

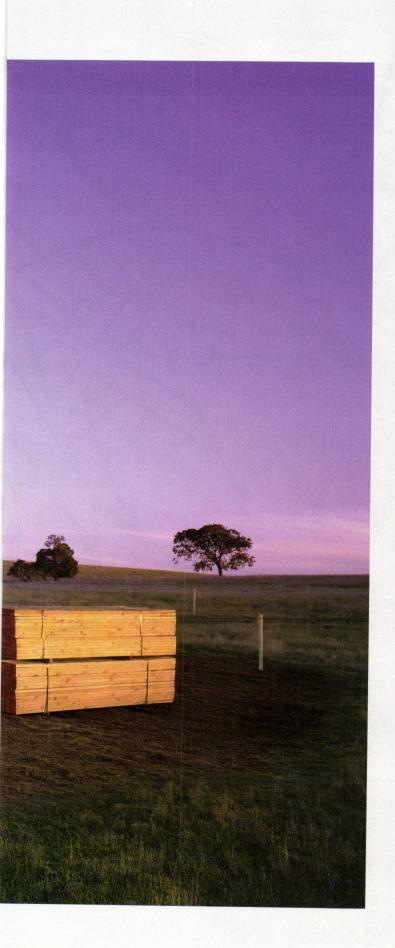
steel, the show.

Make a statement that has high drama and visual impact. That's precisely why we created our unique portfolio of MetalWorks™ and WoodWorks™ ceilings and Infusions™ accent canopies. All are available in an extensive array of innovative options designed to take a starring role in your next creation.

1-877-ARMSTRONG

armstrong.com/ceilings







The right windows and doors help bring your plans to life beautifully. Specify Marvin, and you're assured of complete design flexibility and better-performing windows and doors with superior aesthetics. That includes furniture-grade interiors, consistent sight lines and the tightest tolerances possible—along with countless design options, from cladding profiles to hardware choices.

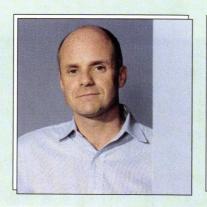
Call 1-800-236-9690 or visit marvin.com



Circle 33 or www.architecturemag.com/productinfo



2B Enric Miralles and the team of EMBT/RMJM designed a dense, low-slung fabric for the new Scottish Parliament, with internal and open-air corridors and concourses, irregularly shaped interior volumes, and ample fenestration for air and light.



BUFFALO ASCENDANT

BY C.C. SULLIVAN

We know architecture can transform a city. Can it also save a city? Buffalo, an all-but-forgotten industrial town near Niagara Falls, is about to find out.

For those not in the know, this lakeside metropolis contains a remarkable architectural legacy. Beginning in the 1890s with a parkway system by Frederick Law Olmsted and renowned structures by Stanford White, H.H. Richardson, Daniel H. Burnham, and Adler and Sullivan, the wealthy birthplace of the steam-powered grain elevator gained global prominence in 1901 as the site of the Pan-American Exposition, an electrically illuminated spectacle that briefly earned Buffalo the moniker "City of Light." Subsequent years brought major works by Frank Lloyd Wright—for the Larkin Soap Company and for Darwin D. Martin, perhaps his greatest patron—as well as the Rapps, the Saarinens, Gordon Bunshaft, and Minoru Yamasaki, among many others.

But as these later names were working in the 1960s, the glimmer of Buffalo's midcentury industrial successes (aerospace, steel, automotive) were rapidly fading—as was its legacy of great building commissions. And unlike other U.S. cities, Buffalo was untouched by that era's tidal wave of urban renewal.

Being passed over might have been Buffalo's saving grace: In spite of decades of economic challenge, many of its architectural gems remain intact. Today, this outdoor museum is a highly visible reminder of the city's rich cultural legacy, which includes music halls, botanical gardens, and the unrivaled collection of modern art at the Albright-Knox Art Gallery.

A few years ago, these cultural assets became the focal point of a push by descendants of local industrialist families to re-energize Buffalo. Wright's Darwin D. Martin House (1906) became a rallying point; in 1992, restoration of this home, widely considered one of the architect's preeminent works, began in earnest. Other projects also employ Wright's legacy to boost tourism and commerce in Buffalo, such as the preservation of Graycliff—his 1927 summer house for the Martin family in nearby Derby, New York—and the construction of as-yet-unrealized Wright designs for a boathouse, a mausoleum (January 2005, page

11), and a gas station for the Pierce-Arrow Museum.

While local leaders unflaggingly promote their built heritage, other Buffalo denizens prefer to focus on the city's promising contemporary work. In Olmsted's long shadow, for example, Robert Shibley's regional plan for Buffalo, "Queen City Hub," earned wide praise and honors from the American Planning Association last year. And two much-anticipated life-sciences buildings are underway: a visually dynamic research lab by Merhdad Yazdani and a large bioinformatics facility by Philadelphia's Francis Cauffman Foley Hoffmann, both under an elegant master plan by Chan Krieger and Associates. Even reuse projects are making news, such as the neogothic Asbury Delaware Church by John H. Selkirk (1876), now being adapted for an unlikely occupant: Righteous Babe Records.

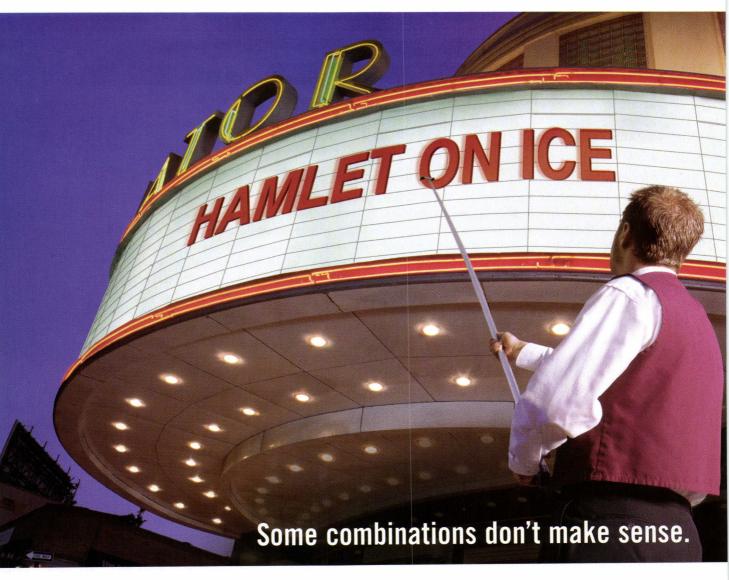
The most powerful new development, however, is a small and subtle visitors' center tucked behind the Martin House, set to break ground this summer. Designed by Toshiko Mori, the pavilion's glass walls will expose an inverted hipped roof set on four large piers containing mechanical systems—a direct reference to Wright's structural approach for the house, in which quartets of columns conceal internal plenums for heating and ventilation.

Most aptly, the visitors' center unites Buffalo's legacy of architecture, beauty, and technology with its present-day equivalent—a worthy metaphor for a city that sees its architectural assets, both new and old, as its saving grace.

PASSING THE BATON

Just as Buffalo hands over its built legacy to a new generation of designers, so too did leading architects at Architecture's P/A Awards ceremony at the AIA New York Chapter's Center for Architecture last month. Former P/A Awards jurors and recipients Peter Eisenman, Thom Mayne, and Brian Healy were on hand to confer citations to five first-time awardees. Thanks to the presenters for their time, anecdotes, and good wishes for our 52-year tradition. And we congratulate (again) all seven of this year's winners.





This one does.

Transparency meets solar control in an unbelievable new combination: *Starphire®* ultra-clear glass and *Solarban®* 60 solar control low-E. Now it's easy to design brilliantly transparent glass into almost any project without sacrificing solar control – or your budget. It's a combination you have to see to believe – after all, looks are still everything. For samples of *Solarban* 60 *Starphire* glass, call 1-888-PPG-IDEA. Or visit www.ppgstarphire.com.



letters

Research matters

The article on increased interest in research in the architecture profession and the AIA [December 2004, page 62] stimulated my hopes that we will focus again on the fact that ours is a knowledge-based field—and that doing good service and design is more than just surface, form, and appearance.

George Siekkinen

National Trust for Historic Preservation Washington, D.C.

Going orna-mental

I am so bored with the one prominent aesthetic filling your pages: the modern design idiom. Some call it "contemporary" if it has current technologies or some minor invention, but the root ideas are from Bauhaus. As you insightfully noted, "ideas from history, nature, or other civilizations ... are best viewed as noteworthy starting points" [December 2004, page 13]. How about focusing on more work that addresses these starting points rather than continuing on with work that isn't, as you wrote, "precisely in sync with our times"? Winston Churchill said, "The further you look into the past, the further you will see into the future." Let's keep our eyes wide open.

Mark Parry

Santa Rosa, California

I was immediately drawn to your editorial on ornament, but I was let down by the same linguistic gymnastics and obscure phrases that most writers employ when discussing the subject. It's as if our puritan modernist forefathers were still exerting their guilt-ridden consciences over us. Still, I hope you continue to cover the subject.

Daniel Morales

Washington, D.C.

While pardoning ornament from its criminality, why not transcend the outdated stylistic moralizing that led to ornament's original vilification? Sanctimonious verbiage on traditionalists and revivalism is



12 2004 1

as repugnant as any form of dogmatic intolerance.

Michael Burch

La Canada Flintridge, California

Healthcare? Ask the users

Regarding the editorial on healthcare facilities [November 2004, page 11]: First, how should we judge their designs? Simple: Interview the users. Of course, this is not simple: Users span a wide range of abilities to articulate how they respond to architecture, so interviewers need to be skillful social scientists. But how else might it ever be possible to usefully inform future designs? Second, should healthcare architecture be treated as its own discipline? No. Separating healthcare architecture from the main body of the profession is a power move to make it difficult for "outsiders" to get proiects. There is a strong tradition of client-held beliefs that the most experienced healthcare designers are the most likely to perpetuate past patterns—and that those who've never designed a healthcare building can bring fresh ideas.

Wayne Ruga

The Center for Health Design Cambridge, Massachusetts

CORRECTION

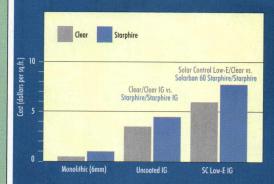
Kalwall's blast-resistant panels were incorrectly called "polycarbonate" [December 2004, page 102]; they are structural composites of thermoset and aluminum.

Get a clearer picture of the facts.

Now that the clearest glass in the world is available with one of the industry's best-performing solar control low-E coatings, you have more freedom to express your design vision without sacrificing energy savings – or your budget.

- Neutral exterior appearance and the truest color transmittance of any solar control low-E glass for exceptional transparency in all vision areas.
- Extraordinarily high visible light transmittance for a solar control low-E product: 73%.
- Blocks more than 60% of total solar energy.
- Available as a standard product through the 28 locations of the PPG Certified Fabricator Network – so Solarban 60 Starphire glass can be delivered with accelerated lead times.

Most important, thanks to advances in PPG manufacturing technology, this exceptional product is surprisingly affordable. For typical projects, having *Solarban* 60 *Starphire* IG units installed in a curtain wall would result in a 4-5% difference in glass cost.



Call 1-888-PPG-IDEA or visit us online at www.ppgstarphire.com for more information or to order samples.

NOTE: PPG does not establish pricing or recommend market pricing for fabricated glass products. Any mention of pricing above is a rough estimating guide provided strictly as a service to architects. For accurate budget pricing on fabricated glass products, as well as overall installed costs, architects should contact a qualified glazing contractor. Price examples are based on a standard set of assumptions. Please requirest ITE 7070 for details.

IdeaScapes, Solarban, Starphire, PPG and the PPG logo are trademarks owned by PPG Industries, Inc.





– Eugene A. Delmar, FAIA, Delmar Architects, P.A..

PAC-CLAD

Petersen Aluminum

"The cost of alumin has never been an for us. It's a life c issue. Aluminum a a longer service life

—Tom Hutchinson, Principal, Hutchinson Design Group, Ltd.

"The cost of alumin not an issue for us quote on 2-3 jobs day and have neve or lost a job due to cost difference of a num. The increase is only pennies. Th of labor is the real not the material."

—Jim Donovan, Westar Roofing Corporation

or projects located coastal regions, agg environments, or are ject to acid rain, PAG Aluminum may be t product of choice fo roofing applications. Inherent properties superior corrosion re ance, lighter weight and ease of installa PAC-CLAD® Aluminu available from Peter over 35 standard co and a wide variety 580 Class 90-rated profiles.

Elementary School: Landover Owner: Prince Georges County F Architect: Delimar Architects, P.A. General Contractor: Hess-Gulfran Roofing Contractor: Kirn-Side Co Profile: Red-Roof Standing Sear Color: Colonial Red

Hill Road Middle School/Benjam

Petersen Aluminum

1005 Tonne Road, Elk Grove, IL 60007 1-800-PAC-CLAD or 1-847-228-7150 Fax: 1-800-722-7150 or 1-847-956-7968 www.pac-clad.com **Other Plant Locations:** MD: 1-800-344-1400 TX: 1-800-441-8661

GA: 1-800-272-4482

Circle 220 or www.architecturemag.com/productinfo

IGHI: RICHARD SCHULMAN/CORBIS; LEFT: PUNIT PARANJPE/REUTERS/CORBIS

ARCHITECTS WORK FOR TSUNAMI RELIEF

U.S. architects are responding to the tsunami-devastated region of Southeast Asia by contributing skills and resources to relief and reconstruction efforts in the region. Several organizations are raising funds to rebuild homes and provide temporary shelter for the millions left homeless in 12 countries hit by giant waves on December 26.

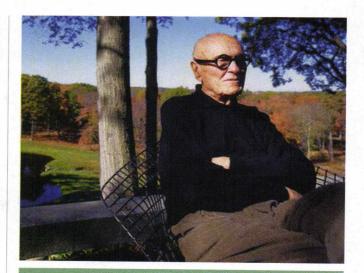
Habitat for Humanity is nearly halfway to their goal of raising \$25 million to fund the construction of 25,000 "courthouse" structures in four of the hardest hit countries: Sri Lanka, India, Thailand, and Indonesia. The single-family dwellings feature a main room, veranda, and sanitary facilities. Donations have come from corporate and private sponsors worldwide, including the building-supply retailer Lowe's, which has pledged to build the first hundred homes and is matching private donations made on Habitat's website.

Other organizations committed to help in the rebuilding effort include New York City-based Architecture for Humanity, raising over \$150,000 in cash and professional services. Among other initiatives, the nonprofit group has been asked by the Sri Lankan government to help develop a master plan for the country's hard-hit Kirinda region. **Katie Gerfen**



FEINER RETIRES FROM G.S.A.

Edward Feiner, the guiding force behind the General Services Administration's decade-old Design Excellence Program, has retired from his position as chief architect of the agency. Following a 35-year career in public service, Feiner begins life in the private sector as director of office operations for Skidmore, Owings & Merrill in Washington, D.C., effective February 1. (According to SOM, his new role will exclude marketing to the federal government.) The former chief architect leaves a legacy of public architecture reinvigorated by high standards for design, urbanism, and sustainability. A national search for Feiner's successor is underway. **Abby Bussel**



PHILIP JOHNSON, 1906-2005

Philip Johnson, often referred to as the dean of American architects, died on January 25 at the age of 98 in his famous Glass House (1949) in New Canaan, Connecticut.

The winner of the first Pritzker Prize in 1979 and a recipient of the AIA Gold Medal in 1978, Johnson was a stylistic chameleon. His oeuvre, ranging from Mies-inspired modernism to postmodernism, includes the sculpture garden at New York City's Museum of Modern Art (1953), the Seagram Building in Manhattan (1958), on which he collaborated with van der Rohe, the Transco Tower in Houston (1983), and the Chippendale-topped AT&T tower (1984) also in Manhattan.

Influencing architecture far beyond his built legacy, Johnson was a historian, author, and the first curator of architecture at the Museum of Modern Art. His 1932 exhibition and book, *The International Style*—produced with Henry-Russell Hitchcock—literally coined the phrase, and it endures as a seminal reference on the architecture of that time. **Anna Holtzman**

→ The U.S. General Services Administration (GSA) released a study in January that estimates the costs of developing green facilities using the U.S. Green Building Council's LEED standards. The report, prepared by Steven Winter Associates with contracting giant Skanska, suggests that a federal building pursuing a LEED "gold" rating costs between 1.4 and 8.1 percent more than a building that merely conforms to the GSA's standards.

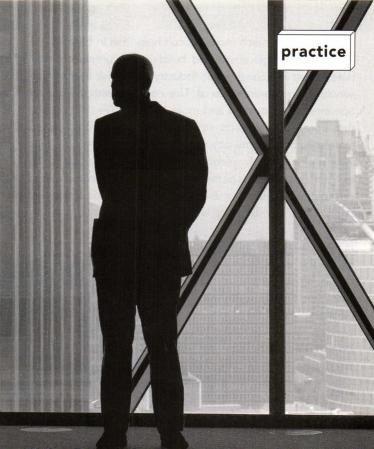
Competition update: A star-powered jury selected four professional-category winners in the C2C (Cradle-to-Cradle) Home Competition [November 2004, page 15]. The winners—who include Brian Cloward, Bruce Kinnan, and Tammy Frick of Seattle; Patrick Freet of Minneapolis; Russell Ashdown of Leicester, U.K.; and Douglas Oliver and 2002 P/A award-winner Vincent Snyder of Houston—will work with competition organizers to develop their designs and build the homes in Roanoke, Virginia, this summer.

Arts&Crafts™

Designed with the energy efficiency and optical performance of a modern luminaire, the Arts & Crafts reflects the style and warmth of the Craftsman era.







WHY IS EUROPE WINNING?

For Europeans, architecture is a *process of making* rather than a product of design. The results speak for themselves. by Peter Buchanan

American architectural students and recent graduates inundate better-known European architects with job applications. Particularly sought out are offices where they might learn from the leading edge of architectural and technological innovation, about aesthetically refined high-performance design and construction, and the highly collaborative working methods that achieve both these and the snug synthesis of a building's various systems—space, structure, services, and skin—characteristic of such architecture. These skills, the budding designers assert, cannot be learned in American academe or practice. Yet the most influential European architects sought out, such as Norman Foster and Richard Rogers (both with masters' degrees from Yale), originally set out to emulate American expertise. Along with other Europeans, their heroes include: R. Buckminster Fuller; Neutra, Eames, and Ellwood; Wachsman and Ehrenkrantz; Mies and Saarinen (especially his GM and John Deere works); Pei and Skidmore, Owings & Merrill, as they once were; and Kahn, particularly in his collaborations with engineers Le Ricolais and Kommendant. (Perhaps significantly, many of these were European émigrés.)

Some attribute Europe's current technological ascendancy over America to differences in architectural culture and education. American architects and academics tend to focus on form and theory; Europe's are also concerned with making and performance—both social and technical. Since postmodernism, much high-profile American architecture tends toward scenographic illustration of ideas about history and theory, with tectonics and construction as secondary concerns. Design, generally, from engineering to products, confers and has a high status in Europe, featuring frequently in the press and on television. Also, Europe has more of a "culture of engineering" (in Britain, it's a cult), with many engineers familiar by name to architects and two—Peter Rice and Frei Otto—as recent winners of gold medals from the Royal Institute of British Architects. Even mechanical engineers enjoy renown, particularly now as energy efficiency depends heavily on their creative input.

DIVERGENT IDEALS

European and American architects who have worked on both sides of the Atlantic vary in their emphasis on such matters. But they firmly agree that: Although America produces some high-performance products and components, it is a small elite of European architects who lead the world in technological advances throughout the processes of design and construction; also, although some visiting architects from Europe with enlightened and determined clients manage to innovate

Ironically, the current generation of innovative Europeans—such as Renzo Piano, Mario Cucinella, Jean Nouvel, and Norman Foster (right)—have found inspiration from past American pioneers like R. Buckminster Fuller (left).









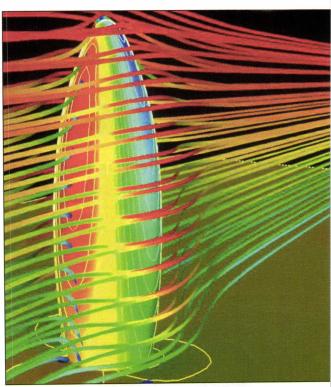
CUM™ d lin

" HEWI® Nylon



www.hdirailings.com • 717-285-4088





For 30 St. Mary Axe, Foster and Partners employed cur tomized parametric software and integrated desig techniques to achieve high efficiencies.

mitted client's environmental goals and close collaboration with project engineers, architect Foster and Partners used customize software and novel design and fabrication approaches to integrate architectural form, a diagrid structure, and environment systems for great overall efficiencies (above). And while this is singular work, it is emblematic of the potential for similar groundbreaking projects in Europe.

Optimists claim competition for commercial advantage, professional prestige, and personal vanity will always spur innovation. But some British engineers wonder if buildings like Swi Re's 30 St. Mary Axe mark a climax for such intensively and contained to a laboratively designed architecture. They worry that, with Europe emulating America, competitive fee tendering is driving fir billings below the threshold at which thorough and innovative work is feasible. Already some engineers admit privately to two-tier system with intensive study, research, and innovative confined to only high-profile, deep-pocketed commissional although the lessons of these carry over into the more mundain and profitable projects. As others cut fees further, competiting to survive threatens the capacity for even a few "boutique engineering" projects to make noteworthy advancements.

This is bad news for architecture and the planet. The begeoning environmental crisis stresses the need for radical improved efficiency in use of all resources, including energine situation necessitates the innovative design and precisi engineering found in European architecture—a recent tration inspired by past American example.

A former architect, planner, and editor of T Architectural Review in London, Peter Buchanan is a cu tor and author of the forthcoming Ten Shades of Green

READING, WRITING, AND ARCHITECTURE

Design education is cropping up in public schools. Will it democratize the profession? by Anna Holtzman

You don't have to be over 18 or attend an exclusive university to study architecture anymore. In fact, design education programs for the K-12 set have been in existence for many years, but recently there has been a surge in their numbers and a push to disseminate information on such programs—many of which are run by public or nonprofit institutions.

In New York City alone, five new architecture-themed public high schools have sprung up over the last three years. "Partly, it's [a result of] this new 'small schools' movement," says Lorraine Whitman, president of the Salvadori Center, a nonprofit founded in 1987 that conducts after-school courses and teacher-mentoring programs that integrate architecture and engineering into academic studies. The term "small schools" describes high schools with no more than 300 to 500 students that may pursue a particular theme and that typically partner with outside organizations like the Salvadori Center. Design is a handy teaching tool, "because it represents the real world and it's engaging," believes Whitman. "We're not in this to create architects," she continues. "It's a way of scaffolding what students need to learn onto what's intriguing to learn."

Architecture high schools elsewhere are more focused on the profession. The two most prominent ones in the nation are the Design and Architecture Senior High School (DASH) in Miami, which has been running for 15 years, and the Charter High School for Architecture and Design (CHAD) in Philadelphia, founded in 1999. Roughly 95 percent of DASH's seniors apply to college architecture or engineering programs, and at CHAD, the mission is to increase the number of minority students entering the field.

More plentiful than full-blown architecture high schools are myriad community-based programs, such as the Prairie Village, Kansas-based Center for Understanding the Built Environment (CUBE), the Center for Urban Pedagogy (CUP) in New York City, the Chicago Architecture Foundation's education programs, and many others. These



More U.S. high-school students are exploring architecture, as at this afterschool program at the Cooper-Hewitt museum in New York City.

organizations—some of which serve students as young as kindergarten age—often partner with schools both locally and farther afield, organizing workshops and exhibitions. "We know there are countless people out there doing this," says Monica Hampton, coordinator for schools at New York City's Cooper-

Twe're not in this to create architects. It's a way of scaffolding what students need to learn onto what's intriguing to learn."

Hewitt museum, "so we try to be a clearinghouse for them." To this end, the museum has run a summer design institute for educators for the past 12 years.

While there are more and more programs out there, access to them relies heavily on word of mouth, since there is no comprehensive database to catalog all of them. Perhaps indicating that the number of programs has reached a critical point—or that mutual interest between K–12 educators and the architecture profession is growing—three online databases are simultaneously being compiled to centralize information on these programs. Last fall, a coalition of architecture accrediting institutions charged the American Institute of

Architecture Students with creating a website for high-school students that will offer a complete list of precollege architecture programs. (In the meantime, an extensive partial list exists at aia.org/ed_k12programs.) Last month, the American Architectural Foundation (AAF) announced a similar initiative. "There should be a national network of these programs," states AAF president Ron Bogle, "and we will seek to be a connecting point for K-12 architecture programs around the country." Coming from the educators' side, Martin Rayala, a teacher who brought architecture to the Wisconsin school system's classrooms a decade ago and is now the curriculum coordinator at CHAD, is planning a related effort, updating the catalog of design programs on his website, designeducation.org.

Like Rayala, initially an art teacher, many elementary-school and high-school design educators are not trained architects; instead, they rely on visiting professionals to give lectures and workshops. Whether it's exposing kids to a possible future profession or simply teaching them to appreciate the history of their neighborhood, says CUBE founder Laurie Bottiger, teaching students at the precollege level "empowers kids to see how they can affect their environments."

BELDEN

THE BELDEN BRICK COMPANY

Canton, Ohio / (330) 456-0031

www.beldenbrick.com

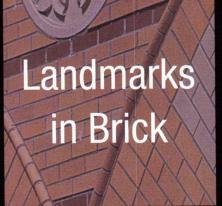
An ISO 9001:2000 Registered Quality Management System





Colors

Belden Brick is available in a world of colors including soft whites and creams, golden buffs and dusty tans, delicate pinks and cinnamon reds, chocolate browns, pewter grays and coal blacks. With so many colors to choose from your options are truly endless. Here is a small sample of over 200 color ranges, 13 textures and 16 different sizes.



Sizes & Shapes

More sizes mean lower wall costs. With as many as sixteen different sizes to choose from Belden has the size you need. Plus, Belden has made thousands of special shapes to provide special details for individual projects. Need an "impossible" shape for your project? Then call Belden Brick and learn how the impossible can become reality.

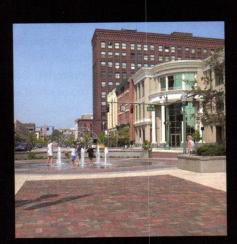


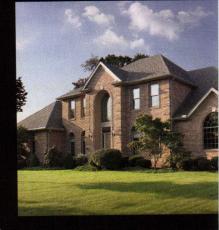
Textures

Belden Brick offers thirteen different textures that range from silky smooth finishes to rugged randomly textured styles. Each texture can make its own distinctive contribution to the visual impact you seek.









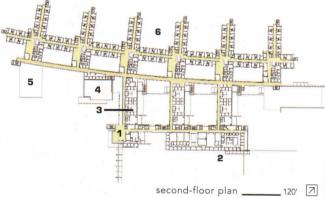
Circle 26 or www.architecturemag.com/productinfo

THE FREELON GROUP WITH CANNON DESIGN | PSYCHIATRIC HOSPITAL | BUTNER, NORTH CAROLINA

A consolidated regional psychiatric facility in North Carolina with 432 beds accommodates new treatment models that focus on "normalizing connections to the landscape" and teaching social skills. Its design uses site walls—linear massings that weave the building into the landscape—to break down 450,000 square feet of program into smaller segments that gently step down the sloped and heavily wooded 120acre site. The approach yields three distinct programmatic zones, organized along the thresholds resulting from the site walls. One of them is a straight, primarily solid mass containing the administrative zone; its internal circulation is vertical, with transitional passage for patients into secure treatment areas. A second, contrapuntal wall is transparent and curved; it visually and physically connects the treatment zone to residential wings. The layout captures a variety of open spaces and feathers out toward the landscape at the perimeter. Completion of the masonry and curtain-wall building is scheduled for November 2006. C.C. Sullivan

- 1 visitor entrance
- 2 administration
- 3 treatment areas
- 4 gym
- 5 forensics
- 6 patient-care units





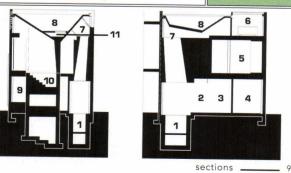
→ JASON KING, MANDI LEW, JOHN COBURN | PARK SLOPE MIKVAH | BROOKLYN, NEW YORK

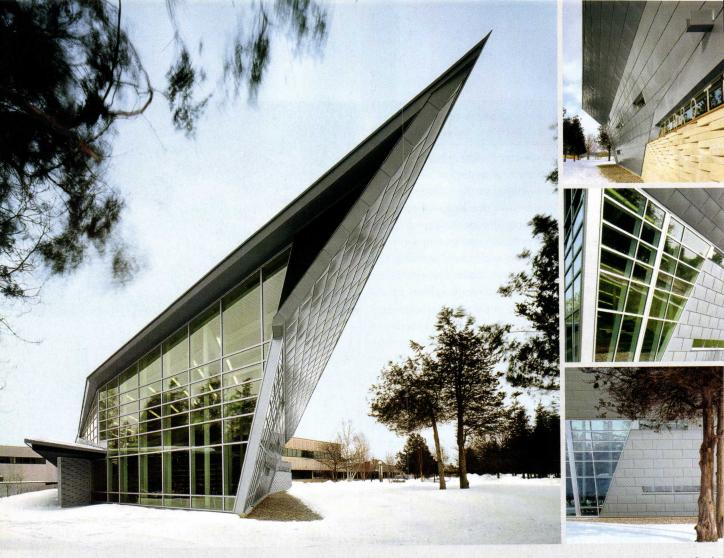
Housing facilities for ritual baths as authorized by Jewish law, the Park Slope Mikvah adapts a 750-square-foot carriage house to include a waiting room, a men's bath and changing area, and a laundry room on the first floor, and a women's bath accompanied by two changing rooms on the second. Because the baths must be filled with rain or natural spring water that travels through seamless pipes, the architects—two of whom are members of the client congregation, B'nai Jacob—created a roof basin for water collection and a system of PVC pipes for water distribution to the baths. Set behind a row house in the picturesque, uppermiddle-class Park Slope neighborhood of Brooklyn, the mikvah is accented by brick and a latticelike wood veneer. Bathers access the building through an alley that provides a modicum of privacy. The congregation expects the project to be built next year. Katie Gerfen

- 1 men's mikvah
- 2 shower wall
- 3 men's changing room
- 4 restroom
- 5 women's changing room
- 6 mechanical

- 7 skylight
- 8 concrete roof/water storage
- 9 stair
- 10 women's mikvah
- 11 water distribution







Loyalist College, Belleville, Ontario, Canada; Fabricator/Installer: Semple Gooder, Toronto, Ontario, Canada; Architect: Stephen Teeple Architects, Toronto, Ontario, Canada

RHEINZINK® - The Material with a Future

RHEINZINK® is a titanium zinc copper alloy that is environmentally friendly with unmatched longevity and elegance, making it the ideal building material. With many detail variations possible, RHEINZINK complements both traditional and modern architecture. Curvilinear surfaces can be clad with ease due to the material's

natural flexibility. At RHEINZINK, we take great pride in our customer support, providing technical assistance to both architects and installers. With a large number of installers throughout North America and material stocked in several states, craftsmanship and lead time is never an issue.

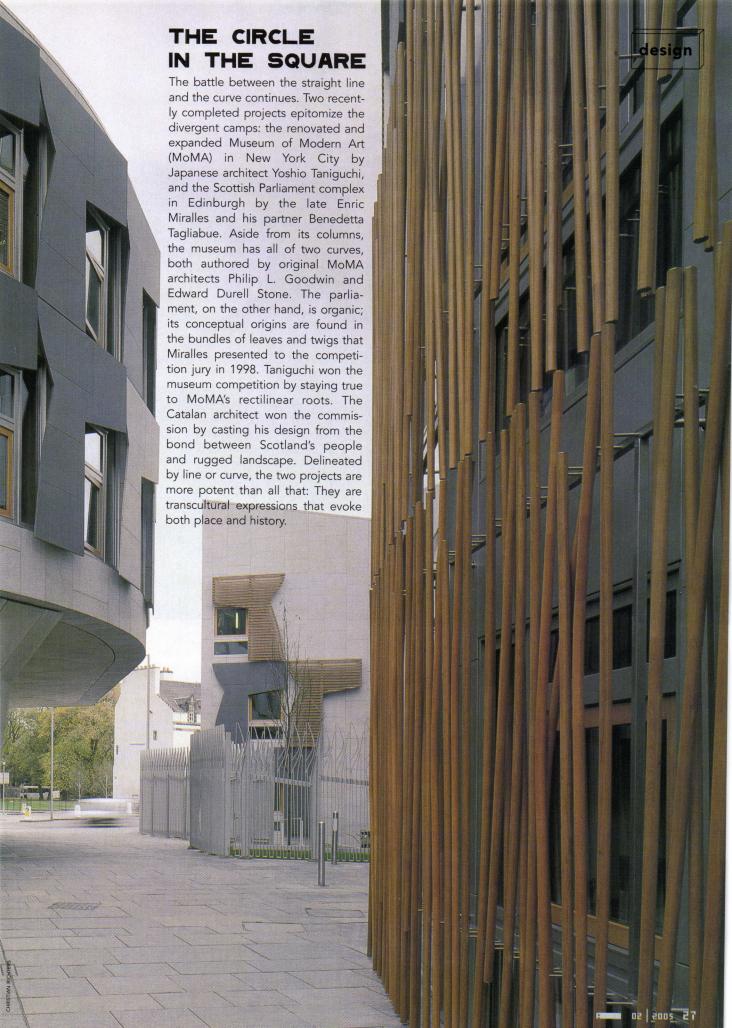












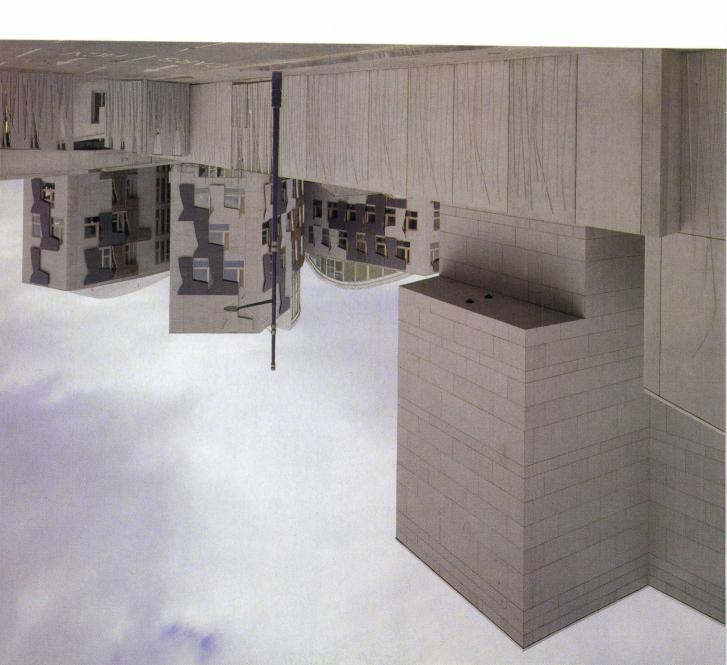


Nature Nurture





The late Enric Mirallen'n lant work in an audaciounly antimonument bal denign for Scotland'n firnt new parliament building in 300 yearn. By CATHERINE SLESSOR I PHOTOGRAPHS BY CHRISTIAN RICHTERS











A heavily ornamented organicism pervades the parliament complex, including the granite and timber treatments on the members' offices (facing page, bottom left) and committee rooms (below left). A canopy of oak and steel announces the public entrance (facing page, top), which looks onto Edinburgh's medieval Old Town. Separate circulation routes deliver the public and members of parliament to the debating chamber (above). Supported by laminated-oak trusses and stainless-steel bracing, 13 leaf-shaped skylights illuminate the members' foyer (below, right). Exposed concrete provides thermal mass (facing page, bottom right), while 80 percent of the building is naturally ventilated.





There's a wonderful moment in the historical epic *Braveheart* when a ragtag Scottish army is lined up across a battlefield about to engage vastly superior English forces. Faced with almost certain annihilation, the Scots pull up their kilts and moon their enemy. Hollywood's typecasting of the Scots as doomed yet defiant warrior poets was not entirely off the mark—something of this spirit still persists in modern times.

Though part of the United Kingdom since 1707, the Scots have a strong sense of national identity, but like that of the Irish, theirs has a bittersweet edge, tempered by centuries of conflict and diaspora. The opening of Scotland's new parliament building in Edinburgh late last year was also bittersweet, given the financial, architectural, and political controversies that dogged the project's progress from competition to completion. The deaths of the project's main protagonists—Enric Miralles, its inspired Catalan architect, and Donald Dewar, Scotland's First Minister and the design's political champion-made the event all the more significant. In a grimly serendipitous way, their loss strengthened the resolve of the design team, the joint venture EMBT/RJMJ, under the direction of Miralles's widow, architect Benedetta Tagliabue, to realize her partner's unashamedly romantic vision of nationhood.

The seeds of this vision originated in the simple bundles of leaves and twigs Miralles submitted to the 1998 competition for a new parliament building. Unlike fellow competitors Richard Meier and James Stirling, who favored more grandiose manifestations of political power, Miralles's intention was that the new parliament should literally grow out of the site, expressing the historic, umbilical connection between land and people. It was an abstract but powerful concept of national identity inspired

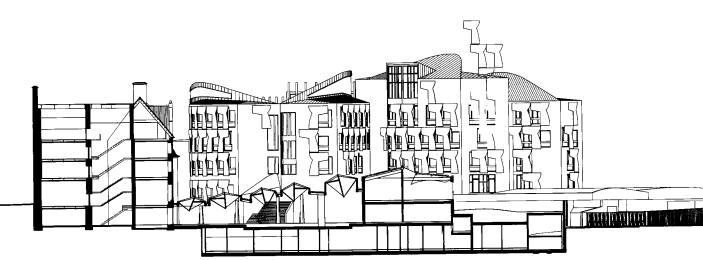
by the rolling topography Miralles encountered on his trips around Scotland, and by folkloric tableaux such as upturned boats, burial mounds, and primitive farm huts.

The parliament's informally structured agglomeration of volumes, with little in the way of a dominant focus, is intentionally antimonumental—a progressive political campus that speaks of inclusiveness and public accessibility. Business is conducted by consensus in a luminous debating chamber crowned by a tautly crafted arboreal roof structure of laminated-oak trusses. In its elevated gallery, the public can come within a few feet of elected representatives—a level of accessibility that ought to be preserved, despite current concerns with terrorism. In terms of location, the site is also antimonumental, lying at the foot of the Royal Mile, the sloping thoroughfare that links Edinburgh Castle on its volcanic outcrop with the Palace of Holyroodhouse (the Queen's official residence in Scotland) to the east. Here, the dense medieval texture of Edinburgh's Old Town dissolves into parkland.

CHANGE AGENTS

Miralles always intimated that the undulating hull-like forms of his proposal were provisional and indeterminate, likening them to boats in a harbor that could change configuration as circumstances demanded. In fact, unexpected changes in client and program increased staff numbers from 300 to 1,200 and building size from 248,000 to 323,000 square feet. One major effect was to elevate the budget from an unrealistic \$74.5 million to a stratospheric \$804 million, which was met with predictable public outcry.

Heightened security measures following the September 11 attacks also brought new challenges, but



Miralles tried to integrate and even celebrate defensive structures as part of the overall architectural language. Along the Royal Mile, for instance, a massive concrete bulwark for blast protection is transformed into an animated patchwork of Scottish geology and literature. Studded with a vivid array of stones and inscriptions, and incised with a Miralles sketch, the Canongate Wall stops passersby with great frequency.

Prior to his death, Miralles completed a final revised design, which saw the fundamental character of the scheme evolve from a loose-knit, gently undulating landscape to a denser urban microcampus. The previously lowrise forms were extruded upward to create four- and five-story office towers that nuzzle around the truncated ellipse of the main debating chamber. These contain rooms for parliamentary staff and committees, where much of the legislative work is done. The block containing individual offices for the 129 members of parliament was also enlarged. Each representative has a modern version of a monk's cell, complete with contemplative window seat cradled in a warped capsule that extrudes through the exterior wall plane to produce a vigorously sculpted façade. Here, as elsewhere in the complex, form and ornament recall the sinuous, florid designs of architectural iconoclast Charles Rennie Mackintosh.

To the west and north edges, the parliament locks into the matrix of the Old Town, expressing physical intimacy with the city and its citizens. To the southeast, the geometry slackens and diffuses into a series of long, low-slung, turf-clad vaults that reach back through a new public garden into the landscape of the park beyond. The entire composition is anchored by a concourse that reprises the notion of boat hulls; its array of tilted, fish-shaped roof lights wrapped in scaly stainless-steel panels is designed to capture and funnel the precious northern light. Simultaneously intimate yet dignified, this modern agora has quickly become the social heart of the parliament.

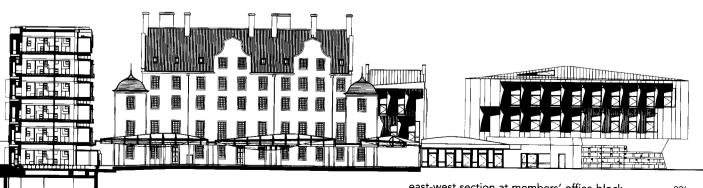
ADDITIVE VS. REDUCTIVE

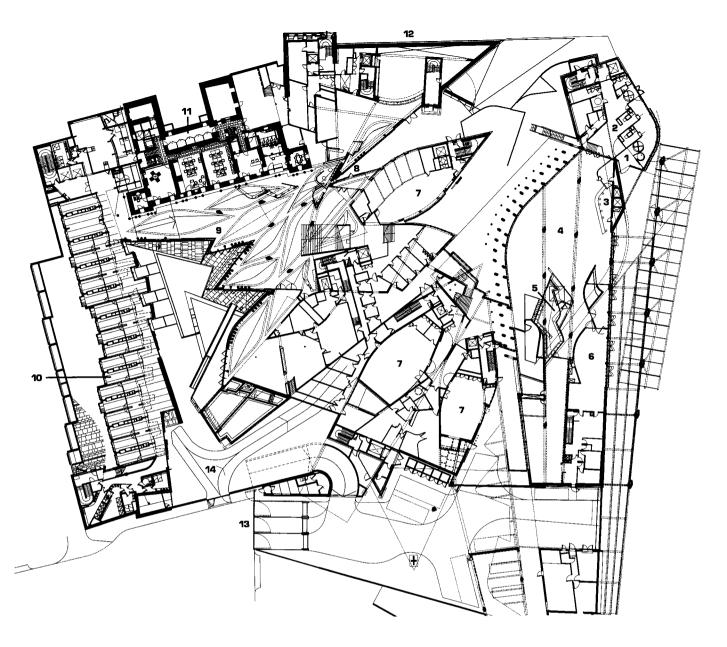
In an age of fashionable minimalism, Miralles's building is a hyperactive paean to the joys of embellishment and addition, drawing on a largely Scottish palette of oak, sycamore, concrete, silver granite, and dark stone. This makes for great richness, both formally and spatially, but at times can be overwhelming. There is a slight sense of complexity generated, however cleverly, for its own sake, though the workmanship is generally exceptional.

As a small nation trying to find its voice in the tough world of modern geopolitics, Scotland has yet to grow into a mature parliamentary democracy. Yet from the outset, Miralles's Catalan background struck a resonant chord with the Scottish experience, and his audacious, intensely wrought vision of government and national identity should give fledgling Braveheart ambitions ample scope to flourish.

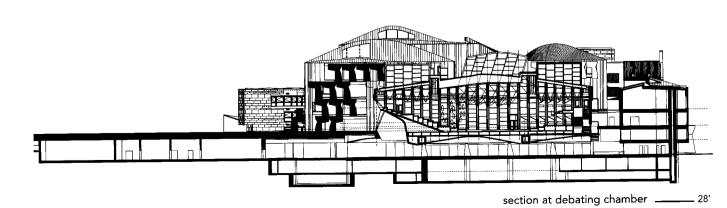
Scottish Parliament Building, Edinburgh

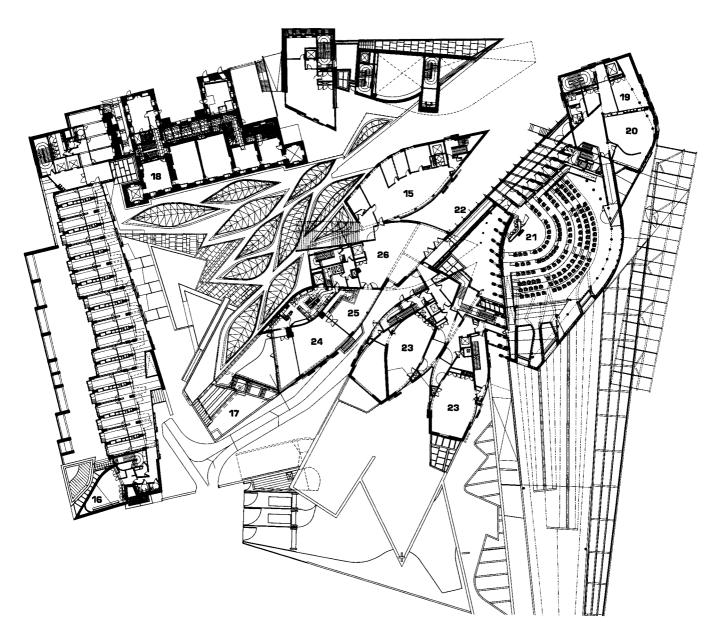
client: Scottish Parliament Corporate Body architects and landscape architects: EMBT/RMJM, Barcelona and Edinburgh—Enric Miralles and Benedetta Tagliabue (design partners) engineers: Arup (structural); RMJM (HVAC) quantity surveyor: David Langdon Everest planning supervisor: Turner and Townsend consultants: Buro Happold (access); Sandy Brown (acoustics); OVI (lighting); CDT (signage); EMS (audio visual) construction manager: Bovis area: 323,000 square feet cost: \$804 million





first-floor plan

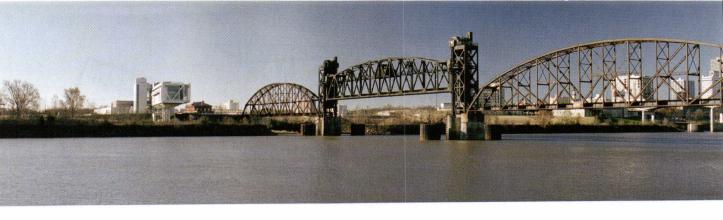




- 1 public entrance
- 2 security
- 3 reception
- 4 exhibitions
- 5 shop
- 6 café 7 tower
- 8 members' entrance
- 9 members' concourse

- 10 members' office block
- 11 Queensberry House
- 12 Canongate Wall
- 13 service entrance
- 14 parking entrance
- 15 offices
- **16** gym
- 17 members' garden
- 18 Dewar Libary

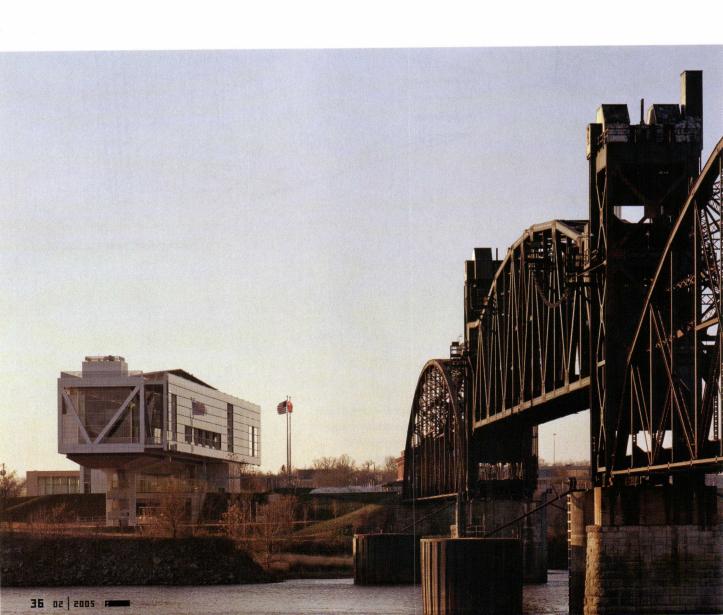
- 19 press room
- 20 press conference room
- 21 debating chamber
- 22 bridge
- 23 committee room
- 24 dining room
- **25** bar
- 26 lounge



Building Bridges

A sustainable museum and library by Polshek Partnership enshrine the Clinton legacy and infuse civic energy into downtown Little Rock.

BY ALAN G. BRAKE | PHOTOGRAPHS BY ALBERT VEČERKA



It took no time for pundits to joke about the cantilevered form of the William Jefferson Clinton Presidential Center. Its namesake, while universally acknowledged for his intelligence, charisma, and broad appeal, has always been prone to potshots. But politics and personality aside, the Clinton Center is a major work of American architecture that fuses building, land-scape, program, and site into a dynamic urban composition.

Bordered by the Arkansas River and a highway interchange, Little Rock has a pleasantly New-Urbanized downover the sloping landscape, echoing the adjacent bridge and, to an extent, the highways, while dramatizing the views out and leaving the riverbank untouched.

A DEMOCRATIC DESIGN

The materials palette is cool and neutral: steel, glass, gray terrazzo, and polished stone. A generously scaled lobby and security screening area allow the center's many visitors to pass through efficiently. "The President wanted a building



town brimming with all the cafés, bookstores, galleries, and gourmet food shops of a blue-state college town. Walking along the river's edge, visitors encounter a stark landscape dominated by the presidential center's museum, one of three structures that define the 28-acre complex designed by Polshek Partnership and landscape architect Hargreaves Associates. A new tree-lined boulevard carries the eye toward the museum, through a new park of gentle hills and swales, leading down to the somewhat wild edge of the river. Abandoned for 30 years, the hulking, 19th-century Rock Island Railroad Bridge, which reopens to pedestrians and cyclists next year, clearly guided the museum's form.

South of the boldly horizontal museum building, aligned along the old rail line, is the brick Choctaw Station, dating from the 1880s, which has been converted into classrooms, offices, and meeting areas for the Clinton School of Public Service (a branch of the University of Arkansas) and other policy-related educational programs. Adjacent to the school—and linked by an inviting "scholar's garden"—is the three-story archive building where presidential papers and artifacts are stored and accessible to researchers. Covered with a veil of perforated metal screens that reduce solar gain, this glass box holds archivists' offices and space for researchers; below it are vaults, partially submerged in the ground, where presidential papers and artifacts are stored.

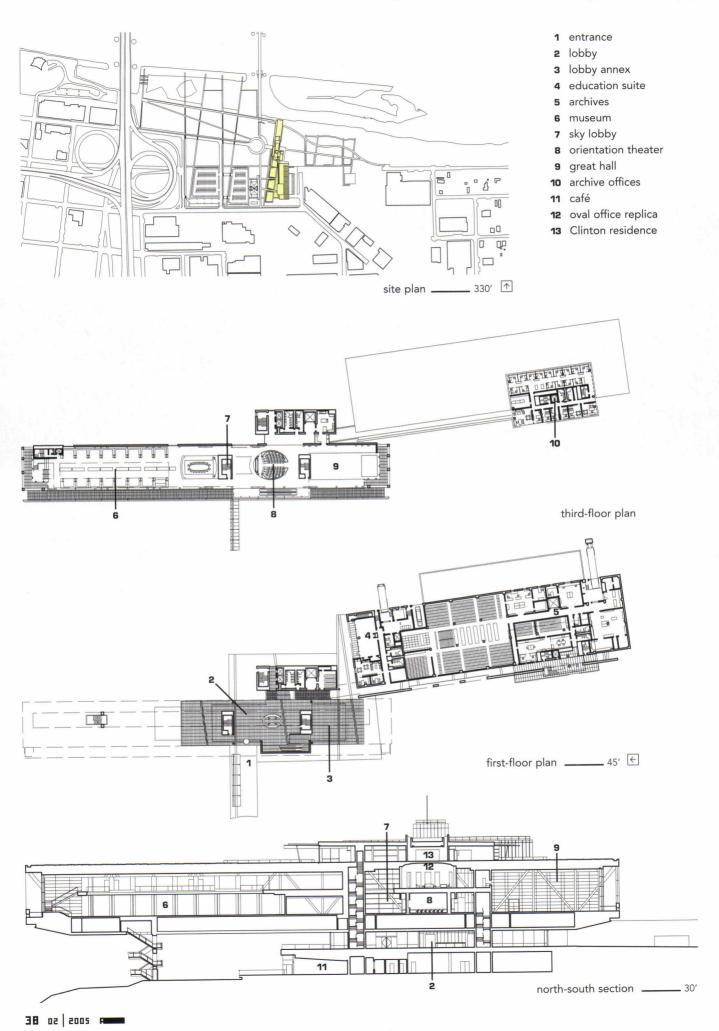
An exoskeleton of V-shaped trusses connects the sleekly modern museum to the formal vocabulary of the bridge. The downtown-facing side of the building is clad entirely in glass, allowing unbroken views of city, park, and river. A fritted-glass brise soleil protects this side of the building from the elements. The 420-foot-long building cantilevers 90 feet

that was both grand and accessible," says design partner James Polshek. The main hall, a double-height volume with a mezzanine level, contains most of the exhibition areas. The designer of those areas, Appelbaum Associates, created a dramatically tilted steel, wood, and laminate time-line display—depicting major events through still images, video and sound recordings, and binders with the two-term president's daily schedule—that bisects this elongated room. Adjacent thematic alcoves focus on specific topics.

Locally quarried stone, bamboo flooring throughout the building, radiant heating and cooling, and photovoltaic panels mounted on the enclosed breezeway between the museum and archive are a few of the elements that earned the building a LEED "silver" rating, an achievement that is both substantial and symbolic. The architects estimate that the presidential center will require approximately 35 percent less energy than a building of comparable size, which is especially significant considering the additional climate controls required for a museum and archive. "The president said from the start that he wanted to build a green building," says Polshek. "He practices what he preaches."

The Clinton Foundation, the organization that operates the center, hopes the new complex will be more than the sum of a museum, archive, and school—that it will serve as an economic development tool for the city and a vibrant hub of activity. Judging by the hotels, housing, and corporate headquarters going up around the Hargreaves-designed park—and the higher-than-expected attendance numbers—these goals seem well underway.

Alan G. Brake is a writer and critic in Louisville, Kentucky.





Bordering the presidential timeline in the museum, thematic alcoves (focused on topics such as foreign policy or the environment) are delineated by cherrywood bookcases. The mezzanine holds the administration's artifacts.

William Jefferson Clinton Presidential Center, Little Rock, Arkansas

client: William J. Clinton Foundation—Gary Eikenhorst (owner's representative); Phelps Program Management (program manager) architect: Polshek Partnership Architects, New York City—Richard M. Olcott, James S. Polshek (design partners); Joseph L. Fleischer (partner-in-charge); Kevin P. McClurkan, Molly McGowan (project managers); Kate Mann (project designer); Megan Miller, Christen Johansen (project architects); Charmian Place (interior designer); Amy Lin, Kathleen Kulpa, Katharine Huber, Tanya Chan, Brad Groff, Elliott Hodges, Stephen Joyce, Edgar Papazian, Michael Regan, Mary Rowe, Oliver Sippl, Oneka Horne, Tala Mikdashi (project team) associate architects: Polk Stanley Rowland Curzon Porter Architects, Little Rock—Tommy Polk, Joe Stanley, Ed Sergeant, Steve Castagno, Jim Thacker, Jason Toland, Veronica Lilly (project team); Witsell Evans Rasco Architects and Planners, Little Rock—Terry Rasco, Don Evans, Charles Witsell, David Sargent, Jason Hayes, Aaron Ruby, Andru Bush, Debbie Clements, Carmen Comer, George Henderson, Cindy Pruitt, Joe Roddy, Carol Wrape (project team); Woods Carradine Architects, Little Rock—Ron Bene Woods, Wali Carradine, Ashley Carradine, Sam Turner, Paul Brown, Valerie Abrahms, Richard Bailey, DeeDee Nichols, Ralph Vines III (project team) landscape architect: Hargreaves Associates—George Hargreaves, Glenn Allen, Catherine Miller, Susan Bailey (project team) associate landscape architect: Landscape Architecture exhibition designer: Ralph Appelbaum Associates engineers: Leslie E. Robertson Associates (structural); Flack + Kurtz (M/E/P); Cromwell Architects Engineers (associate M/E/P) consultants: Poulin + Morris Design Consultants (signage/graphics); Cline Bettridge Bernstein Lighting Design (lighting); R. A. Heintges Architects (curtain wall); Steven Winter Associates, Rocky Mountain Institute (LEED certification); Robert Schwartz & Associates (specifications); Cerami and Associates (acoustics); Entek Engineering (window washing); IROS Elevator Design Services (elevators); Ducibella, Venter & Santore (security); McClelland Consulting Engineers (civil/geotechnical); Grubbs, Hoskyn, Barton & Wyatt (soil); LCM Architects (ADA); Dan Euser Waterarchitecture (fountain); MDL (irrigation); Moffatt & Nichol Engineers (marine engineer); Play.Site.Architecture (playground) general contractor: CDI Contractors area: 163,000 square feet cost: \$165 million



The Museum of Modern Art (MoMA) has made a daring architectural move. It has opted for a revamped complex fine-tuned to its functions, its context, and its longstanding public image, rather than making a bold sculptural statement. An institution expanding so much—in this case from 378,000 square feet to 630,000could obviously have justified a radical new form. Many thought that a museum supporting advancement in design was obligated to underwrite an architectural coup. But when the building committee held an invited design competition in the late 1990s, they chose Yoshio Taniguchi, the competitor who promised to maintain the museum's longstanding character most faithfully.

MoMA didn't need a new image. It wasn't a start-up, like Guggenheim Bilbao, or an institution in search of a visible identity, like the Milwaukee Art Museum, recently transformed by Santiago Calatrava. It had acquired its identity with the 1939 opening of its first building by Philip L. Goodwin and Edward Durell Stone, a structure thoroughly modern in materials and details yet respectful of neighboring townhouses in form and scale.

Advantageously located in midtown Manhattan, MoMA was cursed by real estate values that limited its expansion to a series of baby steps. From 1951 through 1966, three additions were shaped by Philip Johnson (either as architect or consultant), all constrained by their deference to the 1939 building. Johnson's great contribution was the design of the museum's 1953 sculpture garden, the most widely admired part of MoMA's built heritage.

The museum later entrusted Cesar Pelli with its largest expansion up to then, the construction of the 56-story Museum Tower, completed in 1985, which used the complex's air rights for revenue-generating apartments. At the same time, Pelli added a greenhouselike volume that impinged on the garden and contained all-too-prominent escalators. They're now gone, along with their glazed cage, and Taniguchi's new escalators are discreetly screened off from major public interiors.

The best opportunity for expanding the museum itself emerged in 1996, when MoMA acquired the adjoining Dorset Hotel site. This was not an occasion for just another wing, but for an essentially new complex, embracing selected parts of the existing one. Ten architectural firms were invited to compete for the commission, a list much discussed for its avoidance of either established stars or emerging talents (no Gehry, Meier, or Foster; no Libeskind or Diller + Scofidio). All the contenders understood that a sculptural extravaganza wasn't wanted here, but they nevertheless tended to insert discordant elements. The least known of the





monumental MoMA

Yoshio Taniguchi's expansion of New York City's Museum of Modern Art reinterprets its implicit character at enlarged scale. by John Morris Dixon | photographs by Adam Friedberg



competitors in the United States, having built only in Japan, Taniguchi won the competition by respecting MoMA's established vocabulary and bringing coherence to the ensemble.

PURE AND NOT-SO-SIMPLE

What Taniquchi has done is to reinterpret the rectangular volumes of the existing museum essentially as a series of planes-some joined at corners, others not—the gaps filled with glazing of impeccably minimal detail. There is no expression of structural support in this architecture; the thin planar elements appear to hover. Yet great construction ingenuity was required to produce hundreds of square feet of seamless atrium walls, for instance, and the thinnest possible mullions for the vast glazed walls. (Taniquchi's New York collaborators at Kohn Pedersen Fox Associates recall months of design effort to shave an additional 3/8 inch from these mullions, which are solid steel.) And Terence Riley, MoMA's chief curator of architecture and design, points out how Taniguchi plays down the materiality of his planes by using smooth surfaces with degrees of translucency or reflectivity-granite, aluminum, dark-tinted glass—and applying them

in larger-than-customary units.

The composition of planes reinterprets the hermetic box galleries of the former museum as spaces with corner gaps that offer enticing glimpses of cityscape. Occasionally, upward views are seen through skylights, which were totally lacking in the former complex. Lobby and circulation spaces on all floors offer views of the sculpture garden and surrounding buildings, much as they did previously, except that those volumes are now larger and the views more expansive. Among the most appealing features of the new interior are the opportunities to observe the flow of visitors on floors above or below, on stairs and bridges, and roaming the garden.

While the museum has not quite doubled in floor area, it has roughly twice the former volume, and its scale seems to have nearly doubled, as well. The old main lobby, for instance, reached halfway from 53rd Street to 54th, ending at a glazed wall overlooking the sculpture garden. The new one extends through the entire block, with entrances at both ends. The galleries themselves, while expanded only 50 percent in floor area, approach twice their former volume.

The liability of MoMA's low ceiling heights—established at townhouse scale in 1939 and maintained for the sake of continuous floors—has been dealt with by stacking six levels of galleries in the new wing at the west end of the sculpture garden: Only the lower three are aligned with existing floors; the upper three are more spacious. The installation of exhibits now benefits by using the high-ceilinged spaces for works that need them, reserving the more confined lower-





From the new through-block lobby (facing page), the 110-foot-tall atrium quickly registers as the main organizing element of the expanded museum (above). Increased natural light and a more direct connection to the city are evident from the second-floor contemporary galleries (above, at left) and circulation bridges. Views of the restored 1953 Abby Aldrich Rockefeller Sculpture Garden (preceding pages) are ample throughout the complex, reasserting this exterior room as the museum's focal point. Rising above the gallery wing and behind Cesar Pelli's highrise apartments, the museum's new office tower is clad in white fritted glass (page 41).

floor areas for drawings, prints, photography, and design objects.

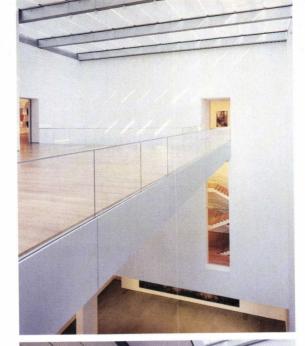
One happy product of the expansion and remodel is the restoration of the original 1939 building's façade, which had been altered by Johnson in the 1960s. With its curvy stainlesssteel canopy and milky translucent glazing back in place, the original structure's role in the progress of modernism is reaffirmed. New terraces enhancing its edges restore the sculpture garden as well, its centrality underscored by the near-symmetrical Taniquchi wings—the new gallery building and a yet-to-be-completed education building across the garden to the east—that now frame it.

IS BIGGER BETTER?

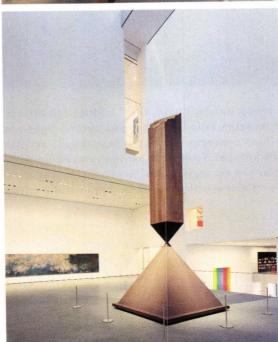
One weakness in the museum's interiors is that the minimal planes can suggest gigantic foam-core models, even for those of us who recognize the effort behind such minimalism. The source of this perception lies not so much in the detailing as in the scale of some spaces, which are much larger than those in Taniguchi's other elegantly detailed museums. A second flaw is the disconnected relationship between the museum proper and the prominently located, street-level design shop and restaurant. Pressure to reopen the museum no more than 30 months after it decamped to temporary quarters in Queens led in part to the separate commissioning of Gluckman Mayner Architects for the shop and Bentel & Bentel Architects for the restaurant. While well designed, the two seem more like tenant spaces than integral parts of the complex.

Such quibbles aside, the expanded museum complex deserves only praise as a fulfilling environment for viewing art and as a contribution to the cityscape. It is a tangible confirmation that MoMA chose the right design strategy and the right architect.

John Morris Dixon is an architectural writer and the former editor-inchief of *Progressive Architecture*.



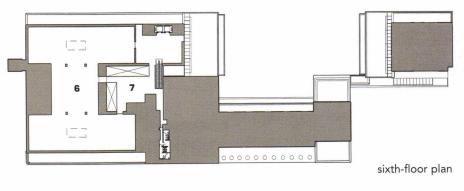


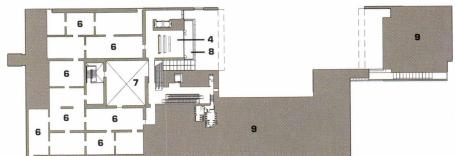






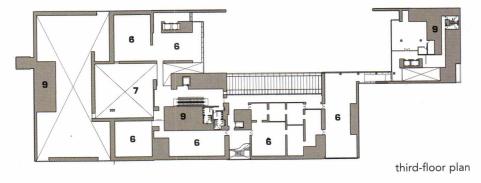
More intimately scaled than the columnless, 22-foot-high contemporary art spaces on the second floor are the galleries for painting and sculpture on the fourth and fifth floors (above). A staircase, revealed through a slit in the atrium (facing page), connects these two floors. Diffused light enters this space from a skylight.

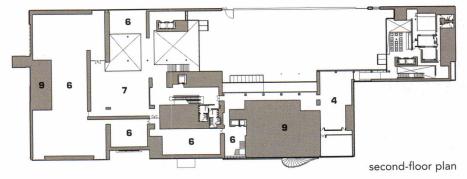


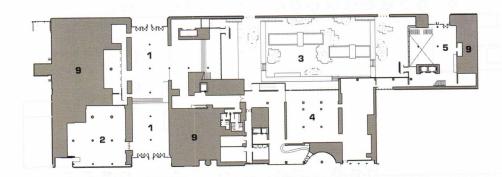


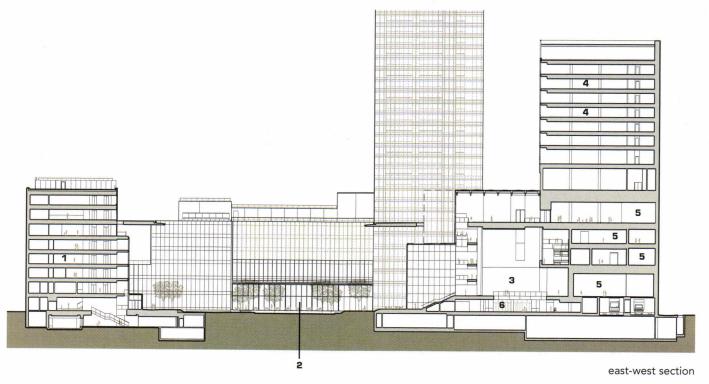
fifth-floor plan

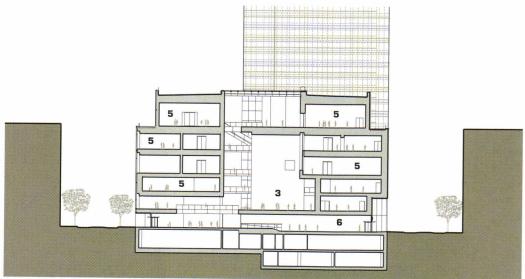
- 1 lobby
- 2 design shop
- **3** sculpture garden
- 4 restaurant
- **5** education building
- **6** gallery
- 7 atrium
- **8** terrace
- **9** back of house



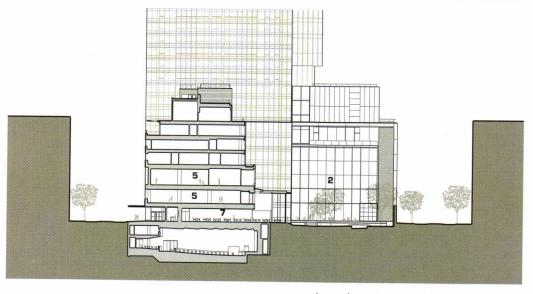




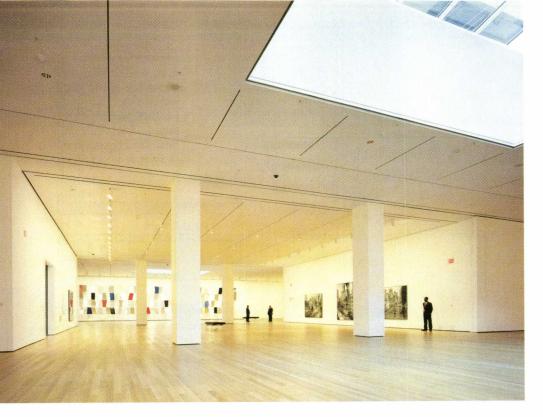








- 1 education building
- 2 sculpture garden
- 3 atrium
- 4 offices
- 5 gallery
- 6 lobby
- 7 restaurant
- 8 auditorium

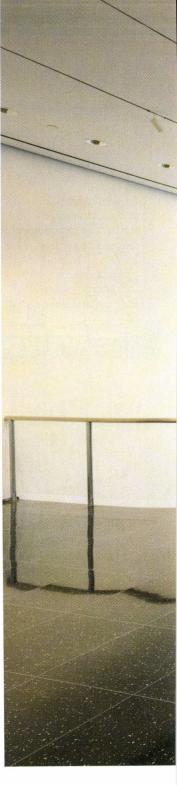


The Museum of Modern Art Renovation and Expansion, New York City

client: The Museum of Modern Art design architect: Taniguchi Associates, Toyko—Yoshio Taniguchi (principal); Brian Aamoth (project architect); Peter Hahn (project manager); Keiji Ogawa, Taichi Tomuro, Junko Imamura (project team) executive architect: Kohn Pedersen Fox Associates, New York City—Gregory Clement (managing principal); Thomas Holzmann, Stephen Rustow, Robert Hartwig (senior associate principals); George Hauner (job captain); Brian Girard, Greg Weithman principals); Claudia (associate Cusumano, Angela Davis, Betty Fisher, Erin Flynn, Stephen Frankel, Ethan Kushner, Yuuki Kitada, Scott Loikits, Kuang Han Li, Hui-Min Liaw, Jeffrey McKean, Carlos Rodriguez, Anna von der Schulenberg, Nathan Wong, Eva Tiedman, Daniel Treinen, Trudy Brens, Judd Chapman, Eunsook Choi, Robert Cody, Patrick Daniel, Craig England, Guy Ewald, Carolyn Huayamave, Hayley Isaacs, Ohna Jung, Ann Lewison, Dan Lenander, Elizabeth Meyers, Bun-Wah Nip, Rebecca Seamens, Yin Teh, Helen Wang (proj-Severud ect team) engineers: Associates, Guy Nordenson and Associates (structural); Altieri Sebor Wieber (M/E/P); Vollmer Associates (civil) retail interior design: Gluckman Mayner Architects restaurant interior design: Bentel & Bentel Architects landscape architecture: Zion Breen and Richardson Associates lighting designer: George Sexton Associates consultants: R.H. Heintges Architects (façades); Shen Milsom & Wilke (acoustics); Cooper, Robertson & Partners (programming); Alspector Anderson Architects (conservation laboratories) construction manager: AMEC area: 630,000 square feet cost: \$425 million

Specifications

concrete: Northside; Urban structural metal: Hellmark Steel curtain wall/skylights: Gartner/ Permasteelisa masonry: Glen-Gery Brick metal cladding and roofing: Gartner stone cladding: Savema; Il Cassone; Vermont Structural Slate; Georgia Marble built-up roofing: Wolkow Braker glass: Zadra Vetri doors: J.C. Ryan ABCO/H&G (wood); Allied Bronze (metal); Nabco (sliding); McKeon (fire/security) hinges: Stanley exit devices: Precision; Von Duprin; Adams-Rite pulls: Allied Bronze security devices: Folger Adam ceiling systems: Armstrong woodwork: Infrastructures; Petersen Geller Spurge paints/stains: Benjamin Moore flooring: Magnin (terrazzo); Haywood Berk (wood) carpeting: Constantine; Crossley furniture: USM (office); Knoll, USM (reception); Poltrona Frau; Kurt Hansen Seating (theater); American (tables/chairs); Maharam (upholstery) lighting: Nulux; Edison Price (interior ambient/down lights); Artemide (task); Hydrel (exterior); Litelab (track); Lutron (controls) elevators/escalators: Schindler





Temporary exhibitions are housed in the vast, skylighted top floor (facing page) of the new six-story gallery building. Aside from the cylindrical columns found throughout the museum, there are two significant curves in Taniguchi's otherwise straight-lined MoMA. Both are found in the restored Goodwin and Stone building: the Bauhaus stair railing (above), and a canopy that marks the museum's original entrance on 53rd Street.

LOOK CLOSELY. IT'S NOT WOOD.

Introducing Natura™. Aluminum inspired by nature.





Natura[™] finish is aluminum that provides everything you love about beautiful wood. Our process creates a natural wood-grain appearance that is baked into the finish for

a material that looks as good as wood, yet provides all the benefits of aluminum.

Vistawall now offers you the best of both materials in ten wood finishes.

Go with the grain.

VISTAWALL®
ARCHITECTURAL PRODUCTS

800-869-4567

natura@vistawall.com

Circle 204 or www.architecturemag.com/productinfo

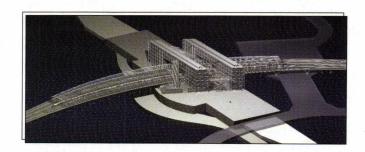
GLASS CEILING

A modern commuter hub replaces a historic Berlin train station.

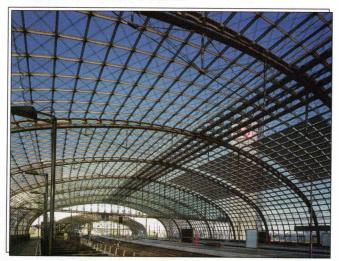
by Katie Gerfen

Billed as Europe's largest train station and located in the middle of Germany's capital city, the 1.94-million-square-foot, seven-level Central Railway Station creates a new hub for commuter and commercial trains, including routes throughout mainland Europe. The station—on the site of the historic Lehrter Bahnhof, built in 1871 as one of Berlin's long-distance train stations—features intersecting buildings with retail, office, and service spaces interspersed on track levels to serve as many as 240,000 passengers daily, 60 percent of whom are simply transferring from one train to another.

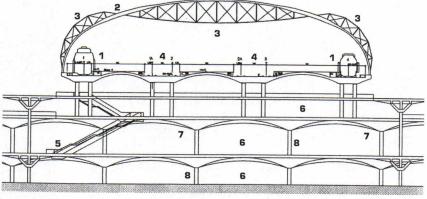
A prominent feature of the complex is the more than 1,000-foot-long enclosure of glass and steel that shelters the ground-level tracks. The **undulating canopy** curves to follow the path of the existing tracks, and is constructed of individually sized glass panels fitted into a weblike structure of steel mullions that are supported by arcing tension cables. The design not only allows for a column-free interior, but it also uses approximately 10 percent of the steel needed to build similar glass shells. Primarily in place to shield passengers from the elements, the canopy also holds **photovoltaic panels** that produce enough energy to power the lights on the track, but little else, according to lead architect Meinhard



The "bridge buildings" (above) of Berlin's new Central Railway Station hold the majority of the commercial and office space, but the main feature of the project is the 1,000-foot-long intersecting glass shell (below) that encloses elevated tracks.







north-south section

- 1 train
- 2 glass enclosure
- 3 steel-cable crescent truss
- 4 tracks

- 5 escalator
- 6 terminal level
- 7 concrete barrel vault
- 8 concrete column

wire mesh fabric



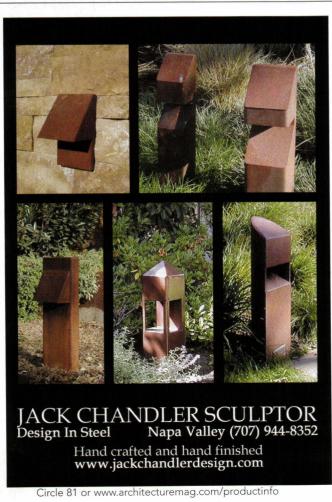
The 1,000-foot-long track enclosure features individually sized glass panes mounted into a steel shell-like structure that is supported by a system of steel-cable and castellated-steel crescent trusses every 100 feet.

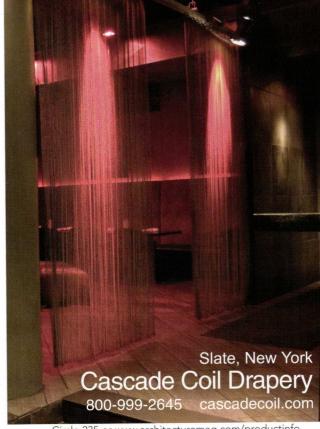
von Gerkan, a founder of Hamburg-based von Gerkan, Marg und Partner. "It is more a political statement than a reasonable function," von Gerkan says, "because [the panels] cost more money than they will ever make back."

While the majority of the canopy is complete, the station's intersecting structures—"bridge buildings" as von Gerkan calls them—are still under construction, but will be completed in time for the 2006 World Cup soccer match in Berlin. The unfinished buildings will house additional service, office, and retail space, but the construction has not interrupted station operations: Trains are already running through the built space.

Central Railway Station, Berlin

client: Deutsche Bahn architect: von Gerkan, Marg und Partner, Hamburg, Germany—Meinhard von Gerkan (lead designer); Jürgen Hillmer (partner); Hans-Joachim Glahn, Klaus Hoyer (project managers, long-distance rail); Prisca Bucher (project manager, glass roof); Susanne Winter (project manager, building slabs) lighting design: Peter Andres + Conceptlicht engineers: Schlaich, Bergermann und Partner, (structural); Ingenieurgesellschaft IVZ/Emsch+Berger Höpfner (mechanical) area: 1.94 million square feet cost: \$850 million





Circle 235 or www.architecturemag.com/productinfo

ACCHITECTUCE'S

4th ANNUAL ACEAWARDS

ARCHITECT'S CHOICE FOR EXCELLENCE

CHOSEN BY ARCHITECTS AWARDED BY ARCHITECTURE

Recognizing durability, customer service, value and design.

Look for the 2005 ACEAWARDS ballot in the April, May & June issues of *Architecture*.

Cast your vote and let the industry know which manufacturers you trust and depend on most.

by Anna Holtzman

Designed by British-born architect Thomas Fuller and completed in 1899, the New York State Capitol Building was originally intended to embody the openness and transparency of the democratic system. Over the years, however, says architect and preservation expert Françoise Bollack, "People do crazy things to historic buildings: They cover windows, they lower ceilings, and then all of a sudden you find yourself in a tomb."

Roughly a decade ago, the state assembly resolved to reinstate the original openness of Fuller's scheme-which Bollack describes as a cross between the Hotel de Ville in Paris and the great cloth halls of Northern Europe—not only with restored windows and ceiling heights, but by making the facilities universally accessible as well. As the renovation architect, Bollack's mandate included restoring the assembly chamber and its related public spaces and retrofitting them with ramps where needed. The project also required her to insert such modern-day necessities as HVAC ducts and to resolve stylistic and spatial conflicts between the original architecture and modifications that had been made over time. After ten years of work, construction was completed in the spring of 2003 and in the same year, the project earned Bollack a merit award from the New York State AIA.

When it came to the design process, recalls Bollack, "The trickiest challenge was to come up with the right approach to the historic fabric, one that would produce a piece of design that's going to stay around for the next 100 years, because it's a very permanent building." Bollack's team was determined not to blindly apply the rhetoric of orthodox preservationism, or that of defiant modernism, to the entire building, but rather to treat each design problem on its own terms. One of the earlier undertakings, for example, was to provide handicapped accessibility to the east vestibule, which is part of the grand entrance to the assembly chamber. For this space, says Bollack, "We thought that we should really defer to [the vocabulary of Leopold] Eidlitz," who designed the Gothic Revival interiors of the chamber and the assembly parlor.

At the other end of the chamber, the architect designed a new office and conference room for the speaker in what had formerly been a public lobby. "Here," says Bollack, "we thought it was important to keep the ceiling vaults visible for the whole length of the lobby and make it clear that this was a modern insertion, so that the space of the lobby was still readable." She also tried to respect the historic structure by maintaining a light touch and ensuring that changes to the original design could be reversed in future years. Her





New York State Capitol's assembly parlor, designed by Leopold Eidlitz, as it was circa 1880 (top), and restored and retrofitted with modern ductwork by Françoise Bollack Architects (above).

scheme added two glass walls that introduce a twentyfirst-century sensibility while preserving the legibility of the original architecture. "The glass fins touch the vault rib in g five places through a pin," relates Bollack. "So you can remove the pin [to demount the walls] and you're left with a dowel hole, which you can easily patch."

As far as technical challenges, says Bollack, "It's very difficult to thread modern requirements like air-conditioning and telecommunications into an old building." In the assembly parlor, she had to slice through a 3-foot-thick, load-bearing masonry wall to insert the supply and return HVAC ducts. To mask the insertion, she camouflaged the vents with grills that were designed to match a decorative band of stencil that she had restored to the room's walls.

Reflecting on the project, Bollack muses, "The thing that interests me with historic buildings is that you have the best of both worlds: You can make the old architecture live if you treat it with love and respect. Ideally, in the final project, the existing building has had a conversation with credits and specifications at www.architecturemag.com the new stuff and has held its own."

design. ENHANCED TOT YOUR LIGHT

YOUR VISION. YOUR PROJECT. YOUR LIGHTING SOLUTION.



architect: OMA / Rem Koolhaas lighting design: Kugler Tillotson photography: Floto + Warner



- retail
- hospitality
- commercial
- institutional
- residential

ONE MORE **ADVANTAGE** OF USING BARTCO LIGHTING.



EUREKA! A TOWER'S EVOLUTION IN 3-D

Building-information modeling helps Australian architects visualize the world's tallest residential tower.

by Eileen McMorrow

Scheduled to house its first apartment owners this year, Eureka Tower (eurekatower.com.au), the world's tallest residential building at 88 stories, is being constructed in Southbank, a popular Melbourne neighborhood. Known for high-rise, high-density buildings, local firm Fender Katsalidis Architects was interested in breaking with traditional modes of working when they received this commission. Hence, Eureka Tower might just be, as its promoters claim, the first project designed exclusively employing 3-D building-information-modeling (BIM) technology.

David Sutherland, director of planning for Fender Katsalidis, pioneered his firm's application of BIM with the tower. "We were determined to use different processes, ones which would enable us to design and document this building in a far more elegant way than we experience using traditional means," says Sutherland. "This was groundbreaking. No one else was doing this in 2000," he says of the **3-D BIM** process, which he believes allowed his firm to incorporate all the information necessary to describe any portion of the building into a single building-model file.

"We embarked on the exciting journey of working with 3-D CAD—but with a pure modus operandi: If we can design—and have all the information we require coming off those designs as a byproduct of the design process—then we can spend more time designing and less time doing what we call the time-wasting process of 'drawing,'" explains Sutherland.

CONCEPTUAL MODELING

"With a conceptual design, we start building our models very early—before

we design," says Sutherland. Fender Katsalidis used ArchiCAD, an object-oriented, 3-D architectural design-and-documentation software, developed by the Budapest-based company Graphisoft (graphisoft.com), from the conceptual design phase through the production of detailed working drawings for the tower. (Other BIM products include Autodesk's Revit and Bentley Architecture.)

For Fender Katsalidis the major advantage and attraction of BIM technology was the integrated virtual model, a **parametric database** with information on all materials, finishes, systems, and occupancy types in the project. From that database, numerous other benefits flowed:

- The ability for designer and client to understand the design better in early phases.
- The option of having integrated design information rather than disaggregated disparate data.
- The opportunity to obtain non-graphic data from the underlying database.
- ∃ The ability to work in parallel with consultants and other project participants by using the same rich dataset.

Another benefit for the architect was being able to analyze the 3-D interrelationships of project components, using automated error checking.

ONE-SOURCE DATABASE

Using BIM technology, all of the design information is derived from one database. Rather than having one team providing renderings of a building, another creating documentation, and a third driving the design, Fender Katsalidis used a single dataset, allowing the firm to leverage the information they create for all design and documentation. "If the architect makes changes for any reason, the changes automatically update throughout the virtual building model, saving time in redrawing and reducing errors that typically result from design changes," Sutherland explains.

For example, says Sutherland, "At the start of Eureka when we produced



Eureka Tower's apartments start on the 11th floor and rise through the 84th. The lower levels comprise retail, offices, and parking.

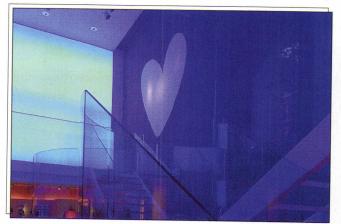
a drawing that showed the primary structure in 3-D, we could see immediately that an edge beam had been left off one of the 88 levels, and we could fix it instantly." While he concedes that his project team would have picked up the missing edge beam in other drawings, many document drawings don't show that sort of information. "By walking through the model, we can view the primary structure in 3-D," he says. "We could see it straight away. The problem is that in 2-D there is little context."

Eileen McMorrow publishes the online facilities management journal *McMorrow Report*.

FOR INFORMATION ON BIM, CIRCLE 125 ON PAGE 73.

- product: Digital Addressable Lighting Interface (DALI)
- ☑ manufacturer: Erco
- ∃ web: erco.com

Created to simplify the installation and programming of lighting control systems, DALI allows each fixture to be linked to a "light server." Shaped like a box, the server stores data on lighting effects and is controlled with a wall-mounted push-button display. Options include RGB color mixing, sequences of lighting effects with optional fading times, or timer functions. Among recent DALI installations is a boutique for Agatha Ruiz de la Prada in Barcelona (below).



- → product: Logico Suspension
- ∃ web: artemide.us

These suspension-mounted luminaires by Artemide provide diffused incandescent or fluorescent lighting, depending on illumination needs. The diffuser of the Logico is made of hand-blown glass with a satin finish, while the ceiling canopy is in steel with a pale gray thermostatic cover. Three sizes are available, as well as a "mini suspension" version.



FOR INFORMATION ON LIGHTING, CIRCLE 126 ON PAGE 73.

- ∃ product: Nastro
- **∃** manufacturer: Andromeda International
- web: leucos.com
 web: leucos.com

The ribbonlike Nastro line of Venetian-glass decorative lighting is made using traditional glass-blowing techniques. Created by Italian designers Afra and Tobia Scarpa, the collection offers floor lamps, hanging lamps, and wall sconces.





A 2-circuit line voltage rail and field bendable commercial lighting system, W.A.C. Lighting's Flexrail2 bridges the gap between style and function. Designed for a wide range of applications, the versatile Flexrail2 features Compact Fluorescent wall washers, HID floodlights, Halogen PAR Floods, Line Voltage Pendants and QuickConnect Low Voltage Spots and Pendants.

View W.A.C. Lighting's entire line in New York and Los Angeles, as well as major trade shows around the globe.



Tel. 800.526.2588 waclighting.com W.A.C LIGHTING

Experience the value. Value the experience.

Circle 31 or www.architecturemag.com/productinfo

- ∃ product: Arboreal
- manufacturer: Ceilings Plus
- web: ceilingsplus.com
 web: a web: ceilingsplus.com
 web: a web:

Its hardwood veneers laminated to an aluminum core, Arboreal is lightweight, bends easily, and can be custom-perforated to create acoustics with noise-reduction coefficients as high as .95. The product complies with LEED criteria, releases zero VOCs, contains high levels of postconsumer recycled content, and can be made with certified wood veneers.



- ∃ product: Techstyle
- ☑ manufacturer: Hunter Douglas

This novel fabric system, which accomodates very large tile sizes (the 4 foot square is popular) with a tiny 1/4-inch reveal, debuted two years ago but it's just now seeing widespread use. Its clean, flush appearance is similar to that of drywall, and the tiles reduce noise across the entire frequency spectrum. Color options are basic: white, off-white, and black.



- ∃ product: Ledges
- → web: armstrong.com/ceilings

A suspended ceiling system, Ledges, is far less expensive than embossed plaster, yet it provides a similar 3-D look and a smooth finish. The 24-inch-by-24-inch panels feature square edge details and install in Armstrong's "Prelude" 15/16-inch suspension system. Reflecting 80 percent of the light that strikes them, the Ledges interior surfaces also help to brighten a space. They carry a Class A UL flame-spread rating.

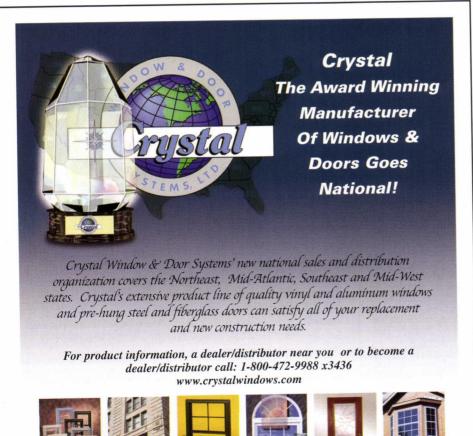


- **∌** product: Billo 3-D Panels
- ∃ manufacturer: USG
- ∃ web: usg.com

Consisting of 2-foot-square infill panels of preformed, lightweight Lexan, Billo transforms traditional, flat ceiling planes into organic forms reminiscent of billowing sails. The system can be installed either curved upward toward the ceiling or downward toward the floor, permitting customization with one panel shape. The semitranslucent installations can be backlit with fluorescent strip fixtures or integrated with standard lay-in fixtures.



FOR INFORMATION ON CEILINGS, CIRCLE 126 ON PAGE 73.



Circle 38 or www.architecturemag.com/productinfo



The first hand-bendable line-voltage track lighting system now available in a white finish.

The revolutionary design features a clean white finish that can be curved in the field to form practically any shape. Complete with powerful and versatile illumination options, including incandescent and ceramic metal halide lamp configurations for heads and a host of decorative pendant designs.

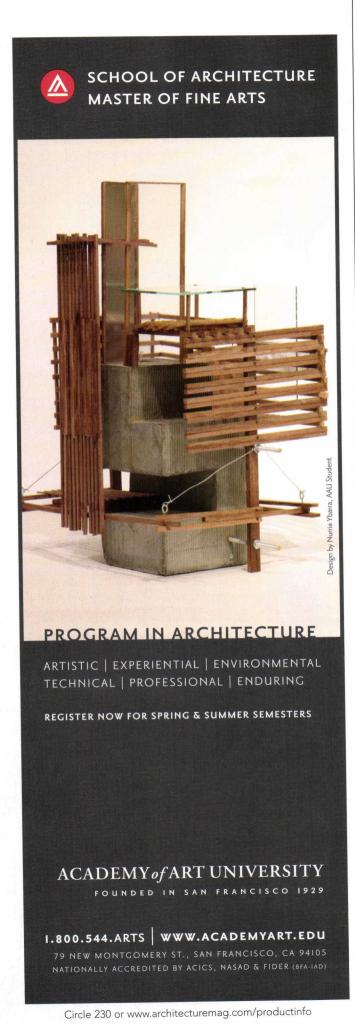
「∼t r a k" — it's track lighting with a twist.



www.techlighting.com

Circle 200 or www.architecturemag.com/productinfo





sources

moisture barriers

- ∃ product: Tuff-N-Dri
- manufacturer: Koch Waterproofing Solutions
- → web: guaranteeddrybasements.com

The two-part Tuff-N-Dri waterproofing system for residential and light commercial basements helps control leakage, seepage, and interior condensation. For part one, a polymer-enhanced asphalt membrane is sprayapplied by a certified waterproofing contractor. The membrane spans foundation-settling cracks to seal out moisture penetration, including water under hydrostatic pressure. Teamed with the spray is Warm-N-Dri foundation board, which insulates basement walls and helps channel moisture to exterior drainage systems.



- ☑ product: HydraFlex
- ☑ manufacturer: TEC
- → web: tecspecialty.com

A mold- and mildew-resistant membrane, HydraFlex provides water-proofing and crack isolation for positive-hydrostatic-pressure applications of ceramic tile and stone. It rolls on to form a smooth, water-tight surface over walls, floors, and ceilings, preventing the transfer of cracks at the subfloor to the finished tile or stone.



- ☑ product: Aqua-Tough
- ∃ manufacturer: USG
- ∃ web: usg.com



Aqua-Tough interior panels, released under the company's Fiberock brand, are made from 95 percent recycled materials. Approved for wet areas, they derive strength and water resistance from a uniform composition. The panels can be installed and finished like traditional wallboard, such as with paint or ceramic tile.

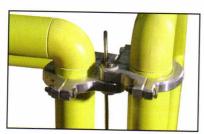
FOR INFORMATION ON MOISTURE BARRIERS, CIRCLE 128 ON PAGE 73.



Bilco's Bil-Guard™ Hatch Rail System

- Independently tested and proven to exceed OSHA fall protection regulations for guardrails (CFR 1910.23)
- Corrosion-resistant construction carrying a 25-year warranty
- Available in a variety of sizes to fit all brands of roof hatches
- Quick, simple installation using basic tools (no training or certification required)
- High-visibility safety yellow color
- Non-penetrating attachment
- Standard self-closing gate feature





Self-Closing Gate Hinge Ensures continuous protection



Quick-Mount Bracket For fast, secure attachment



Pivoting Mounting Sleeve For installation flexibility



For more information call (203) 934-6363 or log on to www.bilco.com

See us at the International Roofing Expo Booth 1042 Circle 216 or www.architecturemag.com/productinfo

Brazil's Modern Architecture | Elisabetta Andreoli, Adrian Forty, editors | Phaidon This

tome chronicles the past, present, and future of Brazilian architecture, as told through plentiful photographs, drawings, and essays. The editors seek to debunk the myth that the iconic Oscar Niemeyer was Brazil's only native architect of note. And while the volume does cover the midcentury designer's salient—if ill-fated—masterpiece, the capital city of Brasilia, the authors prove that there is more to their country's built heritage. The text places the nation's buildings in the context of urban development issues, such as the dual conditions of rapid modernization and vast urban shantytowns, and brings the unschooled reader up to date on such contemporary designers as MMBB Arquitetos and Brasil Arquitetura, forecasting an optimistic future for a regionalist modernism in Brazil. **Anna Holtzman**



Michael Wesely: Open Shutter | MoMA, New York City | Ongoing; Projects 82: Mark Dion |

MoMA, New York City I Through March 14 All the fanfare surrounding the completion of MoMA's new complex [page 40] has overshadowed two exhibitions that focus on the site's history. Open Shutter consists of four large-scale, long-exposure photographs of the museum's construction. Michael Wesely mounted three cameras outdoors—two facing the north side of the building and one facing the west-on August 7, 2001. He left the shutters open for three years, resulting in prints that feature ghostly images of Yoshio Taniguchi's design materializing amid the static landscape of the surrounding buildings. Another exhibition, Projects 82: Mark Dion focuses not on the construction of the new building but rather on what came before it. Dion conducted archeological excavations on several areas of the building site, preserving artifacts including bricks, moldings, and wallpaper from the recently demolished Dorset Hotel and from the Rockefeller townhouse (below), which was demolished to build the museum's sculpture garden in 1939. Katie Gerfen



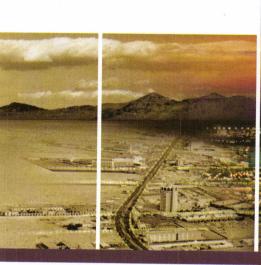
ad index

	FREE PRODUCT INFORMAT	
RS #	ADVERTISER	PAGE
230	Academy of Art University	62
3	AIA 2005 Convention	71
49	Alcan Composites	22
52	Architectural Area Lighting	16
1	Armstrong World Industries	C2-1
213	Bartco Lighting	55
26	Belden Brick (East, Midwest)	24
79	Benjamin Moore & Co.	19
216	The Bilco Company	63
101	BioFit Engineered Products	67
235	Cascade Coil Drapery	52
102	CertainTeed	67
38	Crystal Window & Door Systems	60
211	Eldorado Stone	C3
100	Englert	57
103	EnviroSpec	67
104	Eurotex	67
105	First Source	67
106	The Gage Corp.	67
108	Glass Innovators	68
32	Gypsum Association (Regional)	16A-16E
71	Hanover Architectural Products	10
225	HDI Railing Systems	20
109	Invisible Structures, Inc.	68
81	Jack Chandler Associates	52
33	Marvin Windows & Doors	4-5
57	Mason Contractors Assoc. of America	21
110	North Country Slate	68
107	Northern Engraving Corp.	68
220	Petersen Aluminum Corp.	14
4	PGT Industries (FLA/SC region)	53
193	PPG Industries	12-13
86	Prescolite	2-3
98	Rheinzink	26
	Spacesaver	58
12		8-9
10	Steelcase Tools Linksing	61
200	Tech Lighting	50
204	The Vistawall Group	59
31	WAC Lighting	68
111	Walker Display	65
164	Wausau Tile	68, C4

This index to advertiser page location is published for reader convenience. Every effort is made to list page numbers correctly. This listing is not part of the advertising contract, and the publisher is not liable for

errors or omissions.







magine create transform

AIA 2005 NATIONAL CONVENTION AND DESIGN EXPOSITION May 19-21, 2005 — Mandalay Bay Convention Center

the power of architecture

- » Satisfy your membership education requirements in one place in just four days.
- » Choose from more than 130 continuing education programs, over 45 tours of Las Vegas, and 20 distinct workshops.
- » Visit more than 800 exhibitors showcasing leading-edge products, services, and technologies at Expo2005.
- » Register before April 15, 2005, and get a substantial discount on the registration fee.

Register online at www.aia.org

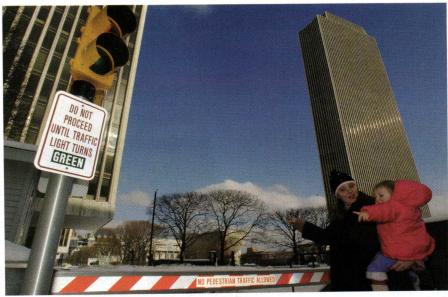
IN THE NAME OF PUBLIC SAFETY, GOVERNMENT OFFICIALS WANT TO KEEP THE PUBLIC OUT OF PUBLIC PLACES. BY JANE GOTTLIEB

It's biting cold in Albany, New York, with whole days of dusk. I have just placed my coat, purse, hat, and gloves on a conveyor belt that passes for intelligence in the state capitol building. I push a stroller through, releasing my two-year-old son first to rush past the phalanx of uniformed personnel who evaluate the gear under X-ray. I retrieve our things, zip all zippers, and cross the street to daycare in the beaux-arts Education Building. In about six minutes, I'm back to repeat the drill, minus toddler and wheels. I ask the security patrol (again) if this could be made easier for daily users. "Yeah," answers one. "We'll dig a tunnel around the capitol so you never have to come inside!"

His attempt at humor is perhaps the most honest reflection of the sentiment here: In the name of public safety, the government wishes the public would stay out of public buildings. But we won't dig tunnels. Instead, as at municipal buildings across the country, we'll hand over our belongings and feel a little worse about the people who run things.

Some architects, like Albany-based preservation specialist John G. Waite, believe that public spaces can be enhanced when antiterrorism is considered alongside historic value. For New York City's Tweed Courthouse, Waite extended sidewalks to keep cars at a safe distance; at another project, steel cylinders sunk in stone took the place of Jersey barriers. And, Waite says, technology has advanced beyond conveyor belts and X-ray screens, enabling people to walk unimpeded through sensors that detect explosives and metal.

But here in Albany—where a guard once said "Blame Saddam Hussein" as he wanded the diaper compartment of my son's stroller—there's no such subtlety or stealth. Instead, we're constantly reminded that we are threatened.



Just a year ago, 18 months after the World Trade Center attacks 140 miles south, the overstaffed crews and their clunky workstations popped up. Legislators and some workers got automatic swipe cards; the rest of us shuffled into line to get through to our government agencies, restaurants, and cultural sites. Outdoors, precast-concrete barriers appeared alongside 100-year-old carved granite walls, and yellow plastic barriers bearing the brand name "Safe Hit" imposed on the silvery geometry of

Some suspect that guarding the public is not the only agenda behind the barriers.

Harrison and Abramovitz's Empire State Plaza (1965), the space-age complex that is the yang to the 1899 capitol's yin.

Just yards from the safety enhancements à la Home Depot, large cranes signal the \$40 million restoration of the capitol, and crews are fastidious in maintaining the plaza's stonework. Yet those efforts are far less obvious than the entrances outfitted with guard shacks, stop lights, paired "Do Not Enter" signs, and striped traffic gates stamped "No Pedestrians"—scenery resembling cold-war Berlin. Most local residents walk around the encumbrances, while policemen question tourists who take snapshots of the government buildings. State workers without swipe cards tend to avoid the plaza, where they once bought greeting cards and lunches. Weekend tours originate at an entrance a quarter-mile away from

the capitol's secured main doors, which have even locked out lawmakers from evening legislative sessions.

A few lawmakers admit that they felt better in the old days of the photo ID, which, unlike today's swipe cards, carried visible evidence of ownership. But then, plenty of them suspect that guarding the public is not the only agenda.

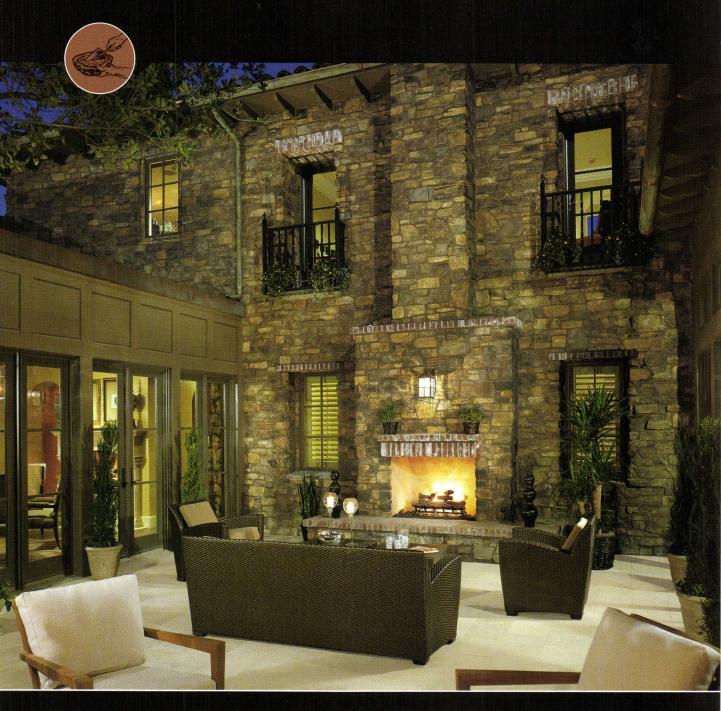
"The message is political," says John McEneny, an Albany assemblyman and local historian. "They remind us, '9/11, 9/11,' as often as possible, every time people walk into our public buildings." Rather than check the pockets of school children, McEneny wants plainclothes police officers who specialize in riot control and explosives. He also advocates common sense, such as granting all state workers—and regulars like my son's daycare teachers—swipe cards.

State officials acknowledge that the measures are heavy-handed. "As time goes on, there will be more money and we'll be looking at new technology and less-intrusive mechanisms," says Jennifer Morris, spokeswoman for the state's Office of General Services. But McEneny, for one, passionately hopes they don't put too much effort into it. "Could they do a better job? Yes," he notes. "But so far it's all temporary. Do you really want to make it blend in so that it becomes a permanent way of life for the next 100 years, like the czar's Winter Palace? If you do that, aren't you surrendering a way of life?"

Jane Gottlieb has written for Photo District News and The New York Times.

THE MOST

IN THE WORLD



They say beauty is in the eye of the beholder. So, behold. For more than 30 years,

Eldorado has been refining the craft of creating architectural stone veneer. Through innovative castings of natural stone. Subtle coloration techniques. And careful hand-finishing by artisans. The result? Twelve Core Profiles and a variety of regional styles that truly capture all the nuances, textures, and tonalities of real stone. Today, you can spec Eldorado with the confidence that it will measure up to your high aesthetic standards.

Call now for a free brochure.



800.925.1491 www.eldoradostone.com

Circle 211 or www.architecturemag.com/productinfo

Sometimes, a spectacular finish is the start of a GREAT DESIGN.



Shown above: Anodized dark bronze aluminum exterior Weather Shield® casement windows. This is one of seven anodized colors offered by Weather Shield. Each provides lasting beauty that resists chipping or peeling, even under intense exposure to the sun. For complete sizing and ordering information, call 1-800-477-6808 or visit weathershield.com/A

Demand better. Compromise nothing.



Weather Shield® Premium Windows and Doors