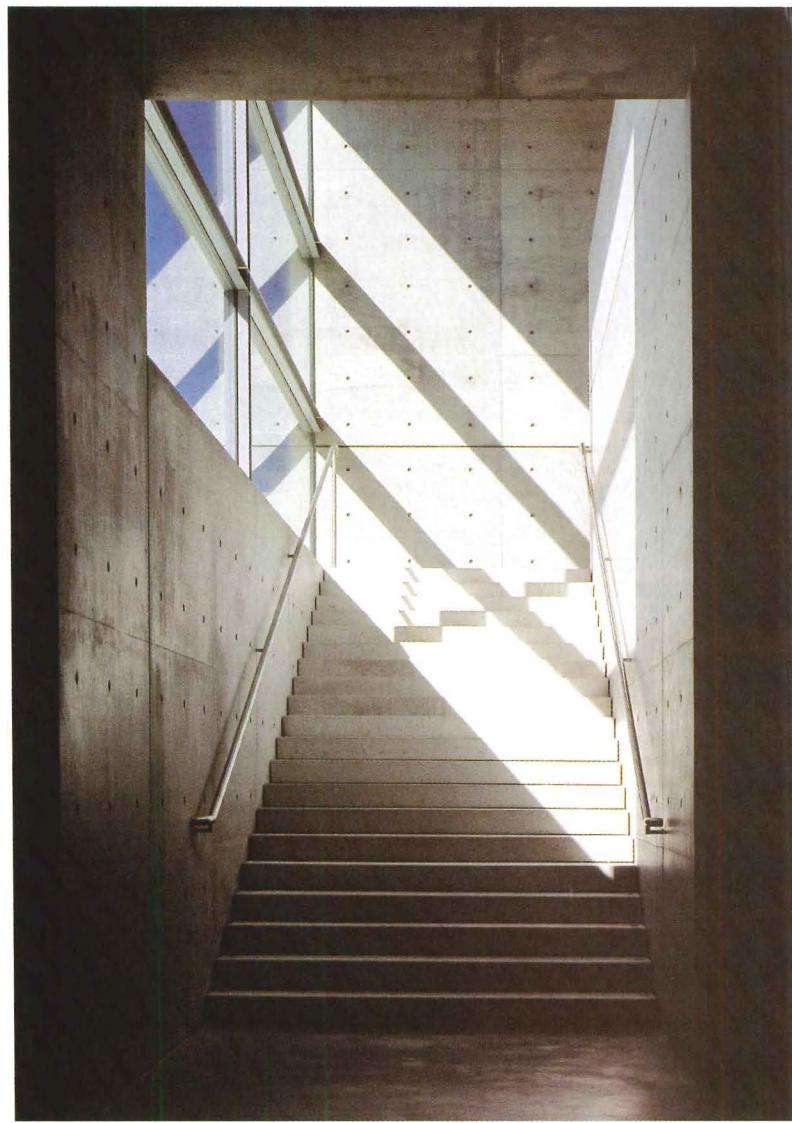
The two below-grade galleries for Modern art are reached by ramps from the mezzanine (above right). By walking through a connecting link, visitors

arrive at the 22-foot-high second gallery (above left). A stair under the projecting mezzanine balcony leads back up to the south lawn (right).

path leads through a large, rectilinear opening carved out of a curved, freestanding, poured-in-place concrete wall, past an irregularly shaped pond, to an unprepossessing entrance near the pristinely glazed, elegant end porch of the rectilinear temple.

Wrapped by glass-and-steel porticos and canopies on all four sides, the poured-concrete structure appears to be contained within a freestanding vitrine. (In actuality, the glass canopy structure angles down to the center of the roof, where it is anchored in two parallel concrete troughs that each flank a gabled skylight forming the roof's spine.) Ando compares these glass-and-steel porticos to the *engawa*, a terracelike space in a Japanese house that mediates between the interior and the outside. At the Langen, both north and south porticos provide long passageways enclosing the cella—the inner sanctum of this temple. Here, a long, dimly lighted gallery contains Japanese scrolls, screens, and other artifacts mounted in a somber, sepulchral setting.

On the south side of the building, the additional galleries for Modern art jut out of the ground at a 45-degree angle and are connected to the main gallery by a ramp at the east end of the south portico. By walking down the ramp, you find yourself suddenly on a mezzanine overlooking two dramatic, double-height galleries, illuminated by skylights and cleaved by an expansive exterior, concrete stair. The light admitted through the gabled, louvered and glazed monitors to these subterranean galleries bathes the spaces in an even glow. Too even, perhaps. (Although Ando calls these "dynamic" galleries, in contrast with the "still" gallery in the main museum wing.) Much of the quietness results from the scale of the relatively small artworks mounted against the large expanses of drywall, so that the art tends to be overwhelmed by the sheer volume of space in the 26-foot-high galleries. Since the exhibition installation does not depart from decades-old Modernist conventions of display, the dwarfing of art is all the more noticeable. (The exhibition *Graphic Works of the Avant-garde, 1918–1934*, on view until August 22, is absorbing, but tends





The north portico (opposite) takes visitors to a large porchlike space at the west end of the main gallery. A mezzanine level (right) overlooks the two sunken galleries and connects to an interior ramp in the first one. Slots of glass articulate the various concrete masses, and a large cross-mullioned window (below right) looks out to the broad exterior stair cleaving the two galleries.



to look like so many postage stamps on the wall.)

It soon becomes clear that the most interesting part of the museum experience is the actual processional path, that is, moving through Ando's serene, stunning exercise in concrete and glass. The totality well illustrates Ando's remark that he likes to site his buildings in nature with "a labyrinth inside," which has its "own nature"—particularly fitting here, since "real" nature outdoors looks a lot like some of the countryside of Ando's native Japan, with a similar mix of clouds and sun. If one is struck more by the architecture than by the actual art installation, however, it might be due to the absolute, pristine nature of the concrete itself, always basic to Ando's work. Here he has achieved a buttery smoothness using a resin-coated plywood formwork.

Although the finished result appears more like a refinement of Ando's vocabulary than an experimental departure from it, his architecture does remove you from the quotidian by virtue of its episodic variations. This newer version of the picturesque has evolved from the 18th-century notion in the sense that the kinesthetic experience of the observer is now more consciously identified as integral to aesthetic perception. And while Ando's geometries seem as Platonic as those found in 18th-century Neoclassical follies, his plans incorporate principles of asymmetry and collage along with a Classical organization. The modern attitude to the picturesque was astutely articulated by Anthony Vidler in 1982 in discussing another rectilinear work of architecture, Richard Meier's Hartford Seminary, in Connecticut. As Vidler wrote at the time in *Skyline*, an architectural newspaper, "Each functional element exhibits its difference, where the total idea of the institution must be pieced together by a moving observer." This piecing together, pointed out so long ago, is more dramatically developed in Ando's processional scheme for the Langen, which allows one to engage art, nature, and architecture. But that experience becomes more memorable than one's individual interaction with the artworks themselves in the museum's galleries. ■



#### Sources

**Concrete:** Florack Bauunternehmung

**Plywood form work system:** Peri

**Steel structure for glazing:** Frenken & Erdweg GmbH

**Glazing (veranda):** Glas Dönges

GmbH; Fertigbauelemente Uniatowski

**Waterproofing for roof:** Pohl Bedachungen

**Millwork:** Schäfer Holzbearbeitung

**Pond equipment:** Anlagenbau GmbH

For more information on this project, go to Projects at  
[www.archrecord.com](http://www.archrecord.com).



The ramp leads up from the east, extending pathways from the dorms. The glazed dining room, on the top floor, includes an intimate space, supported on columns, that bends around (this page and opposite).

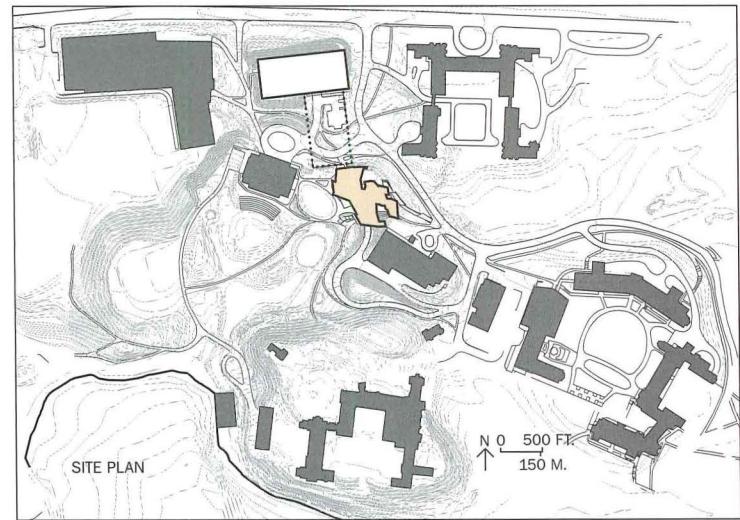
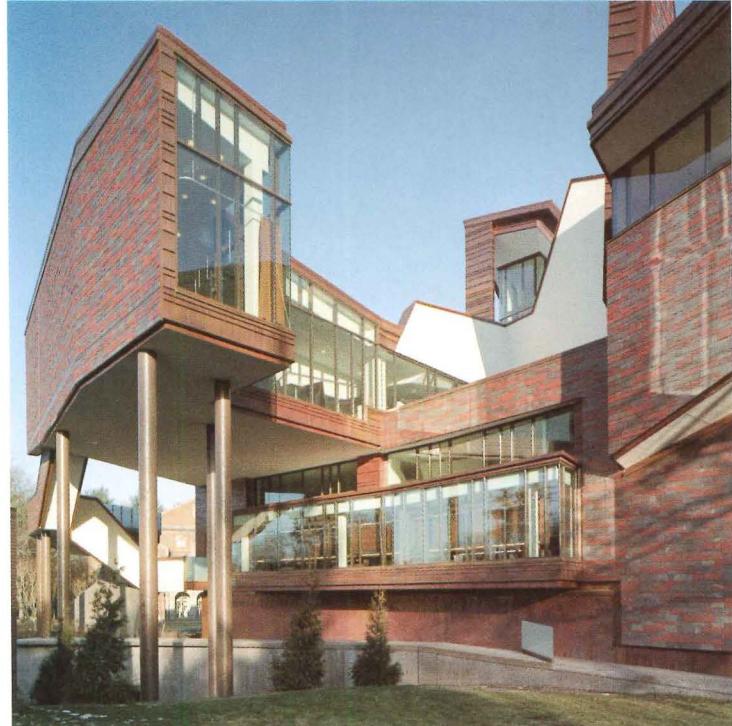
# Mack Scogin Merrill Elam angles its architecture toward the landscape and culture of Wellesley with the idiosyncratic **WANG CAMPUS CENTER**

By Nancy Levinson

In the process of choosing an architect for the campus center at Wellesley College, the school administrators asked the short-listed firms not for conceptual sketches of proposed structures, but instead for analyses of potential sites. The emphasis on landscape instead of buildings might seem unusual, but at Wellesley, a passion for its 450-acre campus—a wooded terrain of rolling hills, gentle plateaus, and flat meadows along the northern edge of Lake Waban—dates to the school's founding in the 1870s. In 1902, Frederick Law Olmsted, Jr., as a consultant to the college, wrote a lengthy letter describing the campus as "not merely beautiful but with a marked individual character not represented so far as I know on the grounds of any other college in the country." The letter, urging the administrators to respect the "exceedingly intricate and complex topography" by building along ridges rather than across meadows, would profoundly affect Wellesley's physical development. The latest evidence of Olmsted's beneficial influence is the Lulu Chow Wang Campus Center.

Designed by the Atlanta firm of Mack Scogin Merrill Elam Architects, the 50,000-square-foot building rises on an escarpment overlooking a cattail-filled meadow that slopes down to the lake—a setting the great landscape architect would surely have approved. Moreover, as Mack Scogin, AIA, explains, the Olmstedian philosophy and its particular meaning at this women's college west of Boston have informed not just the building's placement, but also its design. "Wellesley has always rejected the idea of imposing any abstract or geometric order on the land," says Scogin. "They've chosen instead to value the natural and the irregular." As a result, you come to understand this campus neither easily nor quickly, but gradually, as you meander along its paths and tramp its hills and valleys. And so, Scogin adds, "Our idea was to embody in this project the values of the landscape—to make a place that draws you in, a place that you discover slowly, over time."

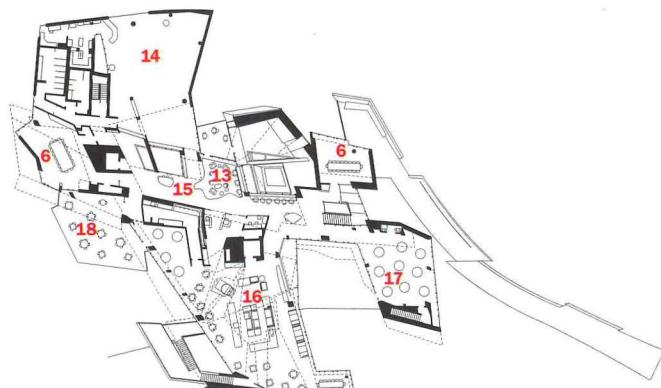
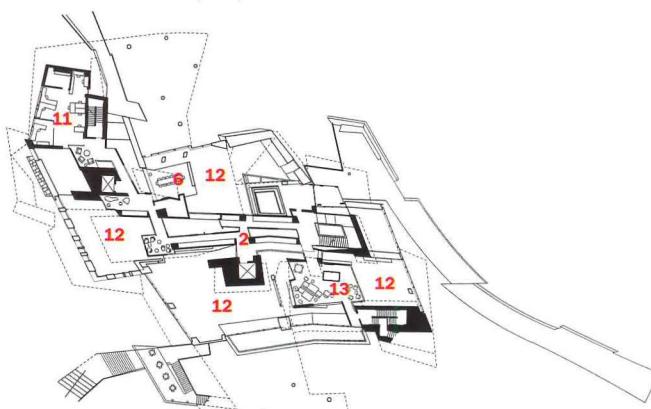
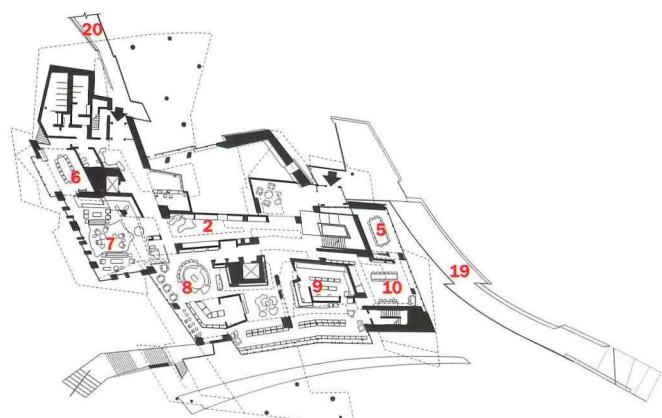
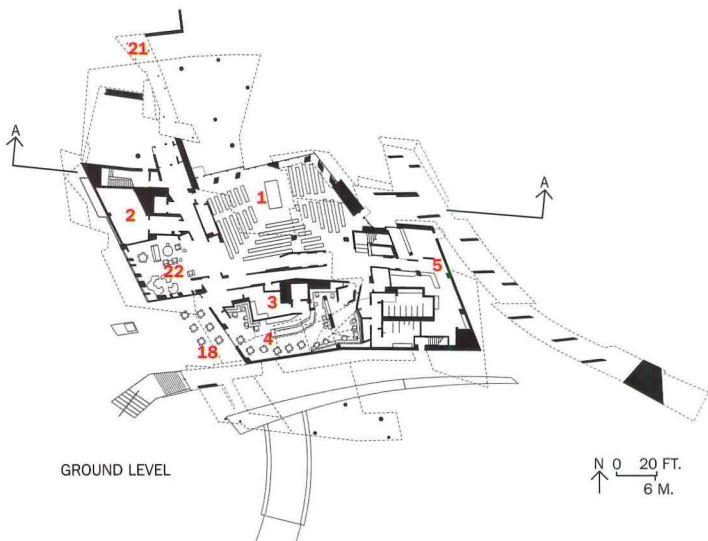
The architects' focus on a process of discovery resonated with Wellesley's leaders, who envisioned the building's program as open-ended and evolving. The clients admit that they were clearer about what they did not want than what they did: They did not want to pander to national campus-consumerist trends with a building devoted to cappuccino and rock-climbing walls. As Wellesley president Diana Chapman Walsh notes, "We didn't want a place that was more about marketing than about enhancing campus life." Ultimately, the college leaders decided on a nonprescriptive program: The center would house the student post office, a bookstore, and



**Project:** Lulu Chow Wang Campus Center and Davis Garage, Wellesley College, Wellesley, Massachusetts

**Architect:** Mack Scogin Merrill Elam Architects—Mack Scogin, AIA, Merrill Elam, AIA, principals; Timothy Harrison, AIA, Christopher Agosta, AIA, David Yocum, AIA, Kimberly Shoemake-Medlock, Jeffrey Collins, Jennifer Pinsky, Barnum Tiller, Christian Rice, Michael Wirsching, Jennifer Hurst, John Trefry, Stephen Trimble, Kevin Gotsch, Andrea Korber, Jane Lee, Ashley Moore, Margaret Fletcher, Brian Bell, AIA, Trey Lindsey, Sophia Greenbaum, Helen Han, Ted Paxton, design team

Nancy Levinson, based in Massachusetts, is a contributing editor to RECORD.

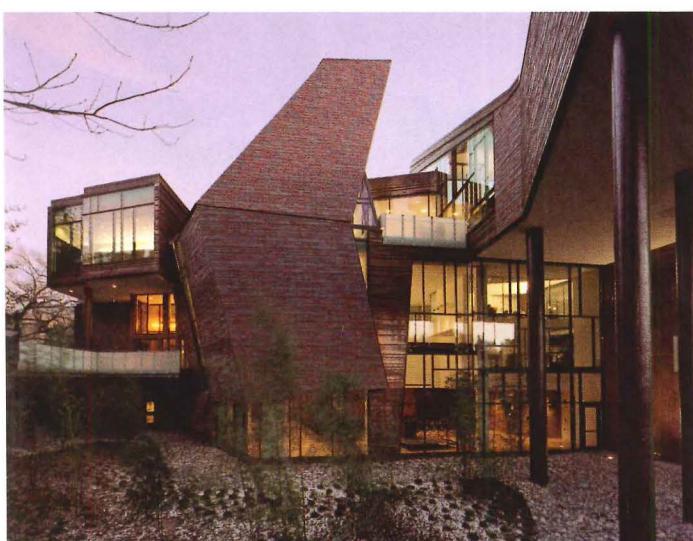


- 1. Commons
- 2. Storage
- 3. Catering kitchen
- 4. Pub and bistro
- 5. Café
- 6. Meeting
- 7. Lobby/forum
- 8. Convenience store

- 9. Post office
- 10. Student resource room
- 11. Administration
- 12. Open to below
- 13. Lounge
- 14. Bookstore
- 15. Retail
- 16. Serving
- 17. Dining
- 18. Terrace
- 19. Ramp
- 20. Bridge to sidewalk
- 21. To parking garage
- 22. Multipurpose

A bent, boomerang-shaped wall (below left) partially encloses the light scoop that directs rays into the commons. Another exuberantly angled and gestural wall

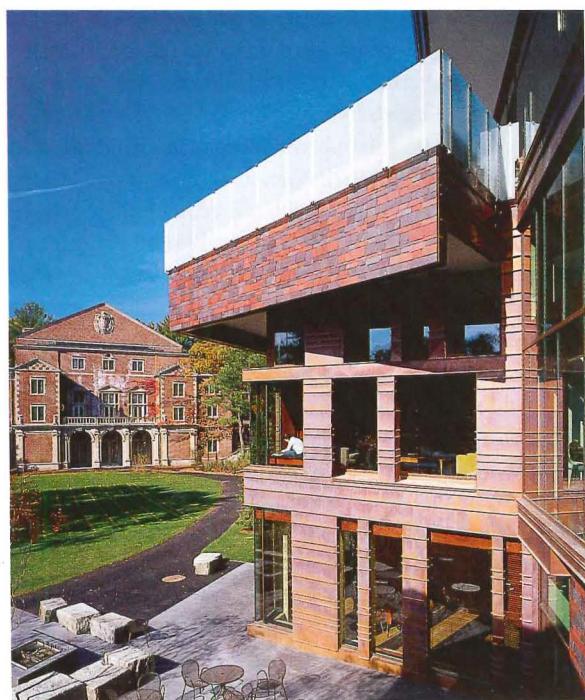
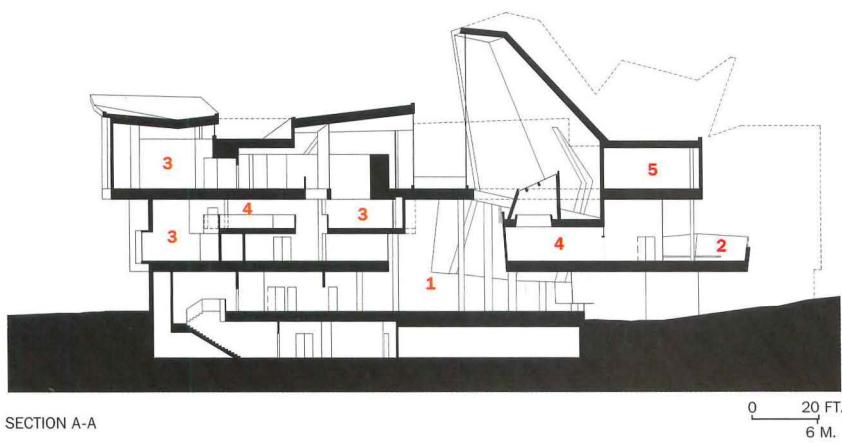
(below right) embraces a small garden that extends between two dining areas on the top floor. This planted bed offers visual access only.





1. Commons
2. Terrace
3. Meeting
4. Student lounge
5. Dining

A dramatic light scoop crowning the building (above) illuminates the north-facing commons, on the ground floor. With a 1923 building by Cram (far left in photo, right), the Wang helps define a green space.





The two-story-high commons, or great room, features a light scoop and a Mondrian-esque wall of windows (right). Wood storage cabinets, lit from within, glow through disk-shaped lenses (left).

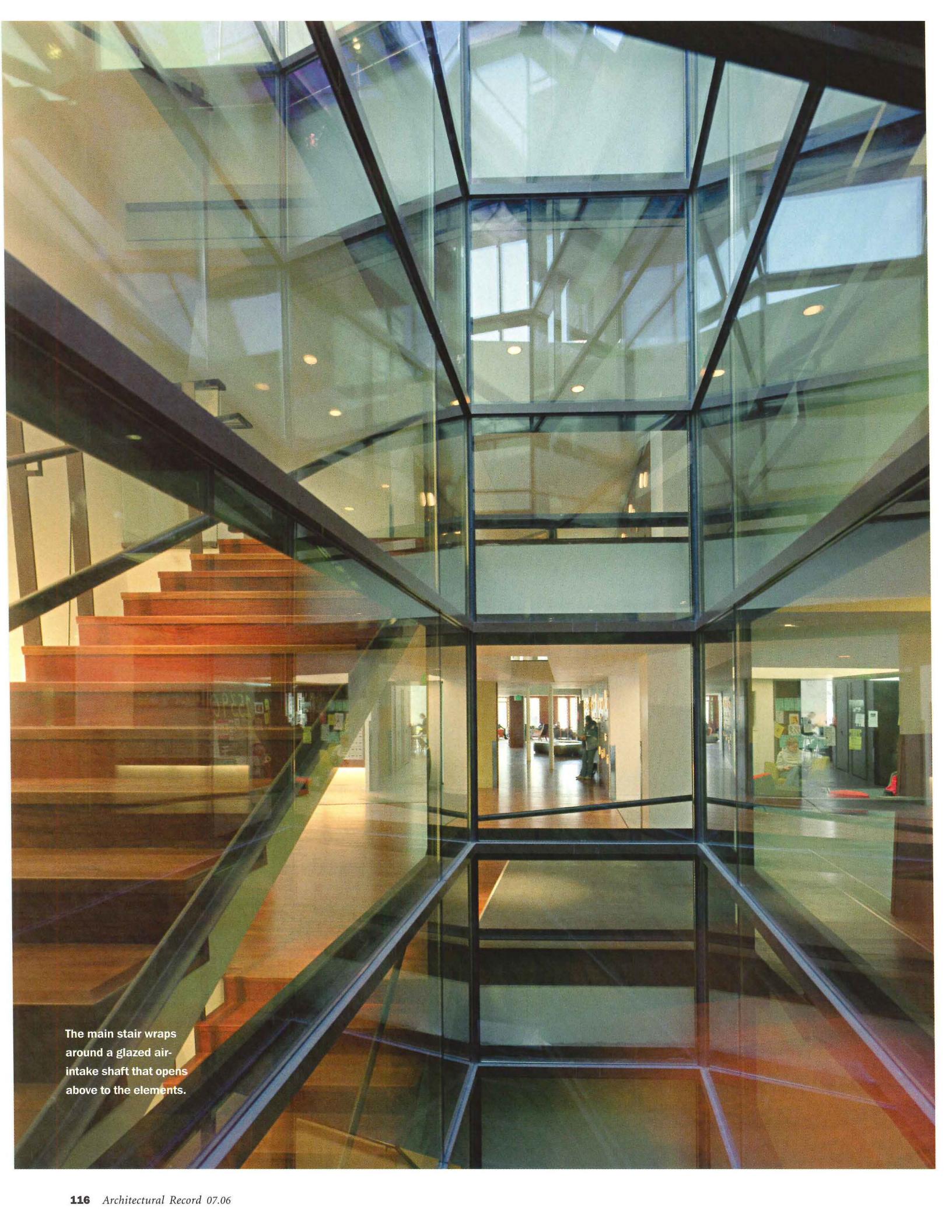
other spaces where the entire community could socialize. "We didn't want any group to feel it 'owned' the center," says Patricia M. Byrne, vice president for administration and planning. "The Wang is for everyone at Wellesley."

It seems unlikely that anyone on campus regrets the lack of climbing walls (and happily, there is no lack of cappuccino). The architects have succeeded in making the center as rich and idiosyncratic as the landscape. Unfettered by an elaborate program, Scogin and Elam created four intersecting levels of spatially graceful and diversely scaled spaces for eating, drinking, meeting, studying, and relaxing. The ground level includes an atmospheric bistro and pub, with deep red furnishings, and a double-height commons, with a dramatic four-story light scoop. The second level has a wood-paneled living room with a fireplace and, nearby, a coffee bar. The mezzanine has a lounge with a pool table and flat-screen TV; and the top level, two airy dining rooms and a southwest-facing terrace. Some spaces are linked visually by interior windows, or vertically by overhangs and balconies. The corridors are lined with wood-paneled storage cabinets (for campus groups). The cabinets are lit from within, glowing through translucent disks on their doors that provide illumination and generate a playful pattern.

The building's exterior is no less expressive. Viewed from any direction, the Wang is an exuberant and asymmetrical (to say the least) composition of jutting volumes, canted walls, swooping ramps, and tilting roofs, all articulated in slate, glass, and copper. Those who prefer their Modernism crisp and Mesian might wonder what all the zigzagging is about, but the design decisions are neither arbitrary nor whimsical. The architects have shaped the building to fit a complicated site, with each elevation responsive to its particular setting. To the north, the Wang is on axis with the campus's main automobile entrance, and its scale corresponds







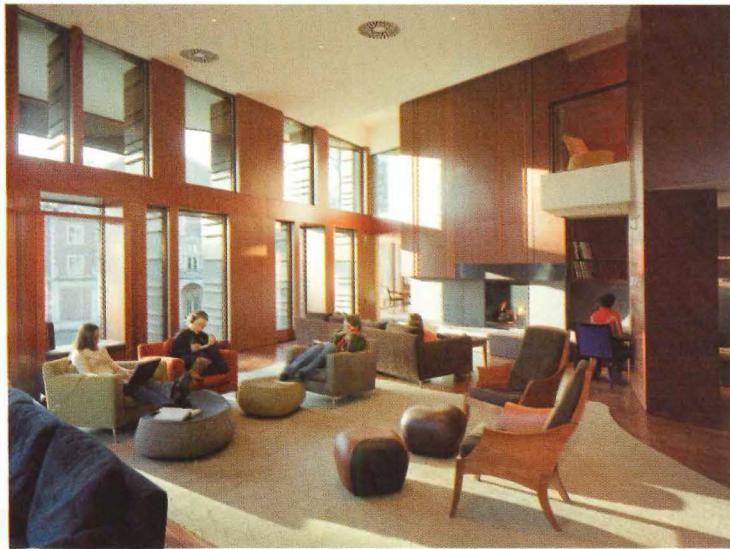
The main stair wraps around a glazed air-intake shaft that opens above to the elements.



The bistro and pub, on the ground floor, have moody, deep red furnishings. The "forum" (below) has a fireplace and piano.

accordingly—visitors, faculty, and staff, who usually arrive by car, cross a footbridge (which connects to a new, 563-car garage, also by Scogin and Elam) and enter a lobby with an inviting glimpse of the coffee bar; to the east are a series of footpaths, the main approach from the dorms, and here you encounter first a pedestrian ramp, arcing into the landscape and drawing you up into the building. To the west is Alumnae Hall—designed in 1923, in vaguely Jacobean style, by Ralph Adams Cram—and here, the Wang's height and mass respond to the older building; together the structures frame a green courtyard. To the south, the meadow sweeps down toward the lake. At this point, the Wang becomes a large-scale composition, configured to bring in light and, says Scogin, "hold its own against the landscape." (Michael Van Valkenburgh Associates remediated the meadow from a brownfield, and designed its landscape.) As Wellesley assistant art professor John Rhodes writes in the college magazine: "The more one encounters [the building] in person, the more one appreciates its responsiveness to its setting."

The Wang has already become central to campus life. It has also become another example—along with Rafael Moneo's Davis Museum and Cultural Center and Paul Rudolph's Jewett Arts Center—of Wellesley's willingness to embrace contemporary architecture. Which, on a New England campus with its share of Collegiate Gothic, "is not always an easy sell," as Byrne says. But the college planners persisted, and through a thoughtful design process, have built a place of its time, and emphatically of its place. ■



#### Sources

**Curtain wall:** Wausau

**Roofing:** Sarnafil Energy Smart (PVC); American Hydrotech (green)

**Suspension grid:** Armstrong

**Paints and stains:** Benjamin Moore

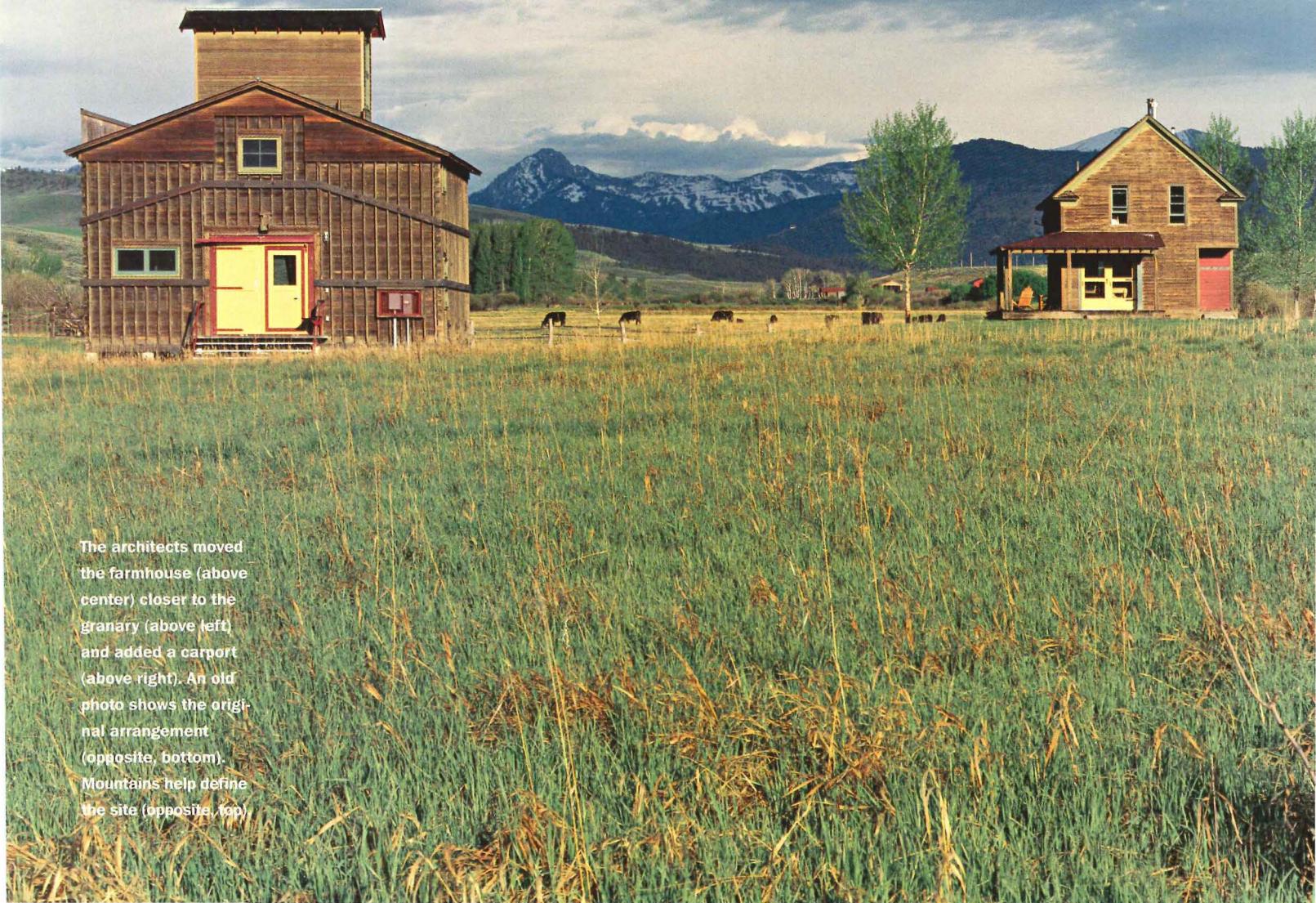
**Wood paneling:** Smith & Fong Bamboo

**Furnishings:** Herman Miller, Steelcase;

Edra; Dryade; Zanotta; Stylex; Frity Hansen; Thos. Moser; Frighetto; B+B; ICF; Vecta; Cassina; Werndl; Moroso; Baleri Halia; Nienkampe; Metro

For more information on this project, go to Projects at [www.archrecord.com](http://www.archrecord.com).

**Fernau & Hartman** recycled the old, added some new, and moved things around to connect the **AVIS RANCH** to its rugged Montana setting



The architects moved the farmhouse (above center) closer to the granary (above left) and added a carport (above right). An old photo shows the original arrangement (opposite, bottom). Mountains help define the site (opposite, top).



**By Clifford A. Pearson**

**O**n a ranch with 17,000 acres of spectacular Montana scenery, why would you build your country house on the lowest part of the land, close to the road? Why split it up into a series of small buildings, rather than gather family and guests under one roof? Because you're thinking like a farmer, not an interloper, explains Richard Fernau, FAIA, whose firm, Fernau & Hartman Architects, designed a retreat in southern Montana for Anne and Greg Avis and their family.

You don't have to drive far along the graded-but-unpaved road linking the Avis Ranch to the nearest town (Clyde Park, population 335) to see what other wealthy newcomers have built for themselves. Some 5 miles down the road, an enormous pile of styles and materials masquerading as a second home stands on a ridge, commanding an impressive view (and ruining it for everyone else).

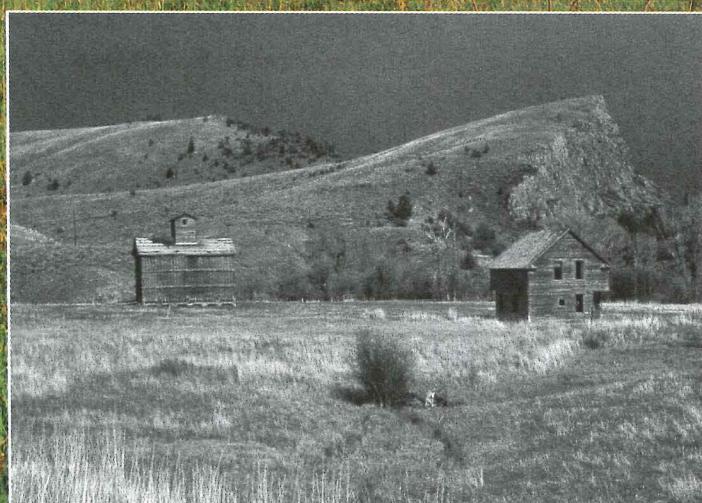
Over the course of nearly 10 years, Fernau and his partner Laura Hartman, AIA, have helped the Avises build a ranch piece-by-piece, so that each little structure fits with the land as well as its neighbors. Recycling old buildings, salvaging old materials, and adding new structures, Fernau and his firm designed a complex that seems as casual and rugged as a group of cowboys at the end of a long day on the trail. But, in fact, the project embodies a painstaking approach to design that included consideration of environmental, social, and aesthetic issues. In the process, the architects and their clients changed a lot more about the buildings than is initially apparent, and—equally important—changed themselves as well.

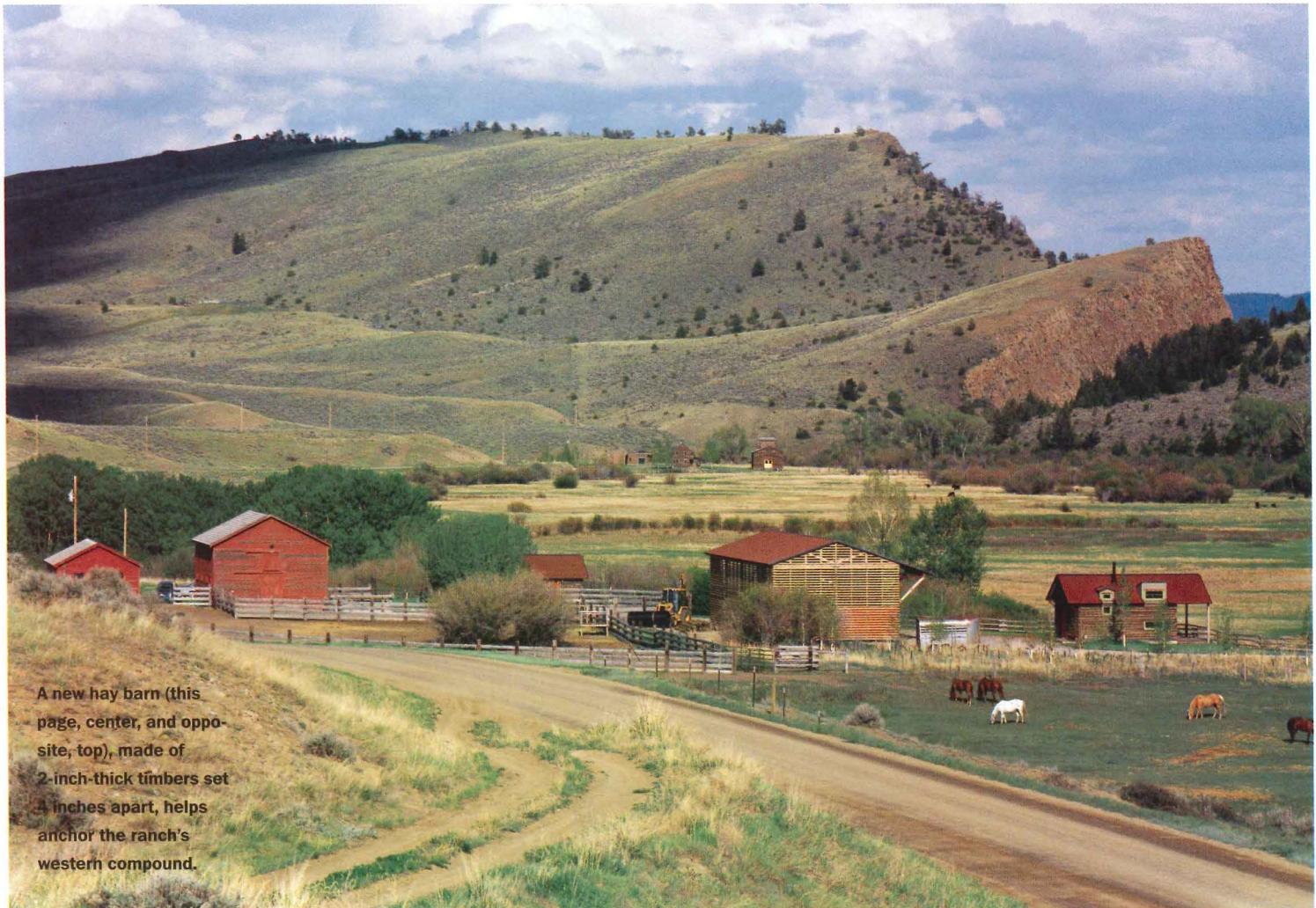
**Project:** Avis Ranch,  
Clyde Park, Montana  
**Architect:** Fernau & Hartman  
Architects—Richard Fernau, Laura Hartman, design principals; Jenee Anzelone, Sean Gilmore, Randy Hellstern, Leyla Hilmi, Peter Liang, Tom

Powers, Aaron Thornton, design team  
**Engineer:** Bridger Engineering—  
Ed Matos and Brad Ebel  
**Consultants:** Sandy Blake (landscape); Alice Prussin (lighting)  
**General contractor:** Anzick Construction



PHOTOGRAPHY: © TIMOTHY HURSLEY, EXCEPT AS NOTED; JUDY K. LAWRENCE (BLACK-AND-WHITE PHOTOS)





A new hay barn (this page, center, and opposite site, top), made of 2-inch-thick timbers set 4 inches apart, helps anchor the ranch's western compound.

The first critical decisions were figuring out what to do with the dilapidated structures that came with the ranch and where to build what the Avises expected would be their new country house. For more than a year, the architects and clients studied the land and considered several locations offering stunning views of Ross Peak to the west or the range of mountains known as "the Crazies" to the east. "Our first inclination was to find the best spot on the land and put our house on it," recalls Greg Avis. Building there, though, would require adding a long driveway, extending water and electrical services, and disturbing the land. As the Avises considered their options, they lived in an uninsulated stucco house on the property, rode horses around the ranch, and got to know the land. In the meantime, Fernau advised "saving the old buildings, by slapping new roofs on them, then figuring out what to do with them later."

The old buildings fell mostly into two compounds about three-quarters of a mile apart. One compound had a weather-beaten granary and a small farmhouse, while the other encompassed some modest buildings, a pair of small stables, and an outhouse equipped with a three-hole latrine. As they studied the land, Fernau and the Avises became increasingly aware of how fragile the tough-looking environment really is and how important the ranch's unremarkable buildings were to the local people who drove by them every day. So much of the area's rural imprint had disappeared that the remaining barns and granaries were becoming increasingly precious.

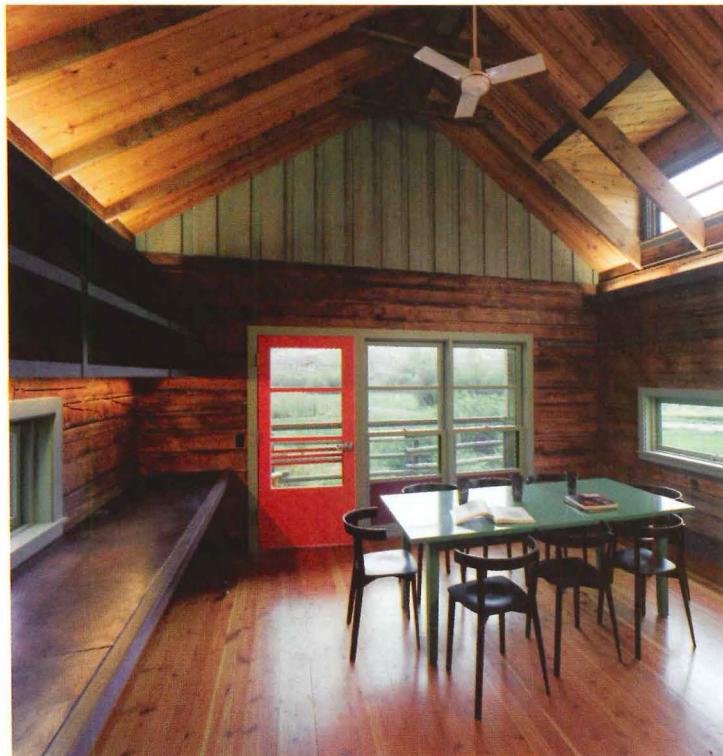
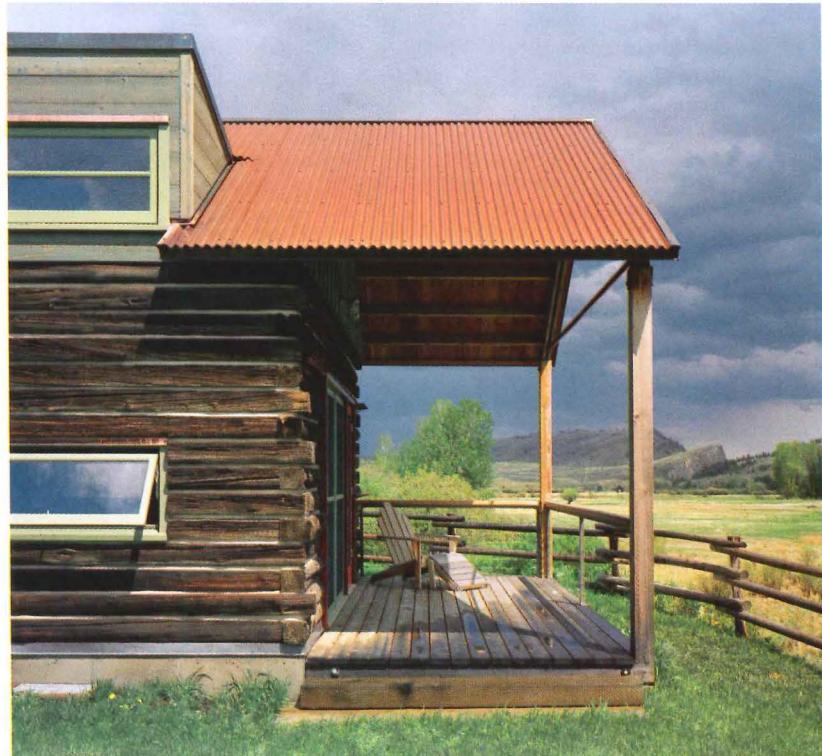
Slowly, Fernau and his clients realized that the responsible approach to the project was "to think like a farmer," recalls the architect.

"We asked ourselves, 'Where would the farmer put his house?'" The answer was obvious: right where the existing farmhouse is, close to a creek for water and to the road for easy access. Reusing the existing buildings also made sense as the participants' environmental ethos deepened.

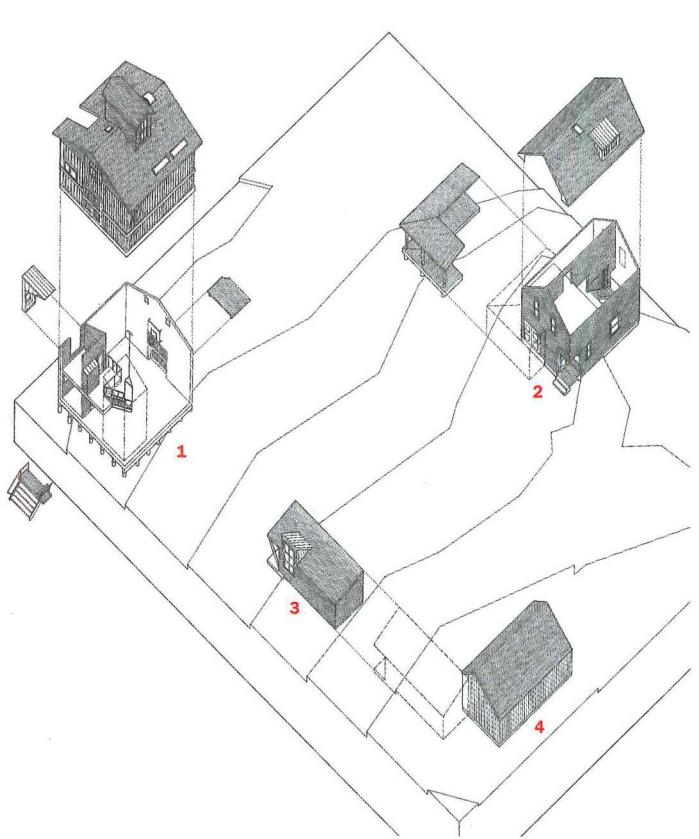
Fernau, however, didn't see the project as an exercise in historic preservation. As he worked on the buildings one at a time, he added new features to some of them: dormers, porches, windows, and doors. He tore down the stucco house and built a new carport/toolshed. He picked up the farmhouse from its rotting wood foundation, poured a new concrete slab, and replaced damaged wood siding with new boards of Douglas fir (same as before). Inside, he created a modern house with a new kitchen open to the living and dining area and a palette of colors (including russet, moss, and ochre) inspired by lichen that grow in the area. He restored the granary's distinctive wood-plank envelope, but moved the building closer to the farmhouse and rotated it 180 degrees because its west facade had been battered by winds for nearly 100 years. He also added windows to the wheel room at the top of the granary to bring more daylight inside. Where grain had once collected, he created an indoor basketball court (great on cold winter days) and inserted a second floor with a bedroom and bath. He restored much of the granary's interior materials, used salvaged wood from a granary torn down in another part of the state, and added new materials such as polished particleboard on two sides of the basketball court.

"I saw the project as a Rauschenberg or Schwitters collage," explains Fernau. "You take some found objects, work with them, add to

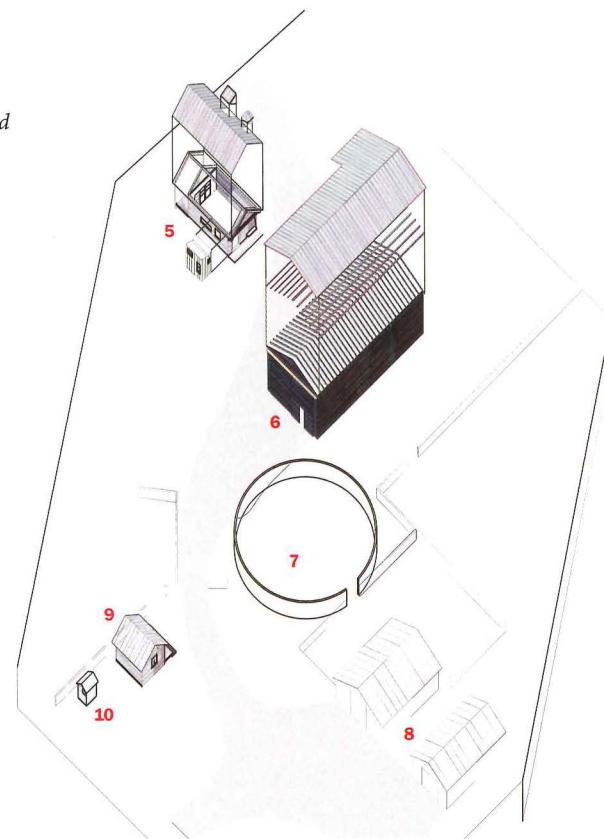
The architects converted a small granary into a 420-square-foot guesthouse (left in photo below), giving it a porch (bottom left) and a simple living space (bottom right).



The farmhouse, which had been abandoned, then used as a barn, was fixed up with a new porch, repaired Douglas fir boards, and a new cedar roof.



1. Granary (converted old building)
2. Farmhouse (refurbished)
3. Toolshed (new)
4. Carport (new)
5. Guesthouse (refurbished)
6. Hay barn (new)
7. Corral (refurbished)
8. Stables (refurbished)
9. Office (refurbished)
10. Privy (refurbished)



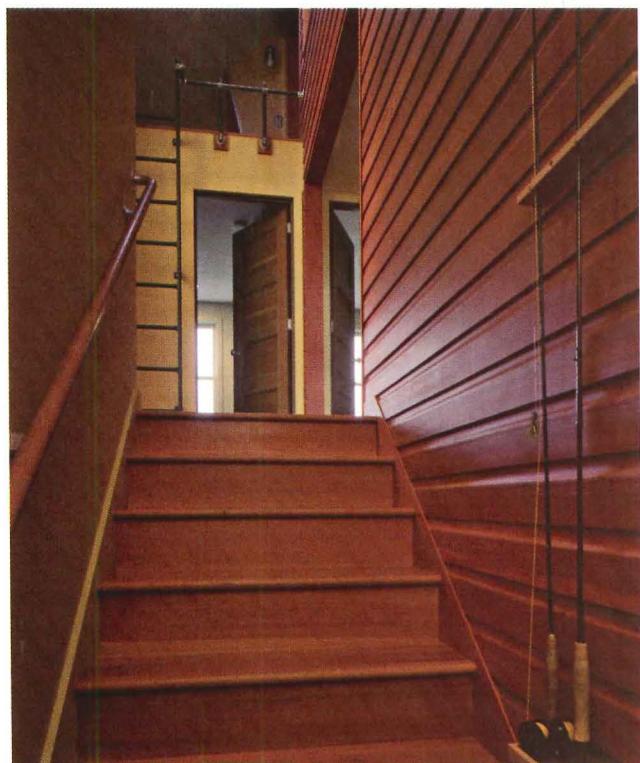


them, arrange them, and rework them." Like Robert Rauschenberg and Kurt Schwitters, Fernau established rules for himself—in this case, minimizing the impact on the land, recycling as many materials as possible, and using only natural ventilation. But aesthetic choices also played a role: This color looks better than that, and this set of proportions feels right for that room.

Of particular concern to Fernau was getting the relationship right between the various buildings and between the two compounds. By moving the granary closer to the main house, for example, he let an adult sitting on the porch of the house see what the kids are doing at the granary without having to hear everything. He also wanted to establish a sense of connection between the two clusters of buildings while decentralizing the functions of a country house and working ranch. "Getting the sight lines correct between the two compounds was critical," states the architect.

While there are bedrooms and bunk rooms in a number of buildings throughout the project, the granary/farmhouse cluster has a stronger residential character than its counterpart, which serves mostly as the heart of the ranch's cattle and horse operations. At the latter compound, the architects built a new hay barn, fixed up a corral, converted a small wood building into a guesthouse, fixed up a shack as an office for the ranch, and updated the privy with a composting toilet and a ceiling

**Inside the farmhouse, Fernau & Hartman created a contemporary interior with 1,260 square feet of space, including a simple living/dining area (above) and three bedrooms upstairs (right).**





light fixture made from the old three-hole toilet seat.

The Avises have long been interested in environmental issues, but working on the ranch has deepened their understanding and commitment to the land. After buying the property, they (and Fernau) enrolled at the National Outdoor Leadership School, which provides wilderness education. They also set up conservation easements for almost all of the ranch, which will maintain its rural character forever and prohibit subdividing it.

By demonstrating their concern for the land and living close to the road, the Avises have found themselves increasingly connected to the local community. Neighbors drop by if they see a car in the driveway or someone working in the hay barn. The Avises host dances in the granary and let people ride their horses on the ranch. In a place where local residents often regard outsiders with suspicion, the Avises have learned that attitudes expressed through architecture and planning can draw them into a close-knit community. ■

#### Sources

**Bifold barn doors:** Richards-Wilcox

**Paints and stains:** Custom prepared by Cabot

**Kitchen fixtures:** Palson

**Lighting fixtures in granary:** Holophane; Stonco; Strand

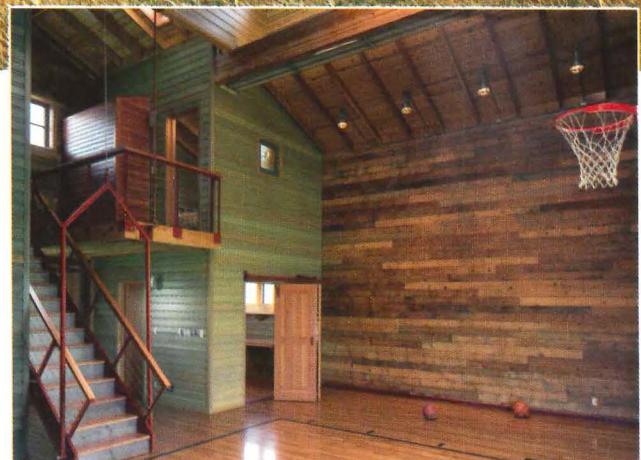
**Lighting fixtures in farmhouse:**

Vons Company; Lightolier

**Fireplace:** Rais

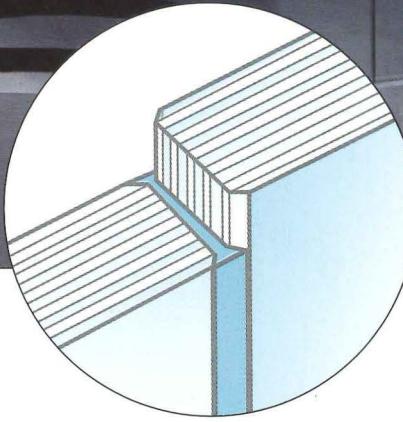
**Solar-powered composting toilet:** Sun-Mar

For more information on this project,  
go to Projects at  
[www.archrecord.com](http://www.archrecord.com).



The granary (opposite, top) and farmhouse were moved closer together to create a tight cluster (opposite, bottom). Inside the granary, the architects created a basketball court (this page and opposite, middle) with a stair that lifts up to clear the way for players.





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# Collaborative Labs Spark Discovery

**ADVANCED CENTERS SUPPORT RESEARCHERS WITH FACILITIES THAT FOSTER CONNECTIONS AMONG SCIENTIFIC SPECIALTIES.**



## 1.

### Toronto

*A slender site on a densely built urban campus encourages architects Alliance and Behnisch Architekten to invest a research tower with transparency.*

## 2.

### Tempe, Arizona

*To establish a sense of community at Arizona State University, Richard + Bauer place interdisciplinary research labs along a central circulation court.*

## 3.

### Cambridge, Massachusetts

*Charles Correa Associates and Goody Clancy design MIT's center for neuroscience research to encourage serendipitous collaboration.*

By William Weathersby, Jr.

**F**orget solitary experimentation behind the closed doors of ivory towers. In new laboratory research facilities rising on many college and university campuses, architects are breaking down the walls that separate scientific disciplines. Challenging traditional models—such as small, cloistered labs run as fiefdoms by senior professors—scores of new buildings offer open, flexible laboratory rooms that are shared, and also easily adapted for specialized equipment. Interdisciplinary research is a soaring trend, and campus lab buildings are taking the form of “science neighborhoods” that foster collaboration.

The incentive for university-based scientists to work as teams is “more than intellectual,” writer Lila Guterman recently noted in the *Chronicle of Higher Education*. “Government agencies that pay for academic research have increasingly provided awards for interdisciplinary science.” Over the six-year period from 2004 to 2010, for example, the National Institutes of Health plans to spend \$2.1 billion on its “Roadmap” for medical research, whose thrust is interdisciplinary.

Nanotechnology—building man-made machinery from microscopic particles—is just one specialty that is changing the composition of academic science facilities. The National Nanotechnology Initiative, established by the federal government in 2003, annually invests \$1 billion in nanotechnology research and development. Universities now upgrading their labs stand to gain a larger share of such future funding.

The projects in this month’s Building Types Study, plus additional facilities featured on our Web site, illustrate the bywords of new lab design: collaboration, flexibility, and transparency. At the University of Toronto, a new tower supports scientists performing cellular and biomolecular research. Adjacent to a high-tech research district and one of the largest hospital precincts in North America, the curtain-walled complex is a new fulcrum between discovery and its application in the marketplace.

At Arizona State University’s Tempe campus, the Interdisciplinary Science and Technology Building encompasses highly specialized labs, from nanotechnology clean rooms to scanning-electron-microscopy suites; its domestically scaled, de Stijl-like architecture is a warm counterpoint to the technically sophisticated experiments under way inside.

MIT’s new center for studying the human brain features a central piazza and many lounges where researchers can converse. “From the start, we asked for places where we could bump into each other,” says Susumu Tonegawa, MIT professor of biology and Nobel laureate for his work in immunology. “Science today is so complicated. No individual can know it all. Interdisciplinary dialogue is more important than ever.” ■

For more information on these projects, go to Building Types Study at [www.archrecord.com](http://www.archrecord.com).

# University of Toronto Center for Research

## Toronto

# 1

ARCHITECTS ALLIANCE AND BEHNISCH ARCHITEKTEN COLLABORATE ON A SLEEK URBAN TOWER SUPPORTING CELLULAR AND BIOMOLECULAR SCIENCE.

By William Weathersby, Jr.

**Architect:** architectsAlliance—Adrian DiCastri, Peter Clewes, partners and project codirectors; Walter Bettio, Deni Papetti, associates in charge

Behnisch Architekten—Stefan Behnisch, principal and project codirector; David Cook, partner in charge; Volker Biermann, associate in charge

**Client:** University of Toronto

**Engineers:** Yolles Partnership (structural); HH Angus & Associates (mechanical/electrical)

**Consultants:** Diana Gerrard Landscape Architecture; Flad & Associates (lab)

**Size:** 248,378 square feet

**Cost:** \$86 million

**Completion date:** March 2006

### Sources

**Exterior cladding:** Kawneer Architectural Aluminum Products; Alcoa; Lafarge Cement

**Glazing:** Cardinal Glass Industries; Prelco; IBG Skylights

**Wall tile:** Orsini Mosaics

**Raised flooring:** Aspmazcess

**Resilient flooring:** Forbo

**Paints and stains:** Benjamin Moore; Tnemec Protective Coatings; Sherwin Williams

**Tables:** Unifor; Segis

**Chairs:** Technion; Keilhauer

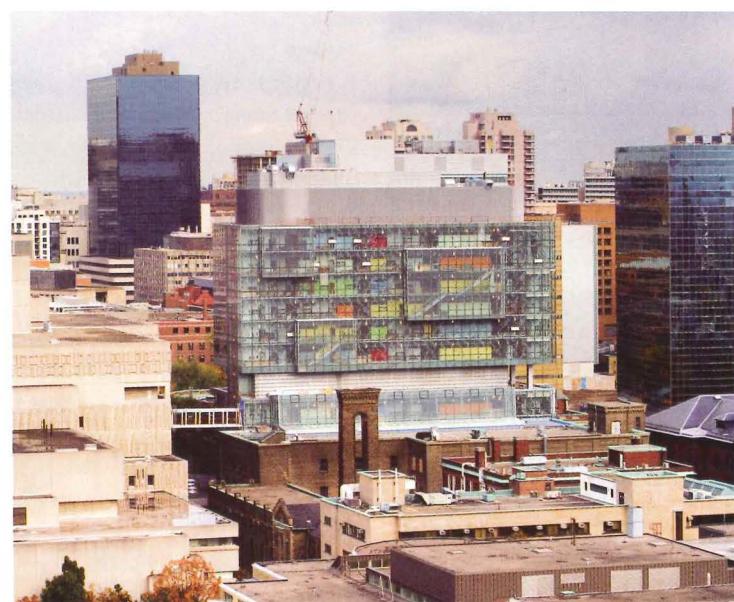
For more information on this project, go to Building Types Study at [www.archrecord.com](http://www.archrecord.com).

The architectural landscape of Toronto is ablaze with adventurous new work, with academia leading the charge. At the University of Toronto, down the block from a new pharmacy studies building by Norman Foster, a science center rises with colorful, transparent grace. The Terrence Donnelly Center for Cellular and Biomolecular Research (TDCCBR) is Canada's foremost institution for the study of the human genome. Its home, designed by Toronto-based architectsAlliance, partnered with Behnisch Architekten of Stuttgart, Germany, is a sleek, 12-story tower that addresses the context of its historical neighbors while giving a modern presence to a progressive scientific hub.

### Program

The building houses 400 specialists who perform research on genetics and disease. Organized as a collaborative, interdisciplinary facility, it had to be functional, flexible, and technologically advanced.

Site restrictions were daunting. Located at the southeast corner of the university's St. George campus, the TDCCBR is wedged within a densely built district. Formerly a parking lot and service corridor, the narrow site was flanked by two historic buildings on College Street, and a mid-20th-century medical sciences building to the north. "Visually integrating the tower with the three surrounding buildings without over-



powering the slender site was a key objective," says architectsAlliance partner Adrian DiCastri. "The building also was intended as a symbolic and physical bridge between the academic community to the north, the medical community to the south, and the public living and working nearby."

### Solution

To relate to the scale of the adjacent, lower-rise buildings, the tower is broken into two vertically stacked volumes. These are divided by an intermediate sixth level that houses mechanical systems supporting the lower floors. Cinching the facade like a belt, the mechanical floor allows the loftlike laboratory spaces to remain free of mechanical rooms.

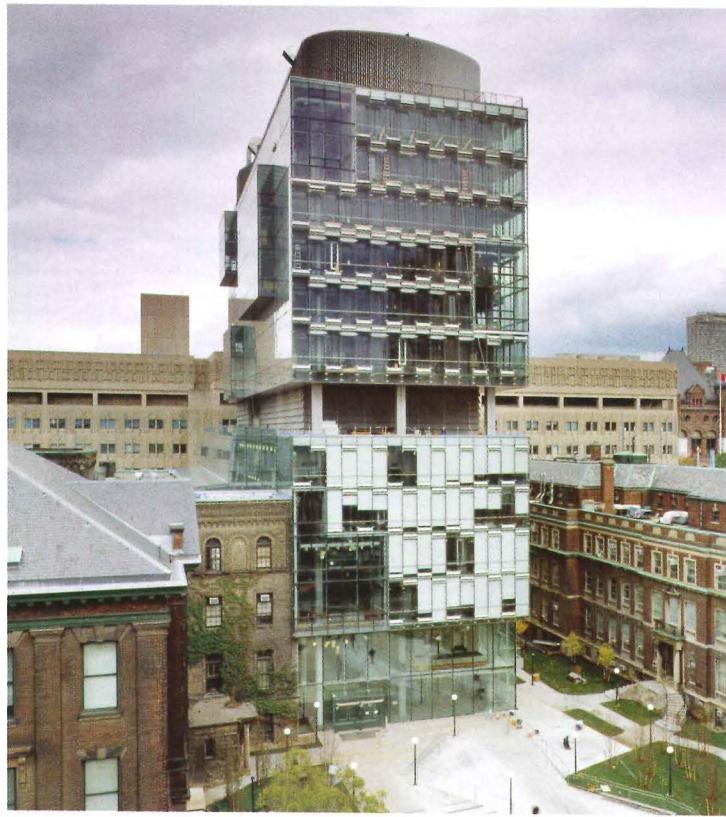
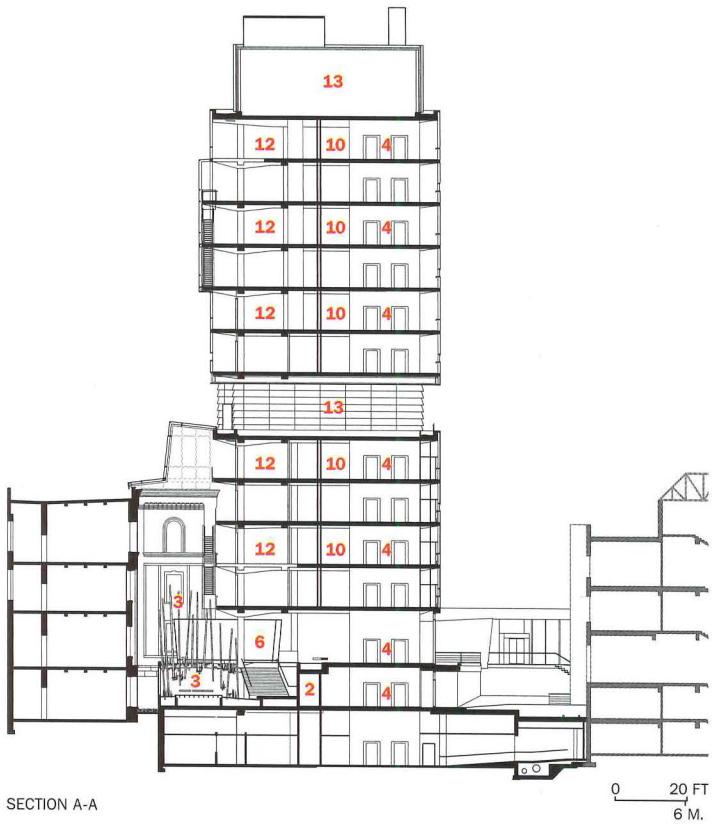
The architects organized laboratories along the eastern elevation on floors two through five, and again on seven through 12. Mechanical systems supplying upper floors are housed within an amoeba-shaped, stainless-steel enclosure on the roof.

A granite-paved forecourt enhanced by landscaping serves as the main entrance to the TDCCBR. Inside, a five-level Winter Garden borders the adjacent Rosebrugh Building, whose restored, buff-colored brick facade (circa 1919) now serves as the skylit atrium's western wall. Liriope grass and 45-foot-tall bamboo trees create an engaging microclimate where students, staff, and visitors gather.

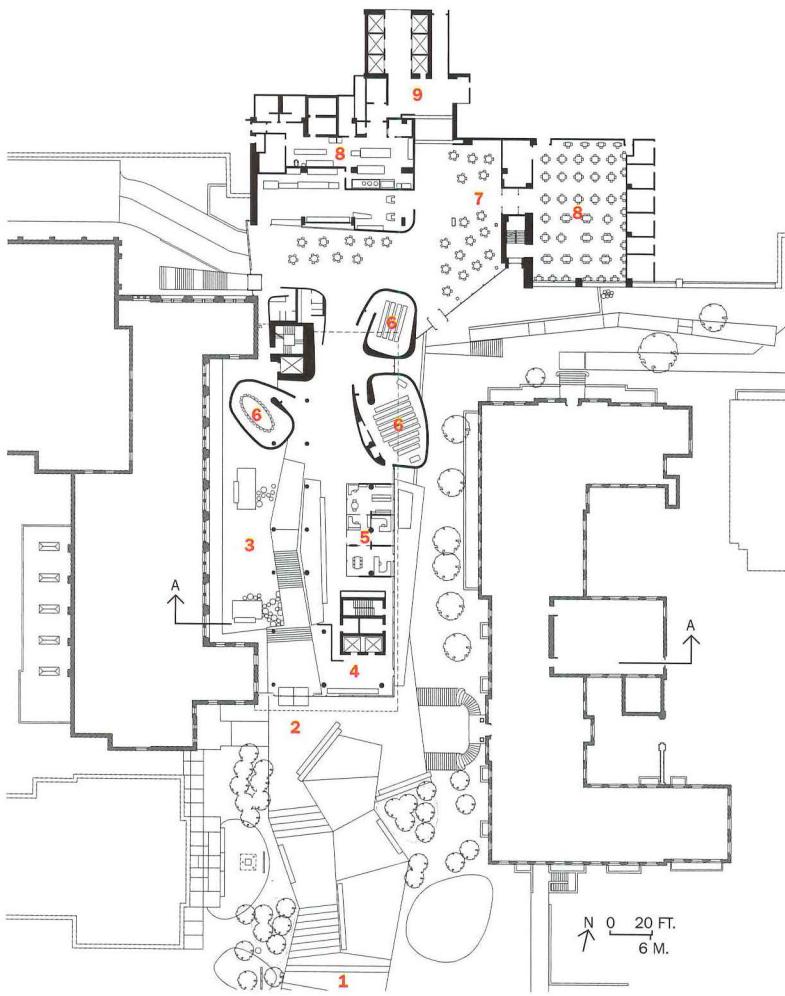
Bordering the Winter Garden,

The tower rises above the densely built campus (opposite). Fitted with automated shades and aluminum louvers, the south facade (right) sandwiches 2.5 feet of space between the single-glazed exterior skin and a double-glazed interior skin to reduce heat loss and gain.

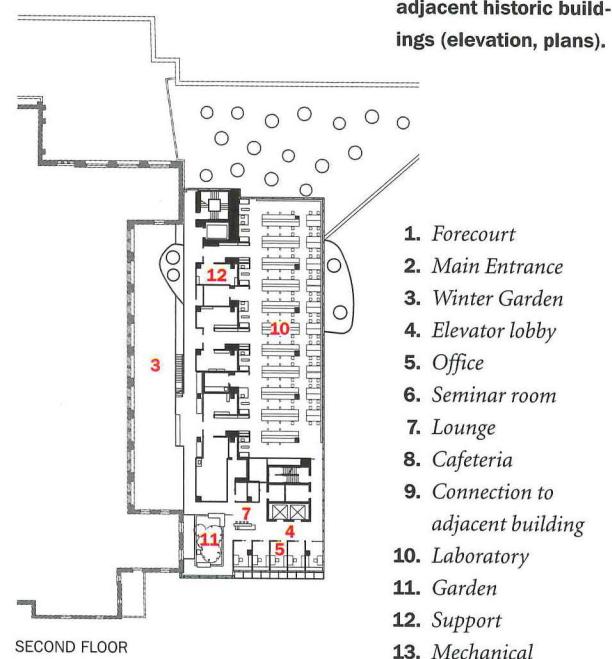




SECTION A-A



FIRST FLOOR/CONCOURSE



SECOND FLOOR

A sixth-floor mechanical level "cinches" the facade (above), lessening its visual mass and relating to the scale of adjacent historic buildings (elevation, plans).

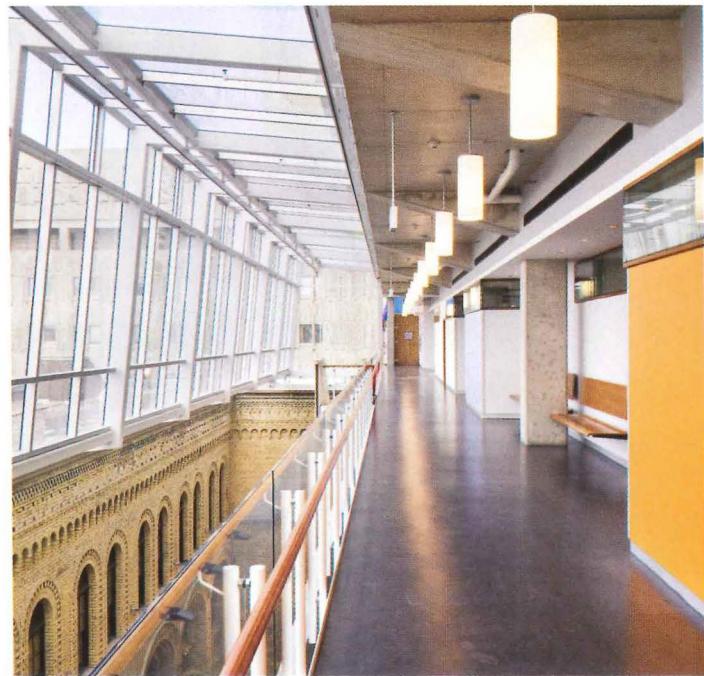
1. Forecourt
2. Main Entrance
3. Winter Garden
4. Elevator lobby
5. Office
6. Seminar room
7. Lounge
8. Cafeteria
9. Connection to adjacent building
10. Laboratory
11. Garden
12. Support
13. Mechanical



Bordered by bamboo in the atrium (above left), a terrazzo staircase leads to a concourse featuring a cafeteria

and seminar rooms (above right). Color-coded labs are visible along the western elevation (below).





a concourse level acts as a north-south campus thoroughfare. The concourse houses a cafeteria, lounges, and administrative offices, plus three 90-seat seminar rooms wrapped by glass-mosaic-tile enclosures—in either black, white, or red.

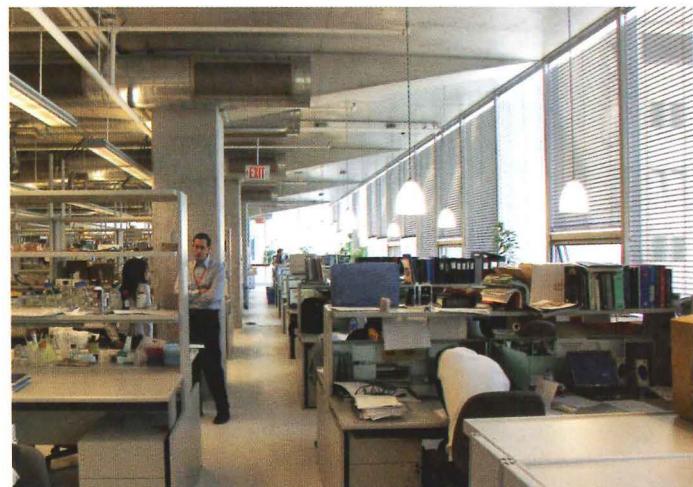
The design team created spacious laboratory interiors by omitting suspended ceilings, exposing services and superstructure, and specifying simple, durable materials. Shallow floor plates and glass walls allow a high degree of transparency, while work zones are differentiated by color, lighting, and millwork.

On each lab floor, six private offices reserved for principal researchers line the southern perimeter. Research associates—38 per floor accommodated at 11 flexible workstation benches—can quickly access lounges, cold rooms, and areas housing specialized equipment. Easy to reconfigure, the research stations are organized along the eastern perimeter of the building. Wet and dry labs hug the central service spine. A spacious circulation corridor on the west perimeter provides access to glass-enclosed lab areas. Connected by staircases, the corridors on lower

levels overlook the Winter Garden. Three additional double- and triple-height gardens accent upper floors.

#### **Commentary**

Respecting the scale of its neighbors, the vibrant tower offers researchers efficient, clean-lined labs enhanced by sweeping views of the city. Architects treated the cladding of each elevation differently and creatively, heeding programmatic and climatic requirements. The south entrance facade, for example, is double-glazed, providing acoustic and solar control while maintaining a richly textured transparency. The east facade uses color-laminated glass, while the west facade's ceramic-fritted glass has a dot-matrix pattern—stylized strands of DNA—that manages solar gain and visually reduces the building's mass. Meanwhile, active and passive sustainable design components support energy efficiency and user comfort. Infused with transparency and light, the high-performance center supports technical rigor while artfully revealing its inner workings to the outside world; as DiCastri claims, it "renders science visible." ■



An open circulation corridor on the western perimeter provides entry to the labs and overlooks the garden atrium (right and opposite, top right). The skylight connects to the restored 1919 facade of the Rosebrugh Building. Labs (opposite, center right) were designed for flexibility; wet labs can be altered for biology, chemistry, or bioinformatics. Dry labs transition to wet labs by adding fume hoods and lab casework. Pocket gardens on some floors (opposite, top left) join the Winter Garden (opposite, bottom) as contemplative spaces away from labs.



# Arizona State Science and Technology Building

## Tempe, Arizona

2

RICHÄRD + BAUER BRINGS DESIGN SENSITIVITY AND A MODERNIST EXPRESSION OF FUNCTION AND STRUCTURE TO A HEAVY-DUTY BUILDING TYPE.

By Suzanne Stephens

**Architect:** Richärd + Bauer  
Architecture—James Richärd, AIA,  
principal in charge of design; Steve  
Kennedy, AIA, principal in charge of  
architectural technology; Andrew  
Timberg, project architect and con-  
struction administration; Kelly K.  
Bauer, principal in charge of interior  
design; Stacey Krantz, project interior  
designer

**Client:** Arizona State University

**Engineers:** Caruso, Turley, Scott  
(structural); Energy Systems Design  
(m/e/p); KPFF (civil)

**Consultants:** CF Schuler (land-  
scape); CMCC (cost controller); AZ  
Lighting + Sales (lighting); Isec (lab)

**Size:** 66,000 square feet

**Cost:** \$13.8 million

**Completion date:** August 2005

#### Sources

**Curtain wall:** Vistawall Group

**Concrete:** Hardrock Concrete (cast-  
in-place); Coreslab Structures

**Masonry:** Hochstetler Masonry;  
Superlite Block

**Aluminum panels, windows:** Mirror  
Works

**Corrugated-metal panels:** Morin

**Roofing:** Progressive Roofing

**Acoustical ceiling:** Armstrong

**Plastic laminate:** Wilsonart

**Tile:** Daltile

For more information on this project,  
go to Building Types Study at  
[www.archrecord.com](http://www.archrecord.com).

Even though the 10-year-old Phoenix firm Richärd + Bauer seems to have a monopoly on branch libraries in southern Arizona [RECORD, May 2006, page 152; January 2006, page 96], it has also won a number of college and university commissions in the area [RECORD, December 2001, page 70]. In a country where other architects, who are also in their forties, still hope to turn the corner from shops, restaurants, and houses to larger-scale institutional work, it almost seems unfair. Of course, it helps that James Richärd, Kelly Bauer, and partner Steve Kennedy are working in one of the fastest-growing areas in the United States. More to the point, perhaps, is that their designs are distinctive: They reflect a Modernist heritage with clean, taut planes; an interpenetration of indoor and outdoor spaces; and a practical, no-nonsense attitude toward the plan. In addition, Richärd + Bauer's interest in regionally appropriate materials and reverence for proportion and line endow its architecture with a timeless presence.

#### Program

For the Interdisciplinary Science and Technology Building (the second of a series) on its Tempe campus, Arizona State University needed a basic 66,000-square-foot structure where physical and environmental research associated with mechanical, aerospace, civil, geological, and

chemical engineering could be carried out. The interdisciplinary program called for labs to be flexible in a major way: The building had to include spaces for testing earthquake-resistant structures, conducting turbine and internal-combustion engineering studies, and analyzing various kinds of soils. In addition to providing a room for a large supersonic wind tunnel, the architects were asked to create labs that could, for example, accommodate microscopy suites for scanning electrons today, and who knows what tomorrow.

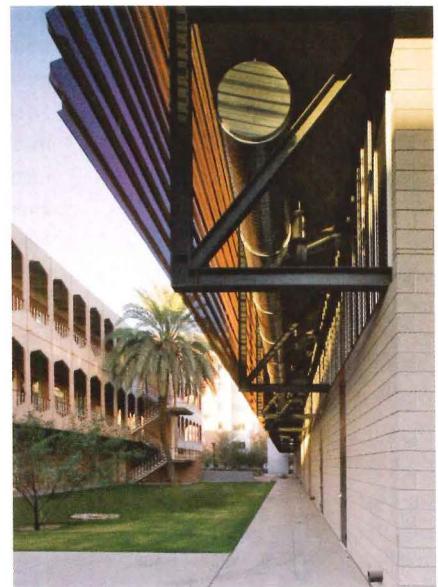
#### Solution

Given a narrow, 38,400-square-foot site on a campus interlaced with pedestrian paths, Richärd + Bauer filled the lot with an inward-turning building. Two long bars of laboratories, each 24 feet wide, flank an interior courtyard that acts as the main circulation spine for the building. (A separate facility on the other side of a service drive accommodates storage for materials to be tested).

Initially the university and the architects were thinking of using tilt-slab concrete construction. But the site proved to be too tight for this technique. So the architects decided on a steel-truss-and-column frame, with precast-concrete floor planks, poured-in-place concrete planes, and concrete-block enclosing walls. The steel super-



PHOTOGRAPH: © BILL TIMMERMAN



On the main (east) elevation of the Tempe, Arizona, campus (below and above left), overhangs protect second-floor offices

from the sun. Weathered-steel sunscreens (above right) skim past steel trusses projecting from concrete-block walls.



trusses, the height of one floor, dampen vibrations for the heavy-duty activities in the labs and, between the two floors, carry a mezzanine on their lower chords to accommodate smaller labs and walkways (section, opposite).

The laboratory's courtyard contains utility cores and steel catwalks and bridges, with hospital-size poured-concrete elevator shafts located at either end of the covered space. In the true Modernist spirit of calling out service functions, the architects ran all the electrical, HVAC, and lab services through this central court within insulated ducts and painted conduits: "We like a tectonic architectural vocabulary," says Richärd. Not all is exposed: Frosted-glass-enclosed meeting rooms are perched above the courtyard at the mezzanine level. Perforated-steel panels, now weathered to a brownish tinge, wrap the exterior of the building to help shade spaces within. The inward focus of the plan and the screen walls also keep the courtyard comfortable in the intense Arizona sun—with additional air provided by large fans and evaporative cooling systems.

### Commentary

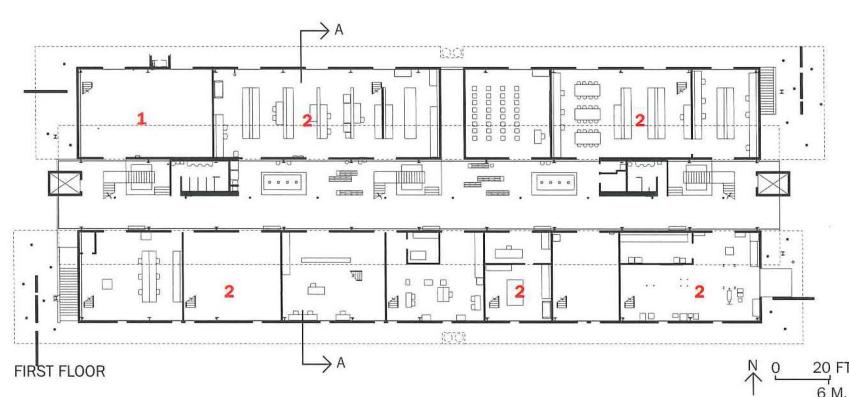
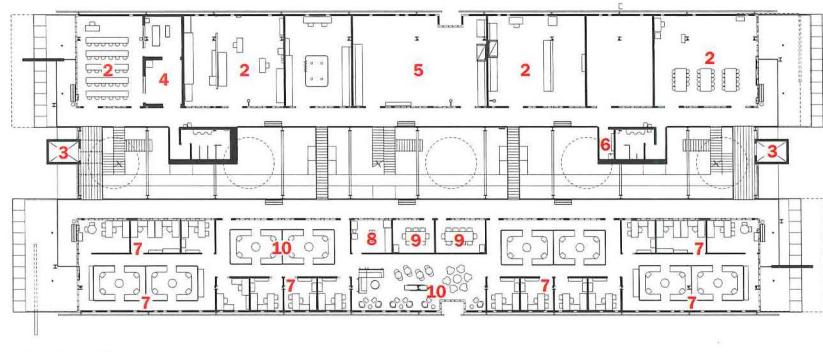
Although Arizona hovers around 100 degrees in the summer, its climate allows an intersection of indoor and outdoor spaces that early Modernist architects only dreamed of. The de Stijl-like composition of the building, combined with the nuts-and-bolts plans for the laboratories, give the entirety an unexpectedly elegant aspect, all the more impressive on the moderate \$13 million budget.

While the industrial-strength labs clearly announce their purpose, Richärd + Bauer endowed the exterior elements with a domestic scale. The firm has produced a design for an ordinarily rough-and-ready building type where the ghosts of Frank Lloyd Wright and Louis Kahn hover, particularly in its planarity and articulation of forms. With technical and budgetary requirements so severely impinging on every decision, this is no mean feat. ■

**Luminous green-frosted-glass-enclosed meeting rooms seem to float within the steel-framed skylit courtyard (right), which acts as the main circulation spine for the laboratory building. Precast-concrete planks surface the interior space at grade, as well as the mezzanine, second, and roof levels.**



- 1. Supersonic wind tunnel
- 2. Lab
- 3. Elevator
- 4. Test cell
- 5. Combustion research
- 6. Data room
- 7. Office
- 8. Copy center
- 9. Conference room
- 10. Lounge

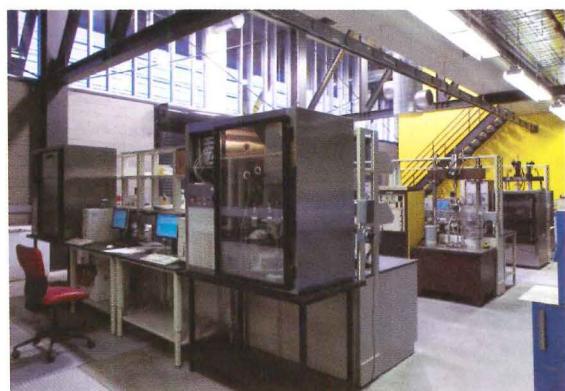
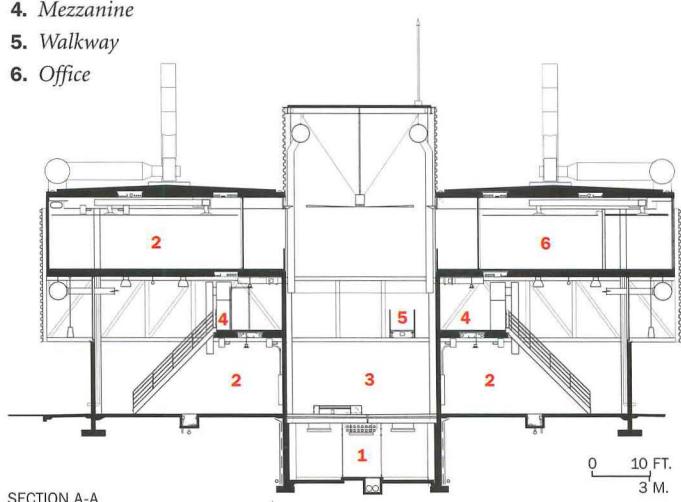




Galvanized-steel-mesh balustrades on the stairs in the courtyard (above) heighten translucency. A second-floor lounge (right) features internally lit

structures of red, dry-erase marker boards. The labs (below right), often 22 feet high, include one for testing advanced paving materials.

1. Service level
2. Lab
3. Central court
4. Mezzanine
5. Walkway
6. Office



# MIT Brain and Cognitive Sciences Complex

## Cambridge, Massachusetts

3

CHARLES CORREA ASSOCIATES TEAMS WITH GOODY CLANCY TO DESIGN A NEUROSCIENCE RESEARCH CENTER THAT ENCOURAGES COLLABORATION.

By Nancy Levinson

**Architect:** Charles Correa Associates (lead designer)—Charles Correa, FAIA, principal in charge; Julian Beinhart, principal; Nondita Correa-Mehrotra, project architect; E. Daniel Broggi, executive architect; Sachin Aghshikar, design architect; Salil Simon, Brian Anderson

**Architect of record:** Goody Clancy—Roger Clancy, FAIA, principal; Ted George, Doug Carr, AIA, project architects; Doran Abel, AIA, Jim Norris, AIA, project managers; Bernard Dooley, AIA, laboratory design director

**Client:** Massachusetts Institute of Technology

**Engineers:** LeMessurier Consultants (structural); BR+A Consulting Engineers (mechanical/electrical/telecommunications); SEA Consultants (civil/storm water); Arup (façade engineering)

**Size:** 412,000 square feet

**Cost:** \$175 million (construction)

**Completion date:** September 2005

#### Sources

**Curtain wall, windows:** Pilkington Planar Systems; Karas & Karas; SOTA

**Acoustical ceilings:** Ecophon

**Flooring:** New England Decks and Floors; Armstrong; Altro; Flor Gres

For more information on this project, go to Building Types Study at [www.archrecord.com](http://www.archrecord.com).

The Massachusetts Institute of Technology has undergone remarkable transformations in the past decade. Not since the mid-20th century, when the school commissioned Alvar Aalto's Baker House and Eero Saarinen's MIT Chapel and Kresge Auditorium, has the 90-year-old, 168-acre campus in Cambridge, Massachusetts, seen so much formally adventurous new architecture. Notable projects of the billion-dollar campus building program include Simmons Hall, the riotously fenestrated dormitory by Steven Holl Architects [RECORD, May 2003, page 204] and the Stata Center, a computer science extravaganza by Gehry Partners [RECORD, August 2004, page 98]. The latest major new work is the Brain and Cognitive Sciences Complex (BCSC), certainly the least showy and arguably the most satisfying of them all. Designed by Charles Correa Associates, of Mumbai, in collaboration with architect of record Goody Clancy, of Boston, the seven-story, 412,000-square-foot BCSC is the world's largest center for neuroscience research; it is also an elegant example of leading-edge laboratory design.

#### Program

The BCSC posed all the typical demands of design for research—and then some. The program specified almost four dozen wet and dry laboratories, along with much specialized equipment (cold rooms,

hot rooms, autoclaves, centrifuges, magnetic resonance imagers, electrophysiology rigs, etc.). It also called for communal areas that would support ad hoc collaboration.

The program was further complicated by a bureaucratically and philanthropically intricate agenda. Home to the Brain and Cognitive Sciences department, the complex also would house two new, endowed centers, the McGovern Institute for Brain Research and the Picower Institute for Learning and Memory—each requiring a distinct presence.

Programmatic complexities were matched by site idiosyncrasies. The BCSC is located on a triangular plot of land. To the north is the major thoroughfare of Main Street, making the new building a campus gateway. To the south is the ebullient Stata Center, a tough iconic act to follow. Complicating matters further, the site is bisected by an active freight railroad. On top of this spatial challenge, the sensitive lab machinery required structural isolation from low-frequency train vibrations.

#### Solution

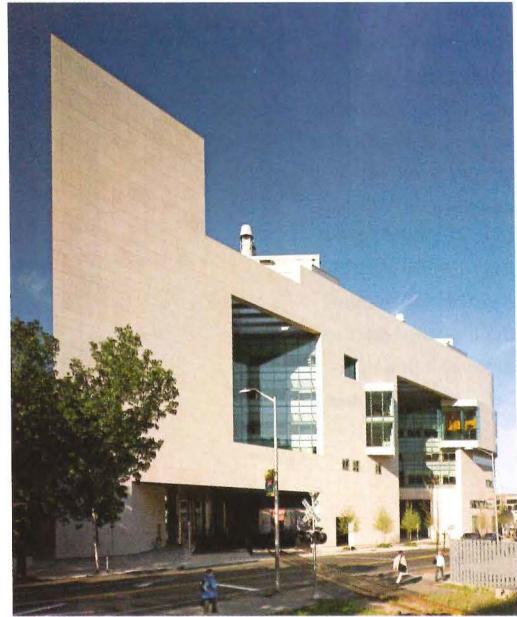
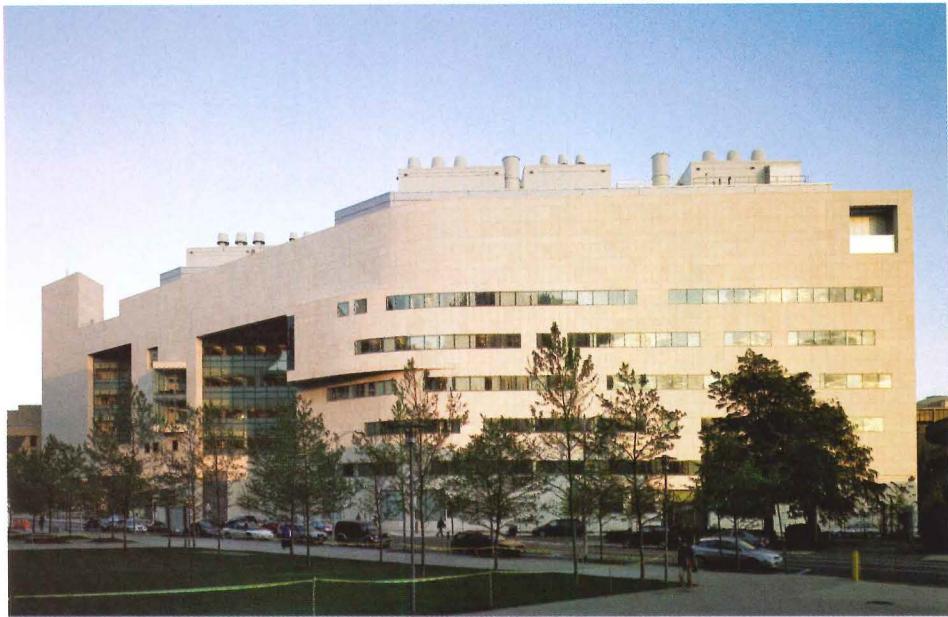
The architects confronted these challenges with formal and technical ingenuity. To accommodate the three departmental entities, they skillfully exploited the site geometry; each program occupies its own generous corner of the triangle, and McGovern and Picower have their own imposing entrances with multi-



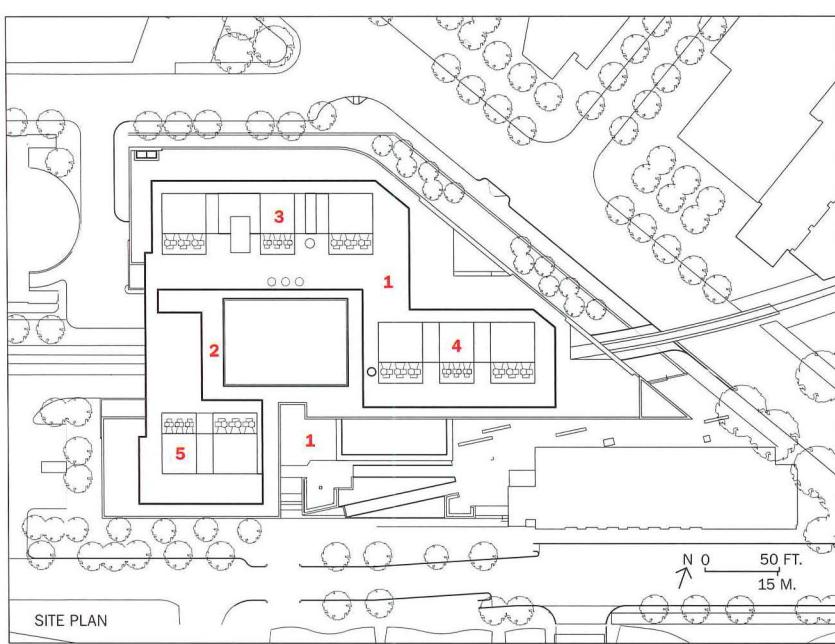
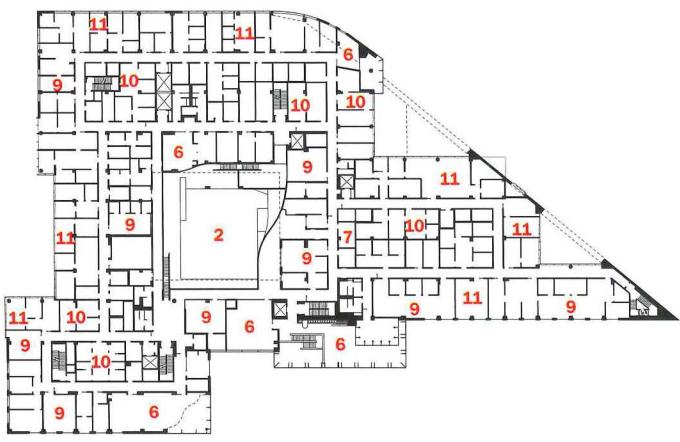
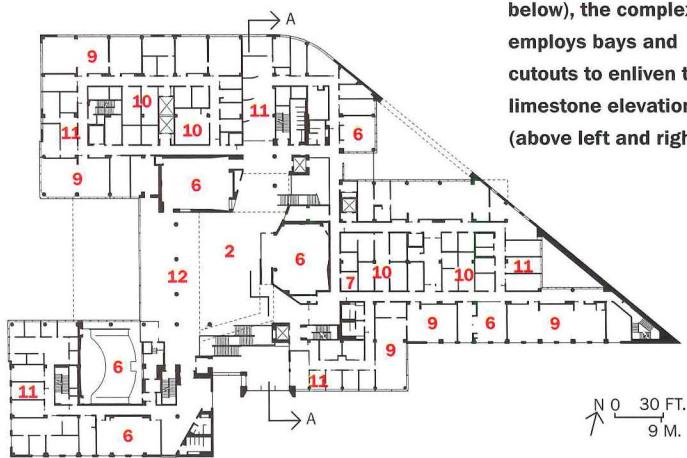
PHOTOGRAPH: © ANTON GRASSL/ESTO, EXCEPT AS NOTED

Cladding of Portuguese limestone and green-tinted glass (right and below) make the science and research complex a quieter counterpoint to Frank Gehry's Stata Center (right, at far left). Two new institutes share the building with the Brain and Cognitive Sciences department.

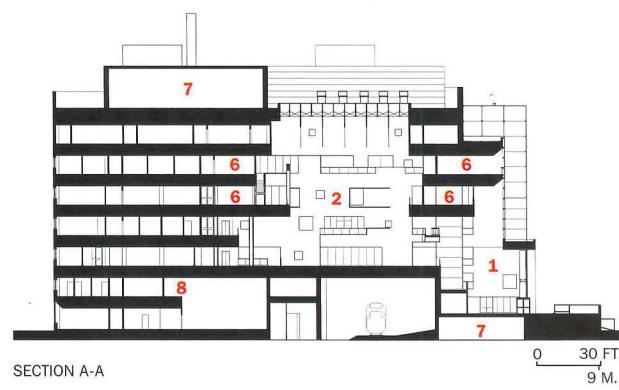




**Curving around the triangular site (plans, below), the complex employs bays and cutouts to enliven the limestone elevations (above left and right).**

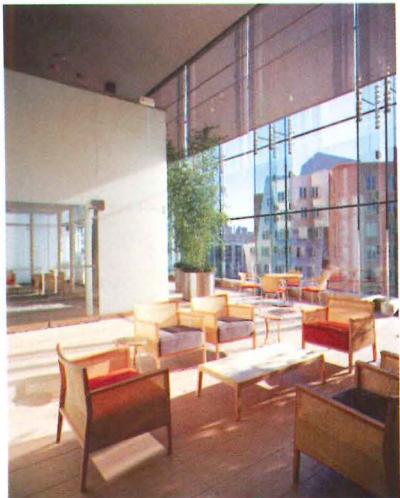


- 1. Lobby
- 2. Atrium
- 3. McGovern Institute
- 4. Picower Institute
- 5. Department of Brain and Cognitive Sciences
- 6. Conference
- 7. Mechanical
- 8. Magnet bay
- 9. Laboratory
- 10. Support
- 11. Office
- 12. Café



**Furnished terraces ring the atrium at multiple levels, providing spaces for reading, meeting, or enjoying the daylight from the skylight above.**





Palm trees and bamboo within the conservatory (far left) provide a visual and environmental break from the intensity of lab research (near left). The five-story atrium unifies the complex (below). Scientists use the space for large gatherings.

story lobbies. In the center of the building, a five-story, glass-roofed atrium brings daylight deep into the building and unifies the complex. Scientists use the atrium for large gatherings. For social interactions, they can choose from a variety of spaces: a bamboo-filled conservatory, a double-height library, and many seminar rooms and tearooms.

To make way for the trains, the building bridges over the railroad (a Vierendeel truss carries the load). To protect the labs from vibrations, supporting piles were driven down 110 feet to bedrock.

#### Commentary

The neuroscientists who work in the BCSC enjoy well-equipped and -serviced laboratories. (The building benefits from green technologies, including heat-recovery systems, graywater recycling, and high-performance walls, and is designed to achieve LEED Silver certification.) Beyond its technical proficiencies, the facility is an assured and thoughtful work of urban design. The architects have treated the exterior with judicious restraint, limiting cladding materials to Portuguese limestone and green-tinted glass, and enlivening the facade with subtle bays and large cutouts—what Correa calls “urban windows”—scaled to Main Street. With this Minimalist approach, they avoided the obvious solution of expressing the building’s tripartite program on the facade. The team resisted the urge to compete with Gehry’s curvy and colorful Stata Center. As Correa says, “We didn’t want to raise the decibel level at this corner of the campus.” The architects have had the confidence to turn down the volume, making Brain and Cognitive Sciences a sleek counterpoint to its neighbors and a distinguished addition to MIT’s 21st century. ■



William Duff, Architect, WDArch.com



James Walbridge, Architect, tektonarchitecture.com

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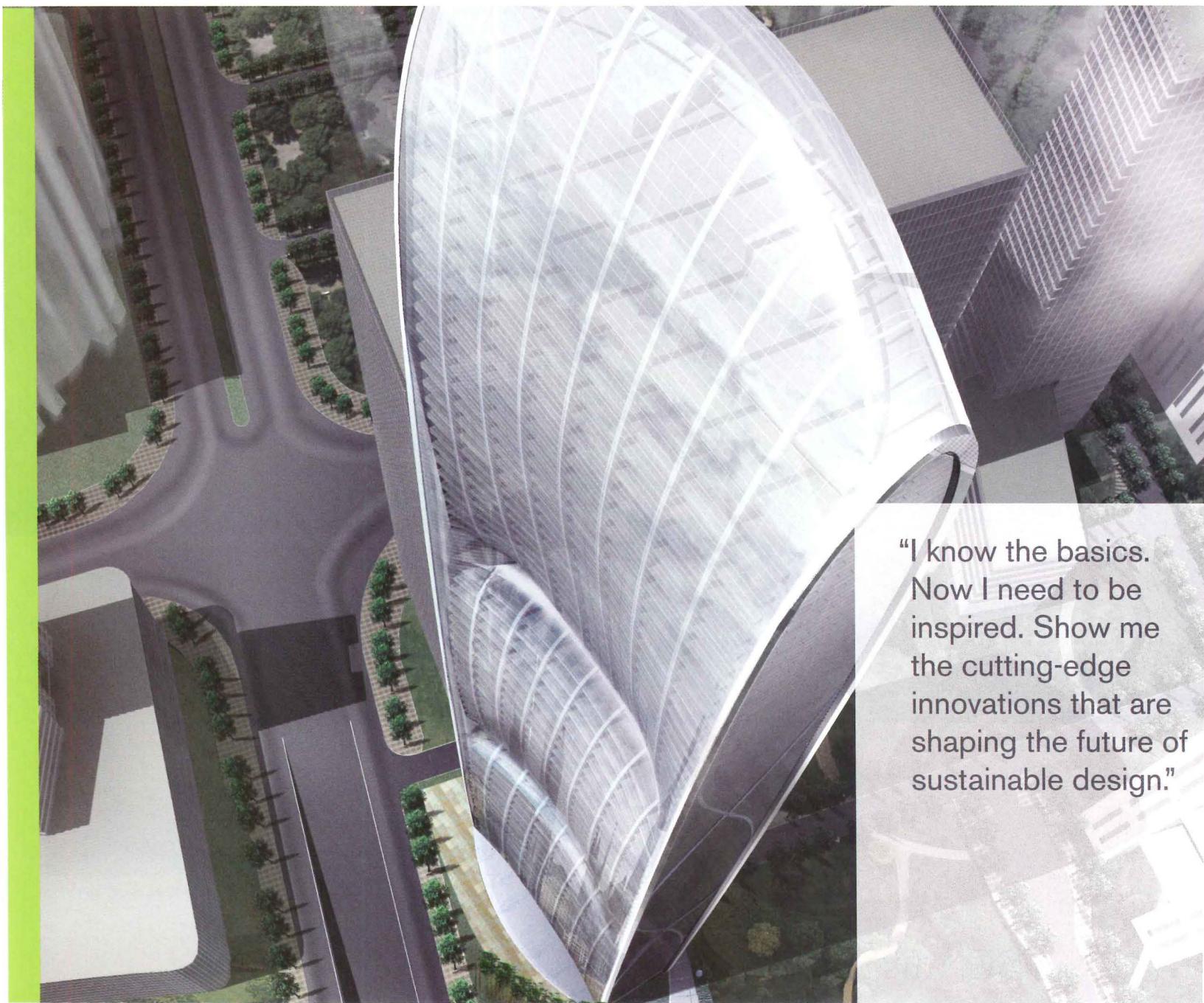
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Skidmore Owings and Merrill's Pearl River Tower (above and right) will be built in Guangzhou, China. It's designed to produce more energy than it consumes, and is just one of the case-study buildings that will be presented at the conference.

06  
INNOVATION

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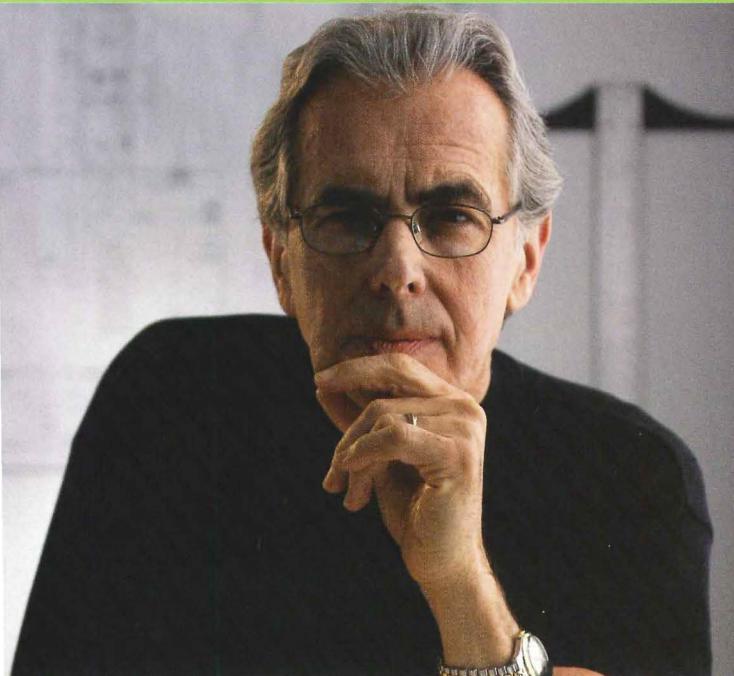
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# An Abandoned Airport Brownfield Takes Off

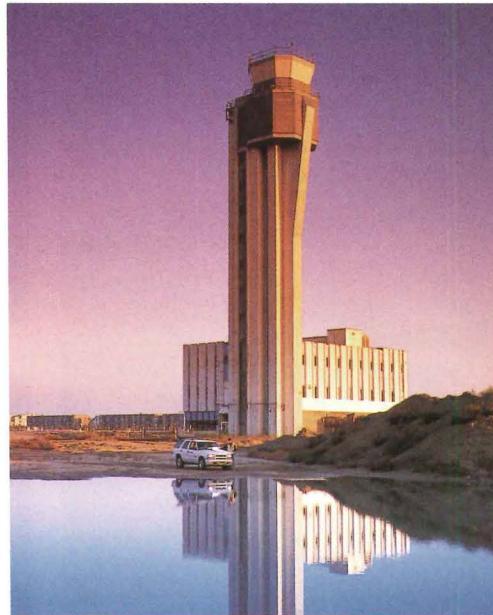
**PARSONS CLEANS UP A MASSIVE BROWNFIELD SITE AT DENVER'S SHUTTERED STAPLETON INTERNATIONAL AIRPORT, ALLOWING FOR THE DEVELOPMENT OF NEW NEIGHBORHOODS FOR THE INNER CITY**

By Russell Fortmeyer

**C**hances are, you've flown into Denver's gleaming international airport, rented a car, and driven into downtown and past the largest brownfield development in the country, if not arguably the largest urban infill project. If you happened to glance out the window, you might see rolling parkland, rows of new houses, and parents walking their kids to school. What you wouldn't see are piles of dirt, 20-foot-deep chasms, and scrapers peeling back layers of soil.

Of course, you'd be driving by the redevelopment of Stapleton International Airport, abandoned in 1995 and, after significant contamination remediation, the site of one of the largest master-planned communities in the country. The story of Stapleton touches many histories—Manifest Destiny and westward expansion, along with 19th-century industrialization, 20th-century suburbanization, the rise of the aviation industry, and the limits of sprawl.

Established by Mayor Benjamin F. Stapleton in 1929, Denver Municipal Airport began on a site then mostly used for cattle grazing. It was renamed Stapleton International Airport in 1964 and slowly expanded to its present 4,700 acres by 1985. Denver voters approved the construction of a new airport west of the city in 1989, ensuring that Stapleton would be



**Stapleton International Airport's abandoned control tower is now an icon for the new neighborhood.**

closed. Sensing an opportunity, in 1990 community leaders established the private nonprofit Stapleton Development Foundation (SDF) that, with the City, would put in place a plan that by 1995—the year Denver International Airport opened—provided the basis for how land that had originally been peripheral to the city and then isolated by its nature as an airport, could be integrated into the existing neighborhood. In 1999, the city selected Forest City Stapleton, a subsidiary of the Cleveland-based Forest City Enterprises, as the master developer of the new neighborhood.

## **Reclaiming the tabula rasa**

The Stapleton project is a kind of bizarre conflation of 20th-century planning techniques. Embodied in the new town is the Modernist urban-planning dream, evocative of Le Corbusier's 1925 Plan Voisin for Paris, where an existing piece of the city is cleared out in a tabula rasa reclamation project and regraded as if what had been had never been.

In this case, the visionary architect is replaced by the demands of market research. Conversely, the Stapleton Development Plan—the guidebook to the new neighborhood produced by the SDF—neatly puts into place a New Urbanist vision for the city that emphasizes “defined centers for services and civic uses, walkable scale, access to nearby employment, diverse transportation options, and strong connections to parks and nature.” Design guidelines developed by Forest City Stapleton encourage other New Urbanist strategies, including neo-historicist architectural styles and a postmodernist tendency toward the indexical mark, in this case the design decision to keep the airport’s original control tower as a landmark for the neighborhood.

Although architects working at Stapleton inherit clean sites, they still respond to the environmental history of the site in their design considerations. Peter Dominick, FAIA, a principal of 4240 Architecture, has been practicing in Denver for decades and is particularly interested in the idea of how the built environment can be used as a means toward “healing.” The firm built one of the first large-scale projects at Stapleton, the East 29th Avenue Town Center, a mixed-use development. “In relationship to brownfield sites, we envision ourselves knitting communities back together and healing fabrics that have been destroyed over time by the particular use that was there,” Dominick said, adding that “there is a memory associated with these places that shouldn’t be entirely denied.”

Tom Gleason, with Forest City Stapleton, said the redevelopment reflects the will of Denver’s citizens. “What we’re trying to do is to implement a vision for how we reflect the surrounding neighborhood,”

## **CONTINUING EDUCATION**



*Use the following learning objectives to focus your study while reading this month's ARCHITECTURAL RECORD/AIA Continuing Education article. To receive credit, turn to page 154 and follow the instructions. Another opportunity to receive Continuing Education credits in this issue can be found in the sponsored section beginning on page 161.*

## **LEARNING OBJECTIVES**

*After reading this article, you should be able to:*

1. *Describe the redevelopment project at Stapleton.*
2. *Explain how the soil contaminants were remediated.*
3. *Discuss sustainability implications for the Stapleton Development.*

For this story and more continuing education, as well as links to sources, white papers, and products, go to [www.archrecord.com](http://www.archrecord.com).



**Neighborhoods include a variety of home styles and sizes (left), with downtown Denver looming in the distance. An outline of the site shows the extent of development (below). New neighborhoods are built as clean land becomes available (bottom).**



Gleason said. The Stapleton Design Book, developed by Wolff Lyon Architects of Boulder for Forest City Stapleton, lays out zoning requirements and architectural styles for home developers working at Stapleton, all of which is organized within a master plan developed by several contributors, including Cooper, Robertson and Partners; Calthorpe Associates; and EDAW.

Further building off sustainable principles of the Stapleton Development Plan, Forest City Stapleton produced its own sustainability master plan emphasizing connectivity between zoning districts, community education, residential construction requirements for builders to meet the Environmental Protection Agency's Energy Star and the evolving LEED residential efficiency benchmarks, the institution of recycling programs, and various alternative transportation initiatives. Gleason said all of these programs add up to houses that are 30 percent more efficient than the typical home built within existing codes. And while Gleason notes home sales are so good they have had to instigate a lottery process, buyers still must legally sign an agreement that they are aware of the previous environmental conditions of the land under their homes.

#### Land values, developer interest rise

Thus, the embedded environmental history of Stapleton is always already present in every aspect of its redevelopment, from the impetus to begin the plan in the 1980s to the legal documents involved in every new real

estate transaction. It has certainly not deterred home buyers, including the City of Denver's brownfields coordinator, Stacey Eriksen, who considered the contamination minor. "As a homeowner, I wasn't concerned at all," Eriksen said. "I wanted to be closer to the city, it's less expensive, and I'm a block from an 80-acre park."

While redevelopment in many American inner cities has lately focused on industrial or commercial building conversions to residential use, a low-rise residential development of the scale of Stapleton is a rare opportunity. And while the economic benefits—30,000 new residents, 35,000 new jobs, and 1,116 acres of park and open space, representing a \$5 billion investment in the city over 25 years—of such a development are clear, brownfield redevelopment projects nationwide are only now beginning to make more economic sense for developers.

Robert Colangelo, executive director of the National Brownfield Association, said owners and developers are beginning to look at brownfields again because of rising land values in inner cities, which is why he encourages developers to involve their architects and other design consultants in the process as early as possible so that design solutions for brownfield remediation, as well as for the project, can be considered holistically. Colangelo also cites the institution of voluntary cleanup programs at the state level as making it easier to remediate contamination without onerous oversight. "In general, what's changed is the liability relief from state programs," Colangelo said, referring to the use of No



Further Action (NFA) letters from state agencies that mostly clear developers of responsibility for environmental contamination associated with a brownfield once they have cleaned it up.

Colorado's state legislature passed the Voluntary Cleanup and Redevelopment Act in 1994. Colorado, as elsewhere, provides an income tax credit of up to \$100,000 to compensate landowners for remediation costs; the state also runs loan and redevelopment credit programs. The Colorado Department of Public Health and Environment administers the voluntary cleanup program. The Environmental Protection Agency's Web site ([www.epa.gov/swerosp/bf/](http://www.epa.gov/swerosp/bf/)) provides a complete resource for tracking down information for anyone pursuing brownfield remediation.

#### Getting dirty

The brownfield remediation at Stapleton occurred under Colorado's voluntary program. Prior to Forest City Stapleton's involvement on-site, following a competitive bid process the city and county engaged Parsons, the international engineering giant, in a contract to clean the site's soil and groundwater contamination. Although the city was aware of the obvious polluted sites, such as the aircraft refueling and maintenance areas, the contract included the directive to conduct soil and groundwater testing throughout the acreage. Tom Wood, Parsons's project manager for Stapleton and an environmental engineer with over 27 years experience in brownfield remediation, said it wasn't unexpected to find additional con-

tamination on such a large site, which has led to an increased scope.

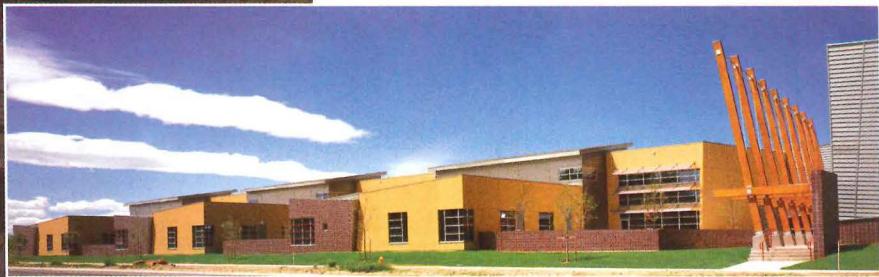
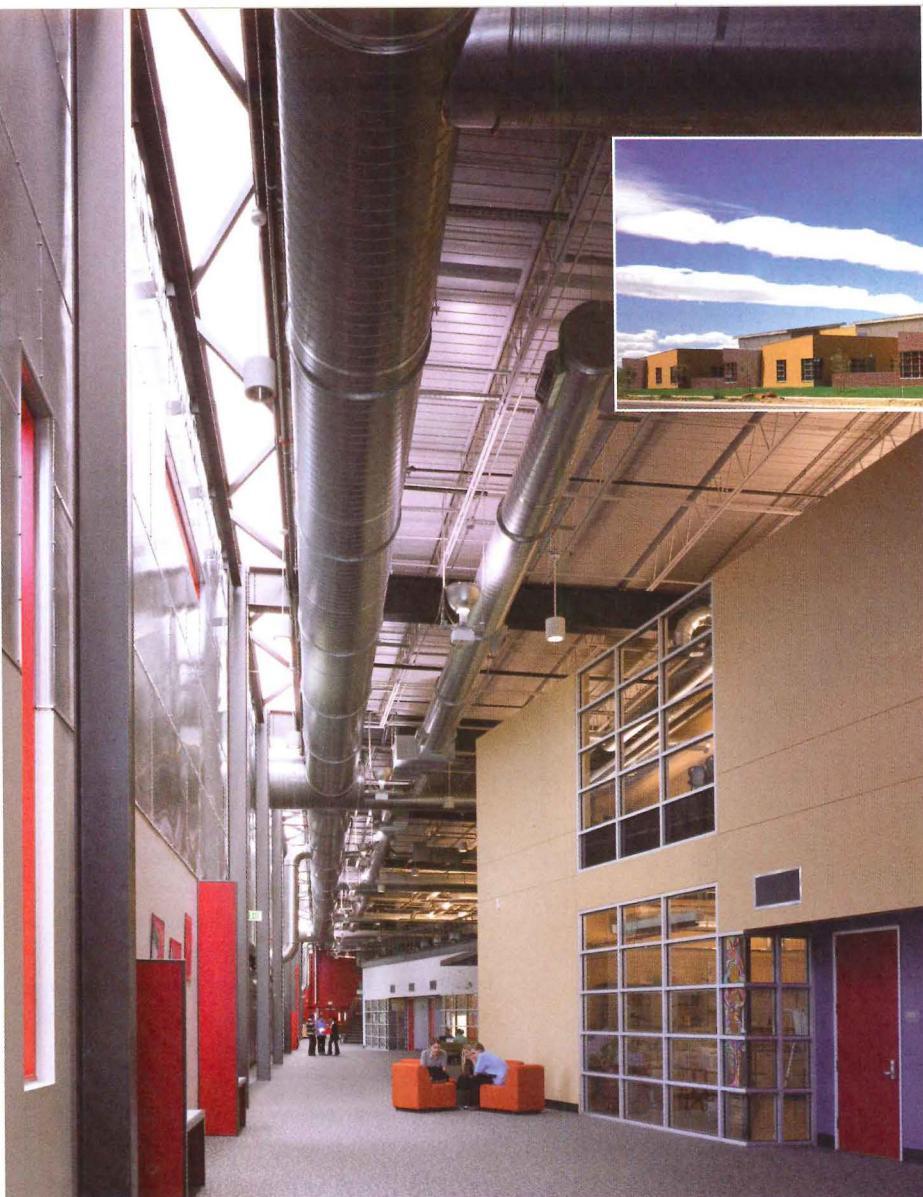
It's no surprise the major contaminant present at Stapleton was jet fuel, as well as glycol for deicing purposes and aviation fuel (AV fuel) used for smaller planes. The contaminants one looks for in the ground for these various chemicals differ greatly: For jet fuel, one would look for petroleum hydrocarbons and, in some cases, chlorinated hydrocarbons; glycol contains polypropylene and ethanol; and AV fuel, which is lighter than jet fuel, contains mostly benzene.

Parsons began the remediation process by drilling thousands of wells across the site. Where they discovered large plumes, such as at each concourse, they mapped them and plotted their trajectories through the site. More often than not, the contaminants followed logical underground routes, either along existing groundwater channels, such as the two natural creeks on-site, or along pipelines that provided easy distribution networks for liquids. The fire hydrant system, for example, consisted of a pipeline complex packed in porous gravel, as serviceable a flume for contaminated water as any.

Spilled fuel sinks through the topsoil and eventually comes to rest floating on the water table, which is between 20 and 25 feet beneath the ground across the airport. Parsons used a conventional direct-push drilling technology mounted on a hydraulic rig on a pickup truck. The drill pushes a 1-inch diameter hollow rod into the ground and exhumes a  $\frac{3}{4}$ -inch core of soil for examination. Wood said it was relatively easy to see contamination

**Parsons' contractors scraped nearly 5 million tons of soil, both contaminated and clean, from the surface of the abandoned Stapleton International Airport. In some areas, contractors dug down as far as 25 feet. Once the 3-to-5-foot-deep "smear zone"**

**of petroleum contamination was removed, contractors would refill the area with clean soil. Parsons removed 1 million tons of contaminated soil, hauling it in trucks to an off-site, lined landfill where it was used to cover trash.**



**Klipp Architects' design for the Denver School of Science and Technology focused on exposing the structure and building systems in order to encourage vicarious learning among the students (left). The school (above) sits on land that was part of the Stapleton International Airport redevelopment project, one of the largest brownfield sites in the country.**

in the field because jet fuel leaves an obvious "smear zone" of oily, black residue along the water table, similar to the ring around a dirty bathtub.

Geologists on-site paid particular attention to soil grain size as a chief indicator of conditions that would suggest an underground stream or sand channel where contaminants were likely. While visual analysis and smell provided basic evidence, Parsons utilized an infrared spectrophotometry screening method, a standard testing procedure regulated by the EPA, that would determine the amount of petroleum hydrocarbons in the soil to within 100 parts per million. While samples were sent off-site to a lab for more precise testing, Wood said it could take up to five days for results. In order to meet the schedule for turning over clean land for development, field testing was considered thorough enough to bracket off contaminated areas in order to proceed with remediation.

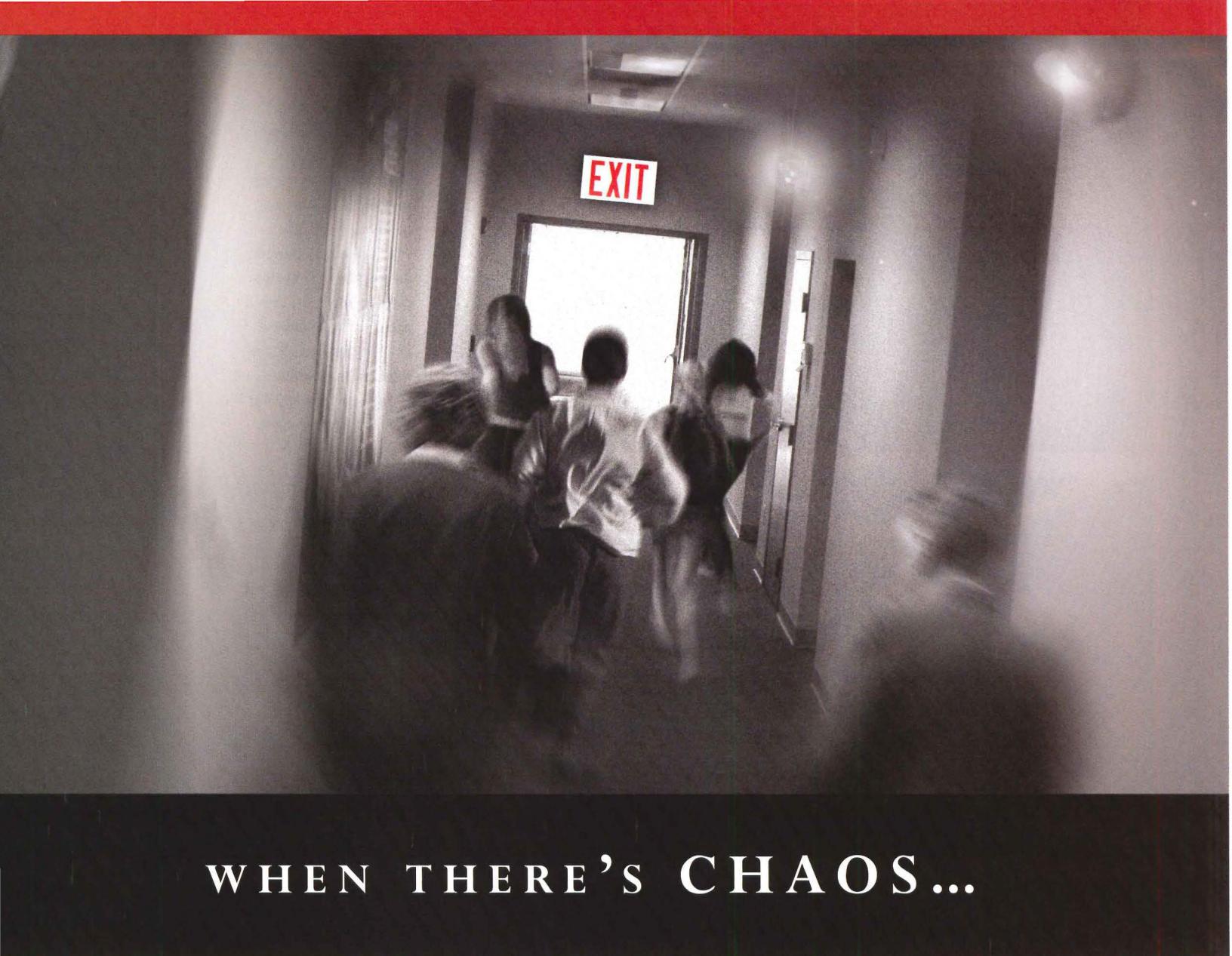
#### Glycol

Of the three, glycol is the least hazardous, while jet and AV fuel require significant remediation. Over time, glycol, which smells like sewage owing to its tendency to generate large quantities of methane, will naturally biodegrade. Excavating glycol-contaminated soil and spreading it out on the ground to "air out" is an effective remediation method, but it obviously depends on the availability of large areas of land that can be requisitioned for what could amount to months of natural degradation. At Stapleton, open land was not a problem. "The developers wanted to develop a park with a sledding hill, so quite a bit of glycol dirt went into that hill because

we knew it was going to be a park and would have a lot of clean, new soil packed over it," Wood said. Other glycol-contaminated dirt was allowed to biodegrade and then was returned to its original location.

#### Jet and AV fuel

There are a number of ways to remediate petroleum contamination. At Stapleton, as with the majority of sites nationwide, excavating the soil and hauling it to a landfill was the easiest method to deal with the quantities of earth needed to be removed. However, this depended on the availability of clean infill dirt, which mostly came from new development excavations and grading, and it required ready access to an affordable landfill site. Wood noted that in denser urban areas, such as New York City, trucking dirt to a landfill can be prohibitively expensive. Alternative options to consider for this kind of contamination include bioremediation, similar to that undertaken for glycol, or cover and cap (sometimes called "engineered barriers"), where the contaminated soil is simply contained from further spreading. But, Wood adds, these methods would be inappropriate for residential development. Other methods, though less popular, include soil-vapor extraction, where air blown through soil strips it of hydrocarbons and then burns off in a catalytic oxidation chamber; and also phytoremediation, where specific plants are added to the landscape to naturally clean the soil. Chemicals for dissolving contaminants can be used in some instances, but were not considered at Stapleton. Wood said these other methods, in contrast to "dig and dump," would



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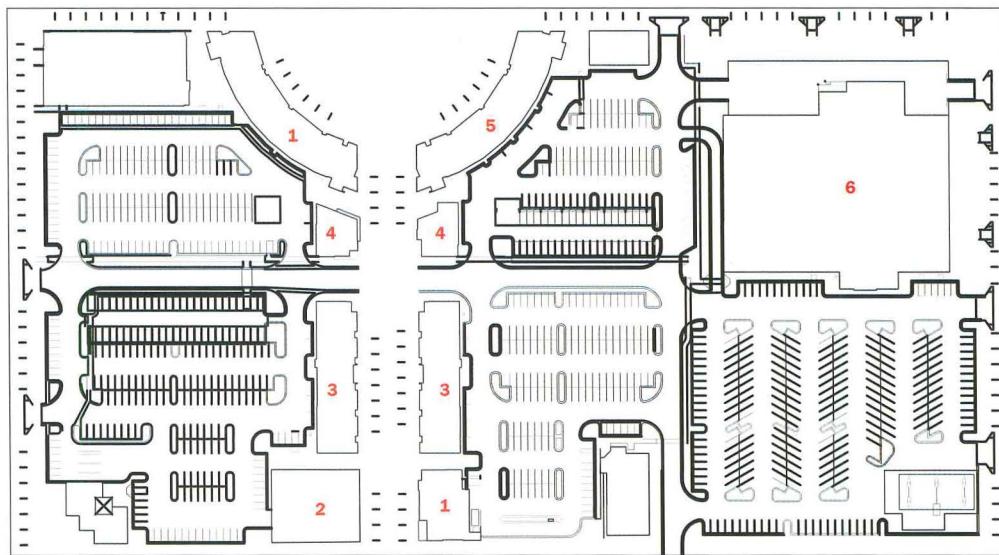
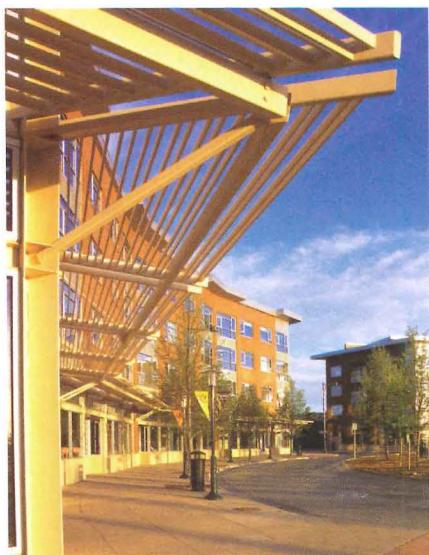
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**4240 Architecture's**  
**East 29th Avenue Town**  
**Center includes the**  
**Founders' Green, a large**  
**park (left), and mixed-**  
**used buildings for**  
**office, retail, restaurant,**  
**and residential develop-**  
**ment (below left). The**  
**site plan indicates the**  
**New Urbanist principles**  
**engaged in its design**  
**(below), particularly the**  
**classical symmetry of**  
**the main street.**

1. Retail
2. Retail/Restaurant
3. Office/Retail
4. Restaurant
5. Residential/Retail
6. Supermarket



have taken too much time at Stapleton. Where airport buildings were preserved, remediation occurred around the perimeter and hot, soapy water was injected beneath the buildings and pumped out to "clean" the soil.

#### Tracking the dirt

Cleaning 4,700 acres of contaminated land presents a number of obstacles, chief among them the documentation process for distinguishing polluted zones and those that have been remediated. Balancing the assurance that the entire breadth of any one fuel plume is cleaned, thereby preventing further contamination of adjacent sites, and meeting the requirements of the developer to have key tracts of land available for use required a careful strategy of detailed mapping and repeated testing. Parsons developed a database for its findings and then translated that into a geographic information system (GIS) with three-dimensional contours of the entire site. "It was like developing a mine," Wood said, "where we would excavate the contaminated areas and mine the contaminants out of it."

Since Stapleton was to be redeveloped into primarily a residential community, the extent to which the land was cleaned was necessarily higher than if the land had been turned into a park. However, federal and state laws for brownfields lack a comprehensive scope for dealing with large sites with multiple contaminant types, viewing some as needing little oversight. Furthermore, Colorado's laws only tackle petroleum contamination levels in groundwater, not soil.

In order to assuage any lingering doubts about the site, the city

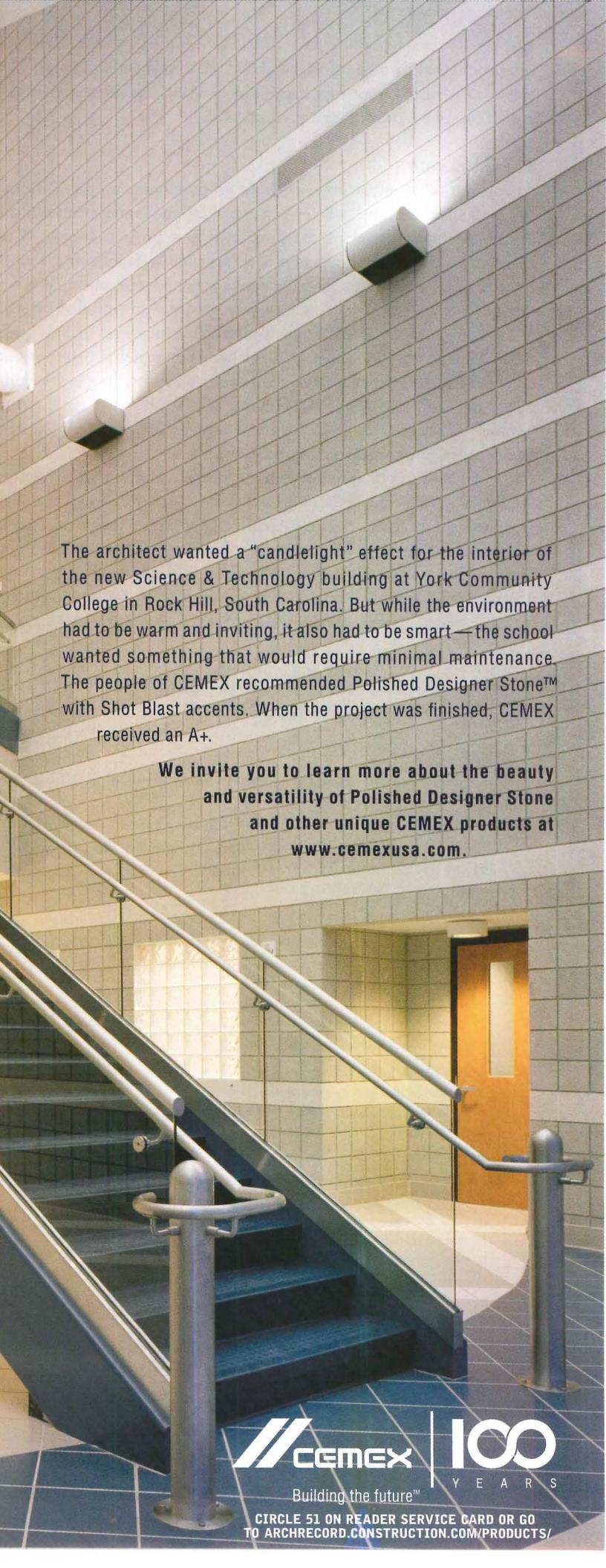
developed what they called the Stapleton Numeric Criteria to address both groundwater and soil. The SNC guideline set analytical threshold values more stringent than PPM levels required by the Colorado Department of Public Health and Environment (CDPHE) and the Colorado Department of Labor and Employment's Division of Oil and Public Safety (OPS), the state agencies that regulate various types of hazardous materials remediation. The SNC set the standard for total petroleum hydrocarbons (TPH) at less than 250 mg/kg in soils 20 feet below grade or to bedrock, whichever was deeper. The standard for groundwater followed the CDPHE's Water Quality Regulations, which for benzene, for example, required the maximum contaminant level (MCL) at wells to be within 5 micrograms per liter.

Once contamination was verified, Parsons would scrape off the soil down 20 to 25 feet and truck the soil to Denver's Arapahoe Disposal Site, a lined landfill owned by the city. Since the CDPHE didn't consider the contaminated soil to be hazardous, it could be used at the landfill to cap waste. In the past five years, Parsons has removed 1 million tons of soil to Arapahoe and dug up and replaced 4 million tons of clean soil.

Throughout the process, Parsons worked with supervision from outside contractors hired by the city for quality control purposes. After Parsons would complete work in one area and monitor groundwater quality for a given amount of time (sometimes nearly a year), they submitted reports to the CDPHE and would in return receive a NFA letter effectively declaring that portion of the site to be clean. Only upon receipt of the NFA

A graphic design element on the left side of the page. It features a large, stylized letter 'H' composed of yellow and blue geometric shapes. Below it is a smaller, more complex structure made of intersecting blue lines.

# BUILD IT SMARTER.

A photograph of a modern interior staircase. The walls and stairs are covered in light-colored rectangular tiles. The stairs have a dark blue carpet runner. A white metal handrail with a glass panel is visible. The lighting is warm and recessed into the ceiling.

The architect wanted a "candlelight" effect for the interior of the new Science & Technology building at York Community College in Rock Hill, South Carolina. But while the environment had to be warm and inviting, it also had to be smart — the school wanted something that would require minimal maintenance. The people of CEMEX recommended Polished Designer Stone™ with Shot Blast accents. When the project was finished, CEMEX received an A+.

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letter could the city then turn around and sell the property to Forest City Stapleton. All in all, Wood says, Parsons received 20 NFA letters and left the project on good terms with the city and state.

### Filling the void

As portions of the site became available for development upon Parsons' completion, Forest City Stapleton began making good on its commitment to implement the development plan. Two new projects stand out as examples of how an architect approaches a site like Stapleton, given its environmental history and its extraordinary status as a second chance for urban Denver. 4240's Town Center project, previously mentioned, opened in 2003 and incorporates a range of sustainable measures such as grass swales for storm-water runoff, formaldehyde-free materials, 100 percent recycled steel, 40 percent recycled materials in all concrete, operable windows, and sunshades. More important, 4240's Dominick said, is the flexibility of the buildings, where unrented residential space could be easily converted into commercial space as needed.

Following the progressive bent of the community, the Denver School of Science and Technology opened as a charter school in 2004. Designed by Denver-based Klipp Architects, the school focuses on math, science, and technology and utilizes the building as a teaching tool for students. Brian Klipp, FAIA, said brownfields offer an opportunity to get it right. "I think there is an opportunity for the client to be more committed to sustainability because of the nature of the site we are working on,"

Klipp said. "It allows us to do something architecturally unconventional." In that vein, Klipp Architects designed the school with exposed structures and systems to encourage vicarious learning, as well as with no-brainer strategies like increased daylighting in classrooms and corridors.

Where it made sense, original airport buildings were maintained. Aside from the control tower, one hangar preserved as the site of Pope John Paul II's visit to Denver in 1993 has been converted into a television studio. The redevelopment plan seized the opportunity to reintroduce two submerged waterways, Sand Creek and its tributary, Westerly Creek, which are both now major features of Stapleton's parklands. The acres of concrete runways were removed and recycled into a product lovingly called "Staplestone," which has been used on-site.

While not every brownfield project will have the incredible amount of players involved as at Stapleton—government agencies, politicians, developers, contractors, architects, planners, citizens, and visionaries—the process remains generally similar. In the way that many older cities have redeveloped abandoned waterfronts, once the major hub of industrial activity, Denver's isolated location and relatively recent history resulted in its airport acting that role. As Dominick offered, the West's great resource has been its environment, and unchecked growth has destructively influenced that. "This community is really optimistic and opportunistic," Dominick said. "I think right from the get-go, the primary goals of this project were really to talk about sustainability and green development." ■



## AIA/ARCHITECTURAL RECORD CONTINUING EDUCATION

### INSTRUCTIONS

- ◆ Read the article "An Abandoned Airport Brownfield Takes Off" using the learning objectives provided.
- ◆ Complete the questions below, then fill in your answers (page 241).
- ◆ Fill out and submit the AIA/CES education reporting form (page 241) or download the form at [www.archrecord.com](http://www.archrecord.com) to receive one AIA learning unit.

### QUESTIONS

1. How is the development at Stapleton International Airport different from the redevelopment in many American cities?
  - a. it focuses on residential development
  - b. it focuses on commercial building conversion to residential use
  - c. it focuses on low-rise residential development over a large area
  - d. it focuses on brownfield redevelopment
2. Home sales at Stapleton were which?
  - a. so good that a lottery process was used
  - b. good enough that developers tripled their investment dollars
  - c. supported by rebates from the energy companies
  - d. for low-income families
3. The New Urbanist vision for the Stapleton Development Plan emphasizes all except which?
  - a. walkable scale
  - b. diverse transportation options
  - c. strong connections to parks and nature
  - d. reuse of existing structures
4. The sustainability master plan resulted in houses that were which?
  - a. 30 percent more expensive than other houses
  - b. 30 percent more energy efficient than homes built within existing building codes
  - c. 30 percent less dense than other low-rise housing developments
  - d. 30 percent less desirable than other housing developments

5. The major soil contaminant at Stapleton was which?
  - a. aviation fuel
  - b. glycol
  - c. jet fuel
  - d. chlorine
6. Spilled fuel sinks through the topsoil and is found where?
  - a. in the bedrock
  - b. on the water table
  - c. in the earth's core
  - d. in the stratosphere
7. How was the soil containing glycol cleaned?
  - a. it was spread out on the ground to air out
  - b. it was spread out and sprayed with chemicals
  - c. it was washed with sand and gravel
  - d. the contaminants were blown out with air and burned off
8. The petroleum-contaminated soil was remediated by which method?
  - a. contained from further spreading by engineered barriers
  - b. hydrocarbons were blown out of the soil and burned
  - c. plants were added to naturally clean the soil
  - d. the soil was hauled to a landfill
9. Petroleum contamination is addressed by Colorado law in which way?
  - a. in terms of oily soil as a landfill cover
  - b. in terms of groundwater
  - c. in terms of total petroleum hydrocarbons in the soil
  - d. in terms of 20 feet below grade or bedrock
10. The control tower at Stapleton International Airport was preserved for which reason?
  - a. to use as a security vantage point
  - b. it could not legally be removed
  - c. it could not physically be removed
  - d. it provided a landmark for the neighborhood



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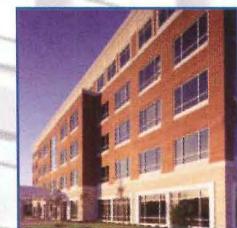
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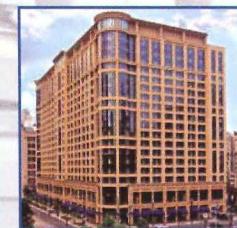
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# Tech Briefs

**U.S. Green Building Council** tackles contentious materials credits • Architects surveyed on building information modeling • U.S. mayors group endorses zero carbon targets

## Proposed LEED changes intensify debate over recognition of wood certification systems

In response to a long-escalating controversy over the recognition of certified wood products by its LEED rating system, the U.S. Green Building Council (USGBC) is considering revising two of the metric's credits that deal with material and resource use.

Late in May, the council's board of directors asked the LEED steering committee, the group responsible for

One motivation for considering credit revisions was to gain a wider foothold for green building practices. "Wood certification had become a significant issue at the state and local level and had become a distraction" from the council's mission of market transformation, says Michelle Moore, USGBC vice president.

The changes, if implemented,

rewards projects for use of building materials derived from rapidly renewable sources—those regenerated in less than 10 years—to one that recognizes all biobased materials, including wood. With this change, wood certified by FSC could receive credit, in addition to wood certified by SFI, CSA, and possibly other organizations.

A comparison of standard forestry and agricultural practices is the basis for the recommendation. Agricultural products now recognized by the rapidly renewable credit, like those made from soybeans or cotton, "often carry significant environmental burdens, [therefore] rewarding rapidly renewable products over wood-derived products may not be justified," says the paper.

In addition to the move from a rapidly renewable to a bio-based credit, the paper suggests changing a

current credit that rewards projects for use of FSC-certified wood only. The revised credit would recognize other biobased materials that satisfy still-undeveloped "robust" criteria.

The proposals are receiving mixed reviews from industry stakeholders. The suggested biobased credit is "an exciting development," says John Mecham, a spokesperson for the American Forest & Paper Association, a wood products trade group and creator of the SFI rating system. However, he urges the USGBC "to retain a credible independent consultant" to assist with formulating the criteria for certifica-

tion system assessment.

Other stakeholders worry that inclusion of certification systems previously not recognized by LEED in the proposed biobased credit would be premature. "I am pleased to see wood treated as an environmentally beneficial building material," says Liza Murphy, a senior manager at the Rain Forest Alliance, a nonprofit FSC certifier. She adds, however, "I encourage the USGBC to have a conversation about the on-the-ground differences among certification systems even before putting the question before its membership."

Some sources are critical of the paper's reliance on life-cycle assessment (LCA)—a methodology that takes into account factors like a material's embodied energy and projected life span. According to Dan Harrington, product development director for EcoTimber, the paper does not "address downstream water quality, seasonal water retention, local and global climate change, and a host of other complex impacts that are difficult to assess using LCA." EcoTimber is a supplier of FSC-certified wood products.

Rob Watson, a USGBC board member and senior scientist at the Natural Resources Defense Council, calls the white paper's suggested credit language "a first cut at a very complicated issue." Before adoption, the changes must go through several steps, including review by the council's technical advisory group for materials and resources, a public comment period, and balloting by the full USGBC membership.

"Some have characterized this [white paper] as the end of a process, but it is really the beginning," says Watson, suggesting that quick resolution is unlikely. "This is one of the most complicated and loaded issues the council will face." Joann Gonchar, AIA



**The Forest Stewardship Council, which certified this teak plantation in South America, is the sole wood certification system currently recognized by LEED.**

shaping the rating system, to address recommendations outlined in a white paper on the topic. The proposed changes would open the door for recognition of wood certification systems favored by the timber industry, such as the Sustainable Forestry Initiative (SFI) and the Canadian Standards Association (CSA). Many in the environmental community consider the forest management practices allowed under these systems less environmentally preferable than those of the Forest Stewardship Council (FSC)—the sole wood certification system currently recognized by LEED.

would double the number of LEED points a project could earn for wood use. "It is justifiable to give additional weight to wood. It is produced by renewable energy [in the form of] sunlight and photosynthesis. It has a high yield, is reusable, and is ultimately biodegradable," says Alex Wilson, author of the white paper, and executive editor at Building Green. [Note: RECORD publisher McGraw-Hill Construction and Building Green are partners in a magazine for USGBC members about sustainable design.]

Wilson's paper suggests broadening the current credit that

## Tech Briefs

### To architects, building information modeling is still primarily a visualization tool

Almost three quarters of U.S. architecture firms are using 3D or building information modeling (BIM) for at least one phase of their work. The statistic comes from a survey conducted by a joint committee of the American Institute of Architects and the Associated General Contractors of America.

The results of the questionnaire, completed online in December and January by 1,266 AIA members, along with those of a similar survey of construction firms to be administered later this year, will be used to inform the initiatives of the joint committee and the individual organizations.

Of the respondents to the survey of architects, 36 percent are in firms with fewer than seven employees. In the last completed fiscal year, 33 percent had gross billings of \$500,000 to \$5 million, and 58 percent spent less than 5 percent of their operating budget on 3D modeling/BIM technology.

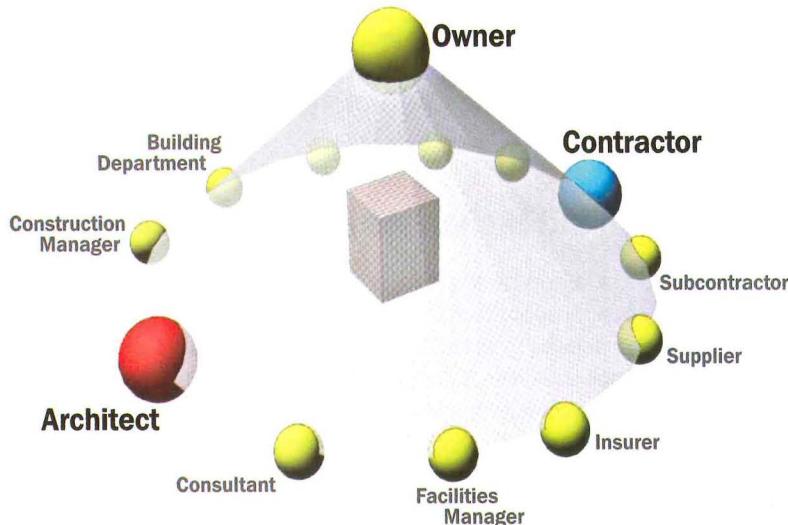
Of the 74 percent of parti-

pants that reported using 3D or BIM, 98 percent use the tools for renderings and presentation graphics related to conceptual design. Of this group, many are using the technology for simple geometric massing and for adding material elements and details to drawings.

Just over one third of respondents using 3D/BIM reported using it as a construction resource, for tasks like conflict identification. However, most firms using the technology for this purpose still produce 2D drawings for permitting, shop drawings, record drawings and client reviews.

About 34 percent are using it for "intelligent modeling," or for generating information like cost or quantity data. Nearly all using the technology for this purpose included structural systems in the model. Twelve percent are using it for post-occupancy facility management.

CAD software developers say the results are encouraging, even though most firms are using 3D/BIM primarily as a visualization tool, and



are not yet taking full advantage of its capabilities. "Thirty-four percent of firms using BIM 'intelligently' is great, [even if it's] a self-selected respondent base. It's still early," says Phil Bernstein, FAIA, a member of the joint committee and vice president of Autodesk's Building Solutions Division. More widespread adoption of BIM depends on "creating a closer relationship between the activities of design, engineering, construction, and building operation."

The National Institute of Building Sciences hopes to facilitate this integration and sharing of information through the creation of a national BIM standard. The goal of

the project is to "improve performance of facilities over their full life cycle by fostering a common, standard, and integrated life-cycle information model for the architecture, engineering, construction, and facilities management industry," according to NIBS.

The organization hopes to release the first module by year end, and is now testing the link between CAD and a geographical information system. Such an interface could assist in locating nearby police stations, for example, and would be useful to first responders, insurers, and property owners, says Earle Kennett, NIBS vice president. J.G.

### Mayors move to halt climate change with goals for carbon neutral buildings

An ambitious set of performance targets for buildings has won the support of the nation's mayors. At a meeting in Las Vegas early last month, the U.S. Conference of Mayors, a group representing cities with a population of 30,000 or more, unanimously approved a resolution calling for an immediate reduction in consumption of energy generated from fossil fuels by 50 percent for all new and renovated buildings.

The measure, known as the "2030 Challenge," was sponsored by Mayors Richard Daley of Chicago, Greg Nickels of Seattle, Manuel Diaz of Miami, and Martin Chavez of Albuquerque. It calls for further reductions in fossil-fuel use of 10

percent every five years, with an ultimate goal of carbon neutrality by 2030. The resolution's performance targets parallel those outlined in a sustainable-practice position statement adopted late last year by the American Institute of Architects board of directors.

Prior to passage of the resolution on June 5, the group's energy committee debated whether the intent of the measure was to target municipal buildings or all buildings, according to Paul Mendelsohn, AIA, senior director of state and local affairs. The committee, and ultimately the full body of mayors, approved language that would apply to all buildings. "If you constrain the

measure to only city-owned buildings, then you profoundly reduce the desired outcome," says Mendelsohn.

In order for the measure to have real impact, it must now be translated into enforceable policy, says Ed Mazria, AIA, a Santa Fe architect. "Now the resolution needs to be codified in executive orders and legislation, and it must work its way into building codes," says Mazria, who has done extensive research on building energy consumption and on the link between the built environment and climate change. He addressed the mayors group at a mid-May summit on energy and the environment held in Chicago, where he urged adoption of the resolution.

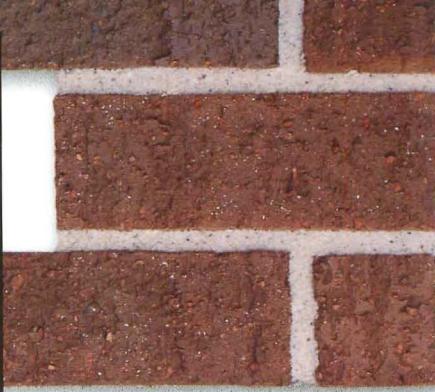
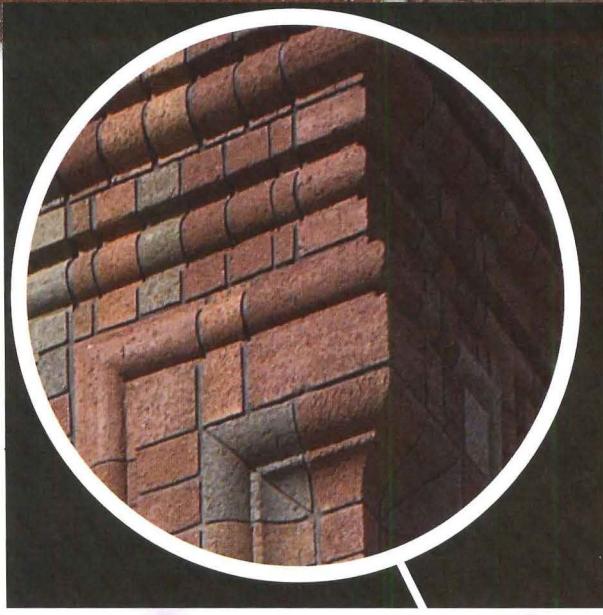
In addition to regulations, incentives can also be an important

tool for encouraging private developers to build more efficient buildings, says Sadhu Johnston, commissioner of Chicago's Department of the Environment. He points to his city's recently instituted expedited permit process for developers of green buildings.

Passage of the carbon neutrality measure is one sign of more public visibility for architects, say some sources. "I am hopeful that this does indicate a new role for architects," says RK Stewart, FAIA, a principal in the San Francisco office of Gensler and 2007 incoming AIA president. "Now architects are engaging in debate about issues of long-term benefit to the public, not only on sustainability, but also on topics such as the creation of livable communities." J.G.

# *Not Just Another Brick In The Wall.*

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# Universal Design: Integrating Innovative Products and Spatial Design

Provided by Whirlpool Corporation

By Mark R. Johnson, FAIA

Two decades ago, architect Ronald Mace, FAIA, coined the term "universal design" calling for the design of products and the built environment to be usable by all people, in the greatest extent possible, without the need for adaptation or specialized design. At that time, Mace was particularly responding to the lack of adequate barrier-free architecture to meet the needs of the physically handicapped. Yet, even then, Mace had a much broader application in mind—that all spaces, features, and aspects of all things should be designed to be usable by and marketable to people of all ages and abilities.

Today, universal design is making its way into the collective consciousness, spurred on by the needs of an aging population. Often referred to as "lifespan" design, the new focus is to provide a product—be it a home or an appliance—that recognizes, respects, values and attempts to accommodate the broadest possible spectrum of human ability.

Builders have responded to this trend by incorporating wide doorways and stacked closets into new homes that can be converted into an elevator, as well as locating the master bedroom suite on the main floor. Appliance manufacturers are also addressing the universal needs of product users. Usability and functionality rank high on consumers' wish lists. As sophisticated technology infuses product design, manufacturers find they must be even more aware of the human interchange with the product, and strive to make the operation comfortable both ergonomically and cognitively.

The emerging trend of "aging in place" will continue to have a huge impact on life-style considerations. A survey by the American Association for Retired Persons in 2000 suggested that 72 percent of the population aged 45 and over want to remain in their own home as they grow older. More and more attention is being paid to a person's physical and

## CONTINUING EDUCATION



Use the learning objectives below to focus your study as you read **Universal Design and Appliances**. To earn one AIA/CES Learning Unit, including one hour of health safety welfare credit, answer the questions on page 166, then follow the reporting instructions on page 242 or go to the Continuing Education section on [archrecord.construction.com](http://archrecord.construction.com) and follow the reporting instructions.

## LEARNING OBJECTIVES

After reading this article, you should be able to:

- Learn how the need for accessible design lead to the development of universal design.
- Understand the key principles of universal design and how they apply to the practice of architecture.
- Identify how universal design solutions have been incorporated into appliance design.



The front controls of the KitchenAid Pro Line cooktop paired with an accessible installation create a great solution in universal design.

psychological changes and how that interfaces with one's environment. It's easy to see why universal design is catching on. Mace was adamant in emphasizing the need to simplify. He wrote, "The design of products and the environment should be usable by all people in the greatest extent possible, without the need for adaptation or specialized design." The idea is to integrate accessibility into product design, to make it invisible, to strive for quality aesthetics.

## From Accessibility to Universal Design

It's estimated that nearly 50 million people in the United States have at least one disability that affects their everyday life. Is there a civil right for a barrier-free environment in this country? Yes, Congress thinks so, and in 1990 adopted the American Disabilities Act, which is the first truly anti-discrimination act against persons with disabilities in this country. However, Barrier-free activists had made great inroads three decades earlier with the publication by the American National Standards Institute of the first codes and standards: A117.1-Making Buildings and Facilities Accessible to and Usable by People with Disabilities. It stated that for a building to comply and be usable, it had to have "a reasonable number but always at least one" of the features it described, i.e., one accessible door, one accessible toilet room, etc. A117.1 provided some relief for handicapped persons however, it was just a minimal beginning effort in that most of the regulations and codes that adopted the standard have never mandated truly accessible or barrier-free building and facilities, but rather only parts and pieces of buildings were required to be accessible.

Under A117.1 only certain building types are required to comply—just government owned buildings or federally funded projects. Subsequent standards included minimum specifications for accessible features in houses such as kitchen sinks, bathtubs, toilets, etc. However, these specifications were adopted and mandated in most localities only for applications in multifamily housing programs, such as publicly or managed apartment buildings.



Whirlpool Duet controls address ergonomics, readability, and cognitive usability in the Fabric Care Studio.

Section 504 of The Rehabilitation Act of 1973 mandated that 5 percent of the apartments must be wheelchair accessible in programs receiving federal financial assistance. An additional 2 percent had to be equipped for visually impaired and blind residents and another 2 percent for hard-of-hearing and deaf tenants. Therefore, the 1973 legislation only affected selected features in a small number of rental apartment in publicly assisted housing projects.

The Fair Housing Amendments Act (THAA) of 1988 established a special and different accessibility standard for rental multifamily housing, which mandates a lower level of accessibility but covers a great number of apartments, including all units on ground floors and all units on floors served by elevators. The minimum level of accessibility provided is an improvement over many conventional and inaccessible apartments, but it is not

sufficient for many people with disabilities and is far from being barrier-free or accessible. In 1990 Congress passed the American Disabilities Act that guaranteed for people with disabilities equal opportunity in accommodations, commercial facilities, employment, transportation, state and local government services, and telecommunications. ADA Guidelines set rules for public buildings, but only pertain to government-funded housing.

Throughout this time, accessible design came to be identified with the use of physical devices—expensive assistive technology devices, durable medical equipment, stainless steel and chrome and awkward features such as ramps that gave houses a clinical look. Builders, owners, and the public resisted the inclusion of “barrier-free” or accessibility features as the aesthetics were usually undesirable and seemed to decrease marketability. Accessibility was more of a burden than a challenge.

Ronald Mace and his Center for Universal Design at North Carolina State University worked hard to dispel this notion. He and other proponents of universal design advocated good aesthetics—finding solutions that are “invisible.” The solution: use color, scale, texture, line, and light to create spaces that have harmony, balance, and proportion. The theory was that universal design is not a new science, style, or unique in any way. It requires only an awareness of need and market and a common sense approach to making everything that is designed and produced usable by everyone to the greatest extent possible. This might involve only slight changes in simple things—the shape of an element, its placement or size, the force necessary to operate it, or the way in which the user must interact with the item.

## Provide Options for All People

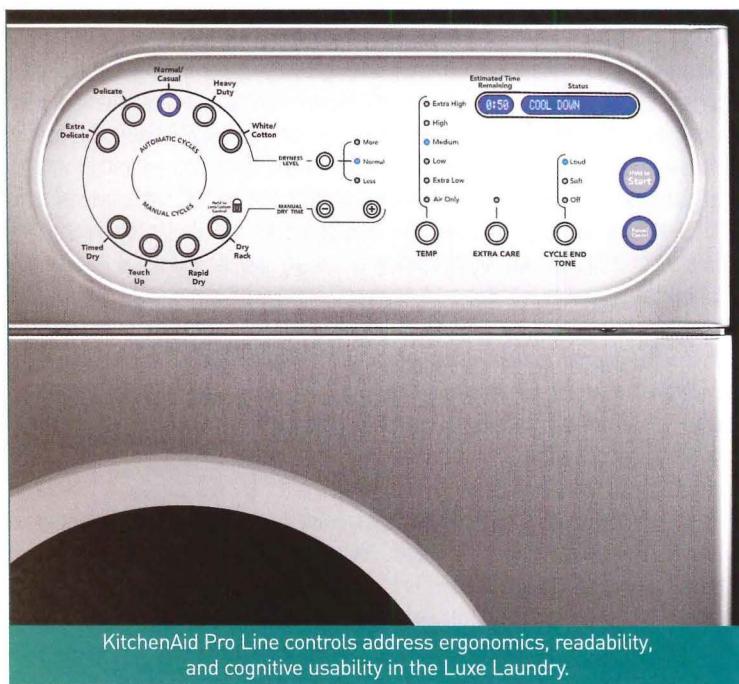
The idea for universal design in housing grew out of the recognition that, because most of the features needed by people with disability are useful to others, there is justification to make their inclusion common practice. Examples include: raising electrical receptacles to 15 inches or 18 inches above the floor eliminates the need to bend over as far and makes it easier for everyone. Mobility is much easier in houses with stepless entrances and wider door and hallways.

Some universal design features create experiences many people have not had before. For example, when well-designed bathrooms with extra floor space to accommodate users of mobility aids are perceived as luxurious, and people revel in their now-found ability to have furniture in the bathroom. A chair, bookcase, towel rack, or étagère can give bathrooms a marketable elegance and utility and can be removed if the space is ever needed to accommodate a disabled family member or friend.

In housing, homeowners and builders began to recognize the universal design features that would support them into the future without taking away from the home's appearance, some of which we mentioned above:

- Wide doors
- Stacked closets that can be converted into an elevator
- Kitchen with many easy-to-reach amenities, such as undercounter dishwashers and refrigerator drawers
- Main floor bedroom suite

Incorporating universal design into the kitchen includes not only the location of appliances but their ease of operation as well. A simple change in the design of an appliance can make a big difference in accessibility. For example, a wall oven that opens on the side instead of the top makes it easier for a person in a wheelchair to reach inside the oven. Appliance manufacturers are rethinking everything from the size of knobs to the shape of a door handle in order to make appliances more user-friendly. Appliance manufacturers are combining a sense research-based ergonomics with ease-of-use features, to create products that are convenient for everyone.



KitchenAid Pro Line controls address ergonomics, readability, and cognitive usability in the Luxe Laundry.



Drawer dishwashers are a good option for universal design by mounting the unit higher in a pull-out configuration.

For increased visibility, some of the new features include:

- Larger-print labels on appliances
- Large-print owner's manuals
- Light-colored ranges with contrasting dark cast-iron elements to help those with limited vision
- Dryers with audible lint chime when it's time to clean the filter
- Side-swing doors on wall ovens and microwaves that provide easier and safer access
- Refrigerators that allow people in wheelchairs or individuals under five feet easier access to both frozen and refrigerated food
- Adjustable slide-out refrigerator shelving that can be set at more convenient heights

It's important to note that advocates maintain that universal design is a set of principles, not a standard or code, and that it goes far beyond the minimum specifications and limitations of legislated mandates for accessible and barrier-free facilities. Think of it this way. Codes and standards tell you what you must do. Universal design concepts open up the world of opportunity to what you can do.

## The Seven Principles of Universal Design

Led by the Center for Universal Design, a group of architects, designers, engineers, and design researchers established these seven principles. These principles they suggest, are applicable to a wide range of design disciplines, including architecture, interior design, and industrial design. They can be used to evaluate existing products, guide the design process, or educate designers and consumers about the need for universal design.

A full explanation of the seven principles listed below is found in the article of this title on Architectural Record Continuing Education web site. You will also find a method in which to use these seven principles to evaluate the universality of a design.

The seven principles of universal design are:

1. *Equitable Use:* The design does not disadvantage or stigmatize any group of users.
2. *Flexibility in Use:* The design accommodates a wide range of individual preferences and abilities.

3. *Simple, Intuitive Use:* Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

4. *Perceptible Information:* The design communicates necessary information effectively to the user, regardless of ambient conditions or user's sensory abilities.

5. *Tolerance for Error:* The design minimizes hazards and the adverse consequences of accidental or unintended actions.

6. *Low Physical Effort:* The design can be used efficiently and comfortably, and with a minimum of fatigue.

7. *Size and Space for Approach and Use:* Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility.

These goals should be reached to the greatest extent possible by simplifying design at minimal extra cost. Universal features are generally standard building products or features that have been placed differently, selected carefully, or omitted. Consider the following:

- Accessible route from vehicle drop off or parking
- Covered entryway
- Package shelf or bench to hold parcels, groceries, etc.
- Lever door handles
- Electrical receptacles at 18-inch maximum height

(For a more complete list see the corresponding article on the Architectural Continuing Education web site.)



KitchenAid undercounter beverage centers not only allow accessibility with storage below the counter surface, but also have a glass front to enable the user to see the contents before having to open the unit.



Modular work surfaces and storage pedestals elevate the frontloading Whirlpool Duet washer and dryer, eliminating uncomfortable bending as well as creating a sorting/folding area.

Universal design is closely associated with human-factors design, although the latter is considered a more rigorous design process. The focus here is on human behavior and human interaction with space, with regard to aesthetics (including color and texture), form, scale, proportion, function, daylight, equipment, and furnishings. Also of importance in human-factors design is establishing a sense of ownership, community, presence, comfort, security, performance, and privacy. In the end, the product is designed "for the user" rather than "forcing" the user to accommodate the design. It's interesting to note that human-factors design is modeled after the process used by the U.S. military in designing its products and facilities. It is a rigorous step-by-step formula.

Perhaps more closely aligned with universal design, particularly in regards to product design, is ergonomics. Generally, ergonomics has come to mean "making something easier and less stressful to use." It is, however much more than that—a well-defined scientific discipline with broad applications and implications in the work environment, product design, and architecture. The uniting element is the assessment of the physical, psychological, and social needs of human beings in all design projects.

It's not hard to see the relationship with universal design. Industrial designers, in particular, see ergonomics as a major part of universal design. Again, product design, like architecture, has no legal requirements for accessibility, but industrial designers do recognize the market need and opportunity to focus on the preferences of users. And the changing demographics of the aging population have established a clear call for universal design.

As one industry spokesman suggested there are three primary drivers of universal design in the manufacturing of appliances: ergonomics, visual acuity, and cognitive recognition.

Ergonomics, as stated above, examines the relationship between man and machine, making changes where possible for healthier and more satisfying work conditions. For instance, the ergonomic chair that improves our posture and reduces stress comes to mind, but ergonomics can be an important consideration when designing door handles and levers or the placement of an oven door or the height of a dishwasher.

Visual acuity, the second factor, addresses the needs of those vision ranges from slight impairment brought on by aging to individuals with severe difficult seeing. Design changes to accommodate them can also be welcomed by those without disabilities. Placement and size of lettering is important as is assess. For example, a dishwasher is available for which the position of the door is perfectly balanced and can be opened to any angle to bring the controls to an optimal viewing position.

Cognitive recognition can be described as our ability to adapt to new technology. We like the old ways of doing things, and often need help to make a technological leap. For example, a home cooking enthusiast may aspire to be more like a professional chef, which would mean expanding cooking options as much as possible at home. Yet, the instructions for the new convection oven may seem confusing or complicated. In this case, the appliance features an easy convection button that makes the cognitive leap for the consumers so they can bake as they have always done so in the past; a microchip makes the adjustment to convention technology.



KitchenAid Pro Line laundry pedestals incorporate a shelf to hold laundry baskets, allowing the user to move clothing articles more easily from washer to dryer while reducing bending.



A balanced dishwasher door with top-mounted controls can be positioned at any angle for ease of use.

## The Seven Principles and Appliance Design

Industrial designers are enthusiastic adopters of the concepts of universal design. Why? The field has no standards for accessible design yet industrial designers see the value of focusing on the needs and preferences of users. Designing a user-friendly product is a high priority in home appliances to achieve success as a manufacturer.

Ask yourself if these features promote the Center of Universal Design's seven principles listed above. (For more information see the corresponding article on Architecture Record's Continuing Education web site.) The goal is to address the accessibility of cabinets, countertops, and controls in the kitchen by all people and to the greatest extent possible. This doesn't have to result in increasing costs or unattractive aesthetics but it does require an understanding and consideration of the broad range of human abilities throughout a person's lifespan.

Consider control of the appliance. Issues include:

- Instructions close to user for easy viewing
- Knob shape and size for ease of manipulation
- Electronic interface—intuitive function
- Hardware that is easy-to-use, offering flexibility with little or no strength
- Loop handles pulls on drawers and cabinet doors in lieu of knobs
- Larger, easier-to-read graphics on knobs and elsewhere on appliances
- Advanced preprogramming options for ease of cooking
- Reheating and browning functions using "sensing technology"

Appliance height is also of great significance. Consider:

- A cook top with knee space below, allows someone to use the appliance from a seated position
- A cook top or range with staggered burners and front- or side-mounted controls to eliminate dangerous reaching over hot burners.
- A Dishwasher raised on a pedestal or drawer unit so that the top rack is level with the adjacent counter top
- Front loading washers and dryers positioned side by side for staging laundry

## 21st Century Appliance Design

Universal design principles have already shaped appliances. Consumers may not be aware of this trend for such improvements may have been considered advances in usability and justified as meeting consumer demands though not explicitly promoted.

When specifying appliances, consider the following—you will be familiar with some features; others will be on the market soon.

### The Kitchen

#### Ovens

- Side-opening ovens for easy access
- Easy-to-read and to use time and temperature displays
- Increased glass viewing area and lighting for better visibility
- Racks that easily pull out on ball-bearing extensions
- Oven racks with edges ergonomically designed to fit an oven mitt

#### Cook tops

- Stagger burners, cool, or automatic shut-off burners
- Smooth electric cook tops
- Front or side-mounted controls
- Cook tops of a variable surface height
- Open knee space below cook tops or sinks to increase accessibility

#### Dishwasher

- Front-mounted controls
- Raised control buttons
- Dishwasher installed on raised platform
- Under-the-counter or drawer dishwasher
- Full-extension racks
- Smaller-capacity, top-loading dishwasher installed into the counter surface
- Door with flexible positioning
- Height adjustable components

#### Microwaves

- Controls that require minimal programming
- Controls detectable by touch and require minimal finger use
- New appliances that combine multiple technologies, like microwave and convection, to streamline and simplify the cooking process.

#### Refrigerators

- Under-the-counter or drawer-type refrigerators help place food items within easy reach
- Clear, pull-out shelves, drawers, and tilt-out door bins allow easy viewing of content and bring hard-to-reach items closer to the user
- Full-height handles on refrigerator doors

### Laundry Care

#### Washers and Dryers

- Front loading
- Pedestals—10-inch, 13-inch, and 15-inch tall
- New 15-inch tall can store large bottle or boxed detergent
- 10-inch—good for wheelchair access or short individual

## The Future and Consumer Preferences

According to the National Kitchen and Bath Association, 38 percent of consumers are considering universal design elements for their homes. We're looking at an aging population and with it even more demands for a user-free environment. No doubt universal design solutions in housing and appliances will continue to grow—and because they are meant to be "invisible"—we may not even know it is happening. ■

**CLICK FOR ADDITIONAL SUPPLEMENTAL READING**  
 The article continues online at <http://www.archrecord.com/resources/conteduc/archives/0607whirlpool-1.asp>


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**LEARNING OBJECTIVES**

After reading this article, you should be able to:

- Learn how concern the need for accessible design lead to the development of Universal Design.
- Understand the key principles of Universal Design and how they apply to the practice of architecture.
- Identify how Universal Design solutions have been incorporated in appliance design.

**INSTRUCTIONS**

Refer to the learning objectives above. Complete the questions below. Go to the self report form on page 242. Follow the reporting instructions, answer the test questions, and submit the form. Or use the Continuing Education self report form on Record's web site—[archrecord.construction.com](http://archrecord.construction.com)—to receive one AIA/CES Learning Unit including one hour of health safety welfare credit.

**QUESTIONS**

1. Universal design calls for products and the built environment to be:
  - a. Designed just for the handicapped
  - b. Technical in appearance and operation
  - c. Supplements to basic design
  - d. Usable by all people to the greatest extent possible
2. What percentage of the population over age 45 is reported to favor "aging in place."
  - a. 10 percent
  - b. 49 percent
  - c. 72 percent
  - d. 88 percent
3. What federal law sets the rules for accessibility in public buildings?
  - a. DOE
  - b. ADA
  - c. DAA
  - d. EPA
4. Universal design is a:
  - a. Science
  - b. Set of principles
  - c. Architectural style
  - d. Marketing strategy

5. One of the seven principles of Universal Design is:
  - a. Size and Space for Approach and Use
  - b. Inequitable Use
  - c. No tolerance for Error
  - d. Maximum Physical Effort
6. Universal design is closely associated with:
  - a. human-factors design
  - b. ergonomics
  - c. human-factors design and ergonomics
  - d. neither
7. Which is the best Universal Design solution?
  - a. Cook top with controls at back
  - b. Front loading washer and dryer without pedestals
  - c. Refrigerator with fixed, opaque shelves
  - d. Cook top with knee space below
8. The two other primary drivers of universal design in the manufacturing of appliances, besides ergonomics, are:
  - a. visual acuity and posture
  - b. posture and positioning
  - c. visual acuity and cognitive recognition
  - d. positioning and cognitive recognition
9. Which of the following is not an important consideration in a universally designed kitchen?
  - a. Loop handle pulls on drawers
  - b. Cook top with knee space below
  - c. Television at eye level
  - d. Knob shape and size for ease of manipulation
10. A simple universal design solution is to raise electrical receptacles how many inches above the floor?
  - a. 4 inches
  - b. 15 inches to 18 inches
  - c. 25 inches
  - d. 4 inches to 10 inches



Whirlpool Corporation is the world's leading manufacturer and marketer of major home appliances, with annual sales of more than \$19 billion, more than 80,000 employees, and more than 60 manufacturing and technology research centers around the world. The company markets Whirlpool, Maytag, KitchenAid, Jenn-Air, Amana, Brastemp, Bauknecht and other major brand names to consumers in nearly every country around the world. Additional product information and services for architects can be found at [www.insideadvantage.com](http://www.insideadvantage.com).



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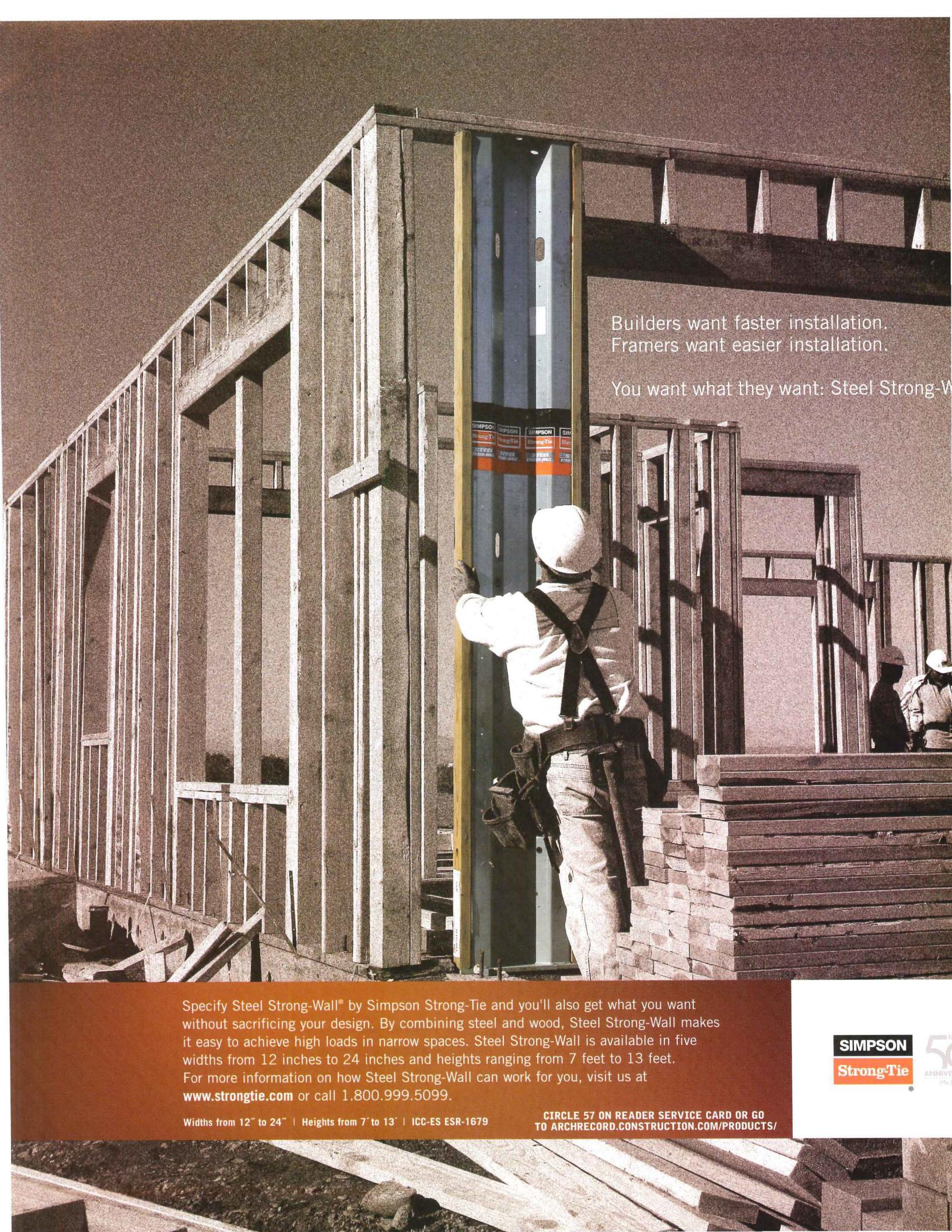
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# Residential

## While preserving a symbol of our agricultural past, architects teach the old barn new tricks

### BRIEFS

#### **KB Home and Martha Stewart**

**Living Omnimedia** are building their second community together. Located in suburban Atlanta, the development contains 800 houses whose architecture is inspired by the domestic style guru's design sense. Stewart's company first partnered with the builder on a development this spring in North Carolina and is also creating a line of interior fashions exclusively for KB Home's customers. For more, visit [www.kbhome.com](http://www.kbhome.com).

#### **Mobile homes got a bad rap**

after Hurricane Katrina, but students at the University of Colorado at Boulder may help change negative perceptions with a complete makeover of an old trailer. Starting with nothing but the chassis, they are developing a prototype low-cost housing unit called TrailerWrap that will incorporate efficient insulation and sturdier materials—all with an eye for attractive design. They hope to complete the transformation this fall. See plans at [www.trailerwrap.net](http://www.trailerwrap.net).

#### **Topography and groundwater availability**

are key factors in determining the degree of sprawl across the United States—perhaps more important than zoning regulations and road building, suggests a new study by researchers at the University of Toronto. Using satellite photos, the team also found that while most cities have grown in size during the past 20 years, they remain reasonably compact, and suburban development is not as scattered as previously thought. Find more details and maps at [www.diegopuga.org](http://www.diegopuga.org).

#### **Speaking words that may warm the hearts of architects,**

panelists at the "Building for Baby Boomers & Beyond: 50+ Housing Symposium 2006" agreed that as baby boomers retire and move into smaller houses, they are avoiding McMansions and the cookie-cutter designs typical of suburban developments. This trend creates more opportunities to express individualism in residential architecture. Visit [www.nahb.org](http://www.nahb.org) to learn more.

#### **Lumber giant Weyerhaeuser has consolidated**

five business units to create iLevel, a new platform that provides one-stop shopping for architects and builders seeking residential structural framing. Weyerhaeuser hopes that the new unit, which encompasses the Trus Joist and Structurewood lines, will streamline product delivery, make customization easier, and reduce waste. For more information, go to [www.ilevel.com](http://www.ilevel.com). James Murdock

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#### **170 Holly Barn**

*Knox Bhavan Architects*

#### **174 Modern Barn**

*Specht Harpman*

#### **180 Party Barn and Guesthouse**

*Shipley Architects*

#### **187 Storage Barns**

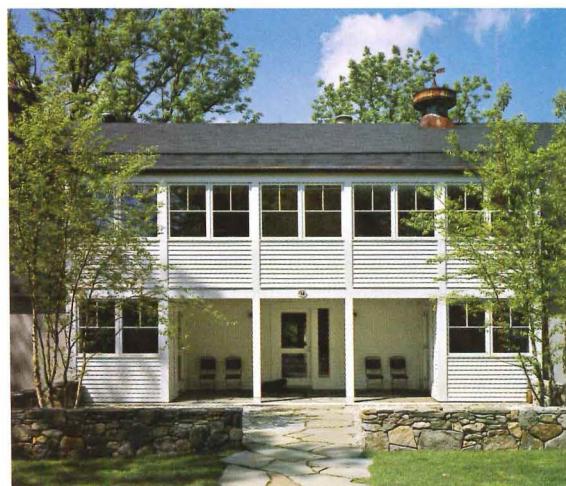
*Albertsson Hansen Architecture*

#### **191 Kitchen & Bath Portfolio**

#### **201 Residential Products**

#### **206 AIA Housing/HUD Awards**

To farmers, barns serve an essential purpose, but also signify values that go beyond everyday chores. The qualities of tradition, hard work, and independence represented by barns are as much a part of the building type as their framework and roof. Over the course of centuries, various barn styles evolved in Europe and North America. Here, immigrants imported diverse designs and construction techniques, and then adapted them to conditions of climate, geography, available materials, and changes in agricultural practice in this country. Through all this change, the barn remains a powerful symbol of the past, even as it becomes endangered. Lucky for us, its form persists as an inspiration to architects. On the following pages, we present examples of barns that have been adapted for contemporary, nonagricultural use. While some are part of farm complexes, others are now in purely residential settings. All in all, the barn remains a reminder of our rural past, and a fertile source for modern interpretations. *Jane F. Kolleeny*





## Knox Bhavan Architects designed Holly Barn to fit impeccably into the native terrain of the Broads

By Robert Such

**O**n England's east coast lie the Norfolk Broads, a protected area of outstanding natural beauty. The Broads consist of a crisscrossed network of 117 square miles of waterways and shallow lakes. Though they appear natural, their formation resulted from centuries of peat extraction by local people, who used the material as heating fuel during medieval times. When sea levels later rose, the man-made pits flooded. Now tourists come here to visit museums, sail, walk nature trails, and observe bird life on the marshes.

A husband and wife with grown children discovered a dilapidated barn on the banks of the River Yare in the Broads. They asked London-based Knox Bhavan Architects to investigate converting it into a weekend retreat, where they could get away from the busy life of London. The barn's poor state of repair, however, meant that it could not be renovated.

The architects decided to build a barnlike house instead, one whose design recalled the wooden shiplapped buildings in the area. For the exterior, they specified hard-wearing, rot-resistant Siberian larch. "The timber," says Simon Knox, "was chosen because we thought it went very

well with local windmills, boathouses, and boat construction." Suitable for a wide variety of uses, larch wood weathers to a silvery gray patina.

The local authorities were inclined to grant permission to build a house with a pitched roof, like the one on the original barn. So the architects used such a roof and inserted glazed gables at its east and west ends, fitted with louvers made of the durable, tropical hardwood iroko (also known as African teak). Standing-seam zinc cladding covers the ridge of the weathered larch roof. The bats and owls made homeless when the old barn was torn down now take shelter in the horizontal slots of the new structure's exterior cladding.



**Project:** Holly Barn

**Location:** Reedham, Norfolk, England

**Owner:** Alan and Jenny Rogers

**Architect:** Knox Bhavan Architects—  
Mary Lou Arscott and Simon Knox,

project designers; Lucy Thomas,

project team

**Engineer:** Eckersley O'Callaghan

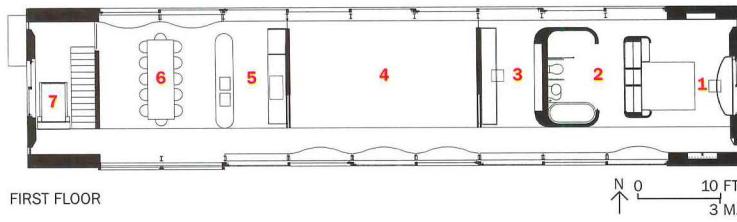
**General contractor:** Willow Builders

**Landscape:** Buckley Design Associates

Robert Such writes about and photographs architecture, design, landscape architecture, and lighting for a wide range of publications.

The rectilinear shape and the natural timber boarding reflect the traditional construction of buildings in the Broads. A hidden gutter allows the curved eaves to blend into the roofline. The simple and smooth detailing of the envelope gives the house a clear profile (opposite, top, and this page).

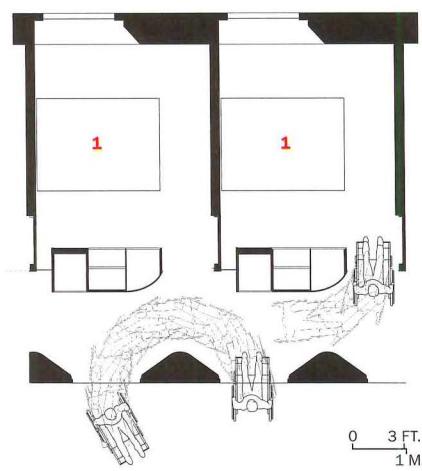




With a narrow rectilinear footprint of 1,780 square feet and total square footage of 3,229, the house's overall two-story volume closely resembles that of the demolished agricultural building. The first floor accommodates an entry hall, playroom, four small guest bedrooms, and two bathrooms. Each bedroom is 118 square feet, which is "reasonable in size but not overgenerous," says Knox. To make the rooms feel bigger, the architects treated the doors to the bedrooms as a continuation of the corridor. During the day, they remain open, tucked into wall recesses. The connecting hallway thus takes on a much larger scale. While floor-to-ceiling French doors on the south side bring in abundant daylight and unite the interiors with the garden, smaller rectangular windows on the north permit light to enter but minimize heat loss in cold weather.

As the husband in the family suffers from chronic arthritis, the proportions of the rooms and hallways "have been very carefully detailed to accommodate the turning circle of a wheelchair," says Knox. The walls and furniture feature rounded corners, varying in radius from 12 to 30 inches. "The mobility issue is not in your face," continues Knox; the subtle curves become a design element that is carried throughout the residence, including elegant curves above the second-story windows, where the smooth shell of the plaster ceiling meets the low eaves.

A staircase and a wheelchair lift lead from the entry hall to spacious rooms on the floor above. The upper floor contrasts significantly with



- 1. Bedroom
- 2. Bath
- 3. Study
- 4. Sitting room
- 5. Kitchen
- 6. Dining room
- 7. Elevator

GROUND FLOOR: PARTIAL PLAN

**The open volumes on the second floor narrow with the pitched roofline. Curved projections in the window sills facilitate wheelchair access (above).**



**The glazed gables, screened by louvered iroko-slated panels, bring light into the interior. They are visible from one end to the other (above).**

the first floor, with its flat ceiling, predominantly white walls, and cellular spaces. "It is open all the way to the roof, which you can see from one end to the other," says the architect. "It's uplifting to come upstairs and be in this larger volume."

Locating the principal rooms upstairs means that the owners enjoy panoramic views of the countryside. The dining/kitchen area,

living room, study, and master bedroom are separated from each other by 7-foot-high privacy walls topped with glass that extends to the ceiling. The only fully enclosed space is a bathroom. On the south side, a 3-foot-wide oak-floor hallway runs the length of the elongated space, ending in the master bedroom.

Holly Barn demonstrates how sensitivity to the regional context and the needs of the disabled, combined with attention to detail and execution, can create a home where fluid and sensuous spatial design clearly fulfills a client's practical and aesthetic requirements. ■

#### Sources

**Wood cladding/shingles:** Patrick & Thompsons

**Metal roofing:** Rheinzink

**Wood windows/doors:** Riverside Joinery

**Glazing:** East Anglia

**Cabinet/woodwork:** John's Joinery

**Rubber flooring:** Freudenberg

**Elevator:** Freeway Lift Services

For more information on this project, go to Residential at [www.archrecord.com](http://www.archrecord.com).



# Specht Harpman's Modern Barn is a comfortable space that combines the old and the new

By Jane F. Kolleeny

**O**pportunity can be cloaked in misfortune, as was the case for an artist couple from Manhattan whose country home was partially destroyed by fire. With their primary residence in New York City, they had been spending weekends in Wilton, Connecticut, for 23 years, until an electrical fire in 2001 burned their barn-turned-rural getaway down to its gambrel frame. Several ungainly additions during the 1960s and '70s had camouflaged the potential of the structure, but the fire allowed the owners to see their home as if for the first time.

Involving the rebuilding of a 4,500-square-foot dairy barn and the partial restoration of a silo, this project fits well in a town like Wilton, which takes pride in preserving its history. With its wooded hills, winding roads, old stone walls, and tranquil ponds, Wilton is a quaint New England town, about 55 miles north of Manhattan.

Specht Harpman, based in New York City and Austin, Texas, undertook the project on this former farm, which includes two barns and a silo clustered on an 8-acre site. The 1870 complex sits comfortably on a rolling grassy site dotted with crab apple and other flowering trees.

Until the fire, the owners had lived on the upper level of the dairy barn, connected by a deck to the upper level of an adjacent storage barn, which contained an apartment for guests and workrooms for the owners' use. This unusual arrangement left the ground floors of both buildings for storage. "We appreciated the love they felt for the ad hoc and informal

**Project:** Modern Barn

**Location:** Wilton, Connecticut

**Architect:** Specht Harpman—Scott Specht, AIA, and Louise Harpman, Assoc. AIA, project designers; Courtney (Allan) Rice, project

manager; Amy Lopez-Cepero, project team.

**Engineers:** Gibble Norden Champion Brown Consulting Engineers

**General contractor:** Prutting & Company Custom Builders

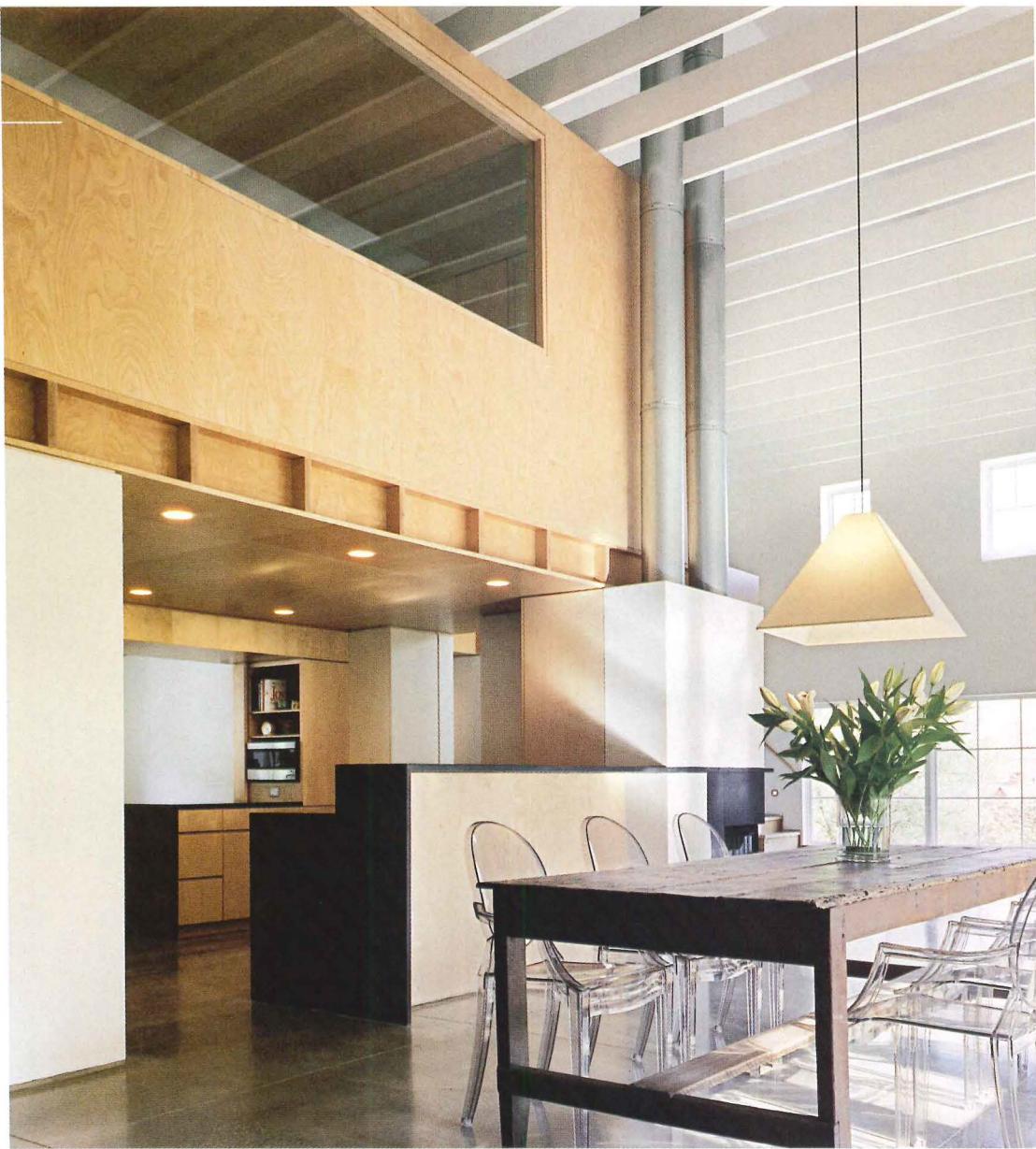


The living/dining area occupies the ground floor, with stairs leading up to the master bedroom/bath, which appears to rest in the rafters (right spread). A silo and equipment barn sit to the left of the main barn, creating a cluster of structures that defines a backyard (below left).

PHOTOGRAPHY: © MICHAEL MORAN







To preserve the loftlike space of the barn, the architects created an external buttress that allowed them to move the cross ties high up enough to get 16 feet of clear volume without beams. The kitchen is tucked under the upstairs bedroom, and the chimney flues thread through the cross ties to the rooftop.

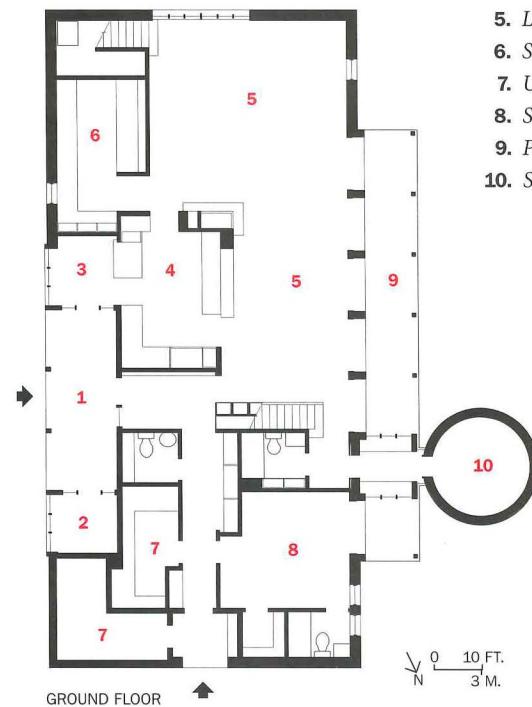
arrangement of structures, roads, and paths on the property, but thought they were missing an opportunity to establish a more direct connection between their home and the gardens and fields," says Scott Specht, AIA.

Engaging the landscape, creating a new entry, and reenvisioning the main barn guided the architects as they developed their design. The house also needed to accommodate two large elderly black Labrador retrievers, very much a part of the family.

The architects resited the house in the landscape, creating an outdoor arrival area on the long east side of the barn. An informal garden court leads the visitor inside to an entry porch, flanked by a potting shed and a breakfast room. On the other long side of the barn—the garden side—four French doors join the inside to the outdoors, effectively dissolving the wall and opening it to the landscape and silo. A teak terrace/deck abuts the house and negotiates the boundary between living quarters and backyard. The wife in the couple, a former fashion designer turned landscape designer, enlivened the site with plantings, and created a secluded garden and wading pond for the dogs, between the main house and the storage barn.

The architects brought the public spaces down to the ground-floor level, making them more accessible. They took their cues from the original gambrel barn, leaving the main volume open and adding concrete exterior buttresses secured by a series of cross ties to create a loftlike space. Now air and light flood the central barn space. The living/dining

1. Entry porch
2. Potting room
3. Breakfast room
4. Kitchen
5. Living/dining room
6. Study/family room
7. Utility
8. Staff bedroom
9. Porch
10. Silo





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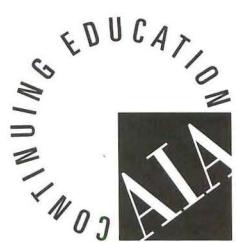
Photo: Courtesy of Victor International Corporation  
Architect: Alexander Bogaerts & Associates

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Upstairs, the intimate spaces of the master bedroom (right) and bath (below) contrast with the openness of the public areas downstairs.

area, powder room, kitchen, breakfast room, husband's study, and maid's suite occupy the ground floor, while the upper level—suspended from the rafters like a wooden box—houses the master bedroom suite, the wife's study, and a small library.

The architects balanced the large public space with intimate areas, including the studies, library, and master-bedroom suite. "In an open loft, we think it is very important to have private, tucked-away spaces that have specific uses but relate back to the main social gathering spaces," says Specht.

Interior detailing in the kitchen includes maple cabinets and honed, black-granite countertops. In the living room, a wood-burning stove supplemented by radiant heating under the concrete-block floors warm the house. Built-in cabinets, including a *tansu*, a Japanese stepped chest under a stairwell, provide storage. Throughout the house, dog-friendly stairs, covered in thick sisal matting to minimize slippage, also feature closed rails and risers for safety. Dutch doors equipped with push latches that the dogs can activate give the animals freedom of movement from indoors to out.

#### Sources

**Roofing:** CertainTeed (fiberglass shingles)

**Windows:** Bonneville Wood Windows

**Plumbing:** Kohler; TOTO

**Lighting:** Zaneen; Lightolier; Belfer

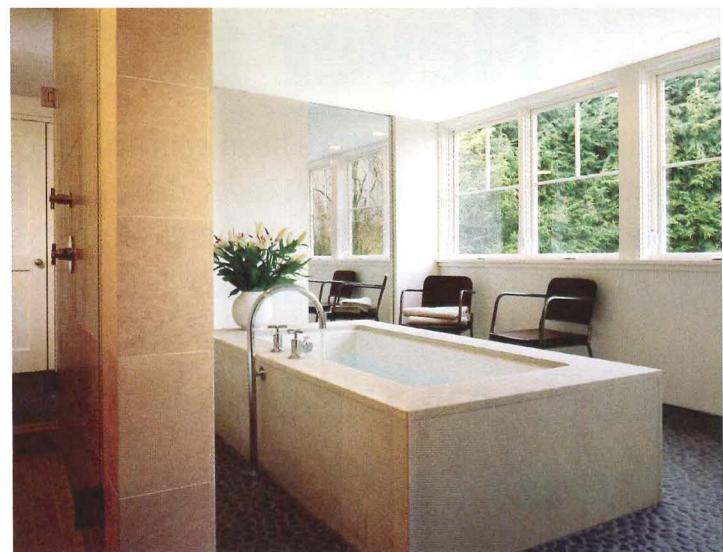
**Countertops:** Nero Assoluto

**Cabinet hardware:** Lamp; Sugatsune

**Custom concrete floor:** Azzarone Contracting Corporation

For more information on this project, go to Residential at [www.archrecord.com](http://www.archrecord.com).

Crowned with the original rusty ventilators on the rooftop, the old barn appears to welcome the modern interventions inside, including the warm-toned woods, stone, plaster, and concrete. "The big idea was to treat the historic barn as a spatial envelope into which a new design idiom could be played without affecting the exterior form," says Louise Harpman, Assoc. AIA. Both rustic and up-to-date, this house feels like a gracious country cousin, with all the savvy of a big-city relative. ■





Kitchen Design: Gabriele Centazzzo



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# Shipley Architects' Party Barn and Guesthouse reveal how to live the simple life in an Old West town



**By Ingrid Spencer**

**D**riving through Hico, Texas, on a scenic route through the hill country from Austin to Dallas, you might get the impression that you've come upon a true relic of the Wild West. Hico (pronounced *hy-ko*) boasts a couple of town slogans—"Welcome to Hico where everybody is somebody!" and "Hico, home of cowboys and legends." You probably wouldn't guess that this old Western town has become an area where contemporary Dallas businesspeople and their families are renovating cattle ranches into second-home retreats, places to enjoy the rough land and spend time away from the stresses of city life.

For Dallasites Martin and Laurie Cox, a banker and artist, respectively, and their two teenage daughters, Hico offered a place just close enough—2 hours southwest by car—to make the trek for long weekends and vacations. The Coxes found a 156-acre property known as the Old Calloway Place and fell in love with its rocky and wild terrain and small house, orchard, silos, wells, barns, creek, and windmill. With Dallas architect Dan Shipley, the Coxes decided they could convert the property from a cattle farm into a nature preserve and compound, adding to the existing 800-square-foot, 1920s home, and erecting a new building that would modernize and complement what was already there.

"Martin and Laurie wanted something simple that wouldn't

Ingrid Spencer is a contributing editor and former managing editor of RECORD. She writes about design from her home base in Austin, Texas.

**Project:** Party Barn and Guesthouse

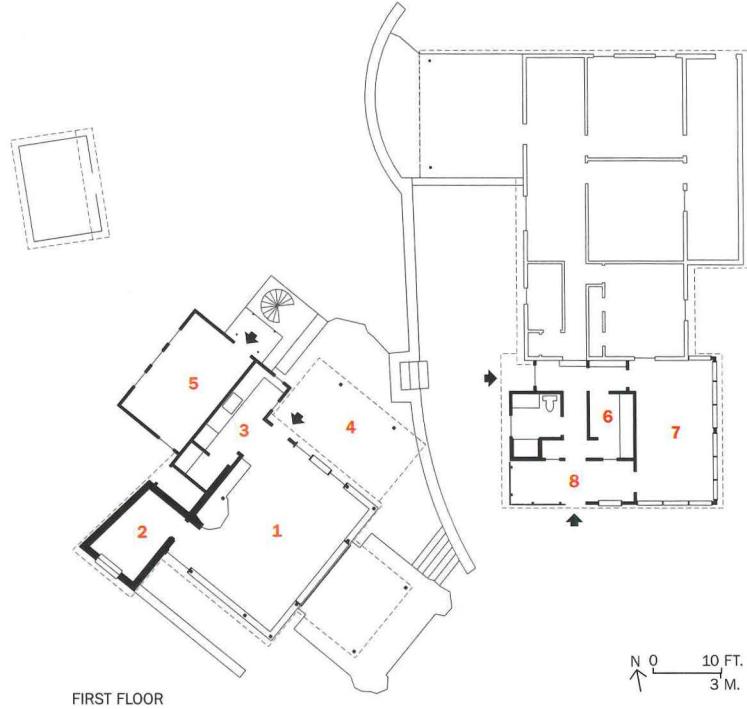
**Location:** Hico, Texas

**Owner:** Martin and Laurie Cox

**Architect:** Shipley Architects—Dan

Shipley, FAIA

**General contractor:** Alex Moore



- 1. Party barn
- 2. Bunk room
- 3. Kitchen
- 4. Covered porch
- 5. Bedroom
- 6. Laundry
- 7. Sleeping porch
- 8. Mud porch



The architect retained the authenticity of the farm structures by using modest materials, such as corrugated aluminum, to clad the party barn (above), and silver paint to cover structural-steel elements outdoors. The shaded patio becomes part of the barn when the rolling, mechanic-shoplike doors are pushed up to rest under the roof. The addition to the existing home (right) mimics but updates what was here, with fiber-cement siding instead of the original vinyl, and a pitched metal roof.



The architect layered corrugated plastic against perforated metal sheets on the lower half of the walls, allowing diffused natural light into the space

(right). Interior materials include exposed structural beams, a field-stone-clad fireplace and chimney, concrete floors, and hard-pine-plank-clad walls (below).



demean or patronize the existing house," says Shipley. The modest home, with its vinyl siding and vinyl flooring, had a kind of authenticity the Coxes appreciated. "All the elements in the original context were considered valuable and worthy," he says.

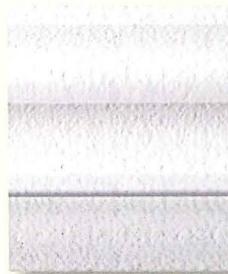
For the addition to the house, Shipley designed a 400-square-foot structure that includes a laundry room, bathroom, and screened porch. He also planned to build a freestanding guesthouse and "party barn" near a grove of large pin oak trees to the north of the existing house, but that scheme went awry when the trees contracted a disease and died. "We had planned to put the freestanding addition away from the house, giving the whole compound a motor-court kind of layout," says Shipley, "but without the trees it just didn't work. We opted instead to locate the new structure closer to the existing house but on the other side, which changed our considerations of scale and detailing—everything had to fit together as a whole."

Now sited a few steps southwest of the house, the 1,100-square-foot guesthouse—two boxes pushed together—comprise a pair of bedrooms with bathrooms, a central kitchen, a bunkroom, and a common area with a stone fireplace. The shorter box, the party barn, engages the outdoors with a pavilionlike design that can open and close. Two sides have glass doors that roll up to nest under the porch roof, allowing the room to open onto a patio outside and a hilly meadow beyond. Shipley clad the exterior of the volume in corrugated galvanized aluminum, while layering the lower portions of the walls with clear, PVC panels and perforated, corrugated aluminum panels. The perforated panels filter sunlight and reduce reflection at night. "Laurie wanted the room to feel warm at night, despite the concrete floors and metal cladding," says Shipley. "The diffused light from the perforated panels accomplishes that without the need for window treatments, which would have been at odds with the whole design."



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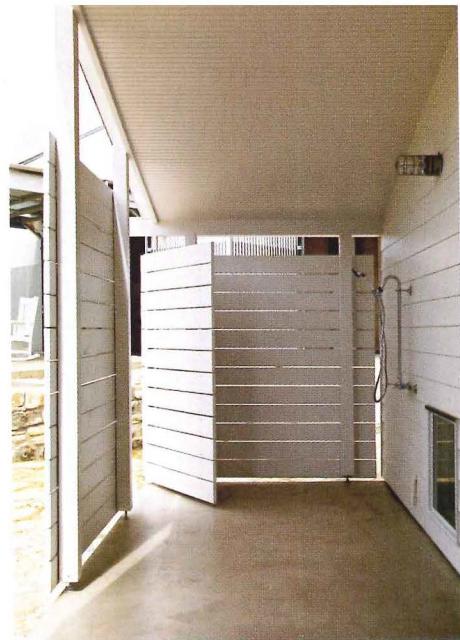
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A spiral staircase leads to the second floor in the guesthouse (right), where painted wooden floors and white linen shades in the room (below) and beaded-

board-clad walls in the bathroom were chosen for an old-fashioned effect, complementing the addition to the home a few steps away (far right).



Shipley also warmed things up in the barn with a fieldstone-clad Rumford fireplace. Its hearth and mantel of stones quarried from the creek on the property fit the massing of the room and harmonize with the ipe-wood-plank entry door, concrete floor, and hard-pine-plank-clad walls. The interior features ceiling fans above, gentle light from spotlights aimed upward, track lights hanging down as if on strings, a wood table that can seat about 10, comfy chairs and sofas, a kitchen that seems made for party preparations, and a little dungeonlike room at the back with stone-clad walls and steel bunk beds designed by Shipley. It's easy to imagine a large gathering, including lots of kids, enjoying this space.

Fiber-cement siding painted white and detailed to refer to the original house covers the second box, a two-story rectangle containing two guest rooms and a bathroom. Upstairs, interior floors are clad with white-painted pine planks, giving the room a sweeter, more old-

fashioned feel than the barn.

The result is functionally designed spaces that are simple, attractive, and comfortable. While some elements might seem out of place—such as the faux-cultured-marble panels in the upstairs guesthouse shower—in context, everything works, and by its juxtaposition creates a modest yet graceful compound that is surely a welcome family escape. ■

#### Sources

**Metal/glass curtain wall:** Alpro; H+F Plastics

**Siding:** James Hardie Building

**Metal roofing:** Galvalume

**Windows, entrances:** Pella

**Metal roofing:** Galvalume

**Locksets:** Schlage

**Paint:** Benjamin Moore

**Floors:** Plynyl

For more information on this project, go to Residential at [www.archrecord.com](http://www.archrecord.com).

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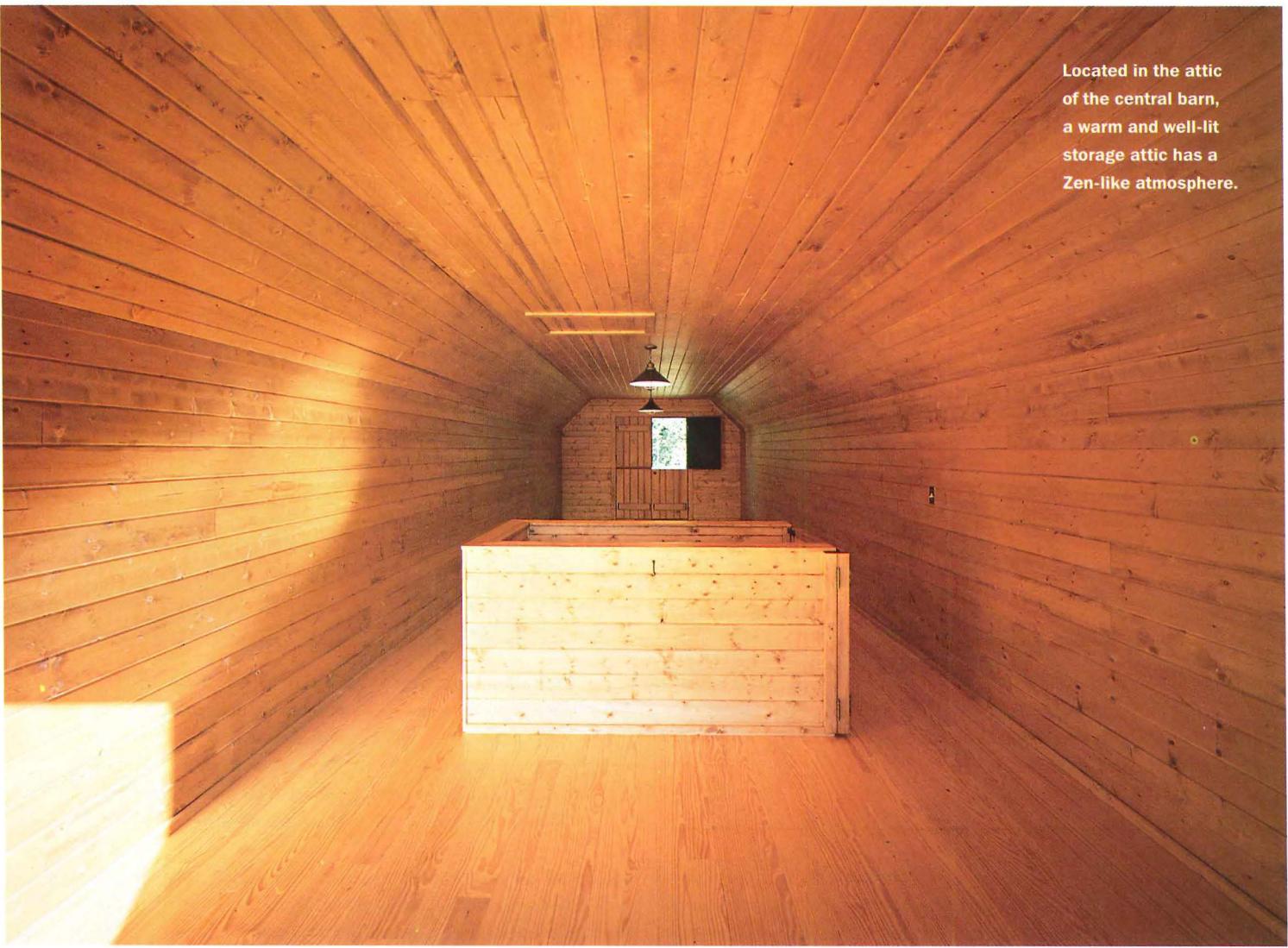


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Located in the attic of the central barn, a warm and well-lit storage attic has a Zen-like atmosphere.

## With these **Storage Barns**, Albertsson Hansen Architecture brings new life to a ubiquitous structure

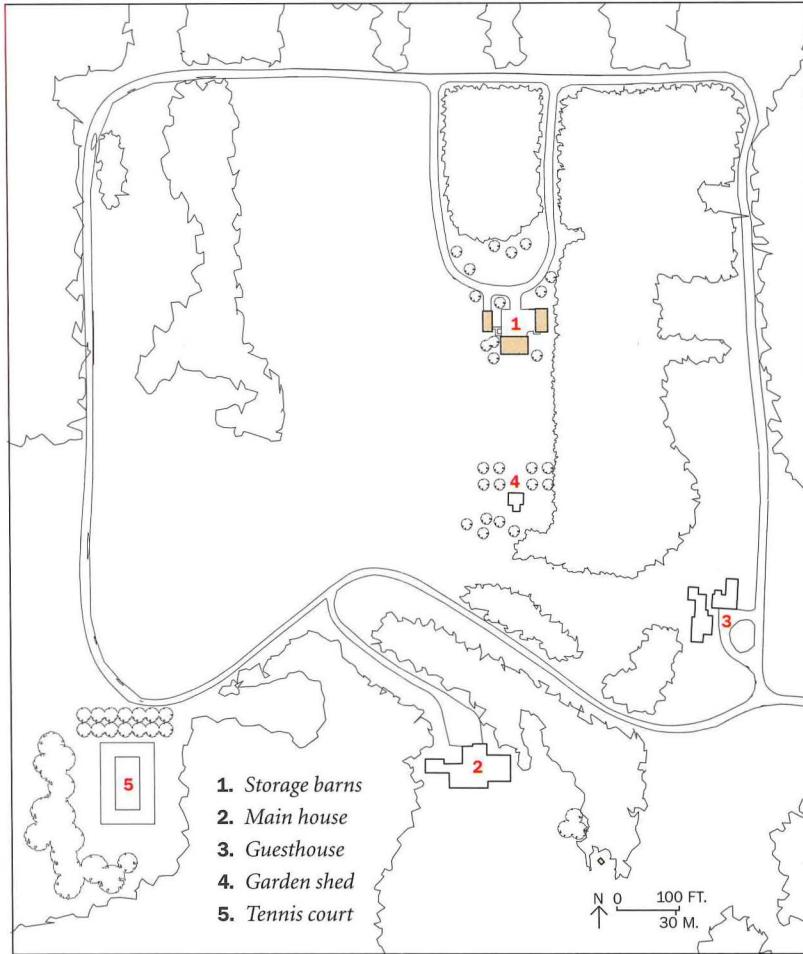
By Thomas Fisher, Assoc. AIA

**W**hy do people seem more willing to invest in vehicles than in the buildings that enclose them, especially since buildings can increase in value as fast as vehicles lose theirs? It may be because, as the social critic Ivan Illich argued, vehicles now rule our lives, turning us all into "habitual passengers," with "speed-stunned imaginations." But this barn-and-garage complex, designed by Christine Albertsson, AIA, of the Minneapolis firm of Albertsson Hansen Architecture, suggests something else. The complex's quality and sense of place make us wonder if the lack of investment in this building type stems from so many stand-alone garages being too much like the vehicles they house—anonymous objects in space.

*Thomas Fisher, previously the editorial director of Progressive Architecture magazine, is dean of the College of Design at the University of Minnesota.*

That these buildings avoid such a fate results in part from an enlightened local building code. Albertsson recalls how her clients, for whom she had done a few residential projects to everyone's satisfaction, "came to the first meeting with a drawing of a big H-shaped plan." It was efficient, but out of scale. Fortunately, the local municipality prohibited utility structures of more than 2,000 square feet, which led Albertsson to break the project into three separate buildings, placed around a court, creating a surprisingly urban space in its bucolic setting at the edge of a meadow, next to woodland.

Each of the three buildings serves a separate function and embodies a distinct identity. The visitor arrives at the complex down a gravel road, going around a group of trees to what appears to be a small village. A one-story barn for tractor attachments and smaller vehicles stands to the left and features overhead doors that provide easy access.



Straight ahead sits a barn to store tractors and trucks, with a finished attic under its gable roof. To the right, another barnlike structure serves as a car garage and workshop, with rear windows that look out across the rolling landscape.

Certain common architectural elements—such as stone foundations, vertical and horizontal wood siding, and metal-clad gable and shed roofs—bind the three buildings together. Yet each building also has its own, slightly quirky character, with asymmetrical compositions of wood windows and doors. “I always try to create variety as well as order and

## PERHAPS OUR LACK OF INTEREST IN THIS BUILDING TYPE STEMS FROM GARAGES RESEMBLING THE VEHICLES THEY HOUSE—ANONYMOUS OBJECTS IN SPACE.

logic in a building,” says Albertsson, “playing with elements and proportions, while achieving a clarity of form.”

The interiors of the three buildings show a similar variety. The two barns have high ceilings and exposed wood structural systems, while the garage has wood-lined walls, a composting toilet, and cabinetry in the workshop that creates a comfortable, human scale. The warmest space of all sits above the central barn: This storage attic with light at both ends creates a Zen-like atmosphere. Albertsson recalls the many hours she spent as a child in the attic of her parents’ house: “An attic should be a clean, dry, finished space to explore,” she says. This is one not just to explore, but to stay in.

These barns and garage galvanize our attention not only



**The project consists of a three-building, 2,000-square-foot maintenance facility on a 250-acre private estate (above). The wood-lined**

**workshop offers a comfortable interior space (opposite, bottom). Tractors are stored downstairs in one of the barns (opposite, top).**

because of the care that Albertsson has taken with them, but also because such buildings remain largely absent from the architectural canon. That absence is ironic, given how much automobiles have dominated our landscape and tractors have plowed it under. Nevertheless, it seems odd that our discipline has largely ignored the enclosures that contain the vehicles that have become some of the most important icons of our culture.

Rather than dismiss this building type, we might heed the words of Ivan Illich, who observed that “to gather ... means to be brought together by vehicles.” These structures show just how much vehicles can gather us, while creating a sense of place and revealing the garage’s real architectural potential. ■

### Project: Storage Barns

**Location:** East of Minneapolis/St. Paul

**Architect:** Albertsson Hansen

**Architecture**—Christine Albertsson, AIA, project architect; Sonya Carel, Assoc. AIA, project team

**Engineers:** Mattson Macdonald Young

**Landscape architecture:** Close Landscape Architecture

**General contractor:** R. Hagstrom Builder

### Sources

**Masonry exterior cladding:**

Hedberg Aggregates

**Metal roofing:** Copper Sales

### Windows: Pella

**Wood doors:** Custom Millwork

**Garage doors:** Designer Doors

**Locksets:** Twin City Hardware

**Door knobs:** Craftsmen Hardware

**Cabinets:** Woodland Cabinetry

**Paneling/trim work:** Custom Millwork

**Paint:** Hirshfield's

**Concrete floors/foundation:**

Greystone Masonry

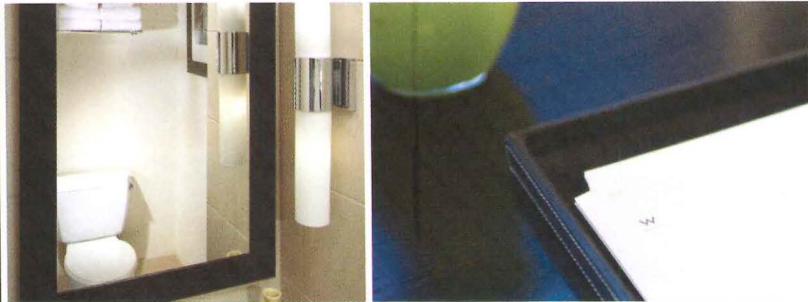
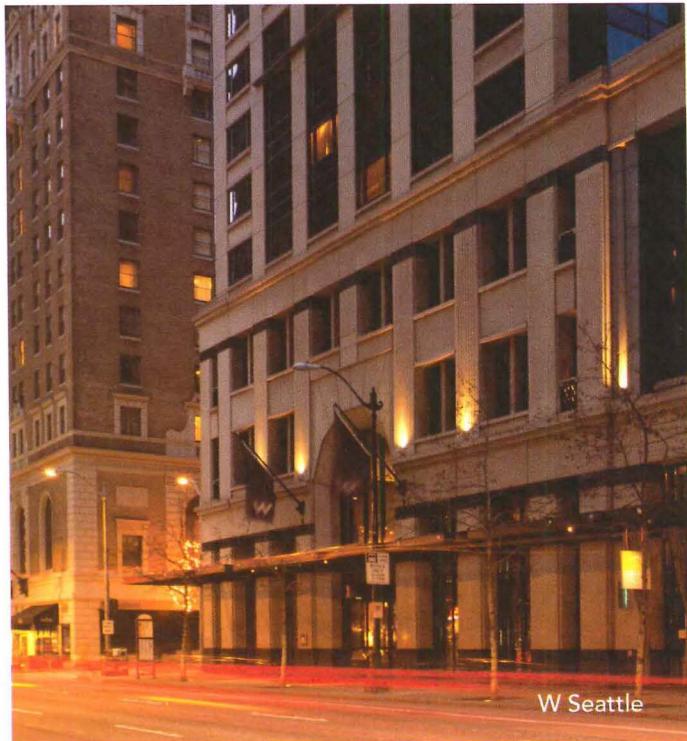
**Wood flooring:** Dahl Wood Flooring

**Interior lighting:** Kichler Lighting

For more information on this project, go to Residential at [www.archrecord.com](http://www.archrecord.com).



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# Kitchen & Bath Portfolio

Our annual roundup features kitchens and baths that skillfully make the most of the space available. Many of the rooms frame surrounding views, whether it's the Marin Hills, a Japanese garden, or even the flowing water of the Columbia River a few feet below. *Rita Catinella Orrell*

## Two bathrooms in a Santa Monica home take advantage of garden views and natural light

Located in Santa Monica, the Erlich Residence was designed by John Friedman Alice Kimm Architects for California entrepreneur Craig Erlich and Christine Lo, a former member of Hong Kong's legislative council.

Lo is a current board member of the Rocky Mountain Institute, so her background in environmental issues made a sustainable design top priority. The architects met this goal in many ways, such as designing plenty of operable windows and doors to let in breezes and eliminate the need for air-conditioning.

The home's master bathroom overlooks a busy street and gets the best south light in the house. "The master bathroom is a good example of where we bring in light from as many orientations as possible. The light is always shifting and changing," says John Friedman, AIA.

As Erlich had been living in a cramped Hong Kong apartment for many years, it was important the home have an open feel, with garden views. In the master bathroom, a sliding door opens up the room to a terrace that accommodates a small garden and looks down on a popular jogging strip. A wooden slatted screen offers additional privacy to the area and "gives another layer to the house itself," says Friedman.

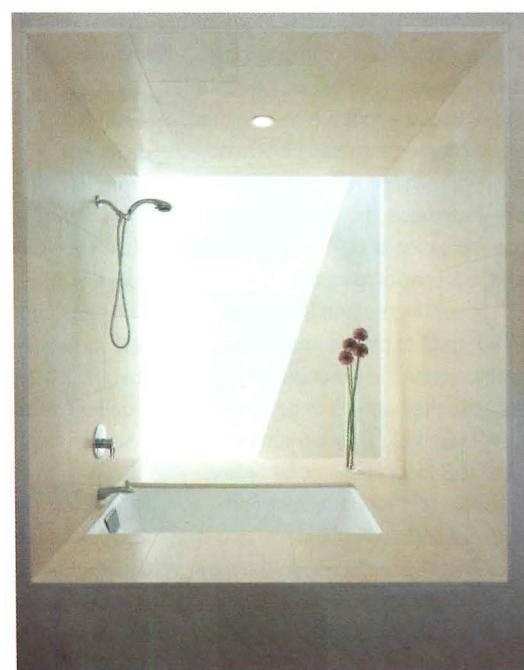
The bathroom's infinity-style soaking tub is surrounded by a Jatoba wood platform. A screen on the outside of the window near the tub matches the one on the terrace. "Throughout the house we used what I call a 'reduced palette,'" says Friedman, including Jatoba wood, engineered stone, and limestone.

That palette, as well as the utilization of natural light, extends to the guest bathroom. Friedman tells the story of a tour he gave to a friend of

the owner who was a priest. They paused in front of the tub area, which is surrounded by a "limestone tunnel" leading to a wall washed in natural light from above. "He turned to me and asked, 'So have you seen the cathedral?'" The reference was to Rafael Moneo's Cathedral of Our Lady of the Angels, in Los Angeles. The allusion to Moneo's style was no accident—he taught both Friedman and partner and wife Alice Kimm, AIA, at Harvard. And like a church, this home's bathrooms create many opportunities for peaceful meditation. *R.C.O.*



The master bath's soaking tub is enclosed in a Jatoba wood platform (above); the shower leads to a private terrace (left). A wall behind the guest bathroom's "limestone tunnel" (below) glows with natural light.



**Architect:** John Friedman Alice Kimm Architects  
**General contractor:** Anthony Bonomo, Bonomo Construction  
**Sources:** Master bath—Kohler (tub, faucets, sinks); Mario Jimenez (Jatoba woodwork); Walker Zanger (limestone); Gnutti Sebastiano (showerhead, controls); Guest bath—Kohler (tub); Grohe (hand shower, control valve, tub spout); Walker Zanger (limestone)

# Kitchen & Bath Portfolio

## Hole in the bathroom floor recalls water-front building's past

Architects Lisa Chadbourne and Daren Doss, AIA, were a little concerned that guests might be reluctant to use the new lavatory they designed for Alderbrook Station, a historic waterfront property they own in Astoria, Oregon. Their apprehension was not unfounded. In the bathroom's floor, roughly 1½ feet in front of the toilet, they inserted a glazed hatch that provides views directly into the Columbia River flowing a few feet beneath it.

But the architects, who are husband and wife, needn't have worried. As it happens, even modest guests admit they are entranced by the play of sunlight as it bounces off the river and reflects on aluminum plating that covers the bathroom's floor and back wall. "When light dances on all of the surfaces, it's like watching a movie. It's amazing," Chadbourne says. At night, Doss adds, guests are sometimes treated to the sight of salmon, sturgeon, and other fish attracted to the hatch by the lighting.

This intimate connection to nature is the appeal of Alderbrook Station. Built in 1903, and now listed on the National Register of Historic Places, the property consists of a residence and a studio, as well as a 15,000-square-foot warehouse that sits on piles in the river. Fishermen once stored their nets and gear in the warehouse; the architects now use the space to host art exhibitions and large social functions.

Chadbourne and Doss took three years to design and build a bathroom for the warehouse because they wanted to get it just right. Ultimately, they inserted an 8-foot-by-8-foot cube, clad by widely spaced wooden boards recycled from elsewhere on the property and backed with translucent acrylic panels—a scheme that allows light to pass through in much the same way it filters through gaps between planks



on the warehouse's floor and walls. The hole in the bathroom's floor, Doss explains, recalls hatches that fishermen used to haul nets between floors—and it reinforces the building's context. "The bathroom is all about being over the water and watching it." *James Murdoch*

**Architect:** chadbourne+doss architects

**Sources:** Aluminum plate (flooring); Douglas fir planks recycled from elsewhere on the property (exterior wall paneling); LUMAsite (interior wall paneling); Halo (lighting); C.R. Laurence (door track); Toto (toilet); Whitehouse (faucet); SETS Systems (electric tankless water heater)

**Light filters through translucent acrylic paneling and wooden boards, echoing the bathroom's historic context (above). A hole in the floor allows views into the Columbia River flowing directly beneath (right).**





**Exemplifying the openness of the house, the kitchen (above) seamlessly joins the dining area and the patio/pool area outside. It also reflects the house's color palette and Minimalism with its streamlined, stained-ash cabinetry. Matlock brought the outdoors into the bathroom by giving the tub (far left) and the sink area (near left) exposure to natural light and views outside. The tub and sinks are made of the same cast concrete.**

## A glass house in upstate New York opens both kitchen and bath to the outdoors

"Build Now" may be the tagline for Audrey Matlock Architects, but the firm chose a different slogan for the Westenberger O'Neill Residence. "Openness was the mantra of this project," says Audrey Matlock, AIA.

Indeed, the house in upstate New York uses glass walls and a neutral palette to create a spacious, flowing residence that seamlessly integrates inside and out. Nowhere is this spirit better expressed than in the master bedroom and bath areas. Glass windows offer the bedroom

scenic views, while the bathroom's tub and sink areas are also left open to the vista. To create some sense of privacy, a low slate wall that encloses a courtyard just outside the bedroom shelters the bath area and extends inside to create the shower stall. Made of cast concrete, a large soaking tub (filled from a spout in the ceiling) mediates between the bedroom and the bathroom area. The same concrete forms twin sinks, above which a mirror reflects the view outdoors, adding to the natural light.

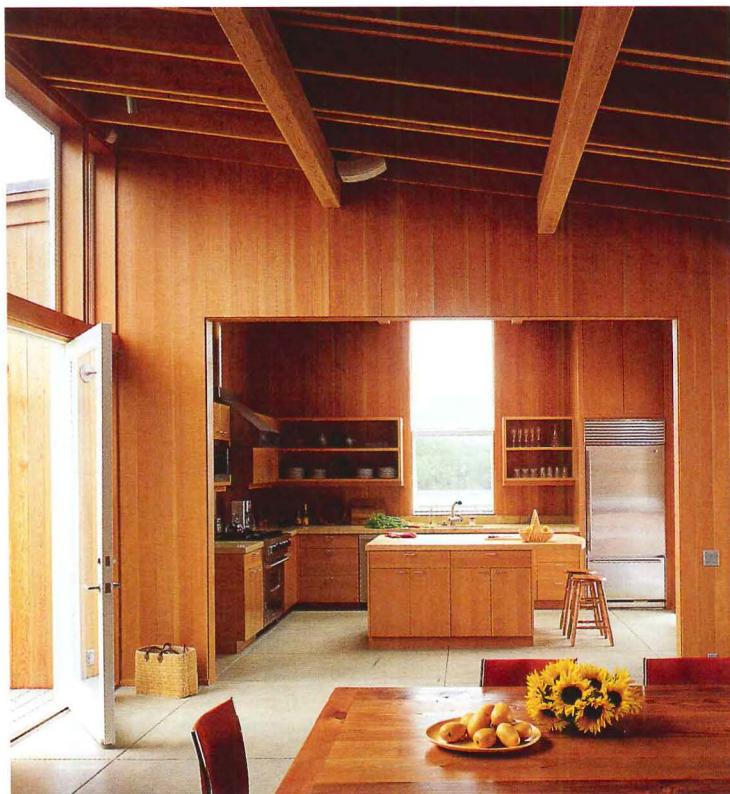
Likewise, the kitchen connects to the dining room and the outdoor patio beyond. While the clients originally wanted the kitchen to be closed off, they were eventually convinced that separating the kitchen would disrupt the flow of the entire house. Full-height stained-ash cabinetry eliminates clutter and allows for abundant storage without any intrusion on the house's organization, while the kitchen's central island is on axis with the dining table and pool beyond. It's this precise level of detail

that lends a classic quality to the house and suggests that Matlock's tagline could just as easily be, "Build for Always." Diana Lind

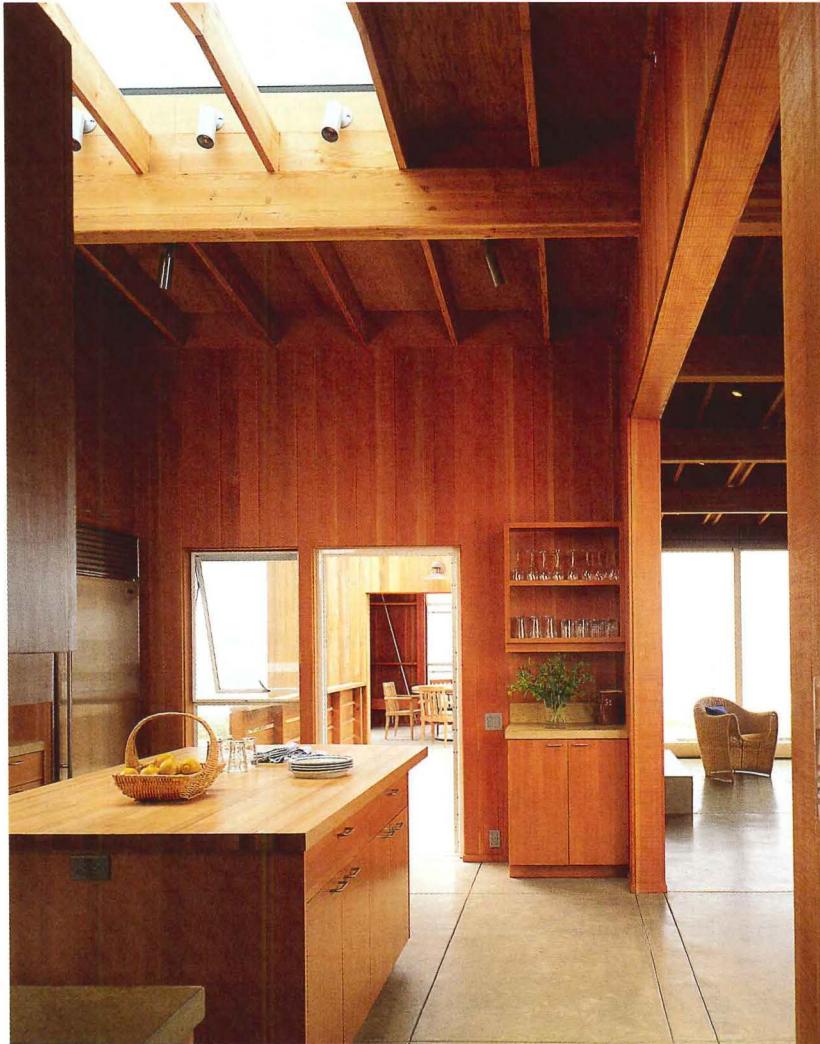
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**Architect:** Audrey Matlock Architect  
**Contractor:** CM Company  
**Sources:** Bathroom—Efco (windows); Get Real (concrete sinks and bathtub); Dornbracht (faucets); Bisazza (tile); Bega (lighting); Kitchen—Efco (windows); Viking (cooktop, refrigerator); Miele (hood, oven, dishwasher)

## Kitchen & Bath Portfolio



A window above the sink in the kitchen (above) frames a dramatic view of the Pacific Ocean and up to the Marin Hills. Resawn Douglas fir siding lines the walls, and fir beams and decking form the ceiling (right), creating a light-filled, clean environment. A lightweight, sand-colored concrete floor runs throughout the beach house.



### A San Francisco beach house, and its indoor/outdoor kitchen, rise from the ashes

Several years ago, a fire destroyed the weekend house of a San Francisco family on Stinson Beach, in the shadow of Mount Tamalpais, just north of the Golden Gate. The house had been designed by William Wurster, one of the chief proponents of the Bay Area style—and Wurster's own beach house was next door. The family loved both the house and the site and hired Turnbull Griffin Haesloop to create an entirely new home inspired by the old while meeting all current seismic codes and FEMA requirements.

Working from family snapshots, the architects learned that the old house had an outdoor fireplace that became part of the inspiration for an indoor/outdoor kitchen. "That outdoor fireplace was on the leeward side, and they knew it worked really well in that location," says partner Eric Haesloop, AIA.

The kitchen flows from the open floor plan of the house, which

gives the house a casual, vacation-home feel, according to Haesloop. But the kitchen also flows in a different direction. "What's really neat about this kitchen," Haesloop says, "is that there's a Dutch door that goes to the outdoor fireplace." Then, past the outdoor fireplace, there is a dining area, half outdoors, but protected from ocean winds by windows. The kitchen even has its own set of stairs down to the beach, and a window over the sink looks directly onto Mount Tamalpais, connecting the space to the beach and the Marin Hills.

The kitchen is well outfitted for what Haesloop says is a fairly large family, but as it's for a vacation residence, "it doesn't have a lot of the features that you would put in for a full-time residence." For instance, while the open shelves contribute to the airy feeling of the house, they also replace the closed cabinets that would be needed for long-term storage. And with part-time residence in mind, the architects chose concrete floors and fir plywood, which hides dings and scratches well. Like the whole kitchen, says Haesloop, "it's easy to take care of."

*Kevin Lerner*

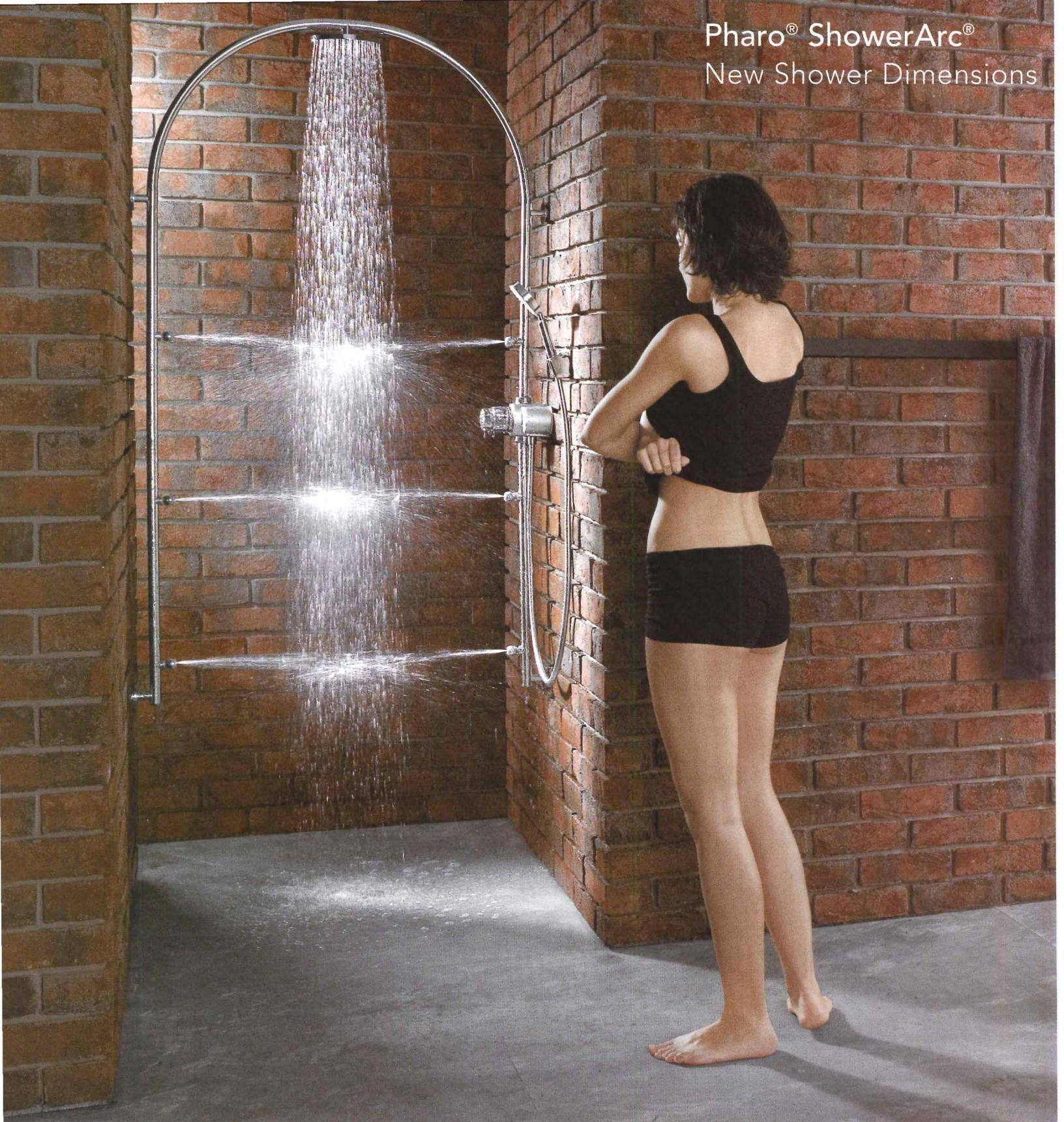
**Architect:** Turnbull Griffin Haesloop Architects

**Contractor:** Robert Cain, Cove Construction

**Structural engineer:** Mike Forbes, Fratessa Forbes Wong

**Sources:** Bonelli Windows and Doors (metal windows); Zeluck (sliding and wood doors); Viking (range, oven, range hood); Sub-Zero (refrigerator); In-Sink-Erator (disposal); KitchenAid (microwave)

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## Kitchen & Bath Portfolio

### A young architecture firm thoughtfully renovates a New York City bathroom

While talking about the renovation of a master bath in Manhattan's Tribeca neighborhood, Silva Ajemian asked rhetorically, "How much can you really do with a bathroom?" Naturally, as young architects, Ajemian and partner Jorge Prado of Todo Design are looking to spread their wings with a juicy urban commission or experiment with new construction by buying a plot of land. But by responding to the challenge of creating something new out of an ordinary bathroom renovation, they showed just how much a generic space could be improved with thoughtfully employed design and products.

Given a 120-square-foot space to work with that included a cramped bathroom, a hallway, and a closet, Todo Design saw the opportunity to enlarge the bathroom to include a spalike shower area and accommodate daily use by a couple. Creating a luxurious

room out of the extant spaces, they selectively chose their materials and designed a sleek box made of tile and glass and punctuated with wall-mounted fixtures.

"We're very interested in man-made and manufactured materials," Ajemian said, and indeed, even the wood used on the vanity is engineered, while the counter is made of Corian. Dark and light Bisazza tiles applied throughout the project form a randomly patterned background with a few striking vertical lines, recalling a Mondrian painting.

This focus on linearity extends to the custom-built, wall-mounted vanity and sink. The structure runs horizontally and penetrates the glass-enclosed shower to form the shower seat. Another dramatic line



is formed by the downlit shower spout, recessed in the ceiling. Small, rectangular, mirrored niches line the shower wall.

Each of these custom measures emphasizes Todo Design's willingness to push the parameters of bathroom renovation, and it's clear the firm's future will be in architectural commissions of increasingly greater scope. *D.L.*

**Architect:** Todo Design

**Structural engineer:** David Bott

**Sources:** Bisazza (tiles); DuPont

Corian (counter); Weststyle 60 (sinks); Lacava (sink faucets, handheld showerhead); Valli & Valli (accessories); Mobles 114 Barcelona (illuminated mirrors); Cor Products (wood at vanity)



For maximum design effect, Todo Design added thoughtful touches throughout the project. In the shower area (above) they created built-in niches and chose a recessed, overhead shower-spout. The sink area (left) is wall-mounted and highlighted by a random mosaic of Bisazza tiles.



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## Kitchen & Bath Portfolio

### An accessible bathroom that doesn't look it

While most accessible design involves adapting or, as some would say, compromising a design to fit within the Americans with Disabilities Act guidelines, sometimes accessibility and beauty can coexist. Before another architect referred the client for the McCoy bathroom to Clint Larkan, Assoc. AIA, he had only dealt with accessible design in a few commercial projects. But in designing this room for a woman and her adult son in a wheelchair, Larkan personalized the idea of accessibility in a space where good design was as important as sink height and turning radius.

The client, located in Alexandria, Virginia, wanted "a clean, modern bathroom," Larkan said. "Nothing off the shelf." His solutions were to incorporate a walk-in closet into the design for more space; create a roll-

in shower with a wet bench for the person showering, and a dry bench for an assistant; specify dual Fireslate sinks with specific knee clearances; and design a series of folding planes that also serve to disguise an awkward, existing plumbing layout.

"Sometimes these awkward situations make a design more interesting," Larkan said. "And in this case, I think it did." K.L.

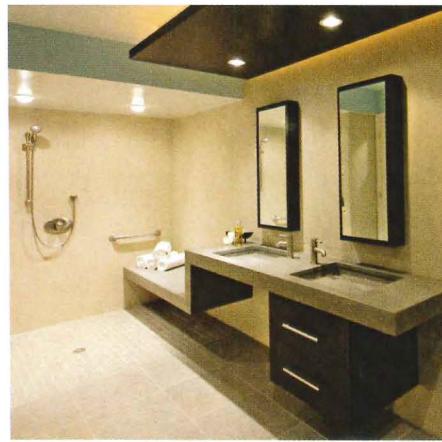
**Architect:** Clint M. Larkan Design Studio

**General contractor:** Bailey Construction

**Sources:** Graff, Hansgrohe (fittings); Burger's Cabinet Shop (custom cabinetry); Fireslate (countertops); Ceramiche Caesar (ceramic tile flooring)



**The bathroom's Modern design skillfully addresses accessibility issues important to a wheelchair-bound client, such as sink height, grab bars, and a flush shower entry.**



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## Awash in memories of Japanese tradition, a wooden stump conceals a soaking tub

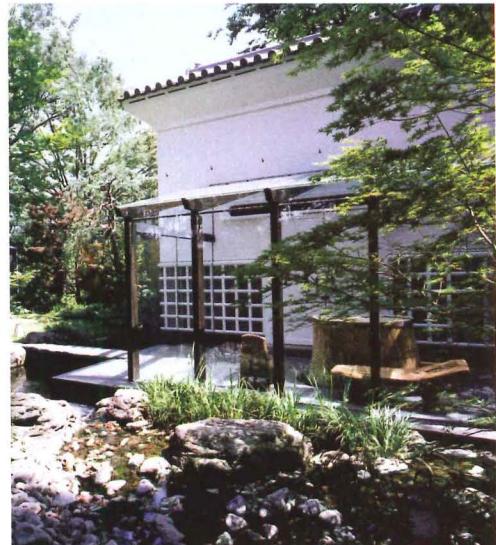
When this wooden stump, located in the back of a Tokyo residence, is covered, it's not readily apparent what purpose it serves aside from making a rustic dining table. But the stump, made from a cedar tree roughly 200 years old, is hollow, and its core, 4 feet wide and 3 feet deep, contains a soaking tub filled with hot spring water.

Light has symbolic cleansing properties, so it's fitting that this "stump tub" sits in a fully glazed solarium, allowing bathers to submerge themselves in both water and light, says architect Kei Sano. It's also fitting, he believes, that the solarium is the vestibule to a Kura (private museum) dedicated to the work of Mukai Junkichi, an artist celebrated for his depictions of traditional Japanese thatched farmhouses.

Junkichi lived near this estate in Setagaya, a highly developed Tokyo suburb. "His paintings make us nostalgic for the good old rural



life and remind us that this area was nicer, even though nowadays it's much too modernized," Sano says. Ironically, spring bathing is another tradition that's changed: The water for this tub arrives from the mountains every two weeks by way of a 4-ton tanker truck. J.M.

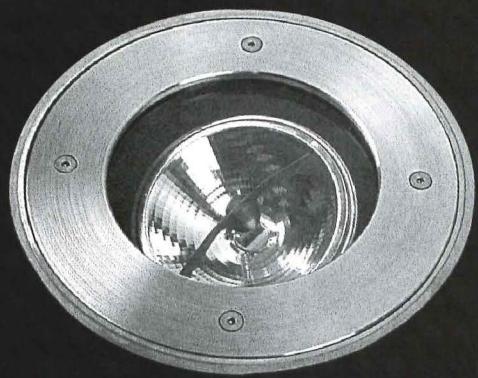


**Architect:** Sano Kei Architects

**General contractor:** Mizusawa Komuten

**Sources:** Moulder Special Company (tree stump tub manufacturer)

The tub (above left) is made from the stump of a 200-year-old cedar tree and can be covered with a matching lid when not in use. It sits in a solarium (above) leading to a private museum in Japan.



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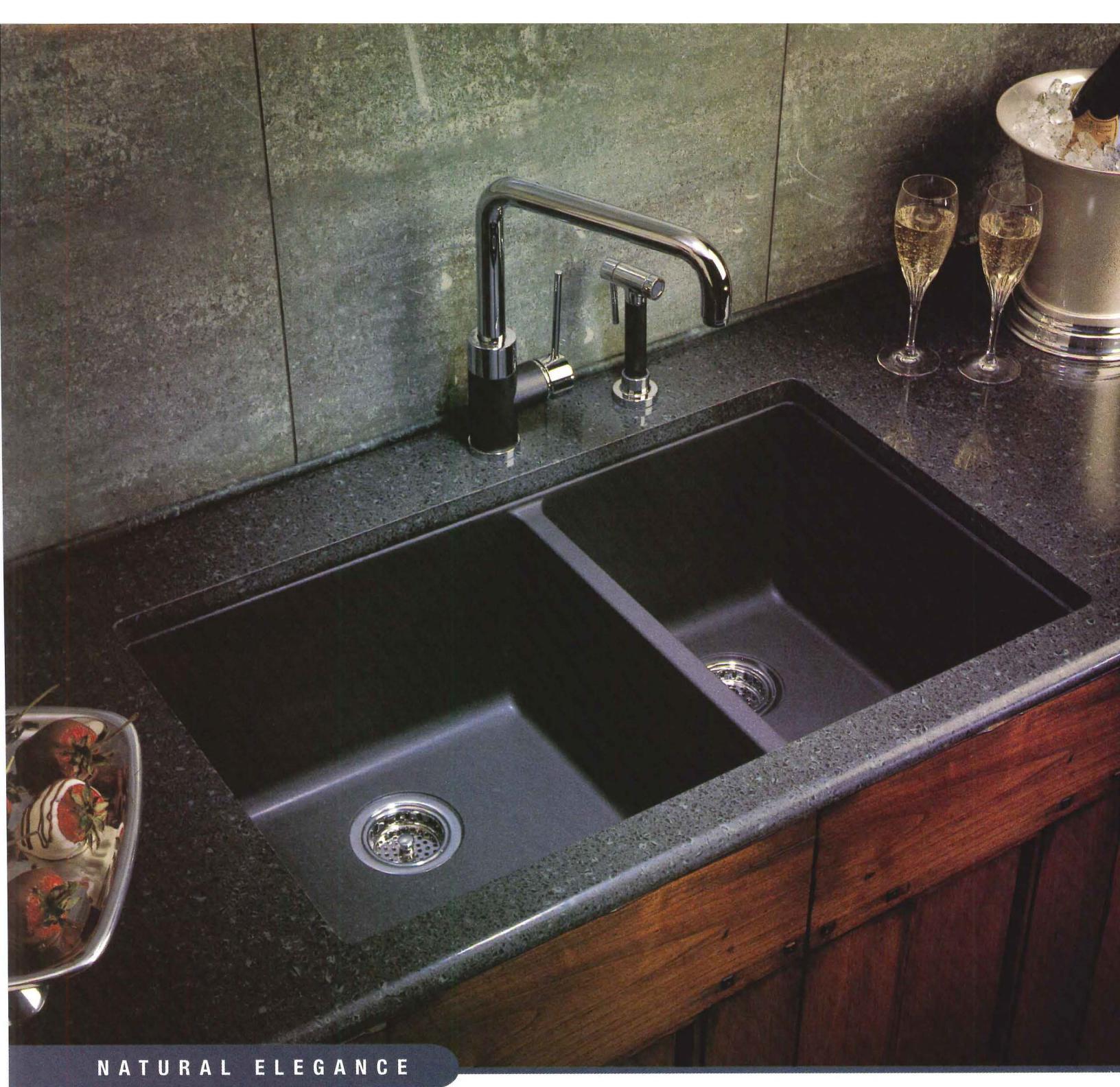


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# Residential Products

## Eurocucina Review

### ► Fire island

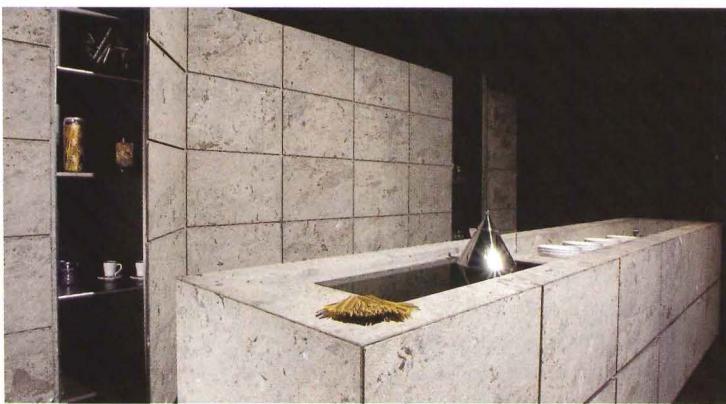
No stranger to the Milan Saloni, architect Zaha Hadid has translated her vision into a futuristic kitchen with the help of DuPont. The Z. Island project consists of two free-standing units. The elongated central unit is devoted to the functions associated with fire; a second, compact unit is dedicated to water. Exploiting the formability and seamlessness of Corian, the units incorporate multimedia equipment, sound actuators, and LEDs within a flowing shell of Corian, enabling users to surf the Internet, listen to music, or use a touch-control panel to adjust the environment, including aroma. DuPont, Wilmington, Del. [www.corian.com](http://www.corian.com) CIRCLE 201



### ◀ From kitchen wares to kitchens

For decades, Alessi has been a leader in producing high-quality, high-design tools for the kitchen. This year it ventured a step farther by designing the kitchen itself. Coordinated by long-time Alessi collaborator Alessandro Mendini, the

project involved several companies: Valcucine provided the furniture; Foster, the sinks, stovetops, and hoods; and the Finnish line Oras provided the faucets. The line comprises four designs, including Trasparente (above), which features doors and drawer panels made of semitransparent glass. Alessi, Crusinallo, Italy. [www.alessi.com](http://www.alessi.com) CIRCLE 202



### ▲ Force of nature

Minimalist master Claudio Silvestrin was inspired by the earth itself when designing Terra, his new kitchen for Minotti Cucine, which combines a rigorous geometry with natural materials like porphyry stone and cedar wood. Similar to the wall units, the imposing figure of the island is uninterrupted; with no visible taps, water flows directly out of the stone sink, and built-in Scholtès appliances are also hidden from view. Minotti Cucine, Verona, Italy. [www.minotticucine.it](http://www.minotticucine.it) CIRCLE 204

Just past the Salone del Mobile, at the end of a nearly mile-long walkway, the biennial Eurocucina kitchen exhibit held court at Milan's new fairgrounds this past April. Josephine Minutillo

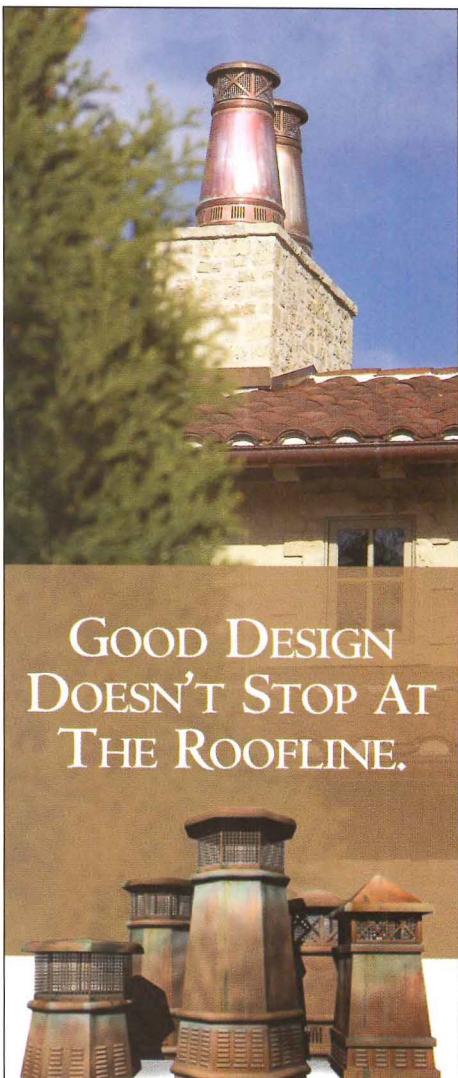
### ▲ All in one kitchen

Not For Food is a concept kitchen by Berloni designed to take a fresh look at conventional ways of using the kitchen for contemporary families and to meet the needs of everyday life in the near future. Created by architect Enzo Eusebi of Nothing Studio, together with Berloni's design team, Not For Food is an integrated furniture system in carbon fiber that combines sophisticated kitchen functions with features such as seating, a worktop and dining area, the Internet, and music. Berloni, Pesaro, Italy. [www.berloni.it](http://www.berloni.it) CIRCLE 203



### ◀ Accessible cooking

Architect Marco Micsoscia, a designer attentive to the world of the disabled, created the Easy Food kitchen system for Valcucine with ergonomics and safety in mind. The stainless-steel top, made by Bautek, is created from a single mold—food is prepared, cooked, and drained from the same workstation. All wall-hung and corner units are completely accessible to those in wheelchairs. Valcucine, Pordenone, Italy. [www.valcucine.it](http://www.valcucine.it) CIRCLE 205



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## Residential Products KBIS Review

Here's a roundup of products launched at the Kitchen & Bath Industry Show, held last April in Chicago.

### ► Cool new introduction

Gaggenau had several introductions this year, including an automatic coffee machine with matching warming drawer, a new backsplash ventilator, and an ultra-slim cooktop. However, the real news was the company's entry into the U.S. refrigeration market with a new modular column refrigeration and freezer system. A heavy-load door hinge holds up to 220 pounds of door weight, allowing for a range of custom cladding materials, even marble. The glass, aluminum, and stainless-steel interior helps prevent bacteria growth and maintain an even temperature, while a motorized shelf adjusts at the push of a button—even fully loaded. Gaggenau, [www.gaggenau-usa.com](http://www.gaggenau-usa.com) CIRCLE 206



### ► Seriously solid sinks

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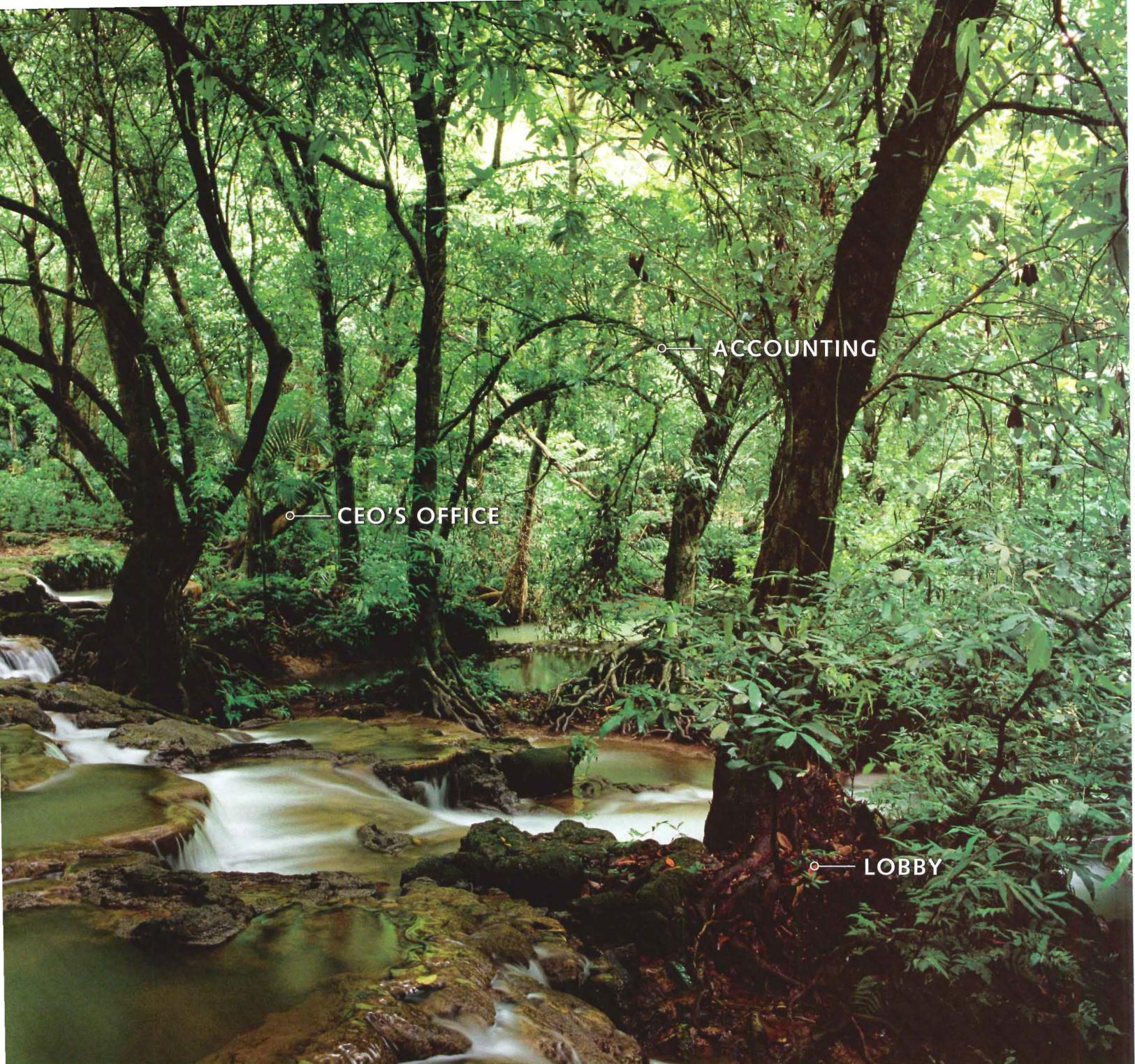


### ► Cook 15 times faster

TurboChef, a specialist in high-speed food-preparation equipment for the commercial market, introduced their first residential offering, the 30" Double Wall Speedcook oven, at a massive booth along with live demos by star chefs. Offering cooking times unheard of in the residential market—a rack of lamb in 4 minutes, steamed asparagus in 45 seconds, a 12 pound turkey in 42 minutes—the high-end oven (listing for \$7,495) can cook up to 15 times faster than conventional methods without sacrificing taste or quality. To achieve these times, the oven's high-speed forced air impingement cooks food from the outside in while jets of recirculating air lock in moisture and microwaves distribute precise bursts of energy that cook the food from the inside out. The oven's retro design features broadly curved edges and hearth-shaped doors in six porcelain enamel colors or stainless steel. A menu driven control with an LCD interface for easy interaction, an intuitive Cookwheel Controller and Cook Navigator display screen, and seven Speedcook modes are all intended to make the oven "as easy to use as an ATM," according to the manufacturer. TurboChef, Atlanta. [www.turbochef.com](http://www.turbochef.com) CIRCLE 208



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## Residential Products

### KBIS Review

#### ► Baths without borders

Sieger Design's 2nd Floor (right), from Duravit, is a comprehensive collection of fixtures and furnishings notable for its breadth of product and price. Long and lean, materials include elegant wood veneers, chrome, and white porcelain. A selection of lavs is offered with a proprietary stainless-steel glaze said to be durable and spot-resistant. From Vienna-based Eos, the freestanding Sundeck tub (below) can be installed indoors within a wood veneer surround or outside encased in weather-resistant laminate. Outfitted with a full-depth overflow, optional air or whirlpool jets, LED lighting, and remote control, Sundeck doubles as a lounge when its marine-quality padded top is folded flat. Duravit, Duluth, Ga. [www.duravit.com](http://www.duravit.com) CIRCLE 209



#### ► Well done Modernist grill

Dubbed "an architectural reinvention of outdoor grilling," the Fuego grill was designed by Robert Brunner, a partner at Pentagram Design, whose works are in the permanent collections of New York's Museum of Modern Art and the San Francisco

Museum of Modern Art. The modern grill is the first product from Fuego North America, a new company run by Alex Siow, founder of Zephyr

Ventilation. Set to start shipping in September, the grill will come in two scales: Fuego 01, a 42" model suited for a rooftop garden or backyard deck, and Fuego 02, a balcony-size 30" model. The larger model offers a retractable lid, electronic controls, and a quick-change drawer system for gas, charcoal, or infrared cooking, or a combination of the three. Fuego, San Francisco. [www.fuegoliving.com](http://www.fuegoliving.com) CIRCLE 210



#### ► Bath from outer space

Displayed in an enclosed, white-screened room, the Ross Lovegrove collection gave an otherworldly feel to the VitrA USA booth at this year's show. Lovegrove's collection for the Turkish ceramic company was inspired by the concept of "organic essentialism"; showerheads resemble mushrooms growing from the ceiling, faucets sprout like branches (left), and levers are pebble-shaped. The line includes 175 products, including plumbing fixtures, wall and floor tiles, bathtubs, shower trays, bathroom furniture, faucets, and accessories. The soft-close toilet and bidet lids come in a translucent option with motion-activated LED lighting (right). VitrA, Atlanta. [www.vitra-istanbulcollection.com](http://www.vitra-istanbulcollection.com) CIRCLE 211



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# Residential Products

## KBIS Review

### ▼ Arty sinks, techy showers

As usual, Kohler's expansive booth at KBIS was brimming with new introductions, including a smarter toilet seat and the company's first hands-free kitchen faucet. The elegant Mille Fleurs design on the Caxton undercounter lavatory (below) addresses the continued interest in metallic embellishment as well as traditionally designed Artist Edition fixtures. A base of either translucent sage or clear glaze provides a backdrop for a delicate floral motif that takes its cue from folk-art genres of embroidery,

tapestry, and rose-maling (Norwegian decorative painting).

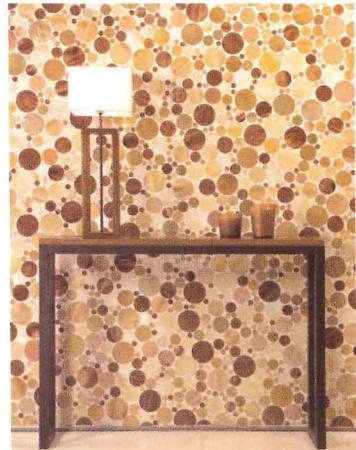
The Kohler DTV shower-control product (above), another new offering, features a thermostatic valve and digital interface to customize the shower experience utilizing multiple showerheads, hand showers, and body sprays. The DTV's preset hydrotherapy experiences include up massage, down massage, wave massage, as well as temperature

therapy that can run from hot to cold or vice versa. Multiple users can preprogram their own customized experience and call them up instantly at the touch of a button. Kohler, Kohler, Wis. [www.kohler.com](http://www.kohler.com) CIRCLE 212



### ◀ Polka dot patterns

Ann Sacks, a division of Kohler's Interiors Group, once again displayed a stunning new range of tile, stone, and concrete products by in-house and guest designers. This year's collection included a line of tile crafted entirely of mesquite wood harvested in Texas, a concrete flooring with a simple geometric pattern by designer Angela Adams, and a fluted and beaded tile by designer Barbara Barry. For her latest collaboration with Ann Sacks, artist Erin Adams was able to develop a method of cutting glass tile that allowed for very fine lines and curves. Her new glass tile collection consists of mosaic patterns composed in brilliant jewel tones, including a natural scene of silhouetted curling leafy vines and a graphic assortment of circles in varying sizes (left). Both mosaics are made to order, allowing for individual art installations. Ann Sacks, Portland. [www.annsacks.com](http://www.annsacks.com) CIRCLE 213



### ▼ Bathing for technophiles

Award-winning architect and product designer Jean Nouvel has designed a new collection of bathroom fixtures for Jado that include a lavatory faucet, tub filler, and shower totem that incorporate electronics for temperature control and touch-sensitive operation. The faucets have programmable presets so users can save their favorite volume and temperature settings. The 44" elongated shower totem is a polished chrome tube that curves and flattens into a Minimalist bend at the top for the showerhead. An integrated automatic diverter controls a handheld shower wand, popping up a spray head that retracts when no longer in use. Like the shower totem, Nouvel's lav faucet and tub filler feature subtle, smooth curves and rounded corners. The tub filler (right) is teamed with a handheld spray that has the same pop-up spray head as the shower totem. Jado, Chandler, Ariz. [www.jadousa.com](http://www.jadousa.com) CIRCLE 214



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## Residential News

# The American Institute of Architects Announces the 2006 Housing and HUD Awards for Design Excellence

### AIA HOUSING COMMITTEE AWARD: SINGLE-FAMILY CUSTOM

**Project:** Kessler Residence

**Location:** Chevy Chase, Md.

**Architect:** Robert M. Gurney,  
FAIA, Architect

**Client:** Lewis and Tamara  
Kessler

In a neighborhood full of older houses, the Kessler Residence successfully weighs the balance between nostalgia and Modernism. Its front elevation features a colonnaded porch, simple fenestration, and a steeply pitched roof—conventional elements, to be sure, but ones that are executed in an unadorned, contemporary manner. At the rear of the property, by contrast, flat rooflines and horizontal massing predominate. On this south-facing side of the building, generous amounts of glazing provide views of a narrow, 75-foot-long lap pool, while translucent panels provide privacy from the house next door.



**Project:** The Coconut House

**Location:** Los Angeles

**Architect:** Lee & Mundwiler  
Architects

**Client:** Brenda Bergman

The Coconut House, similar to its namesake fruit, is clad with dark fiber core panels covered in a wooden veneer—but this hard shell conceals a sumptuous, white-walled interior. The main entry sits to the western side of the property, away from the street, while opposite, a small courtyard punctuates the eastern elevation. Windows surrounding the courtyard allow daylight to penetrate throughout the building.



Who needs air-conditioning, especially in these energy-conscious times, when you can keep a home cool with solar shades—or design a house to maximize cross ventilation? This notion was shared by many of the architects whose residential projects were recognized in this year's awards program. Since 2000, the AIA's Housing Committee Knowledge Community has lauded the most innovative single- and multifamily housing. Partnering with the U.S. Department of Housing & Urban Development, it also recognizes excellence in community design and accessibility. *James Murdock*



**Project:** *Avis Ranch*

**Location:** Clyde Park, Mont.

**Architect:** Fernau and Hartman Architects

**Client:** Anne and Greg Avis

This ranch includes seven buildings split into two clusters: the main house, garage, and a con-

verted granary comprising one; guest quarters, a barn, and stables, the other. All but two of these buildings were renovated or adapted for new uses—meeting the client's goals of respecting the land and recycling, just as any good farmer would (see page 118).



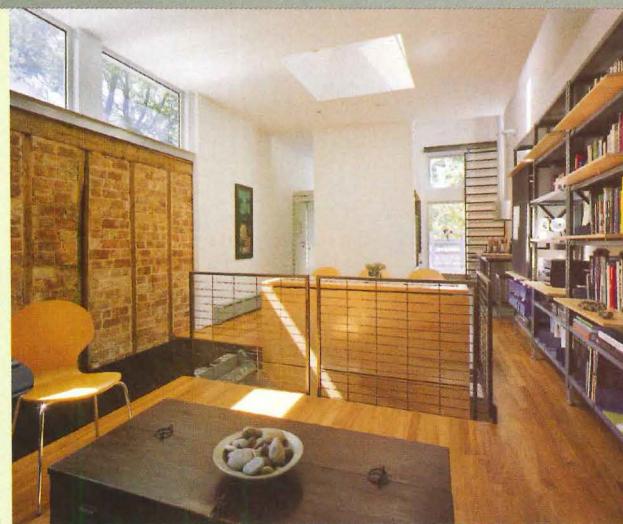
**Project:** *slot house*

**Location:** Brooklyn, N.Y.

**Architect:** noroof architects

**Client:** Margarita McGrath and Scott Oliver

In an age of teardowns and sprawl, Margarita McGrath and Scott Oliver, AIA, pursued a more sensitive strategy in renovating their own residence. Rather than fell a 60-foot-tall maple, which would have freed precious space in the front garden of a 25-by-80-foot lot in a crowded urban neighborhood, the pair chose to save the tree and make it the organizing element of their project. To provide new views of the tree from inside the house, the architects cut a vertical slot



into the front elevation. The partial demolition of this wall revealed an internal skeleton of cedar boards and brick, materials that the architects echoed in their choices for the new construction.



**Project:** *Tower House*

**Location:** Chicago

**Architect:** Frederick Phillips and Associates

**Client:** Frederick Phillips, FAIA

The skyline of Chicago, the city that gave rise to the skyscraper, inspired the organization of rooms and circulation within this four-story residence. A terrace and living spaces occupy the top two floors, with the best views, while bedrooms and a garage take up the lowest floors. A separate stair tower, made of concrete block that contrasts with the steel-clad house, connects all levels.

# Residential News

## AIA HOUSING COMMITTEE AWARD: MULTIFAMILY CUSTOM



**Project:** University of Washington—Nordheim Court  
**Location:** Seattle  
**Architect:** Mithun  
**Client:** Lorig Associates

Nordheim Court provides affordable housing for 460 students at the University of

Washington. A storm-water-retention pond and an existing stand of trees anchor the complex's southwest edge, while an underground parking garage frees space above for landscaped courtyards where the dorm residents can socialize.



**Project:** Metro Hollywood

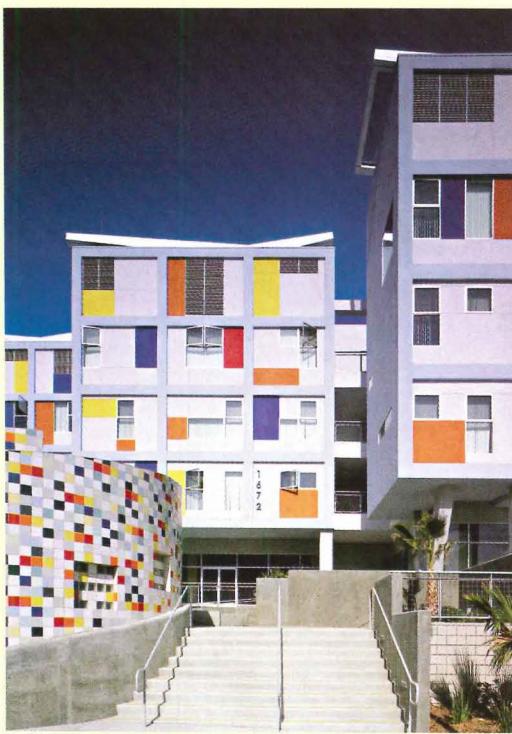
**Mixed-Use**

**Location:** Los Angeles

**Architect:** Kanner Architects, with McCormack Baron Salazar

**Client:** Lyle Parks, Jr.

Mass transit is still relatively new to Los Angeles, as is high-density housing. But the Metro-Hollywood apartment building—which also includes retail and child-care components—proves that the two make an excellent pairing. Heavy steel framing was used for the building's structure, which sits atop a subway station, so to stay within budget Kanner Architects used painted plaster instead of a more costly material for exterior cladding.



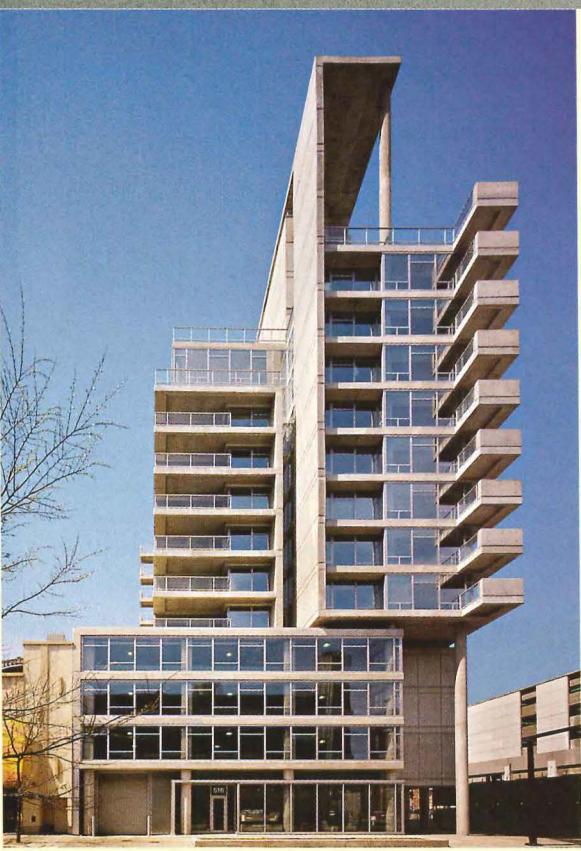
**Project:** K Lofts

**Location:** San Diego

**Architect:** Jonathan Segal, FAIA

**Client:** Jonathan Segal, FAIA

K Lofts, a nine-unit affordable apartment complex, takes its name from a Circle K convenience store that previously occupied the site. More than just the name survived, though, as Jonathan Segal, FAIA, incorporated the original building into new construction. This feat of recycling lowered overall development costs—one would never suspect given the project's fresh



**Project:** *Contemporaine at 516 North Wells*

**Location:** Chicago

**Architect:** Perkins+Will

**Client:** CMK Development

A celebration of glass, concrete, and cantilevered massing, *Contemporaine at 516 Wells* is not your father's condo building. The tower's four-story podium contains retail and parking, made fully visible, along with the building's structural-steel braces, thanks to liberal glazing. Above it rise 11 floors containing a total of 28 condominiums, each featuring cantilevered balconies and views of Chicago's downtown skyscrapers.



ers, located south of this site in a former warehouse district. With its mix of bold forms and varying scales, *Contemporaine* energizes both the streetscape and the skyline.

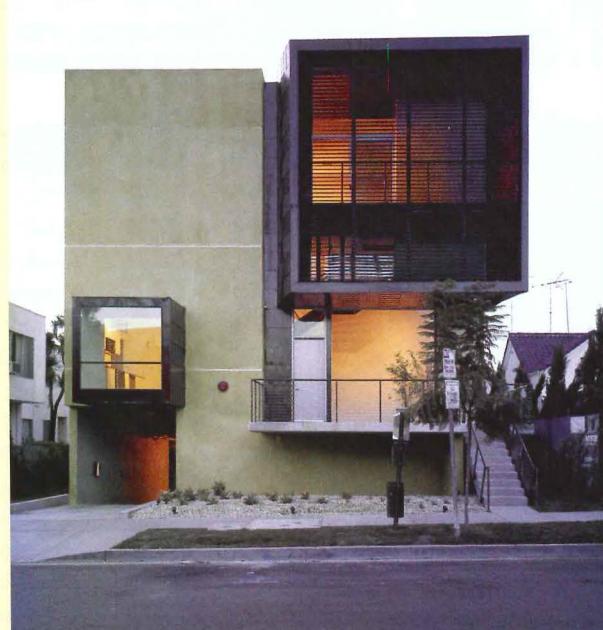
**Project:** *Orange Grove*

**Location:** West Hollywood, Calif.

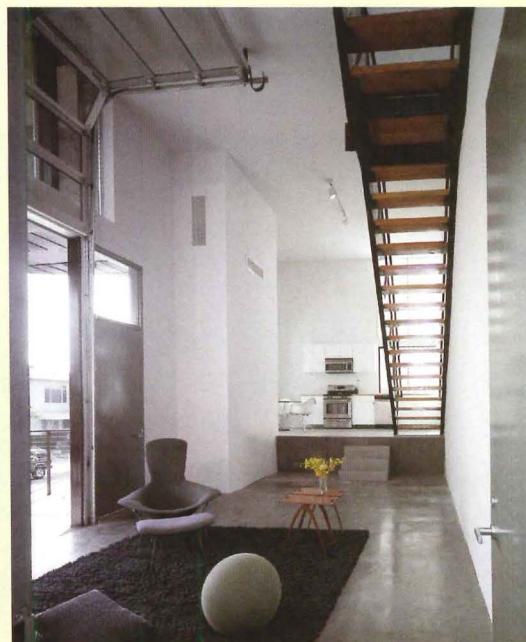
**Architect:** Pugh + Scarpa

**Client:** Urban Environments, LA

In a Los Angeles neighborhood populated by Craftsman bungalows and dingbats, a term that Reyner Banham popularized in reference to Southern California's peculiar strain of cheaply built facade-focused apartments, *Orange Grove* looks like neither. If anything, this five-unit building shares more in common with Los Angeles's primary business: film and television production. Along the building's most-visible elevations, boxy projections frame the rooms within like television screens; beyond the voyeur's gaze,



glazed roll-up doors provide CinemaScope-like views of an internal court and passages.



# Residential News

## AIA HOUSING COMMITTEE AWARD: INNOVATION IN HOUSING DESIGN



**Project:** *Solar Umbrella*

**Location:** Venice, Calif.

**Architect:** Pugh + Scarpa

**Client:** Angela Brook and Lawrence Scarpa

With a nod to Paul Rudolph, architect Lawrence Scarpa used a canopy to shield an addition to his own bungalow. This "solar umbrella" reduces heat gain, while photovoltaic panels applied along the southern exposure generate enough electricity to power the entire house, making this residence "energy neutral."



**Project:** *The Modern Modular*

**Location:** Multiple locations

**Architect:** Resolution: 4 Architecture

Mass customization is the key to success for computer maker

Dell. Why not apply the same concept to prefabricated housing? With this idea, and a flair for Modernism, Resolution: 4 Architecture designed modules that clients configure according to their individual tastes.

## AIA HOUSING COMMITTEE AWARD: COMMUNITY DESIGN

**Project:** *Live/Work Artists' Housing*

**Location:** Mount Rainier, Md.

**Architect:** Hammel, Green and Abrahamson, with The Pan Group

**Client:** Artspace Projects

This 44-unit apartment complex, developed to be the first phase

of an arts and culture district on

**Route 1 in Maryland, provides low-cost housing for artists.**

Each of the 18 different unit types features open, loftlike floor plans. Two common rooms and a workshop provide extra space for residents to collaborate and exhibit their work.



## HUD AWARDS: MIXED-USE/MIXED-INCOME



**Project:** *Esther Short Commons*

**Location:** Vancouver, Wash.

**Architect:** William Wilson Architects

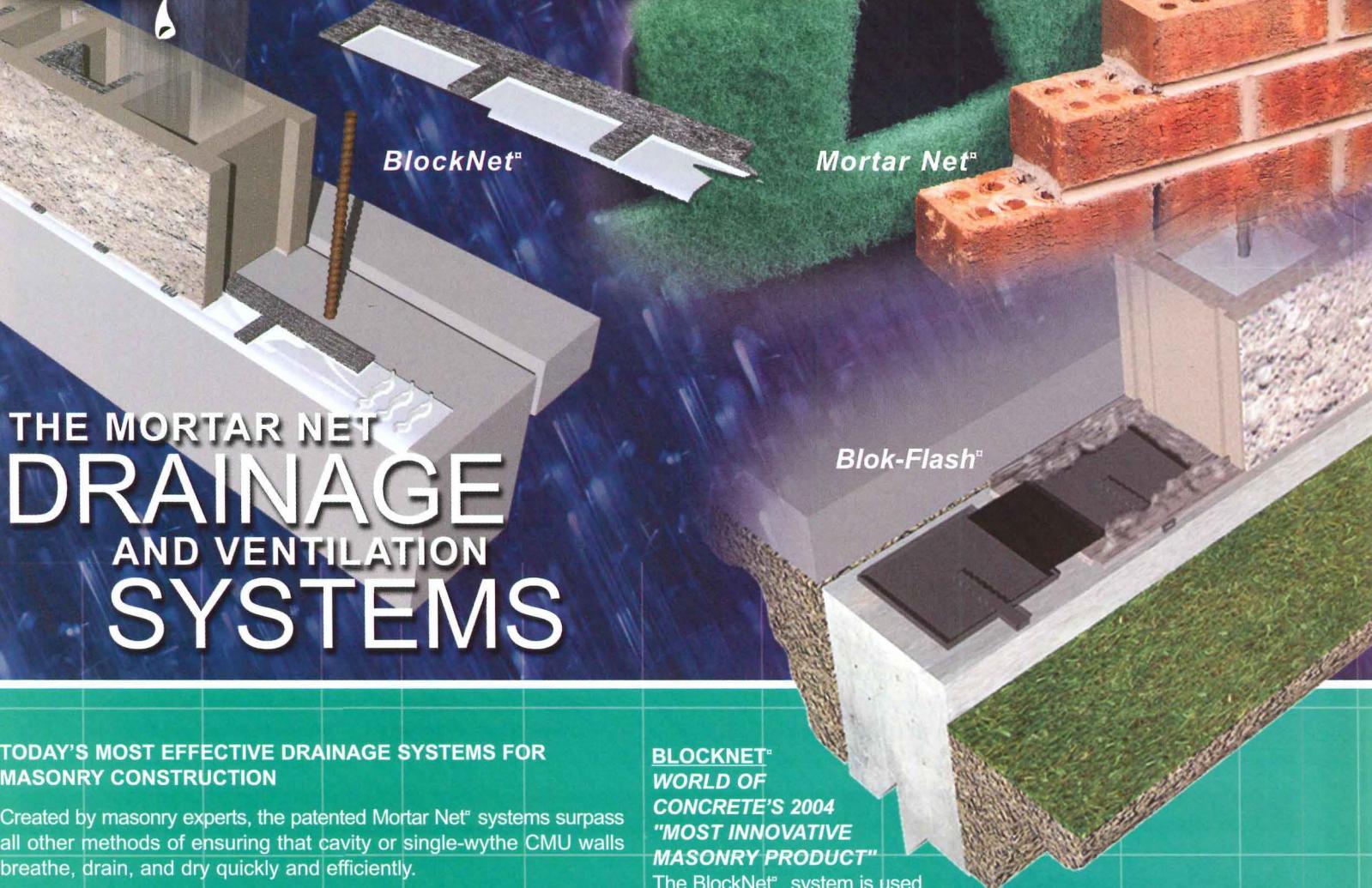
**Client:** Vancouver Housing Authority

The architect incorporated a 20,000-square-foot farmer's market into the ground floor of Esther Commons, using garage doors to maintain a direct connection between this space and the street. Nearly all of the 160 apartments above receive direct sunlight and feature views of a park or a river nearby.



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# Residential News

## HUD AWARDS: MIXED-USE/MIXED-INCOME

**Project:** Metro Hollywood Mixed-Use Building  
**Location:** Los Angeles  
**Architect:** Kanner Architects, with McCormack Baron Salazar  
**Client:** Lyle Parks, Jr.

This 60-unit apartment building

is situated on a busy street corner above a subway station, so mitigating noise figured high on the list of design challenges. The solution lay in reducing the amount of glazing and placing windows strategically within the Mondrian-like facades.



## HUD AWARDS: ALLAN J. ROTHMAN ACCESSIBILITY



**Project:** 6 North Apartments  
**Location:** St. Louis  
**Architect:** Trivers Associates  
**Client:** McCormack Baron Salazar

With features such as sliding walls that help maximize interior floor area, raised

appliances, and adjustable-height countertops, the 80 apartments in this converted industrial building are fully accessible for wheelchair-bound tenants. An existing metal canopy serves as an outdoor gathering space at the heart of the complex.

**Project:** Waterloo Heights Apartments  
**Location:** Los Angeles  
**Architect:** Koning Eizenberg Architecture  
**Client:** Hollywood Community Housing

All of the 18 apartments at Waterloo Heights feature a deck, patio, or French doors that open onto an internal court, nurturing a sense of community among the elderly and disabled residents. Window placement facilitates cross ventilation. The



architect's materials palette was influenced by both Craftsman- and Spanish-style houses in the surrounding area.

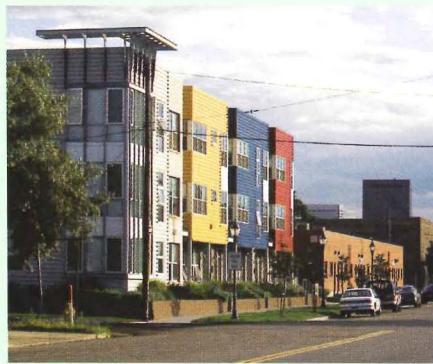
## HUD AWARDS: COMMUNITY BY DESIGN



**Project:** Building Community  
**Location:** Houston  
**Architect:** Rice Building Workshop  
**Client:** Project Row Houses

Partnering with several community groups, architecture students from Rice University designed and built three different residential prototypes—ranging in size from 500 to 900 square feet—based on the vernacular of Houston's row houses.

The duplexes and detached houses alike feature porches and deep roof overhangs, elements that help extend the living space outdoors.



**Project:** Blake Street Flats  
**Location:** Denver  
**Architect:** Humphries Poli Architects

**Client:** Integral Properties

The developer of this 24-unit apartment building faced resistance from neighbors who advocated home ownership over rentals. Humphries Poli Architects helped to win over critics by designing a building that blends seamlessly into its context of historic homes and warehouses.

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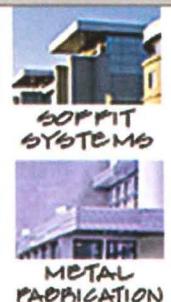
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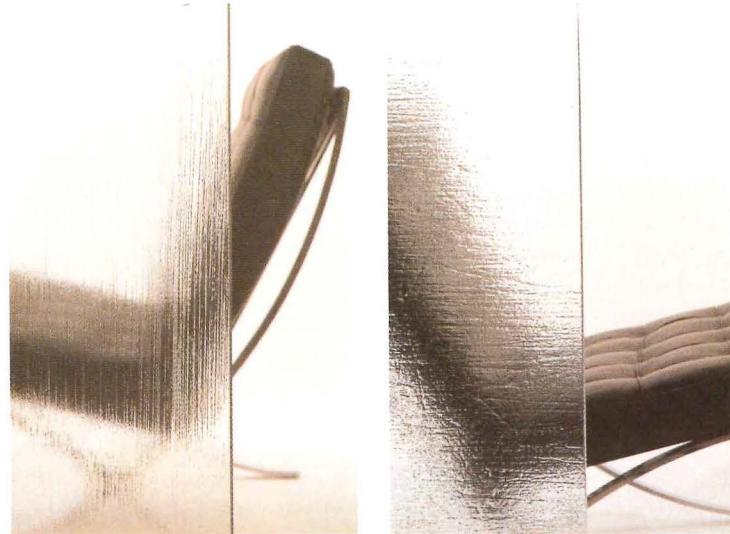
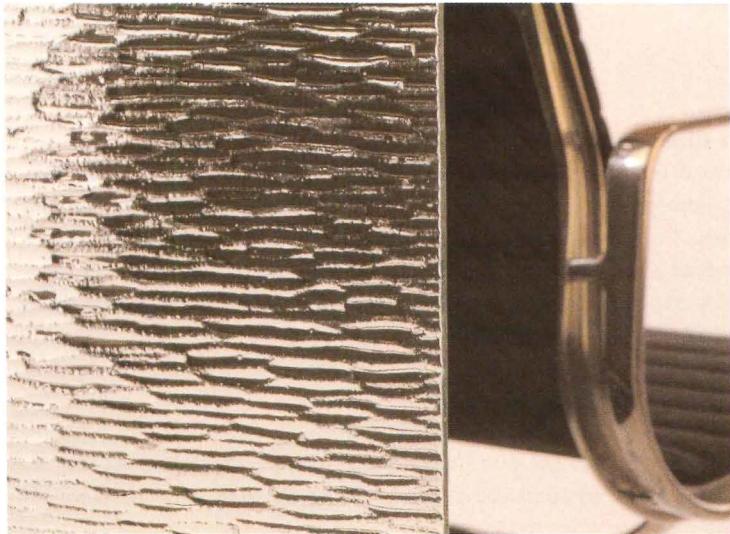
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# Products

## Glass & Glazing

This month's focus is on the latest designs and technologies in the glass and glazing arena, whether intended for **structural, fire-rated, or decorative use**. For a good place to scout the latest in the industry, check out the **GlassBuild America tradeshow**, held in Las Vegas from 9/19 to 9/21. *Rita Catinella Orrell*



### Stone and water inspire a collection of new glass textures

Stones, the latest addition to Joel Berman Glass Studios' award-winning Bricks, Boards, and Sticks Collection of handcrafted kiln-cast textured glass, made its debut at the NeoCon tradeshow held last month in Chicago. Stones adds a new dimension to the collection of multidimensional cast-glass textures inspired by abstractions of organic building materials. Like all Joel Berman kiln-cast glass textures,

Stones can be custom designed into a variety of interior and exterior applications including partition and boardroom walls, office side light panels, balustrades, wall cladding, and doors. The new line is available in panels up to 52" wide x 108" high, in  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", and 1" thicknesses.

Joining Stones is the Piovera texture and the Imprint Collection. Piovera features a specially modified coating that bonds structurally to

the glass surface resulting in a transparent finish that gives the appearance of rain on glass. The Imprint Collection, Joel Berman's new standard glass collection, offers two new scalable kiln-cast organic textures: Stria, inspired by geological striations, and Nuv'eau, whose carvings resemble moving water. Joel Berman Glass Studios, Vancouver, Canada. [www.jbermanglass.com](http://www.jbermanglass.com)

CIRCLE 215

**Clockwise from left:** The texture of Stones kiln-cast glass shows best when backlit; Nuv'eau is a play on "new water" and recalls water in motion; Stria is named after the geological-like striations in the texture; Piovera coated glass evokes rain pouring down a windowpane.

# Products Glass & Glazing



## ▲ Glass with a sense of motion

Piccolo is Lamberts' newest addition to its family of LINIT channel glasses, developed in response to architect's demands for greater design choices in structural glass systems. The vertical fluting, reminiscent of columns found in Greco/Roman architecture, creates a gentle sense of motion and interesting degrees of obscurity. Piccolo is available in tempered or annealed form, as are all LINIT channel glass textures. Bendheim Wall Systems, Passaic, N.J. [www.bendheim.com](http://www.bendheim.com) CIRCLE 216

## ▼ 20 minute addition to the lineup

Pilkington has expanded its Fire Protection Glass product range to include a 20 minute Pilkington Pyrodur product. Pyrodur 20-104 is UL-listed and available in a thickness of approximately  $\frac{3}{8}$ ".

Pyrodur blocks around 90 percent of radiant heat and can be used for interior applications including windows and doors. Pilkington also offers Pyrodur 20-200 in a thickness of .39" and a complete product range of Pyrodur products for 45, 60, 90, and 120 minute fire resistance. Technical Glass Products, Kirkland, Wash., [www.fire-glass.com](http://www.fire-glass.com) CIRCLE 218



## ▲ Pretty, safe glass

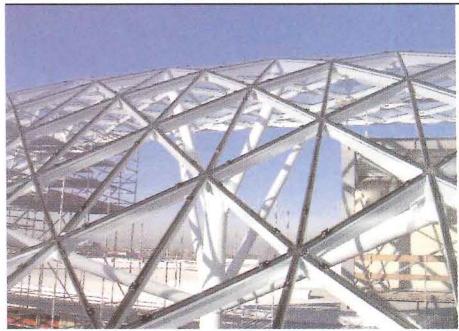
Meltdown Glass Art & Design of Chandler, Arizona, has aligned itself with Safti First to provide fire-resistant kiln-cast art glass. The alliance opens doors for designers who want to enhance buildings such as hospitals and schools with art glass while staying within code. Safti First's patented gel-filled endothermic glazing offers fire protection as well as sound reduction. Ratings are offered from 45 to 120 minutes and meet hose stream, pressure, and thermal shock requirements. Safti First, San Francisco. [www.safti.com](http://www.safti.com) CIRCLE 217



## ◀ Passes the test

Aluflam has completed the UL fire testing of its 60-minute extruded aluminum curtain-wall system. The system can be specified for interior or exterior applications, and is designed to maximize light and vision while blending in with standard nonrated aluminum products. The system's alu-

minum framing is combined with clear, safety-, and fire-rated glass by Vetrotech Saint-Gobain. Aluflam N.A., Huntington Beach, Calif. [www.aluflam-usa.com](http://www.aluflam-usa.com) CIRCLE 219



## ◀ Floating glass fastening system

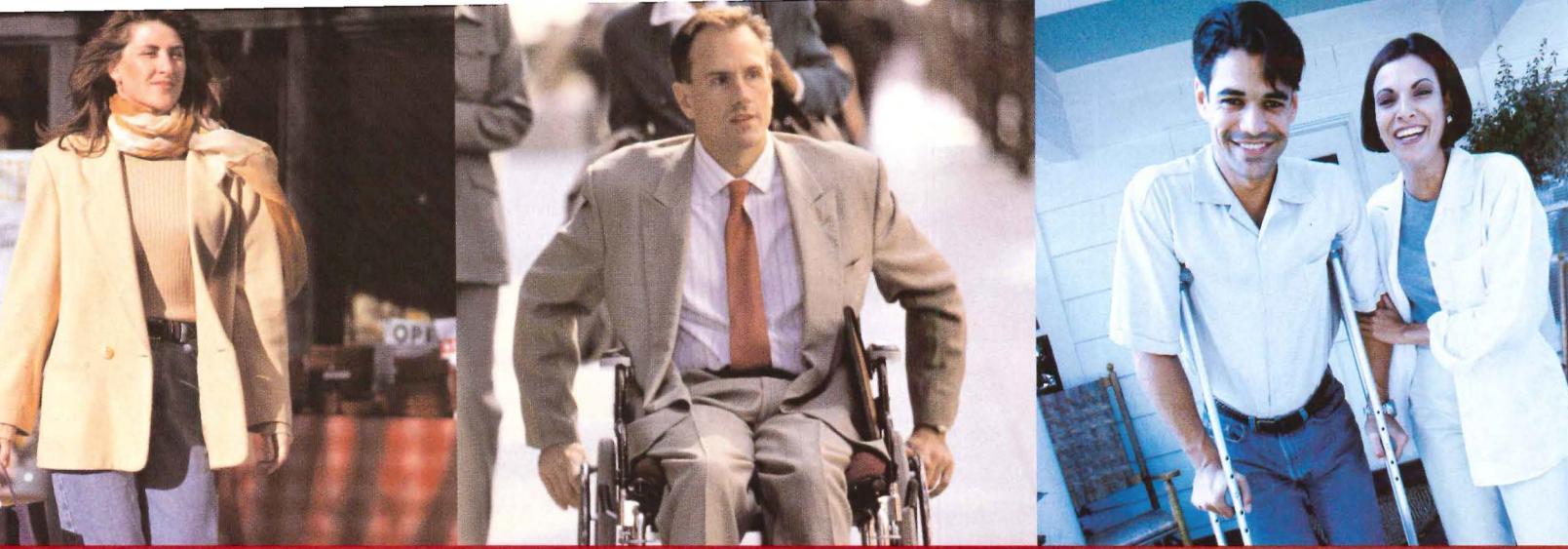
A corrosion-free glass fastening system has been developed by Novum Structures, formerly Mero Structures. The new Edge Clamped Glass (ECG) System is engineered to provide a clean, transparent

way to fasten glazing directly to the supporting structure without the use of a standard aluminum-mullion support system. By eliminating the aluminum mullion, the glazing "floats" on top of the structure. This system, sealed around the glass panel's perimeter by a wet silicone and silicone-gasket technology, creates a transparent glass envelope. ECG can be used to support monolithic, laminated, and insulated glazing systems. Novum Structures, Menomonee Falls, Wis. [www.novumstructures.com](http://www.novumstructures.com) CIRCLE 220



## ◀ Controlling light and heat

In addition to various energy-efficiency upgrades, facility managers at The University of Colorado applied 8,800 square feet of V-Kool window film to prevent campus buildings from overheating. The V-Kool 40 product blocks 65 percent of solar heat while transmitting 42.8 percent of visible light, a condition that is ideal for the environment. The product's colorless transparency and non-mirrorlike reflectance allowed managers to apply it selectively to windows in buildings where heat gain was an issue, while maintaining a uniform design. V-Kool, Houston. [www.v-kool.com](http://www.v-kool.com) CIRCLE 221



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## Visitors come in droves as the Milan Furniture Fair settles into its new home

There was a lot riding on this year's Salone del Mobile. Though 2005 proved to be a tough year for the Italian furniture industry, hopes were high that the furniture fair's debut in its new venue, Massimiliano Fuksas's \$700 million Fiera di Milano megastructure in the RhoPero suburb [RECORD, August 2005, page 92] would generate even more interest in what is already an annual frenzy of industry insiders, designers, exhibitors, media, and spectators.

By the time the show closed its doors on April 18, it was obvious the gamble had paid off. Visitors came in record numbers—more than 220,000 people poured into the city and through the gates of the fairgrounds. While the Fiera's 2.1 million square feet provided enough space for the throngs of visitors, the same could not be said for the rest of the city's infrastructure. Riders squeezed their way into the newly extended subway line, and traffic was often at a standstill as Milan's population increased by nearly 20 percent for one week in April.

For those familiar with convention centers, Fuksas's design is an

inspiring experience. But was it enough to provide Italy's furniture industry, and the fair itself, with that much-needed shot in the arm? Italian design remains unrivaled in terms of quality and innovation, but the business of design seems to have grown too big for its britches. Smaller, more avant-garde lines continue to get eaten up by larger ones. Cappellini's takeover by the Poltrona Frau Group is old news, but its inclusion in the massive display at the fairgrounds alongside Frau and other acquisitions Thonet, Gufram, Cassina, and Alias lent a homogeneous feel to the whole thing. Another leading Italian line, B&B Italia, itself recently sold off, took over the once-promising Monica Armani line, as well as a significant share in the daring Dutch line Moooi. It remains to be seen whether this type of merger will produce better or blander design.

The staggering array of off-site exhibits that greeted visitors upon leaving the Fiera was yet another reminder the fair may be growing out of control—to see them all would require much more than one week.

*Josephine Minutillo*



Clockwise from top: An endless stream of visitors to Massimiliano Fuksas's Fiera di Milano, the Salone del Mobile's new home in RhoPero; inside Moroso's lively stand at the fairgrounds; Zaha Hadid with Patrik Schumacher at the presentation of her new Z. Island kitchen for DuPont Corian; the sprawling Pitti Living off-site exhibit on Via Tortona.

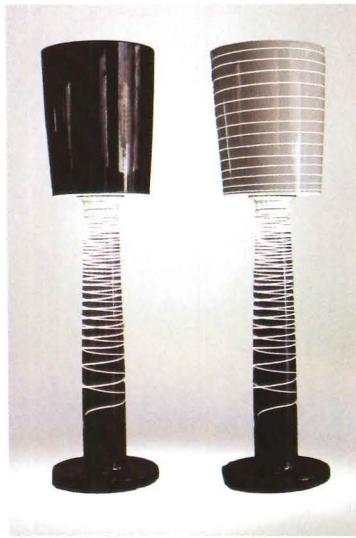


# Product Briefs

## Milan: Outdoor Life

### ► Garden delights

Serralunga has expanded its production beyond planters to include furnishings and lighting for use indoors and out. This year's Salone marked the opening of its new Milan showroom designed by Luisa Bocchietto, who also designed new seating for the company. Loop (below), a bench by Christophe Pillet, is an example of large-format chrome plating. The open shape and polyethylene body make these benches extremely light. Marc Sadler's Lady Jane (right) and Lady Mary garden lamps are a first for the company. The polyethylene body is engraved for contrasts in color and light. Serralunga, Biella, Italy. [www.serralunga.com](http://www.serralunga.com) CIRCLE 222



### ◀ Tying the knot

Danskina art director and renowned textile designer Ulf Moritz created four new contemporary designs for the Dutch collection. Danskina's introductions included innovative rugs made from linen, felt, pure wool, and strong paper in countless color combinations. The boldest of the designs, Knot, is an outdoor rug made entirely of polypropylene. The hand-knotted rug is available in four colors. Danskina, Amsterdam. [www.danskina.nl](http://www.danskina.nl) CIRCLE 225



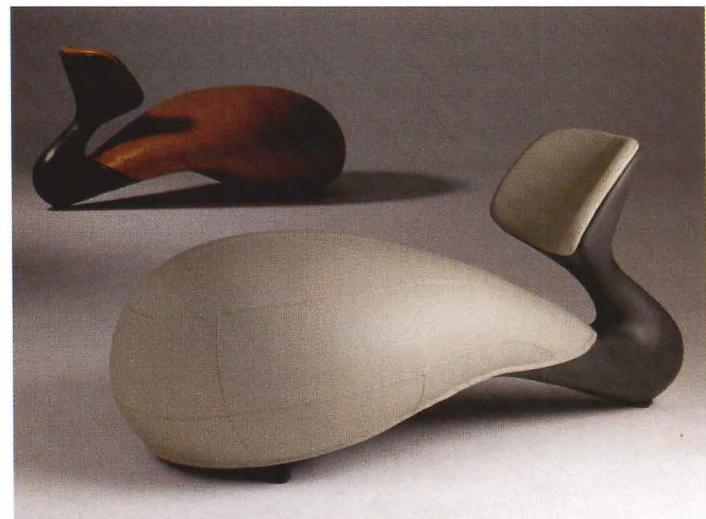
### ▼ A bench for Milan

In 2005, Italy's Urban Land Institute (ULI) invited six leading Italian designers to participate in a competition to create a new bench for the city of Milan. Alias hooked up with its longtime collaborator Alberto Meda for the competition and has now put its entry into production. For Setes, Meda chose a design typology familiar to the Milanese urban landscape, but reinterpreted it using new technology. The structure is made of pressure-cast aluminum treated for outdoor use, with the slats of the back and seat made from teak. Alias, Bergamo, Italy. [www.aliasdesign.it](http://www.aliasdesign.it) CIRCLE 223



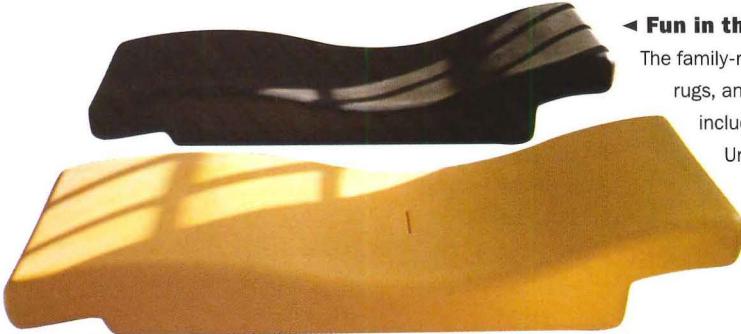
### ▼ Whale ride

As an alternative to the rigid geometries and hard surfaces such as wood, stone, or plastic that characterize most outdoor furnishings, quirky Dutch furniture line Leolux presented Beluga. The organically shaped chaise, composed of a strong, lightweight plastic for easy moving, features a weather-resistant coating. Created by the young Dutch design pair Christiaan Oppewal and Silvijn van der Velden, Beluga is also available in an indoor version that can be upholstered in fabric or leather. Leolux, Utrecht, The Netherlands. [www.leolux.com](http://www.leolux.com) CIRCLE 224

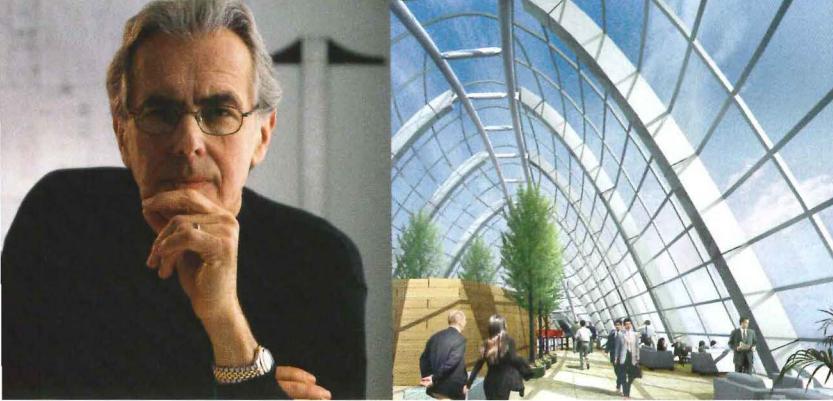
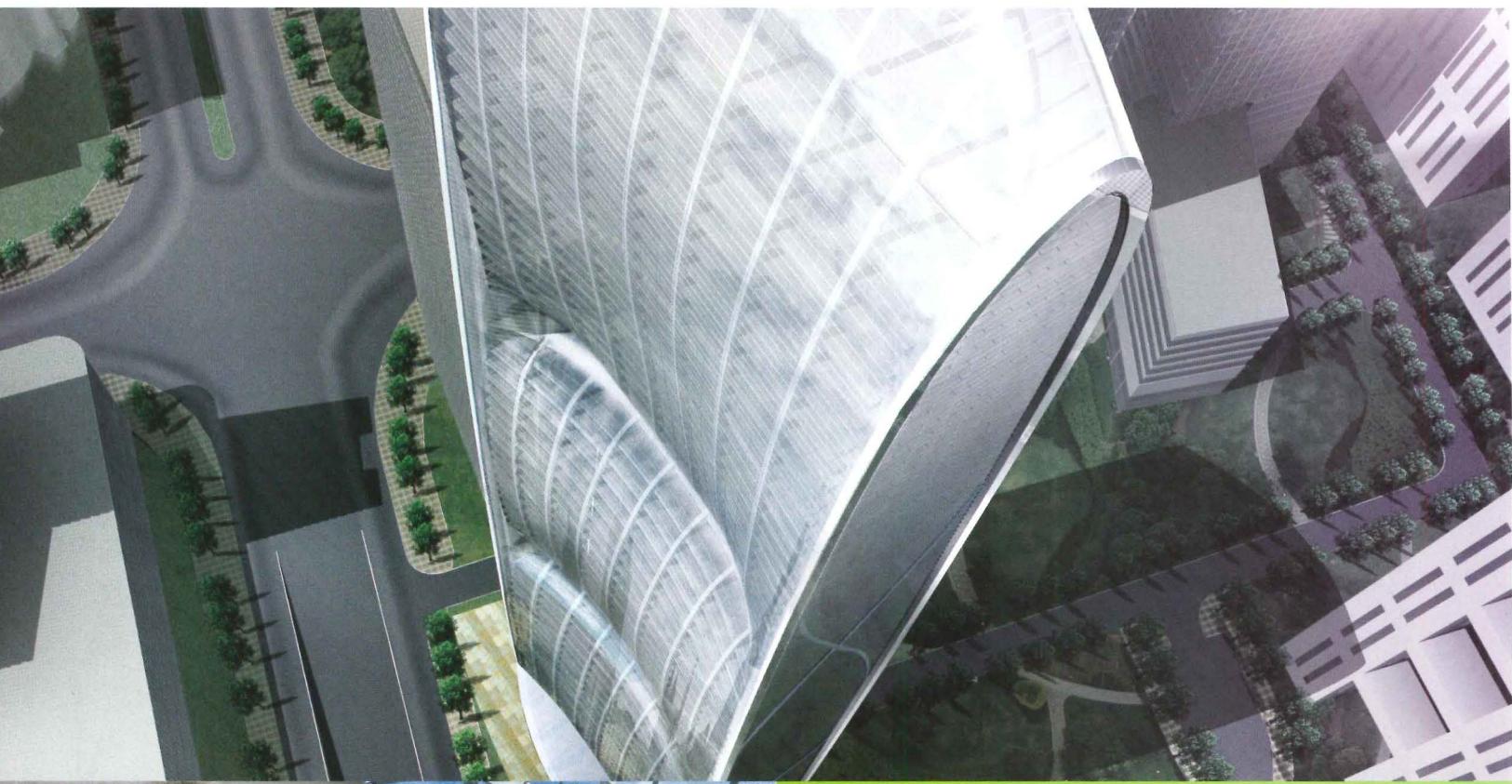


### ◀ Fun in the sun

The family-run Spanish company Gandia Blasco produces indoor and outdoor furniture, rugs, and textiles. This year, its presentation at the popular off-site venue Superstudio included a number of new items, including several by Spanish designer Patricia Urquiola. 356 (left), designed by Pablo Girones and Jose A. Gandia, is a collection of sinuous sun loungers with side table, all made of rotationally molded polyethylene. Available in a range of colors. Gandia Blasco, Valencia, Spain. [www.gandialblasco.com](http://www.gandialblasco.com) CIRCLE 226



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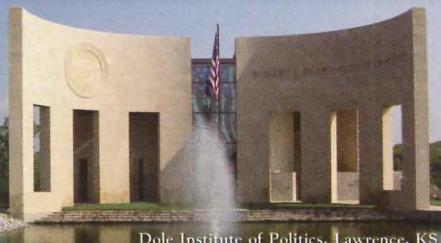
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## Product Briefs Milan: Leather Goods

### ► ▼ Floral arrangement

Moroso made its presence felt throughout Milan, with products and exhibits scattered around the city. Its presentation at the fairgrounds took place in a dizzying booth where boldly patterned bands hanging from the ceiling shifted up and down. Within the commotion, Moroso showed new works by the likes of Konstantin Grcic, Ross Lovegrove, and Tord Boontje. Patricia Urquiola designed several new seating ranges, including Antibodi, a lounge chair whose cover, fixed to a painted or chrome-plated metal frame, is created from triangular-shaped petals sewn together in combinations of felt, wool, and leather (shown). The petals can either face down for a quilted look, or up for an unconventional version. Moroso, Milan. [www.moroso.it](http://www.moroso.it) CIRCLE 227



### ► Thank you for smoking

Le Corbusier's designs were on display in two prominent exhibits at the Salone this year, including a reconstruction of the interior and furnishings of the Cabanon, the holiday hut Corbu built in Cap-Martin in 1952. Inside Cassina's showroom, five new additions to Cassina's I Maestri collection were displayed alongside original articles on loan from the Le Corbusier Foundation. The design for Wagon Fumoir (right) was created by Le Corbusier in 1931 for the smoking carriages of the French railways. In keeping with Corbu's original drawings, the upholstered elements, seat and back, are not fastened down to the support structure, but allow for a flexible back.

Cassina, Milan. [www.cassina.com](http://www.cassina.com) CIRCLE 228



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### ▼ Haute hammock

With Loom (below), Franco Poli's new design for Matteo Grassi, a 2D surface takes on a 3D ergonomic shape thanks to a carefully cut pattern of openings. The thick coach hide is incised using a high-frequency machine,

giving the leather elasticity, breathability, and transparency, properties normally associated with fabric. The leather net, which is sewn and finished by hand, remains inside a continuous stainless-steel frame. Loom is available as a high or low lounge chair with footrest. Matteo Grassi, Milan. [www.matteograssi.it](http://www.matteograssi.it)

CIRCLE 229



### ► Strapping appearance

In addition to introductions by Ron Arad, Antonia Astori, Patricia Urquiola, and Philippe Starck, Driade's presentation included a slew of new products from a threesome of Japanese designers—Naoto Fukasawa, Kazuyo Sejima, and Tokujin Yoshioka. Frequent Driade collaborator Yoshioka, whose designs for the company include the whimsical Tokyo-Pop family of products, this year contributed two lightweight chairs. In Ori (shown at right), the seat and backrest are composed of interlocking strips of black leather. The polished steel frame provides an extra-wide seat. Driade, Milan. [www.driade.com](http://www.driade.com) CIRCLE 230



### ◀ Padded perch

Leaders in leather-upholstered furnishings, Poltrona Frau presented new products as well as reintroductions from a long list of top designers, including Claudio Silvestrin, Enzo Mari, Achille Castiglioni, Lella and Massimo Vignelli, and French designer Jean-Marie Massaud, who also created Frau's booth this year. Among the impressive beds, chairs, and sofas was a curious stool, dubbed Alo (left), designed by Massimo Iosa Ghini. It is composed of a shell in multilayer curved wood, whose leather-upholstered padding features piping around the edge. The frame is chrome-plated steel. Poltrona Frau, Milan. [www.poltronafrau.it](http://www.poltronafrau.it) CIRCLE 231

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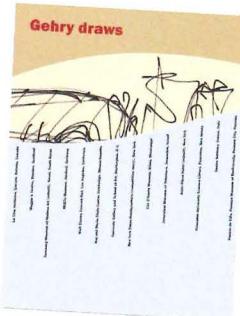


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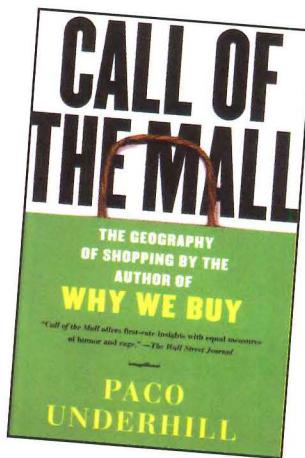
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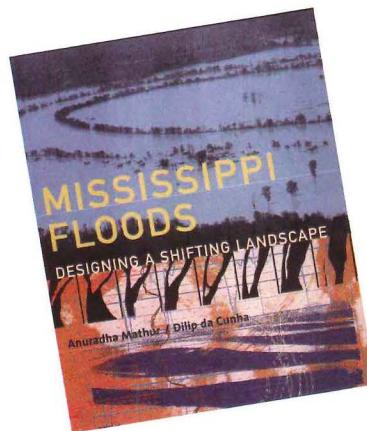
C.



D.



E.



**A. Gehry Draws**, edited by Mark Rappolt and Robert Violette. The drawings, illustrations, and text in *Gehry Draws* definitively place drawing at the heart of Frank Gehry's creative process.

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**E. Mississippi Floods: Designing a Shifting Landscape**, by Anuradha Mathur and Dilip da Cunha. The design of the Mississippi and how it should proceed has long been a subject of controversy. What is missing from the discussion, say the authors of this extraordinary book, is an understanding of the representations of the Mississippi River.

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## Product Briefs Milan: Work & Play

### ► Shimmering shards

Avant-garde Italian furniture line Edra continues to rely on Brazilian brothers Fernando and Humberto Campana to produce their biggest crowd pleasers. In past years, the pair has had enormous success with a series of chairs, each more astonishing than the last, made from the most unlikely materials. This year, instead of twisted wire or scraps of wood, the brothers chose to incorporate colorful shards of glass into a medley of tables in different heights and sizes (right). Edra, Perignano, Italy. [www.edra.com](http://www.edra.com)

CIRCLE 232



### ▼ A gem of a chair

Young Belgian designer Alain Berteau made his debut for leading Dutch furniture line Montis this year with Ruby, a simple but handsome chair (below). Ruby's hexagonal shape offers a wide seat and a frame base that is both linkable to other chairs and stackable. The molded foam pad, however, softens the geometric features

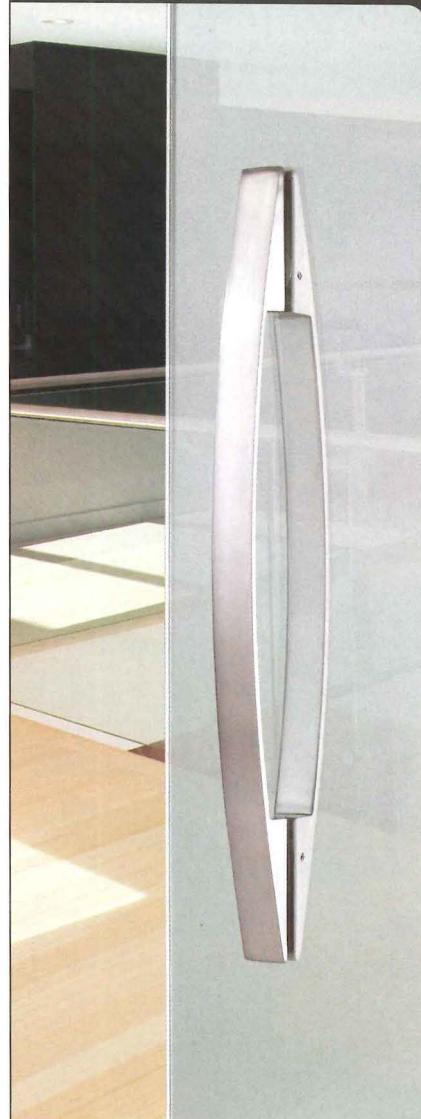
to create a chair with a more organic feel. A number of upholstery options are available. Montis, Dongen, the Netherlands. [www.montis.nl](http://www.montis.nl)

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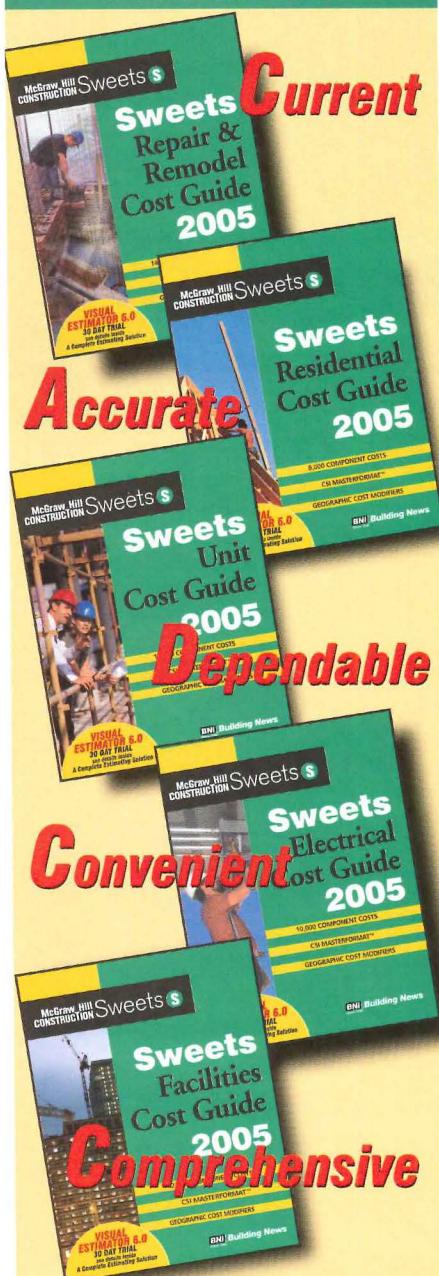
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## Product Briefs Milan: Work & Play

### ► Structural gymnastics

Baleri Italia's sculptural Big Bend table and Little Big chair (right) create an arresting visual impact. The table is composed of two identical sheets of curved multi-plywood that form unusual table legs while skillfully avoiding the legs of those seated around it. When joined to the matching tabletop, these three

elements form a strong, hollow beam without the need for further reinforcing. The curved plywood of the chair, on the other hand, is connected to its tubular steel structure only at the front, thanks to an innovative 3D curving technology. The chair is available with or without padding. Baleri Italia, Bergamo, Italy. [www.baleri-italia.it](http://www.baleri-italia.it) CIRCLE 234



### ◀ Otto is enough

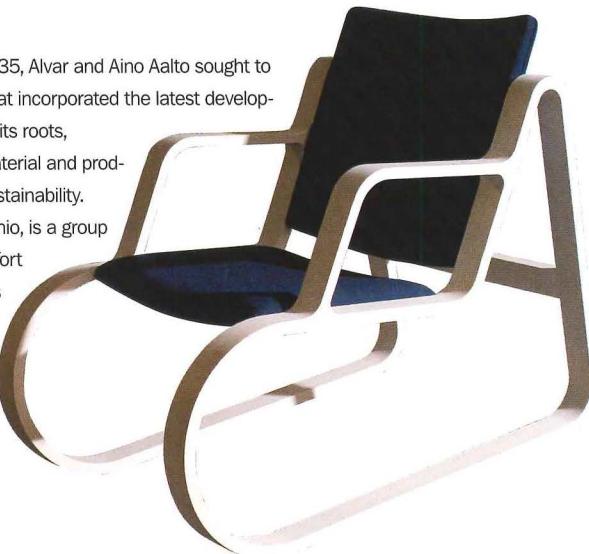
Though the B&B Italia showroom included several Moooi pieces in recognition of the company's recent investment in the fledgling Dutch furniture line, it was the inclusion of Monica Armani's tables and office furniture, another of B&B's recent acquisitions, that really stole the show[room]. In addition, its most prolific designer, Antonio Citterio, together with frequent collaborator Toan Nguyen, presented Otto, a series of office chairs where the molding of bicomponent plastic materials creates a backrest with different degrees of flexibility and transparency (left). B&B Italia USA, New York City. [www.bebitalia.it](http://www.bebitalia.it) CIRCLE 235



### ► Cartoon figure

Among the founders of Finnish line Artek in 1935, Alvar and Aino Aalto sought to promote progressive living through furniture that incorporated the latest developments in design. This year, Artek went back to its roots, presenting functional pieces that exemplify material and product innovation, with an added emphasis on sustainability.

Woodline, by frequent Artek designer Eero Aarnio, is a group of flat-cut furniture pieces (right) with the comfort of upholstered seating. The technique provides great flexibility to customize chairs and sofas according to the needs of spaces and users, while the cartoonish lines suggest it's not intended to be taken too seriously. Artek, Helsinki, Finland. [www.artek.fi](http://www.artek.fi) CIRCLE 236



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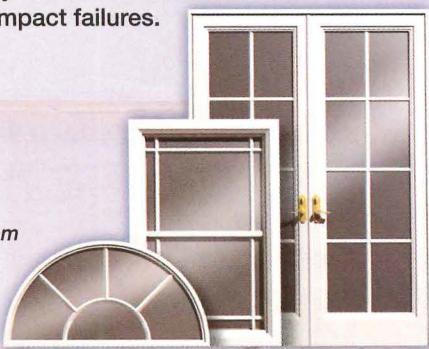
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## Product Briefs Milan: Work & Play

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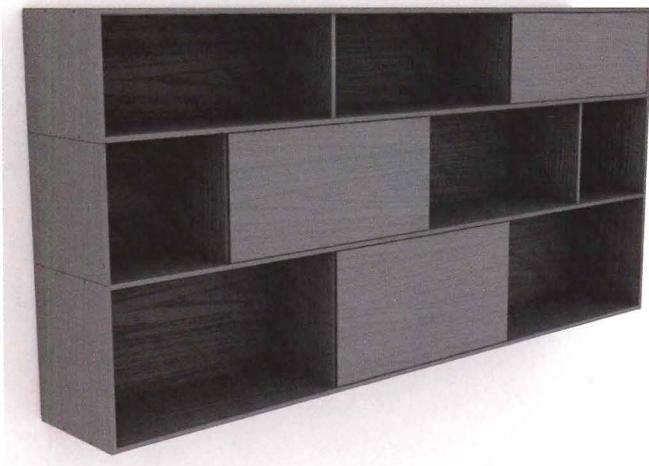


#### ▼ Concrete evidence

Last year's Salone del Mobile saw the international launch of Established & Sons, the London-based line that promotes British design. Just one year later, the company put together one of the largest and most impressive presentations in

Milan. Among the tables, chairs, lighting, and storage units on display—both mass-produced and limited edition—was a deceptively mundane shelving unit. Concrete Shuttering (left), by Sebastian Wrong, features a wall-mounted unit made from concrete that has been cast in wooden shutters, giving the panels and sliding doors their distinctive, raw wood grain. Steel rods reinforce the lightweight concrete frame. Established & Sons, London. [www.establishedandsons.com](http://www.establishedandsons.com)

CIRCLE 237



#### ▼ Veteran brigade

Kartell displayed a retrospective of objects from its celebrated collection as well as pieces from its newest designers, such as Ronan and Erwan Bouroullec. That work, however, was overshadowed by Kartell veterans Antonio Citterio, Piero Lissoni, and Alberto Meda, who continue to produce the company's most innovative products. Meda's Honeycomb (below) is a transparent folding chair whose simple lines contrast with its textured body. The hexagonal structure of its technopolymer seat and back, combined with its aluminum frame, provide the lightness required of a folding chair. Kartell USA, New York City. [www.kartell.it](http://www.kartell.it) CIRCLE 238

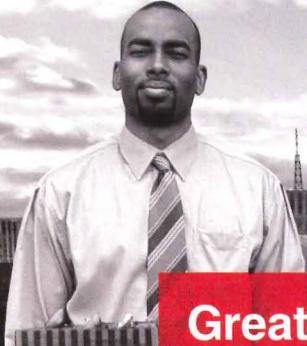


#### ▲ The OC

Seeking an occasional chair that would be appropriate for both residential and contract interiors, Italian furniture line La Palma turned to British designer Simon Pengelly. The result was the OC chair (above), where the shape of the molded wood seat shell is nestled perfectly within the top curves of the stainless-steel wire base. The inherent flex and the foam padding of the shell provide exceptional comfort. The shell is available in several finishes, with a choice of fabric. It measures 31" wide x 29" high x 32" deep with a 15" seat height. La Palma, Cadoneghe, Italy. [www.lapalma.it](http://www.lapalma.it) CIRCLE 239



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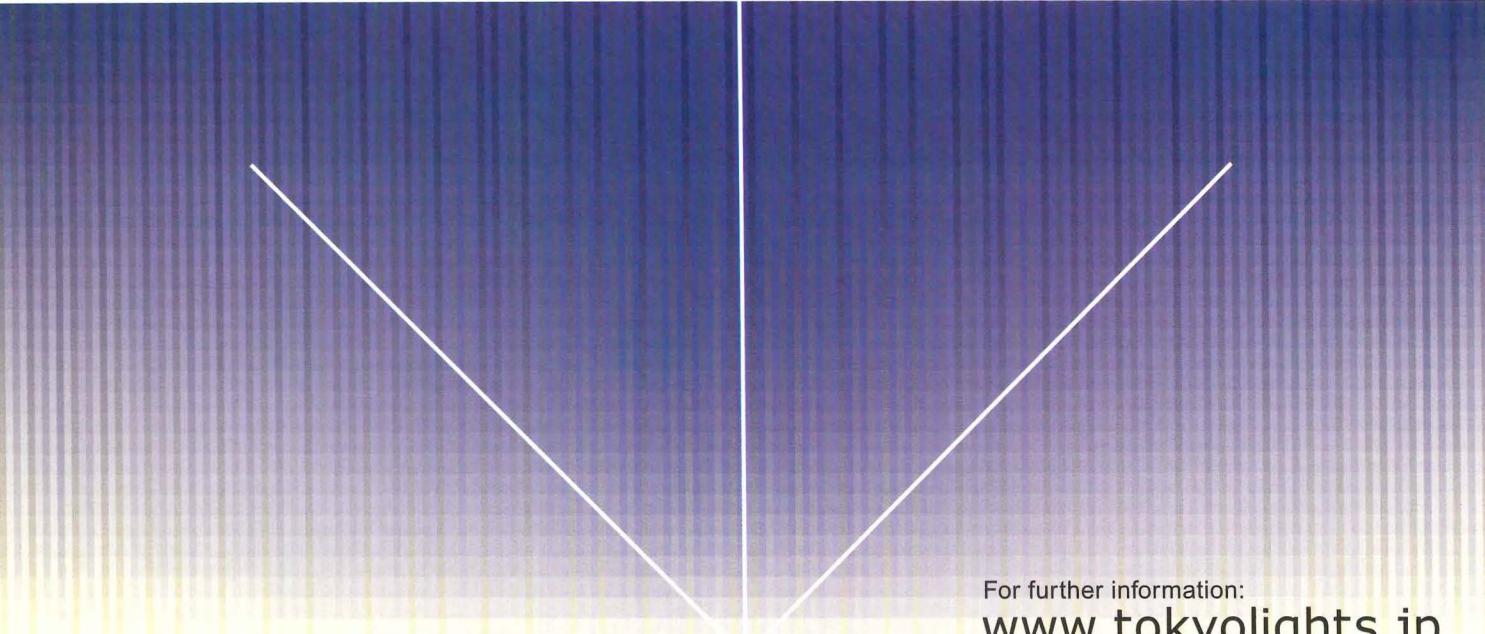


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### Competition Summary

**Ginza-Kyobashi-Nihonbashi Chuo Dori**

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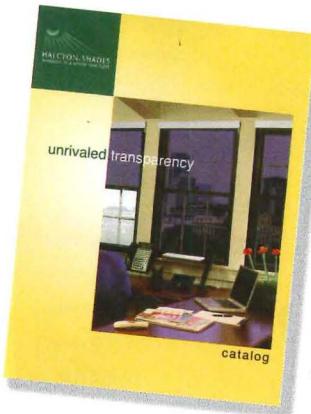
## INTERNATIONAL DESIGN COMPETITION FOR STREET LIGHTING

**Eligibility:** Open to any individual or group, professional or student, engaged in any design-related field: lighting design, urban landscaping, architecture, industrial and product design etc. **Schedule:** Application & Registration: June 15th - July 20th, 2006 Competition Enquiries: June 15th - July 20th, 2006 Proposal Submission: June 15th - August 25th, 2006 **Prizes:** First Prize: ¥5,000,000 Second Prize: ¥500,000 Honorary Mention (3): ¥200,000. All winners will receive a certificate of commendation. The First Prize award includes the fee for supervision of the final detailed design plan. **Jury:** Yoshio Nakamura (Head) Professor Emeritus, Tokyo Institute of Technology / Akiko Moriyama (Vice-Head) Professor, Musashino Art University **Jury Members:** Shozo Baba President, Architectural Communication Consultant, Ltd. / Kotaroh Hirata Associate Professor, University of Tokyo / Naomichi Kurata Professor, Kogakuen University / Norio Shimada Director, Bridgestone Museum of Art / Ritsuko Taho Professor, Tokyo National University of Fine Arts and Music / Makoto Takeuchi Director, Edo-Tokyo Museum / Hiroshi Tanaka Director, Hiroshi Tanaka Design Office / and other members from local neighbourhood associations etc. **Presented by:** Ginza-Kyobashi-Nihonbashi Chuo Dori INTERNATIONAL DESIGN COMPETITION for STREET LIGHTING Executive Committee (The Ministry of Land Infrastructure and Transport, City of Tokyo, Chuo Ward, local neighbourhood associations etc.)

# Product Resource: Literature

## New luminaire catalog

To accompany the expansion of its M-Series linear fluorescent luminaire line, SELUX is publishing an updated *M-Series Specification Guide*. The new catalog includes cross-referencing tables of contents and a step-by-step guide to make specifications easier. SELUX, Highland, N.Y. [www.selux.com/usa](http://www.selux.com/usa) CIRCLE 240



## Calming down the glare

Halcyon Shades puts solar shades in a category of their own with the release of its first complete product catalog. The 16-page catalog includes product photos, selection guides, safety tips, and care information. Halcyon's Shades are ASTM tested to reduce energy costs by shielding against heat gain, glare, and UV rays. Halcyon Shades, Martinsville, Va. [www.halcyonshades.com](http://www.halcyonshades.com)

CIRCLE 241

## Sustainability report

Haworth, designer and manufacturer of adaptable workspaces, is the first American office furniture company to issue a *Global Reporting Initiative Sustainability Report*. The report details long-term sustainability objectives and current results and acts as a blueprint for the company's future. Haworth, Holland, Mich. [www.haworth.com](http://www.haworth.com) CIRCLE 242



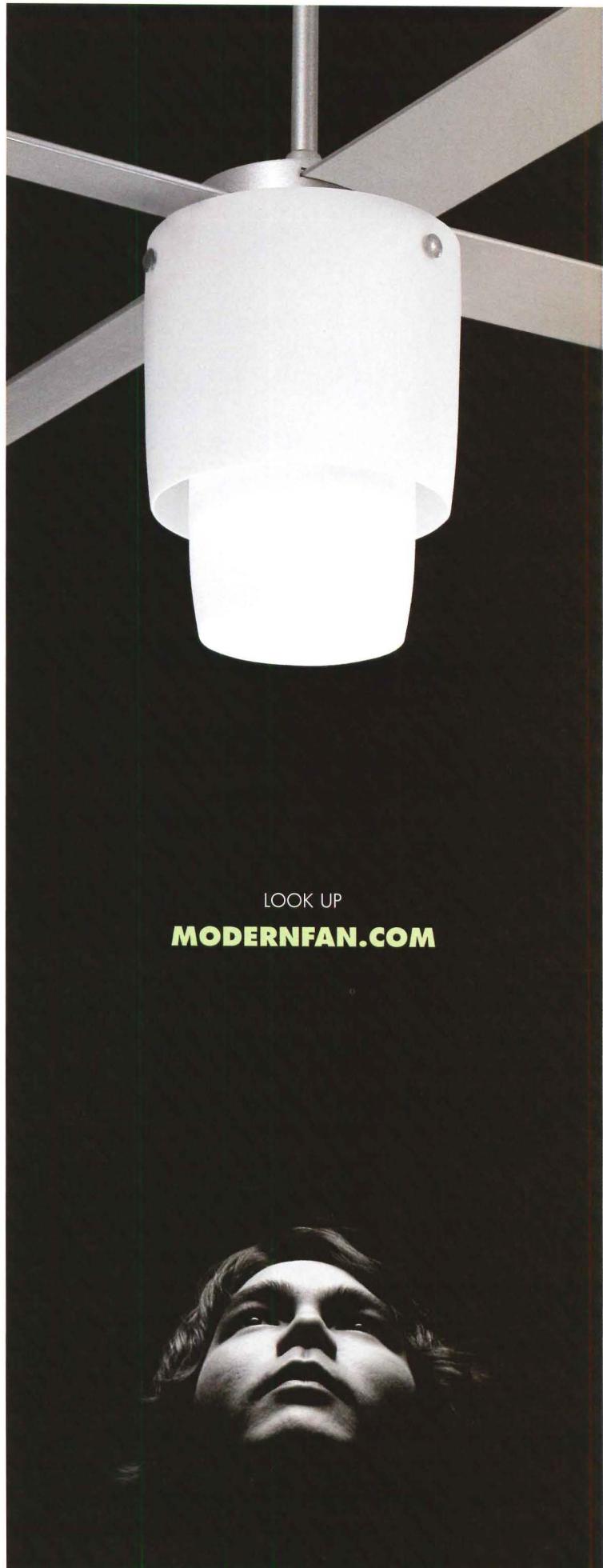
## Books for the bathroom

The National Kitchen & Bath Association has recently published the *Professional Resource Library*, a nine volume series on the design and construction of kitchens



and baths. The comprehensive series caters to a wide range of professional and editorial needs. National Kitchen & Bath Association, Hackettstown, N.J. [www.nkba.org](http://www.nkba.org) CIRCLE 243

For more information, circle item numbers on Reader Service Card or go to [www.archrecord.com](http://www.archrecord.com), under Products, then Reader Service.



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## Product Resource: On the Web

### [www.cersaie.it](http://www.cersaie.it)

The new Web site for the Cersaie international bath and tile exhibition is personalized and easy to use. Particularly noteworthy are its password-protected sections for exhibitors and its database of exhibitor contact info, which includes an address-booklike "Agenda" for the user to customize.

### [www.tivolihome.com](http://www.tivolihome.com)

Run by two Danes who want to share their passion for Scandinavian design, Tivoli

Home showcases a wide range of elegant objects for the home. Most of the products are works by current designers, but the occasional classic is included as well. The Web site displays images and information on each product, including the designer, year, and country of origin.

### [www.maharam.com](http://www.maharam.com)

This award-winning Web site takes patience to navigate, but the reward is a stunning, frame-by-frame presentation of textile designs. Particularly enjoyable is the section featuring pillow designs. The site also includes options to save items to a favorites list and a virtual library with access to a complete set of Maharam's sample books.

### [www.issfa.org](http://www.issfa.org)

The new Web site for the International Solid Surface Fabricators Association includes everything you ever wanted to know about solid surface material. The Web site has sections for consumers, fabricators, and trade specifiers and features a bulletin board for member discussions.

A full-page photograph of a woman from the waist up, wearing a white zip-up hoodie and matching sweatpants. She has her hair pulled back in a bun and is looking directly at the camera with a neutral expression. Her hands are in her pockets. A small, rectangular brick bag with three circular holes and a leather strap hangs from her belt. She is wearing light-colored Crocs.

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\*Roof tile shown: Regal Meadow

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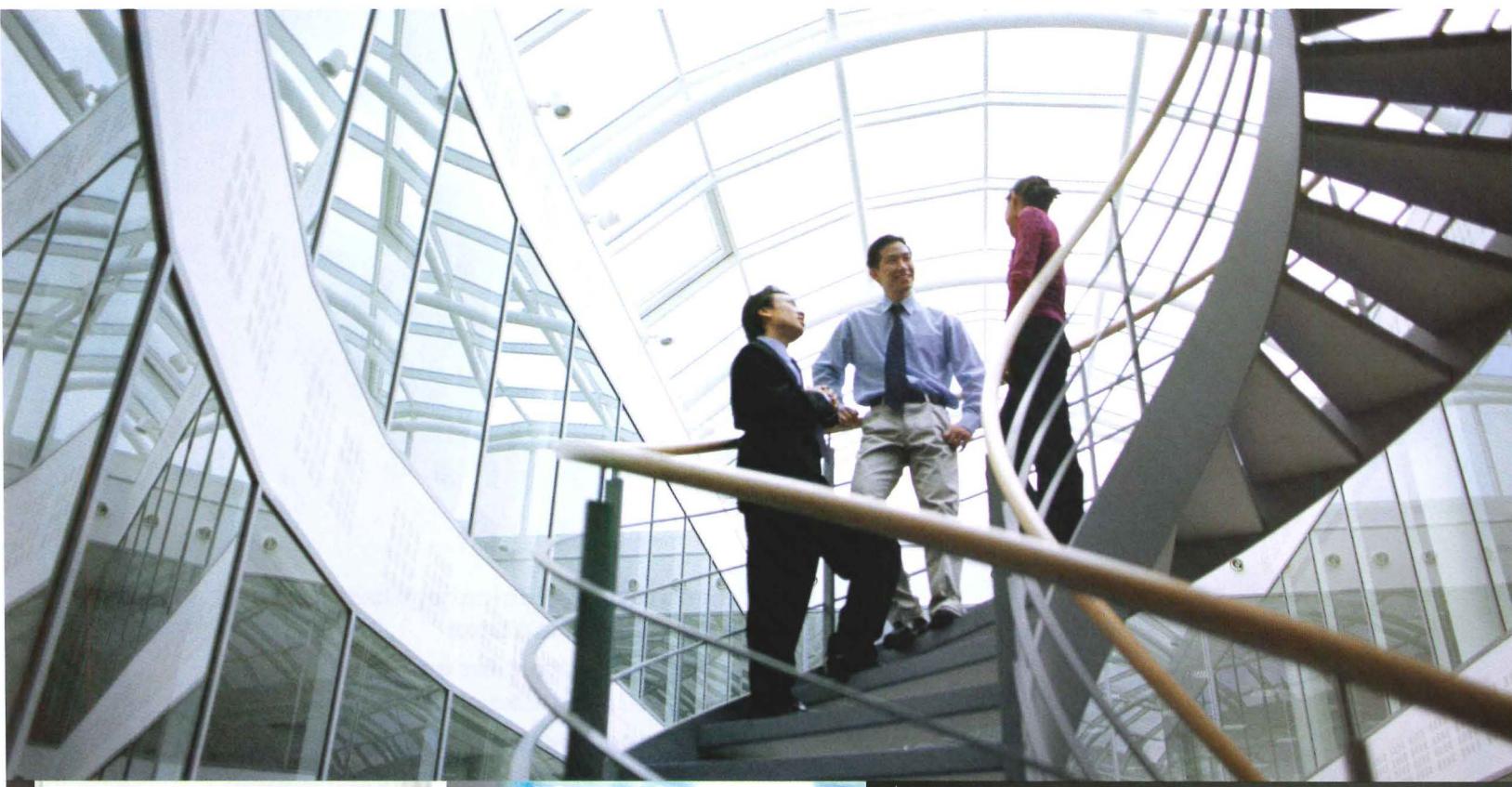
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# Dates & Events

## New & Upcoming Exhibitions

### The Musée d'Art Moderne Grand-Duc Jean—Mudam Luxembourg

Opens July 1, 2006

Mudam is the first contemporary art museum in Luxembourg. The building is the work of Leoh Ming Pei and sits in perfect harmony within the park, planned by Michel Desvigne, on the Fort Thuengen site. Its layout follows the old fortification walls of Fort Thuengen and is characterized by great banks of windows and finishing touches of honey-colored limestone. The building houses an auditorium, a gift shop, and cafeteria, as well as expansive gallery space. For more information call 352 45 37 85 30 or visit [www.mudam.lu](http://www.mudam.lu).

### Jean Prouvé—The Poetics of Technical Objects

#### Weil am Rhein, Germany

September 23, 2006–March 25, 2007

This is the first comprehensive and systematic traveling exhibition of furniture and architecture developed and produced by Jean Prouvé (1901–1984) from 1924 until the mid-1970s. Its curatorial concept, developed by guest-curator Professor Bruno Reichlin, is structured along Prouvé's own ideas, explained in the famous courses he gave at the Paris Conservatoire National des Arts et Métiers (CNAM) between 1957 and 1970. The exhibition contains approximately 50 original pieces of furniture, 10 original architectural units (including a complete "Maison de Sinistrés"), and numerous architectural models, as well as photographs and reproductions of Prouvé's architecture- and furniture-related drawings. At Vitra Design Museum. For more information, call 49 76 21 702 3200 or visit [www.design-museum.de](http://www.design-museum.de).

## Ongoing Exhibitions

### Morphosis Paris

Through July 17, 2006

Sixteen projects (layouts, drawings, photographs, etc.) from Morphosis, currently involved in the construction of numerous buildings, are on view to convey the idea of architecture as "in the act." Screens and Web cams open windows onto build-

ings in operation or sites under way in order to follow their evolution. At Centre Pompidou. For more information, visit [www.cnac-gp.fr/pompidou](http://www.cnac-gp.fr/pompidou).

### Vaults of Heaven: Sanctuaries of Byzantium New York City

Through July 28, 2006

An exhibition of 30 large-format color photo-

graphs of some of the greatest examples of Byzantine architecture. Captured by the renowned Turkish photographer and architect Ahmet Ertug, the striking images reveal in astonishing detail the extraordinary churches and sanctuaries of ancient Byzantium. At the World Monuments Fund Gallery. For additional information, call 646/424-9594 or visit [www.wmf.org](http://www.wmf.org).

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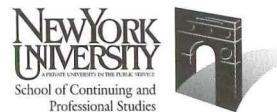
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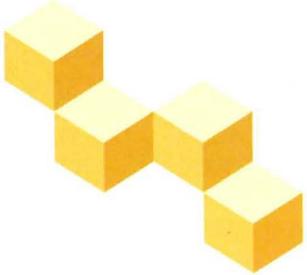


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## Dates & Events

### Newer Orleans— A Shared Space Washington, D.C.

Through July 30, 2006

In response to the need to rebuild New Orleans, the Netherlands Architecture Institute (NAI) and the Tulane School of Architecture, together with the magazine *Artforum*, invited six architecture firms from the Netherlands and the United States to reenvision shared spaces and symbols for the city. Their proposals consider a future for the city in which architecture serves to create a new sense of social commitment, political involvement, and engagement with the landscape. The Dutch firms are MVRDV, UN Studio, and West 8; Morphosis, Hargreaves Associates, and Huff + Gooden Architects represent the U.S. At the National Building Museum. Call 202/272-2448 or visit [www.nbm.org](http://www.nbm.org).

### Alvaro Siza/Architect: Drawings, Models, Photographs

Santa Monica, Calif.

Through August 19, 2006

The first museum survey in the United States to explore the distinguished 50-year career of Portuguese architect and Pritzker Prize-winner Alvaro Joaquim de Meio Siza Vieira. The exhibition's drawings, models, and photographs illustrate the attention to spatial relationships, sensitivity to material and texture, and use of light as an expressive and active element. At the Santa Monica Museum of Art. Call 310/586-6488 or visit [www.smoma.org](http://www.smoma.org).

### From Wood to Architecture: Recent Designs from Finland New York City

Through August 25, 2006

This exhibition takes a fresh look at the possibilities offered by the oldest of building materials: wood. Organized by the Museum of Finnish Architecture, the exhibition

explores the current resurgence of wood as a building material. The show presents 17 recently constructed buildings in Finland, ranging from cultural centers to summer cottages to churches. The architects include established, internationally known figures such as Kristian Gullichsen, Mikko Heikkinen, and Markku Komonen, as well as a new generation of young designers, including Anssi Lassila and Ville Hara. At Scandinavia House: The Nordic Center in America. For more information, call 212/879-9779 or visit [www.scandinaviahouse.org](http://www.scandinaviahouse.org).

### Prairie Skyscraper: Frank Lloyd Wright's Price Tower Washington, D.C.

Through September 17, 2006

Organized by Price Tower Arts Center (Bartlesville, Oklahoma) in cooperation with The Frank Lloyd Wright Foundation (Scottsdale, Arizona), Prairie Skyscraper will present for the first time a comprehensive selection of the Arts Center's collection of historic artworks and objects relating to the Price Tower, including never-before-exhibited Wright documents and drawings from its own holdings and from those of the Wright Foundation's archives. At the National Building Museum. For more information, call 202/272-2448 or visit [www.nbm.org](http://www.nbm.org).

### Artist's Choice: Herzog & de Meuron New York City

Through September 25, 2006

The 7th exhibition in MoMA's Artist's Choice series, in which contemporary artists are invited to select, juxtapose, and comment on works from the museum's collection. Drawing from across the museum's departmental collections, the internationally renowned architects Jacques Herzog and Pierre de Meuron approach the collection not as conventional curators, but as

# Dates & Events

architects. At the Museum of Modern Art. Call 212/708-9400 or visit [www.moma.org](http://www.moma.org).

## **Best of Friends: Buckminster**

### **Fuller and Isamu Noguchi**

#### **Long Island City, N.Y.**

*Through October 15, 2006*

The relationship between Noguchi and visionary designer and inventor Buckminster Fuller are illuminated in this special exhibition, which includes models, sculptures, drawings, photographs, film footage, and letters. At the Noguchi Museum. Call 718-204-7088 or visit [www.noguchi.org](http://www.noguchi.org).

## **Zaha Hadid**

### **New York City**

*Through October 25, 2006*

The first woman to be awarded the distinguished Pritzker Architecture Prize, which she won in 2004, Hadid is internationally known for both her theoretical and academic work, as well as a portfolio of built projects that have literally "shifted the geometry of buildings." This exhibition will provide a comprehensive look at her projects worldwide. True to Hadid's interdisciplinary approach to architecture, there is a wide range of mediums on display, including painting, drawing, large-scale urban plans, proposals for international design competitions, building designs for contemporary cultural and sports facilities, and documentation of current projects under construction. At the Solomon R. Guggenheim Museum. Call 212/423-3500 or visit [www.guggenheim.org](http://www.guggenheim.org).

## **Cantilever-Chairs: Architectural Manifesto and Material Experiment**

### **Vienna**

*Through October 29, 2006*

The Cantilever-Chair represents one of the most significant products of avant-garde design in the 1920s. These steel-tube chairs stem from

the Bauhaus movement and the German Werkbund, and still challenge architects and designers today to experiment anew with their form and material. The exhibition covers more than 80 years of innovative suspension design with chairs by Marcel Breuer and Ludwig Mies van der Rohe, right up to Tom Dixon and Ross Lovegrove. In the MAK Study Collection Rooms. Visit [www.mak.at](http://www.mak.at).

## **Seattle Architecture**

### **Foundation Tours**

#### **Seattle**

*Through October 28, 2006*

Seattle Architecture Foundation connects people to architecture through popular guided walking tours, exhibitions, youth programs, and public forums—programs that inspire participants to engage in shaping their community. Visit [www.seattlearchitecture.org](http://www.seattlearchitecture.org).

## **Lectures, Conferences, and Symposia**

### **Melbourne Design Festival**

#### **Melbourne**

*July 6–16, 2006*

In 2006, the Melbourne Design Festival theme, "Get Set to Glow," will be reflected across over 50 events. Some festival events in 2006 include: the new design show, *Under Capricorn*; the ever-popular design market, ReadyMadeMarket; an exhibition of nonarchitecture by Denton Corker Marshall; and the 50th-anniversary of *Design Icon*, an exhibition from the U.S. on the design practice of Ray and Charles Eames. At Federation Square and venues throughout Melbourne. Visit [www.nationaldesigncentre.com.au](http://www.nationaldesigncentre.com.au).

## **Film: The Case Study House**

### **Program**

#### **Washington, D.C.**

*July 8, 2006*

The film *The Case Study House*

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## Dates & Events

Program, 1945–1966: An Anecdotal History & Commentary, produced by The Museum of Contemporary Art in L.A. (1989, 58 min.), documents the designs for 36 experimental modern prototypes for housing commissioned by the magazine Arts and Architecture in response to the housing shortage following World War II. Some of the most important architects of the Southern California region were involved in this project, including Richard Neutra and Charles and Ray Eames. At the National Building Museum. Call 202/272-2448 or visit [www.nbm.org](http://www.nbm.org).

### Film: Louis I. Kahn: An Offering to Architecture Washington, D.C.

July 16, 2006

The 20th-century American architect Louis I. Kahn was known for his monumental forms that used the

simple geometry of squares, circles, and triangles. This film (1992, 58 min.) focuses on Kahn's mature work, and the talent and character that created his famous architecture. The film is narrated by Kahn himself, using audio recordings of the many talks he gave around the world. At the National Building Museum. Call 202/272-2448 or visit [www.nbm.org](http://www.nbm.org).

### ARE Seminar Los Angeles

July 19 and 26, 2006

This seminar covers electrical systems with Russ Givens of RE Wall Associates. At the AIA/LA Chapter Office. Visit [www.aialosangeles.org](http://www.aialosangeles.org).

### AIA DesignDC Conference and Expo Washington, D.C.

July 19–21, 2006

The second annual Conference and

Expo is designed specifically for architects, designers, engineers, and contractors with two-and-a-half days of the very latest in design trends, construction techniques and materials, and new technologies from numerous national exhibitors. At the Ronald Reagan Building and International Trade Center. Visit [www.aiadesigndc.org](http://www.aiadesigndc.org).

### Spotlight on Design:

#### Stefan Behnisch Washington, D.C.

July 20, 2006

Earlier this year, Harvard University announced the selection of the German architecture firm Behnisch Architects as the designer for the Harvard Stem Cell Institute on the University's Allston campus. The co-founding principal and lead designer for the project, Stefan Behnisch, will discuss the studio's environmentally friendly "green" building designs, including the Allston project, which is the second major commission in the United States for the Stuttgart-based firm. For the

Genzyme Corporation's headquarters in Cambridge, Massachusetts, Behnisch Architects was awarded a Platinum LEED rating, the highest environmental rating from the U.S. Green Building Council. At the National Building Museum. Call 202/272-2448 or visit [www.nbm.org](http://www.nbm.org).

### Julius Shulman, Modernity and the Metropolis

#### Washington, D.C.

July 26, 2006

In a career that spans more than 70 years, renowned architectural photographer Julius Shulman continues to document Modern architecture and the development of the Los Angeles region. The exhibition *Julius Shulman, Modernity and the Metropolis* honors the 95th birthday and life's work of Shulman and includes original prints selected from his work, which was recently acquired by the Getty Research Institute. In this special appearance, Julius Shulman will be joined by Wim de Witt, curator of architectural collections and Christopher Alexander,

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cocurator, both from the Getty Research Institute, to discuss the work and influence of Shulman himself. At the National Building Museum, Call 202/272-2448 or visit [www.nbm.org](http://www.nbm.org).

## Young Architects Forum Los Angeles

July 27, 2006

A new beginnings panel, the location is to be determined. Visit [www.aialosangeles.org](http://www.aialosangeles.org) for further information.

## Competitions

### The Craftsman's Challenge

#### 2006: The Search for the Golden Touch

**Deadline:** July 15, 2006  
Veneer Tech's competition aims to recognize excellence in woodwork and architectural woodwork that features natural edgebanding applications. Awards will be officially announced in August at the International

Woodworking Fair (IWF) in Atlanta. Call 800/593-5601 or visit [www.veneertech.com](http://www.veneertech.com).

### A Bridge Museum

**Deadline:** July 17, 2006

This architectural contest promoted by Arquitectum seeks design entries for a new bridge to replace the Academy Bridge in Venice, Italy. The structure is intended to become a city museum as well as a connecting bridge and entry to the Rio Alto. Visit [www.arquitectum.com](http://www.arquitectum.com).

### Juried Photo Exhibits at Build Boston

**Deadline:** August 1, 2006

All New England architects, landscape architects, and interior designers who are members of the AIA, ASID, ASLA, or IIDA are eligible. For more information, visit [www.architects.org/awards](http://www.architects.org/awards).

### Imagining Penn Center: A National Student Design Competition to Plan New Life for Philadelphia's

### Central Civic Space

**Deadline:** September 15, 2006

Penn Center is one of Center City Philadelphia's important spaces, housing Suburban Station, office towers, retail, and public plazas. Originally conceived by the late Edmund N. Bacon, Philadelphia's renowned former planning director, Penn Center changed the face of Philadelphia when it was built in the 1960s as one of the largest and most ambitious downtown redevelopments of its time. Today, Penn Center is vastly underutilized by the public, yet it holds great potential for revitalization. The Ed Bacon Foundation challenges students to imagine the site's potential and to generate ideas for restoring this important space as a modern Philadelphia epicenter and icon. For more information, visit [www.edbacon.org/penncenter](http://www.edbacon.org/penncenter).

Research Organization (FIERO), in conjunction with the International Association of Fire Chiefs (IAFC) and Fire-Rescue magazine, invites submissions for its awards program to encourage excellence in fire station design. The awards program is being held in as a part of FIERO's 5th National Symposium on Fire Station Design. For more information, visit [www.fierofirestation.com](http://www.fierofirestation.com).

### The 2nd Annual JELD-WEN Student Door Design Contest

**Deadline:** To be Announced

Individuals are invited to create and submit original designs for residential front doors, focusing on the theme of "honoring architecture." The entry form and rules will be posted at [www.jeld-wen.com/studentdesign](http://www.jeld-wen.com/studentdesign). The contest concludes with the selection of winners in November 2006.

E-mail event and competition information two months in advance to [elisabeth\\_broome@mcgraw-hill.com](mailto:elisabeth_broome@mcgraw-hill.com).

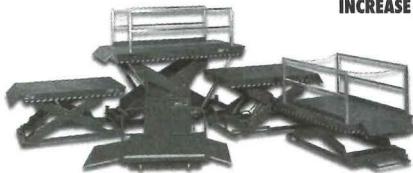


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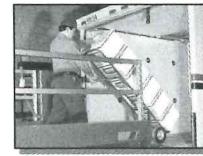
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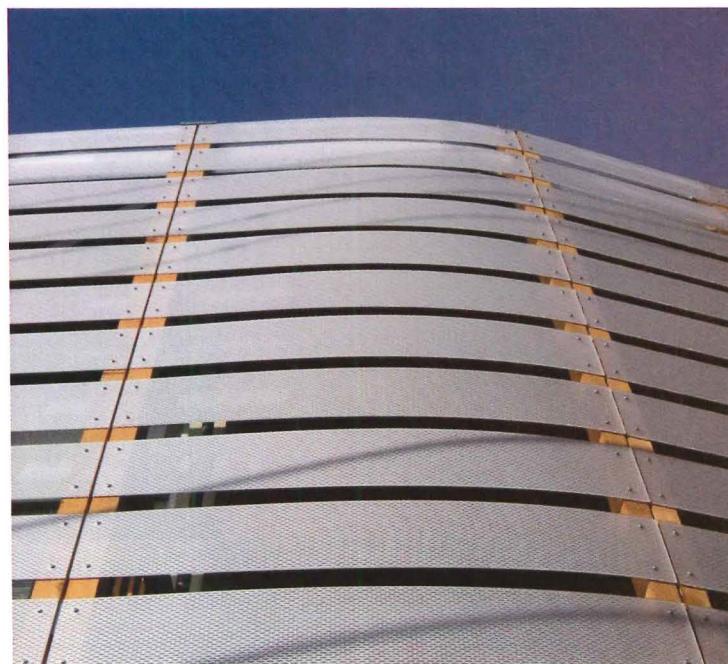
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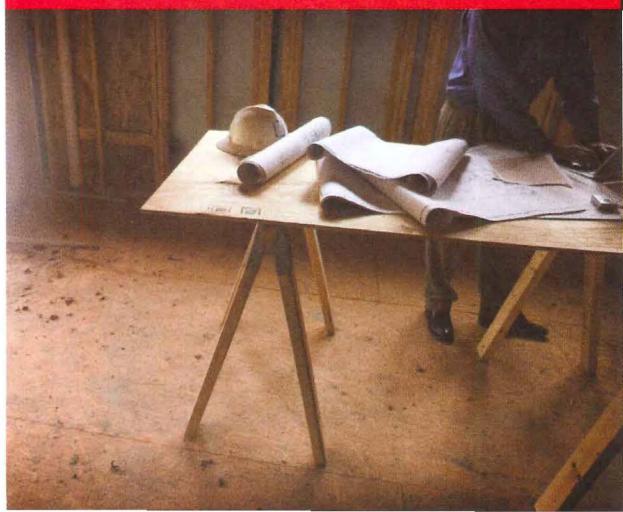
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**Program title: "An Abandoned Airport Brownfield Takes Off," Architectural Record (07/06, page 147).**

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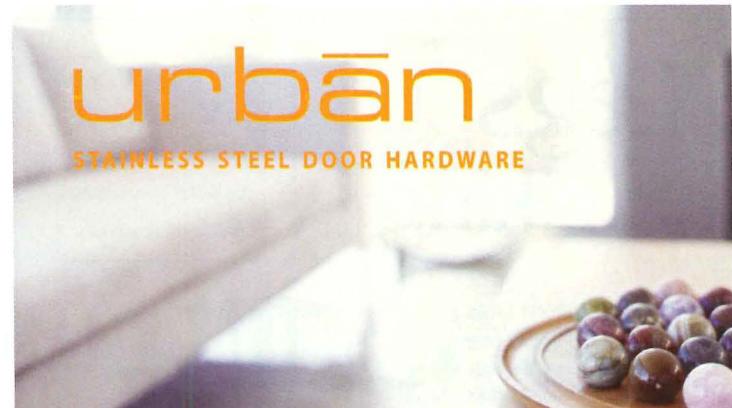
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Chicago, Illinois

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Program title: "Universal Design: Integrating Innovative Products and Spatial Design," (07/06, page 161)

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| 3. a | b | c | d | e | 8. a  | b | c | d | e |
| 4. a | b | c | d | e | 9. a  | b | c | d | e |
| 5. a | b | c | d | e | 10. a | b | c | d | e |

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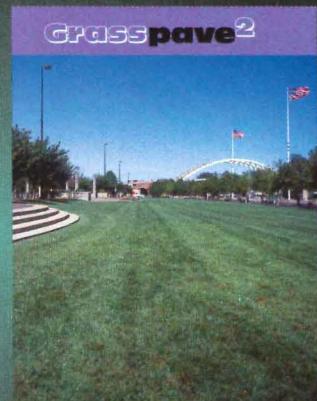
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# The I. Donald Terner Prize FOR INNOVATION AND LEADERSHIP IN AFFORDABLE HOUSING



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The Terner Prize is administered by the  
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### Don't miss your chance to apply!

Recognizing successful and innovative affordable housing projects and their leadership teams, the I. Donald Terner Prize is being inaugurated to commemorate Don Terner on the tenth anniversary of his death. One \$25,000 prize will be awarded biennially to the affordable housing project and leadership team that best exemplifies the spirit of Don Terner's work, commitment to affordable housing, and practice principles.

**First Prize Award \$25,000**  
**Five Finalists Awards \$5,000**

### We are honored to announce our jury:

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John King, *Urban Design and Architecture Reporter,  
San Francisco Chronicle*

Greg Maher, *Vice President & Deputy General Counsel, Local  
Initiatives Support Corporation*

J. Michael Pitchford, *President & CEO, Community  
Preservation & Development Corporation*

Geoffrey Wooding, AIA, *Principal, Goody Clancy*

An application may be submitted by anyone involved in the planning, development or operation of a project, but must include the approval of the original project sponsor, developer, and the architect. Eligible projects must be located in the United States, and have been in operation for a sufficient amount of time to demonstrate success.

**Applications are due on September 18, 2006.**

For more information and an application go to  
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| Circle Reader Service #150

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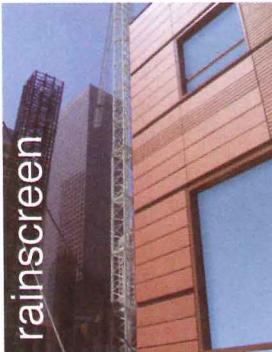
DeckLok is a patented bracket system that secures all critical connections of the deck—deck to building, stair and railpost components to the deck. Spec DeckLok into your construction designs to meet or exceed IRC 2000 requirements. Up to 1500% stronger deck connections. Code Compliant HDG or Stainless Steel.

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| Circle Reader Service #153

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A "green" architectural cladding system delivers the advantages of rain screen performance while retaining the beauty and richness of terra cotta. TerraClad is produced in the U.S. at Boston Valley Terra Cotta Company's state of the art facilities. Available in colors, sizes and patterns to match the designer's imagination.

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| Circle Reader Service #151

Boston Valley Terra Cotta  
[www.terraclad.com](http://www.terraclad.com)

**Nylon Railing System****Handrail Design Inc.**

HEWI® nylon railing system: Add a splash of color and a measure of strength to your next project with nylon-coated railings. Virtually maintenance free, HEWI® railings provide exceptional structural strength, chemical resistance and hygienic qualities. Choose tempered glass or perforated metal infill, colored nylon or solid wood handrails. Standard and custom designs available. Complete supply and installation services accessible throughout North America. HDI railing systems include inox™, CIR-CUM™, HEWI Nylon, and d line™.

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| Circle Reader Service #154

**Thin Stone Cladding Systems****Thin Stone Systems, LLC**

Thin lightweight natural stone wall cladding by THIN STONE SYSTEMS, LLC offers economical solutions for new construction and renovation, for both exterior and interior. Reinforced by a special patented process, the thin veneer panels of natural granite, marble, or limestone are applied to a structural framing system of extruded aluminum. Weighing only 6-lb. psf, the wall system provides many advantages including speed and simplicity of installation.

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[www.thinstonesystems.com](http://www.thinstonesystems.com)

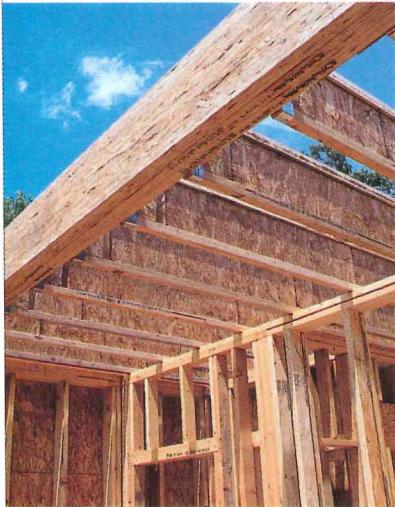
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**Aluminum Access Ladders****O'Keeffe's Inc.**

O'Keeffe's has been manufacturing quality architectural building products for over 60 years, providing their customers with one of the largest selection and highest quality of aluminum access ladders on the market today. O'Keeffe's custom fabricates virtually any type of access, caged or ship ladder depending on your need.

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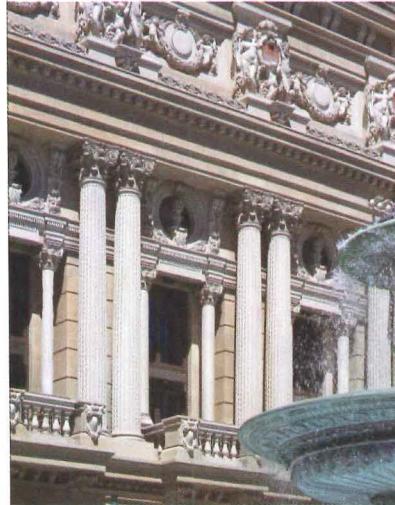
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**Beams, Headers & Columns****iLevel™ by Weyerhaeuser**

iLevel™ Trus Joist® Parallam® parallel strand lumber (PSL) is known for uniform quality, strength and good looks. iLevel's revolutionary technology delivers beams, headers and columns that are stronger, straighter and longer than conventional lumber. Parallam PSL beams and headers are available in large sections, eliminating field assembly and are compatible with common hardware—making installation quick and easy.

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| Circle Reader Service #156

**Columns, Balustrades and Cornices****Melton Classics, Inc.**

Melton Classics provides the design professional with the most comprehensive selection of quality architectural products in the industry, including architectural columns, balustrades, mouldings, cornices, and a wide array of architectural elements. Architectural columns are available plain or fluted, load-bearing or column covers, round or square in fiberglass, fiberglass/marble composite, synthetic stone, cast stone, GFRC, and wood for paint or stain. Melton Classics offers maintenance-free balustrade products ideal for any application.

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[www.meltonclassics.com](http://www.meltonclassics.com)

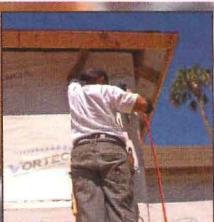
| Circle Reader Service #157

**Insulated Composite Spandrel Glass Panel****Mapes Industries, Inc.**

MapeSpan is a laminated composite glazing panel that combines a heat strengthened glass with ceramic frit on the #2 surface, an insulating core, and a finished interior. Laminated wall panels can be glazed in a monolithic unit from a single source which eliminates costly field labor. Specialty panels to meet fire and sound codes are also available. Interior finishes include porcelain on aluminum, Kynar, anodized and baked enamel. Consult the company's web site for design information or contact the factory.

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[www.mapes.com](http://www.mapes.com)

| Circle Reader Service #158

**Draining Air & Water Barrier****Valeron Strength Films**

Introducing the first non-directional draining water-resistive barrier. Unlike existing flat housewraps, Valéron Vortec™ with EVD Technology has a unique 3-D surface that allows drainage of water and moisture behind the exterior siding. The patent-pending crush-resistant pattern creates airspace between the siding and Vortec's surface reducing the chance of mold.

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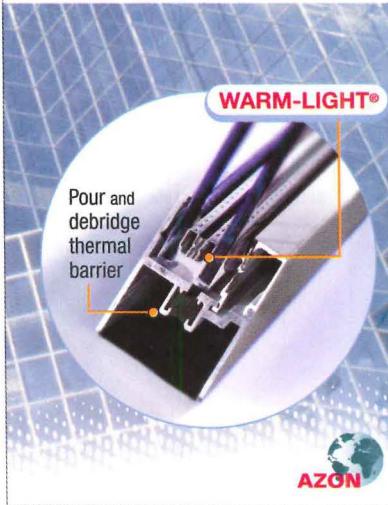
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**Fire-Rated Aluminum Products****Aluflam North America**

Imagine being able to specify a fire-rated system that looks so good you wouldn't know it's fire-rated. Imagine the clean, rich lines of clear glass. With ALUFLAM storefront and curtainwall systems, this is reality. Contact them for further information.

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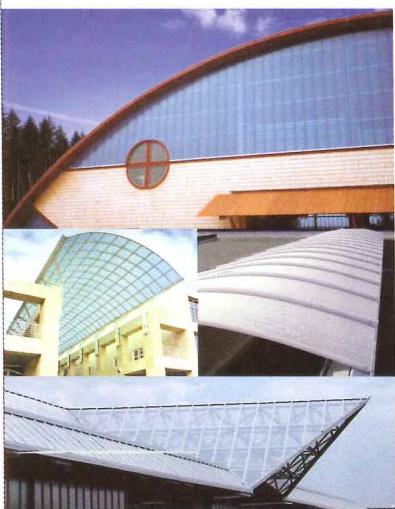
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**Extreme Performance Insulating Glass****AZON USA INC.**

Warm-Light® spacer for insulating glass provides a more comfortable interior environment, reduces thermal conductivity and condensation on the glass surface while lowering utility costs. Azon is the global leader in developing technology for the manufacture of thermal barrier aluminum fenestration, commonly referred to as the pour and debridge method.

800-788-5942  
[www.warmedge.com](http://www.warmedge.com)

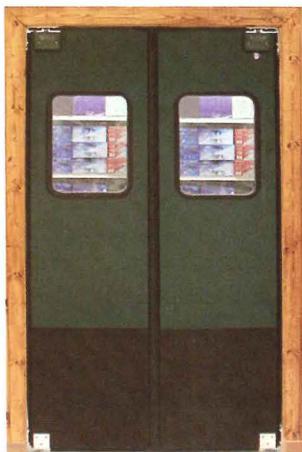
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**Polycarbonate Panels****CO-EX Corporation**

For transparent roofing, skylights or side walls, consider Macrolux® BDL from CO-EX. These panels feature a unique lightweight, multi-layered polycarbonate construction giving them increased thermal insulation and structural strength with high impact resistance. BDL is a complete glazing system with all necessary fittings required to economically fasten the system to most structures. BDL panels have a clear, extruded UV absorber on both sides.

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| Circle Reader Service #162

**Double Action Doors****Eliason**

Easy Swing® Doors manufactured exclusively by Eliason Corporation. Model PMP-2 high impact traffic door reinforced throughout the impact area and back spline. Prevents cracking at hinge location and warping at swing edge. Strong, durable, and yet flexible enough to absorb the initial impact without the use of spring bumpers. Excellent for use in sales to stock room use. All doors are custom manufactured to your finished opening. Uses of doors range from sales to stock room, walk-in coolers, delis, secondary freezer doors, restaurants, or just personnel doors. Easy to install.

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| Circle Reader Service #163

**Versatile Windows****Fenevations, LLC**

Fenevations manufactures MegaWood, Infinity Bronze, and SteelView windows. Megawood offers fine hardwoods with furniture-grade finishes, combined with heavy gauge bronze or hand welded, aluminum extruded exteriors. Infinity Bronze is a unique thermally broken solid bronze system offering beauty, style and traditional sightlines. SteelView offers stainless steel beauty for contemporary designs.



908-688-5710  
[www.fenevations.com](http://www.fenevations.com)

| Circle Reader Service #164

**Ceramic Frit****Goldray Industries Ltd.**

Decorative glass made with Goldray's Ceramic Frit coating is available in a virtually limitless pallet of colors and designs. The coating is permanently fused to the glass surface creating a durable and low maintenance product. Glass coated with Ceramic Frit is ideal for applications such as signage, partitions, balustrades, and art glass. Please visit Goldray's web site to learn more about this and many other innovative products from Goldray.

800-640-3709  
[www.goldrayindustries.com](http://www.goldrayindustries.com)

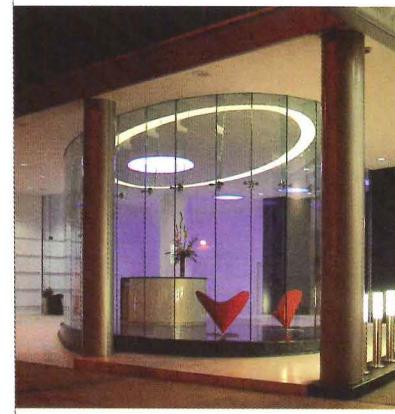
| Circle Reader Service #165

**Anti-Reflective Glass****IGT Glass**

Luxar anti-reflective glass is perfect for any glass application where glare and reflection are not wanted. Luxar reduces glare and reflection to less than 0.5%. It is perfect for museums, store fronts, stadiums, restaurants, projection rooms and display cases. It is available on low iron float glass for maximum clarity in 2mm to 12mm thicknesses to meet any project requirement.

480-767-8220  
[www.luxar.ch](http://www.luxar.ch)

| Circle Reader Service #166

**Building Solutions in Glass****Innovative Structural Glass**

Innovative Structural Glass, Inc. (ISG) offers systems designed to form magnificent entrances with expansive areas of nearly total vision. ISG systems are designed to create exceptional beauty combined with structural integrity. ISG products are meticulously engineered, built of the finest materials, and highly adaptable to creative architectural designs. Inventive designs are created based on the performance, appearance, strength, and tolerance of the glass. ISG also offers a wide variety of support structures for the glass.

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| Circle Reader Service #167

### High-Performance Translucent Building Systems

Kalwall Corporation



Gathering LEED™ points through daylighting can greatly impact any project. Kalwall's highly insulating, diffuse-light transmitting, translucent skylights, wall systems and replacement windows are uniquely suited to achieve the desired results. The use of Kalwall can contribute points in the categories of Sustainable Sites, Energy & Performance, Materials & Resources, and Indoor Environmental Quality.

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### Curved Translucent FRP Panel Systems

Major Industries, Inc.



**MAJOR INDUSTRIES**  
GUARDIAN 275® TRANSLUCENT DAYLIGHTING

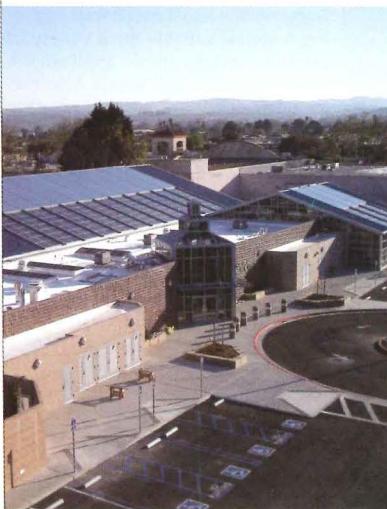
When your daylighting project demands something special, the TransCURVE™ translucent building panel system provides exceptional performance, with the added benefit of a striking, unique appearance. TransCURVE™ glazing panels feature a visually attractive aluminum grid core in several popular patterns, giving panels a refined look while maintaining exceptional strength. TransCURVE™ also features a premium architectural-grade FRP exterior skin that blocks damaging UV rays while transmitting the beauty of natural light.

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| Circle Reader Service #169

### Retractable Roof Enclosures & Skylights

OpenAire Inc.



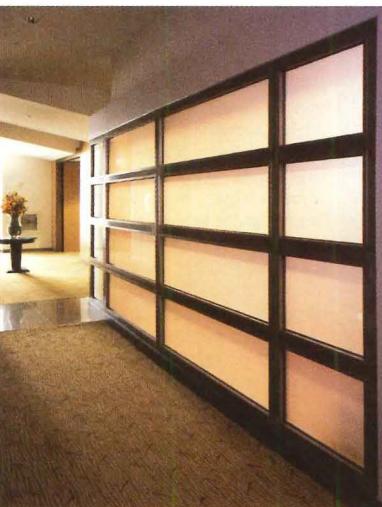
Custom-designed retractable roof structures and operable skylights capable of spanning up to 140-ft. At the touch of a button, motorized panels retract to open up to 50% or more of the roof area. OpenAire can span up to 140-ft. and do custom designs (domes, barrel vaults, biparting, etc.) using its exclusive maintenance-free, thermally broken aluminum framing. These enclosures and operable skylights are perfect for indoor waterparks, pools, atria, and anywhere that you want to bring the outside in.

800-267-4877  
[www.openaire.com](http://www.openaire.com)

| Circle Reader Service #170

### Fire-Resistant Glass

Pilkington North America - Fire Protection Glass



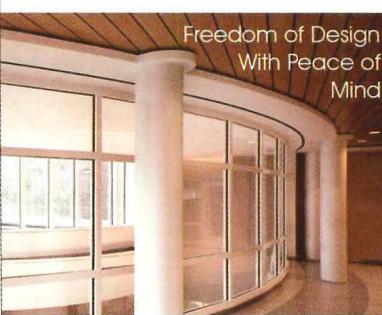
Pilkington Pyrostop™ is available with many options including opaque films, colored interlayers, surface designs and lightly sandblasted. Pilkington Pyrostop™ can also be combined with any of the Pilkington products to meet your design needs. For more information contact Technical Glass Products or see [www.pilkington.com/fire](http://www.pilkington.com/fire) or [www.fireglass.com](http://www.fireglass.com).

800-426-0279  
[www.fireglass.com](http://www.fireglass.com)

| Circle Reader Service #171

### Fire-Rated Glazing Solutions

SAFTI FIRST Fire Rated Glazing Solutions



SAFTI FIRST Fire Rated Glazing Solutions has been manufacturing fire-rated glass and framing for over 20 years. SAFTI FIRST's SuperLite™ product line includes fire-rated glazings for every application, rated from 20-min. to 3-hr. SuperLite™ can protect against noise, attack, impact, bullets, blast, hurricane and UV rays and is available in virtually any architectural make up, with enhanced energy performance. U.S. manufactured to ensure fast lead times. Call them at 888-653-3333 or visit [www.safti.com](http://www.safti.com) for all your fire-rated glazing solutions.

888-653-3333  
[www.safti.com](http://www.safti.com)

| Circle Reader Service #172

### Fire Rated Aluminum Framing

SAFTIFIRST



With SAFTIFIRST's SAFTIfire Frames, rated 45-min. to 2-hr., you can create the maximum barrier against fire and radiant heat while providing attractive framing that meets all the temperature requirements of the national building codes. Design flexibility of multiple forms makes for easy installation, creating a sleek, attractive profile.

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[www.safti.com](http://www.safti.com)

| Circle Reader Service #173

**Insulating Glass with Integral Blinds**

Unicel Architectural Corp.



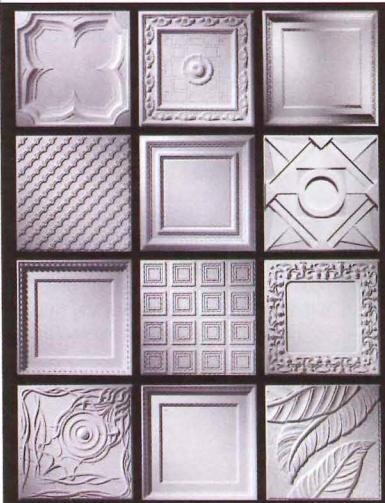
Unicel Architectural is the proud manufacturer of this unique patented glazing product: Vision Control®. With this custom unit, enjoy total control of light, privacy and sound without worrying about cleaning. Unlike ordinary blinds, Unicel's pivoting blinds made of extruded aluminum are mounted inside a hermetically sealed glass unit offering you 100% dust-free and germ-free louvered glazing, without cords or strings! Blinds are operated using a hand crank, thumbwheel, motorized switch or computer. Ideally suited in interior partitions, doors, windows, curtain walls and skylights.

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[www.visioncontrol.qc.ca](http://www.visioncontrol.qc.ca)

| Circle Reader Service #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.

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| Circle Reader Service #175

**Designer Glass Film Overlay**

Architectural Products by Outwater, LLC



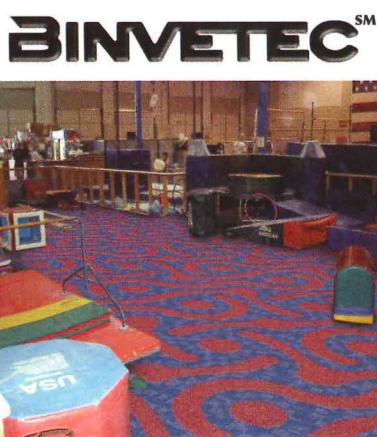
Outwater has updated its line of Designer Glass Film Overlay with nearly 70 different patterns from which to choose, not only offering new designs, but different application and usage capabilities as well. This enables users to easily create or "overlay" an entirely new permanent or temporary appearance for any existing glass installation as well as for many other smooth, shiny non-porous surfaces such as panels, partitions, display cases, signage, mirrors, windows, doors, displays and exhibits. Originally created as a low cost alternative to etched glass, Glass Film will not discolor. Free 1,100-page Master Catalog available.

800-835-4400  
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| Circle Reader Service #176

**Free-Pattern Rotating Carpet Tiles**

Binvetec, LLC



**FreePATTERN**  
ROTATING CARPET TILES™

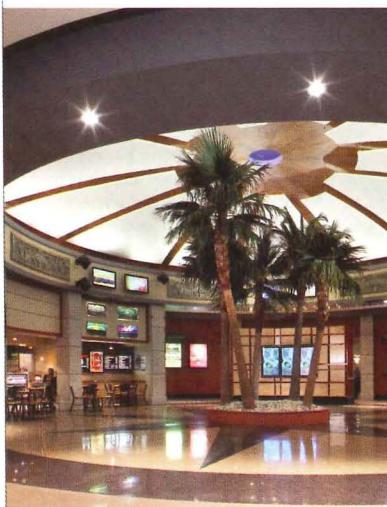
Free Pattern Rotating Carpet Tiles™ with TractionBac™ are the only modular carpet floor covering specifically designed to allow a multitude of patterns to be created or no pattern at all, using only one tile design. The 3-ft. square commercial grade class-1 carpet is suitable for all interior environments, nine colors to choose from. Optional full-service floor design services available by the product designer and dealer. See website for full presentation. Feel free to get floored.

714-731-2369  
<http://www.binvetec.com>

| Circle Reader Service #177

**Custom Ceiling Panels**

Eventscape Inc.



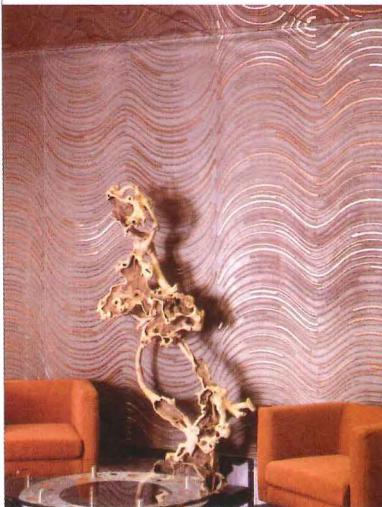
Backlit suspended frame and fabric ceiling panels. Just one example of the numerous custom solutions provided by Eventscape. Designers have the freedom to create virtually any form, clad with any material. Custom ceiling solutions engineered and fabricated to meet your specifications. View their complete portfolio on their web site. Create without boundaries.

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[www.eventscape.net](http://www.eventscape.net)

| Circle Reader Service #178

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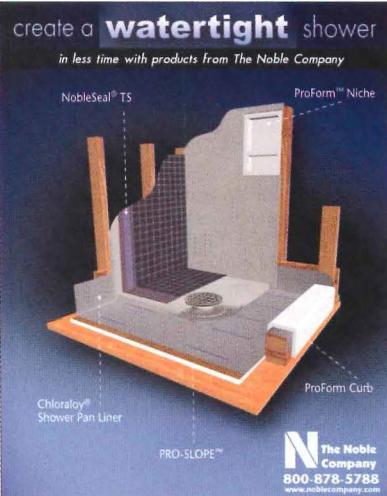
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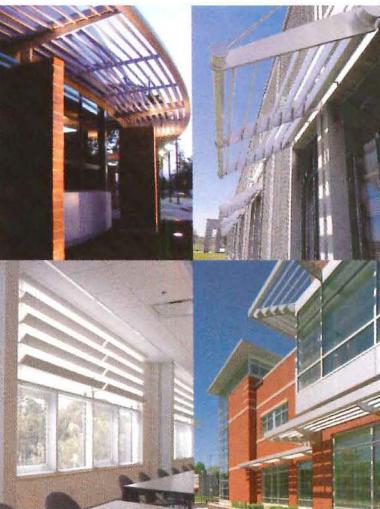
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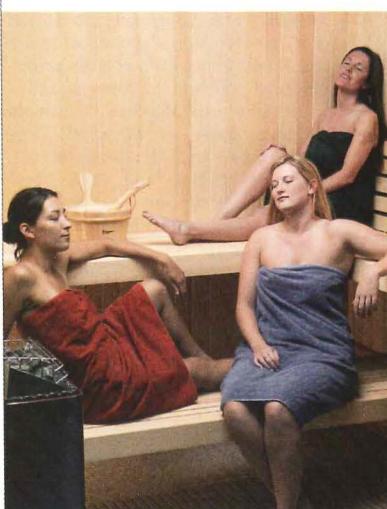
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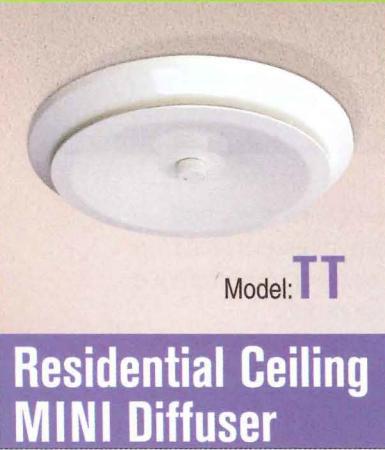
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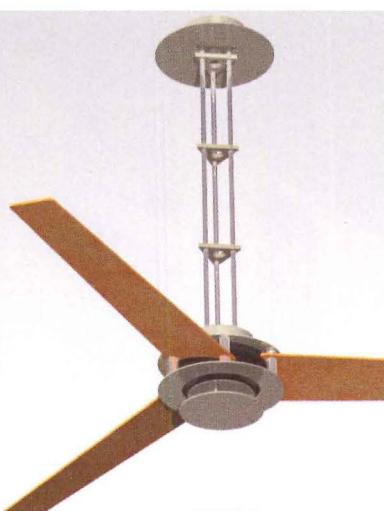
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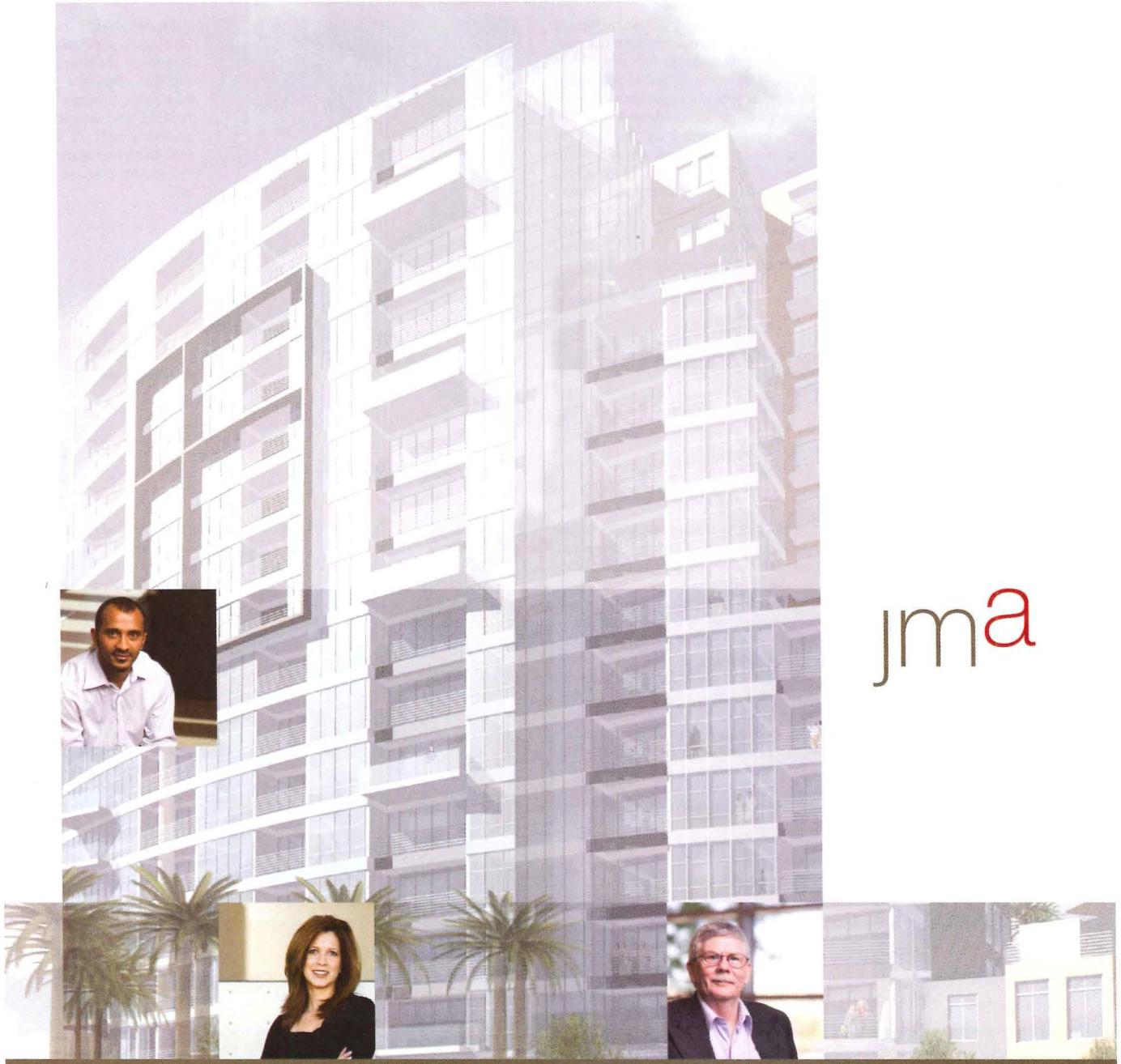
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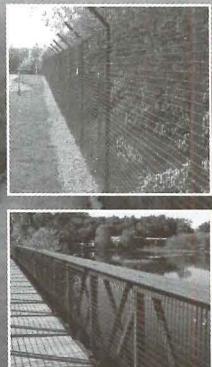
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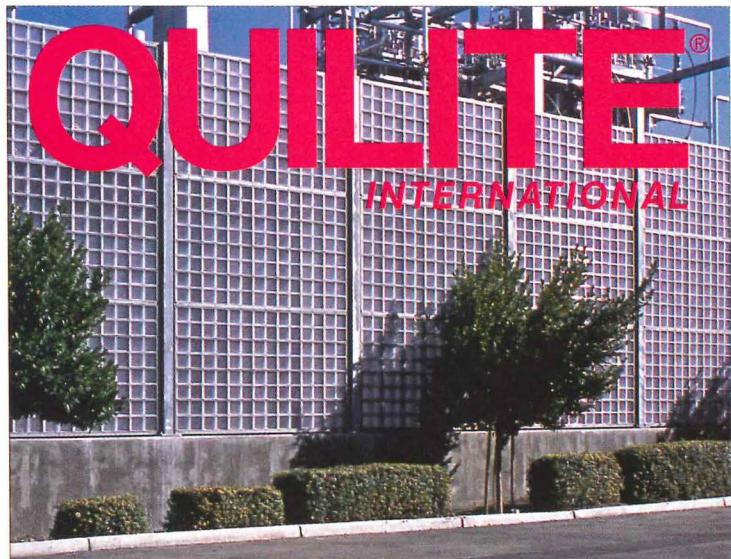


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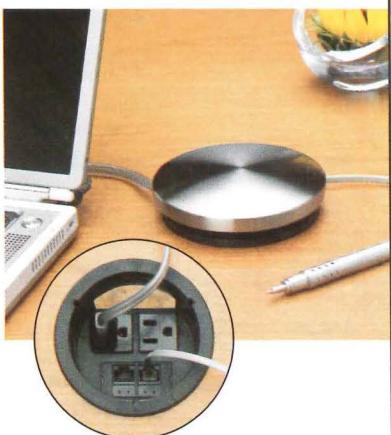
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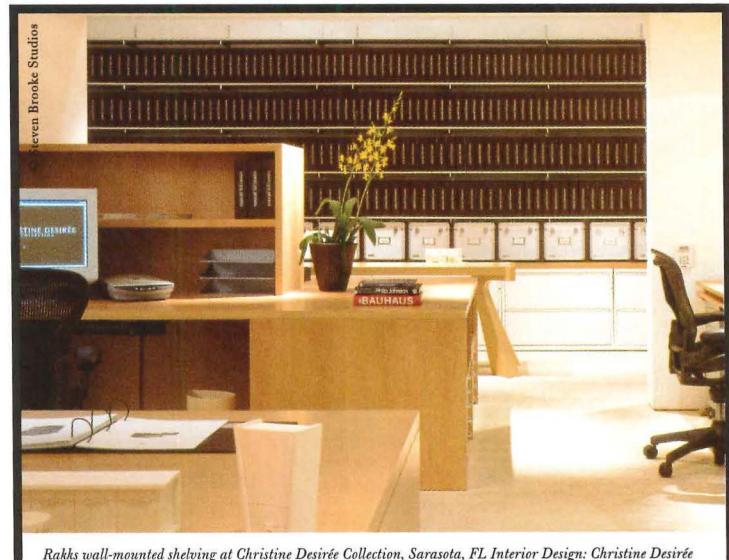
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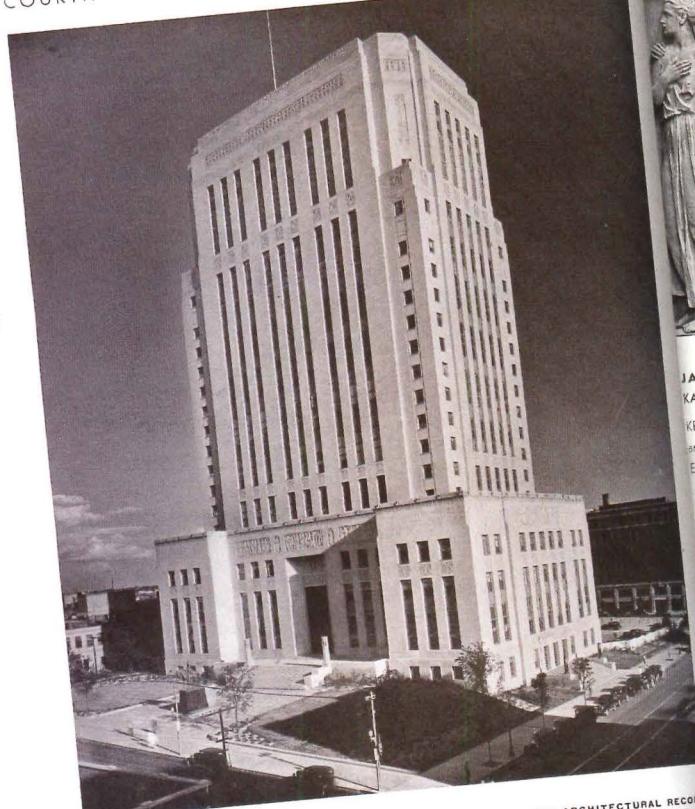
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# AR Past and Present

COURTHOUSE



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COURTHOUSE



JACKSON COUNTY COURTHOUSE  
KANSAS CITY, MISSOURI

KEENE & SIMPSON, WIGHT & WIGHT  
and FREDERICK C. GUNN, Architects;  
EDWARD F. NEILD, Consulting Architect

Sculptural panel over main entrance representing law and justice. CHARLES KECK, SCULPTOR.

While the three hundred feet of height of this courthouse is the equivalent of 28 stories in the usual business building, the courtroom floors in this building actually are two stories in height, with balcony offices providing each large courtroom with plenty of office space for the use of lawyers and court attendants.

A practical arrangement of the courtroom is featured in this structure. The judge's bench is in one corner of the room, permitting a clear view of witnesses, jurors and audience. The jury box is so located as to give a clear view of the witness and the bench. The witness chair is placed against the rear wall in about the position that the judge's bench occupied in older courtrooms—a focal point for every eye in the room.

The floor materials vary from asphalt tile on the ground floor and a part of the first floor to rubber tile in the court corridors of the fourth, fifth, sixth, ninth and tenth floors. The floor treatment elsewhere is a terrazzo tile. Battleship linoleum is used generally on the floors of offices and in the courtrooms and court quarters.

Black walnut and white oak are the woods used in the cabinet work and trim. All furnishings and all metal equipment were designed especially for this building.

Two floors of jail accommodations are just beneath the execution chamber at the top of the building.

A dual system of heating and air conditioning is yet another interesting feature of this building. Huge steam boilers are responsible for courthouse comfort in winter, while through the same pipes air conditioning in the summer in parts of the building is made possible.

THE ARCHITECTURAL RECORD ISSUE OF DECEMBER 1936

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From the pages of ARCHITECTURAL RECORD 1936

## Classicism, our old friend

Looking at the Jackson County Courthouse in Kansas City, Missouri, built in 1934, and originally published in RECORD in December 1936, the application of the term "Classical" seems obvious.

The stripped-down, Art Moderne version of Classical-style architecture reached a kind of apotheosis in the 1930s through the Works Progress Administration. In fact, it was even given a name, Public Works Administration (or PWA) Moderne.

In Kansas City, a small army of architects, including Keene & Simpson, Wight & Wight, Frederick C. Gunn, and Edward F. Neild, produced a monumental, hierarchically planned, strictly symmetrical, and thoroughly institutional building with a sprinkling of archaic Greek and Roman touches of sculpture and architectural decoration filtered through the Machine Age aesthetic.

Architects continue this covert infusion of Classical architecture strategies into modern styles, sometimes skipping the Modern altogether. One need only look as far as Washington, D.C., to see the Classical style hazily incorporated into today's built environment, perhaps most famously in Friedrich St. Florian's controversial design for the National World War II Memorial on the National Mall [RECORD, August 2004, page 71].

What is at stake today in the use of the Classical tradition is what we might simply call "good taste." At its most authentic, the reintroduction of Classical orders during the Renaissance and ever since has reflected a continuing reliance on the decorum embodied in the buildings of the ancient world, where specific building styles acted as cues to a public often educated through imagery alone. The style's popularity still emerges in new courthouse projects, as well as in the call for the preservation of older buildings: In 2005, Berkebile Nelson Immenschuh McDowell Architects designed a master plan for the Jackson County Courthouse site and restored its exterior. Accepted as a norm over centuries of use, the Classical tradition is our most comforting friend, if not always the most apposite. *Russell Fortmeyer*

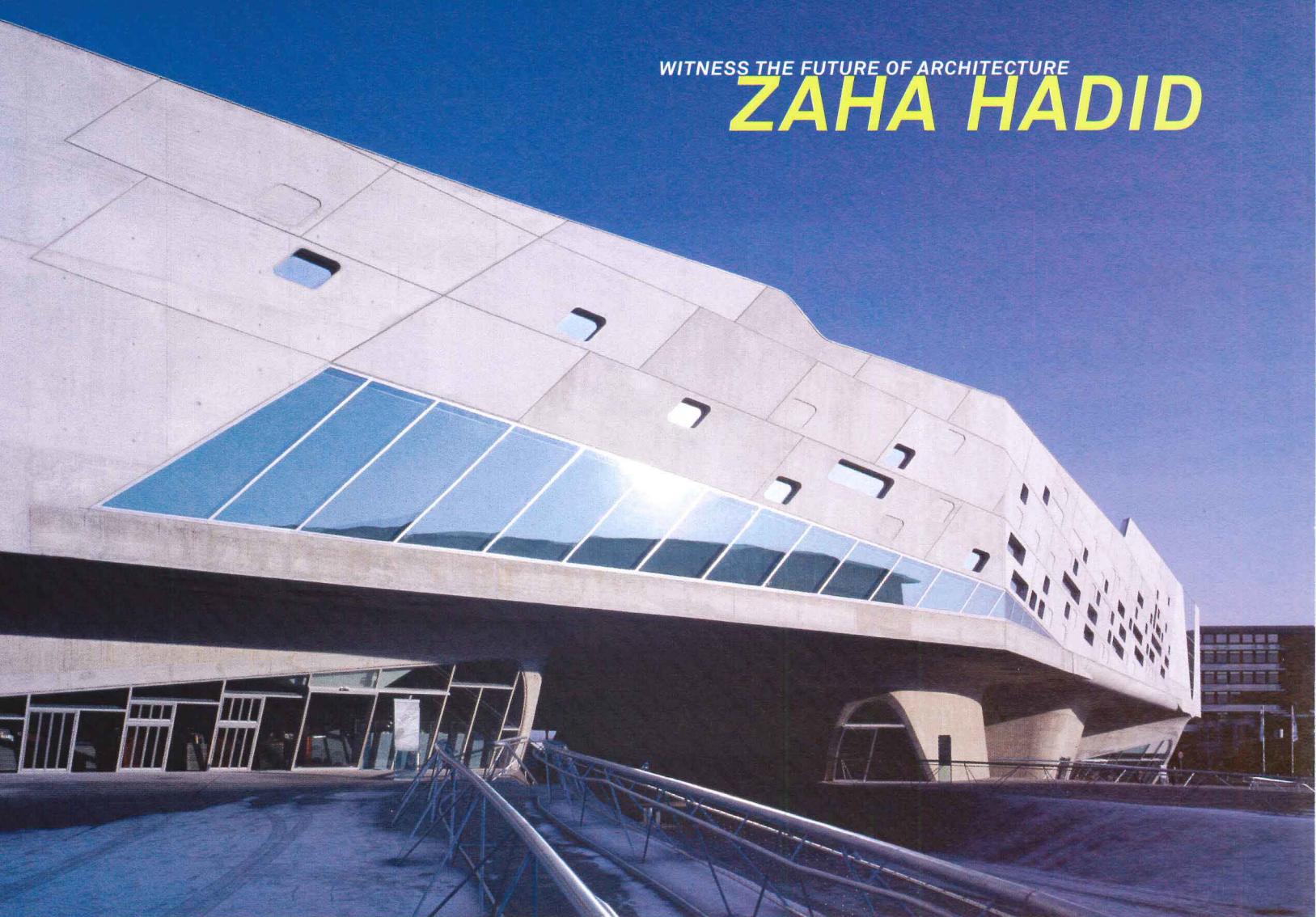


The 1934 Jackson County Courthouse recently underwent a complete exterior renovation.

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ZAHA HADID



Zaha Hadid Architects, Phaeno Science Center,  
Wolfsburg, Germany, 1999-2005. Photo © Werner Huthmacher

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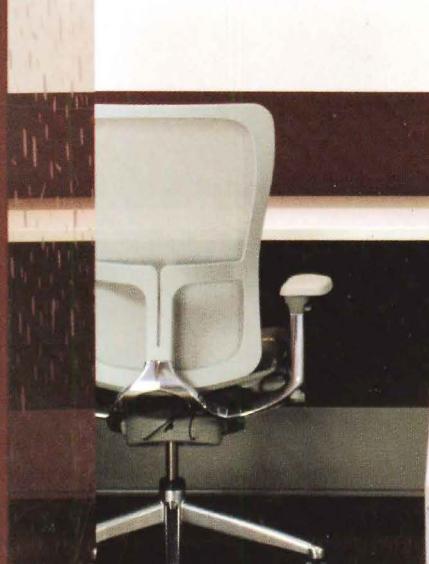
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