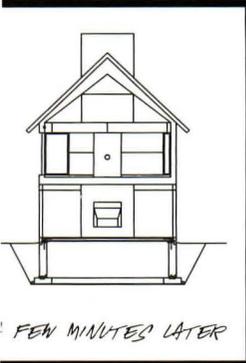
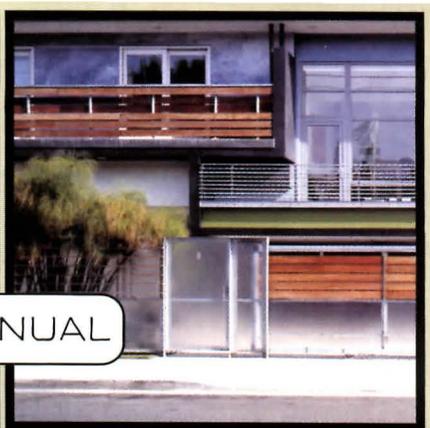


# ARCHITECTURE™

November 2003 | \$8.95 USA | \$11.00 Canada



2ND ANNUAL



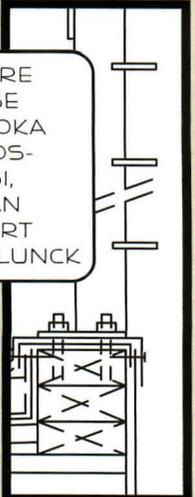
FEW MINUTES LATER



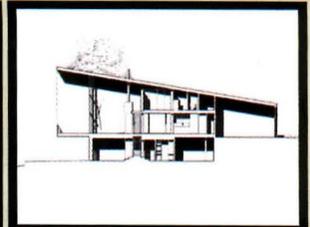
## HOME OF THE YEAR AWARDS



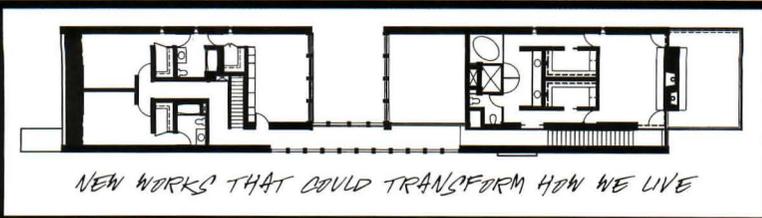
THE WINNERS ARE  
SAIA BARBARESE  
TOPOUZANOV, ZOKA  
ZOLA, LUCAS RIOS-  
GIORDANO, MS-3I,  
SPF:A, ANMAHIAN  
WINTON, HERBERT  
LEWIS KRUSE BLUNCK



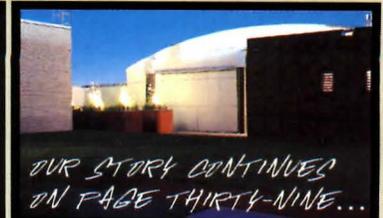
A UNIQUE FOCUS ON THE RESIDENTIAL-DESIGN PROCESS



MEANWHILE...



NEW WORKS THAT COULD TRANSFORM HOW WE LIVE

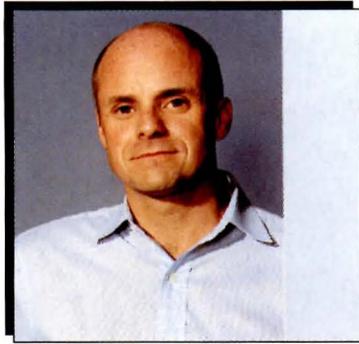


OUR STORY CONTINUES  
ON PAGE THIRTY-NINE...



Cool, stylish and yes, affordable. MetalFX™ Laminate. Where will it take you? For samples, visit [wilsonartlaminare.com/metalFX](http://wilsonartlaminare.com/metalFX) or call 800.433.3222 ext 131.

Pattern shown: *Satin Stainless 4830-7* **NEW**



## FRESH HOUSES, FRESH FACES

BY C.C. SULLIVAN

Where can you learn about the architectural processes behind today's most innovative housing? Right here, in these pages: Anchoring this issue are seven startlingly different studies in the North American domestic condition, seven ways to elevate our discourse about the places where we live. The reason? Our second annual Home of the Year Awards.

Starting on page 39, we proudly present our award-winning projects. Besides pushing the boundaries of spacemaking and beauty, these new residential works challenge our preconceptions and prejudices about the home. Yet, they are also marketable, budget-conscious products that can seduce a broad consuming public. (Two of the winning projects arguably result from more lavish circumstances, but even those are quite restrained and modestly scaled.) As a bonus, the projects offer solutions to perennial housing challenges—the tight lot, the tasteful two-family—showing that high design breeds high value.

Another affirming side effect of the Home of the Year Awards: We're recognizing unsung talent. While three of the premiated entries are by architects who are well known regionally (one has a strong national profile), the rest honor practitioners working in rather anonymous, predominantly local circumstances. Only three of them have been published at all. What could be more satisfying than rewarding the hardworking but as yet undiscovered designer?

Initiated only last year, the Home of the Year Awards were designed to elicit such watershed results. Like our P/A Awards (see January 2003 for the 50th annual edition)—and unlike many other residential design honors from architectural magazines—this is a juried program. To evaluate hundreds of worthy submissions, we invited the most thoughtful minds and perceptive eyes in the country to our offices: four acclaimed practitioners—David Salmela, Thomas Phifer, Michael T. Maltzan, and Carlos Jiménez—and architectural historian Gwendolyn Wright, whose books on the social and moral contexts of American housing have become seminal reading. (For more on their work, see page 40.) Just as the seven home designs do, this year's jury attests to the strength of our young program.

But we should let the work speak for itself, and instead

thank our five jurors and all the architects who submitted their projects to be reviewed. Thanks to your good work, the world is a much more interesting place to live in. A hearty congratulations to the architects of premiated works! And to all: Look for our 2004 call for entries—including a new multifamily category—in March.

### A WORLD OF INNOVATIVE DWELLING

Just as we did last year, we've accompanied this issue's review of the best new residential works with captivating and instructive stories on the latest trends, issues, and resources affecting the single-family and multifamily markets. We heard your request for more data on the materials, finishes, and systems specified for the award-winning projects (see Sources, beginning on page 71), as well as more insight into how architects innovate in the residential sphere.

In San Diego's white-hot housing market (page 25), for example, several architects have become developers in order to advance the city's stock of dwellings for the middle income brackets. There and elsewhere, designers are also taking on the contractor's role to rein in budgets, schedules, and construction quality—and maybe to make a bit more money (page 32). Other architects are mindful of history—for example, when your neighbor is Rudolph M. Schindler's Kings Road house, a prototype of California modernism and an experiment in communal living (page 29).

Even our Views department (page 91) examines the design process behind Glenn Murcutt's masterful Simpson-Lee House, and the client dynamic behind Mies's Farnsworth House commission. (The calendar of events boasts relevant exhibitions as well, including one on domestic design in the Arab world.) Plus, we offer a mix of unlikely ideas you'll only find in *Architecture*—why a Tuscan-style mansion on the West Coast could change design-copyright law (page 17), for example, or how two British architects found unexpected beauty on a tour of America's cheaply mass-produced housing (page 96).

At the very least, we hope you find this assortment of articles provocative and relevant to your work. But most of all, we hope it suggests new ways to consider the perpetual challenges of residential architecture.

**HOW DOES YOUR FIRM INNOVATE?** *Architecture* is committed to bringing the profession's best practices to the fore. Send a 500-word "process brief" and supporting documents to *Architecture*, 770 Broadway, New York, New York, 10003.

# innovation - in and out of the box



Pilkington Profilit™

*Freedom To Design In Glass*

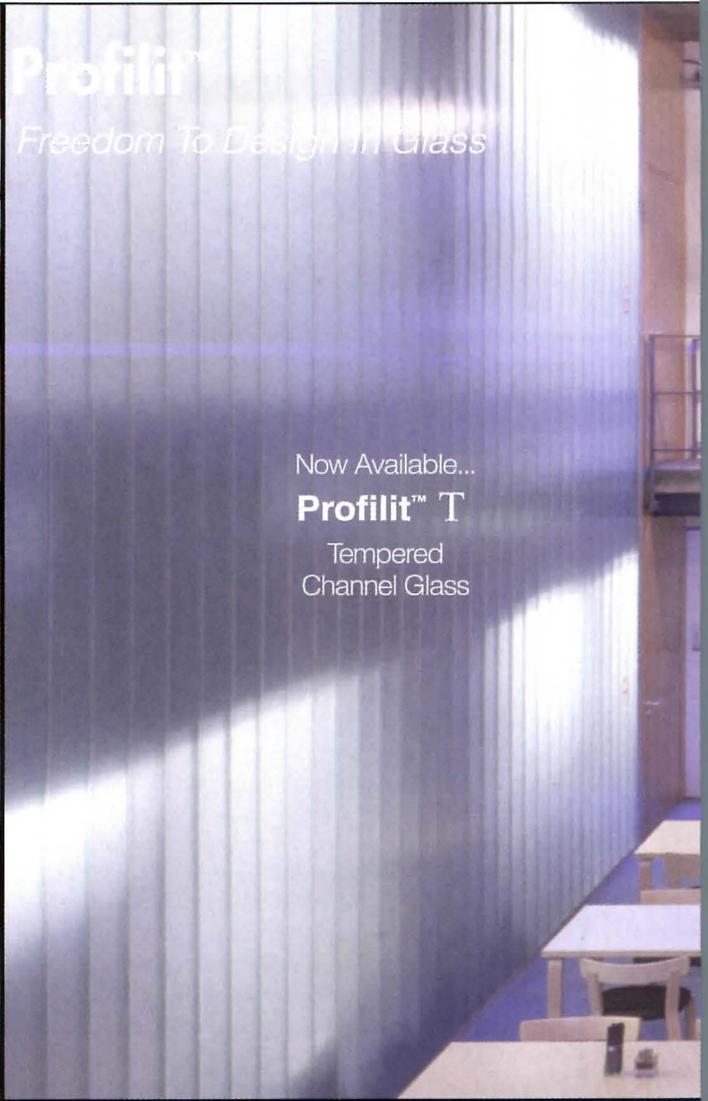
Photography © Don F. Wong



Photography © Paul Warchol



Photography © Paul Warchol



Now Available...  
**Profilit™ T**  
Tempered  
Channel Glass

Photography © Tim Griffin



ESTABLISHED 1873

WESTCROWNS INC.

t: 910-579-4441

f: 910-575-3203

Circle 60 or [www.architecturemag.com/product](http://www.architecturemag.com/product)

[www.westcrowns.com](http://www.westcrowns.com)





Haddonstone is renowned for classic designs including balustrading, columns, porticos, window surrounds, cappings and quoins. Alternatively, Haddonstone can manufacture custom-made stonework to practically any shape or size. Haddonstone - the only constraint is your imagination.

# HADDONSTONE

**Fine ornamental and architectural cast stonework**



Contact us for a copy of **The Haddonstone Collection** richly illustrated in 156 pages.

Haddonstone (USA) Ltd,  
201 Heller Place,  
Bellmawr, NJ 08031.  
Telephone: 856 931 7011  
Fax: 856 931 0040

[www.haddonstone.com](http://www.haddonstone.com)  
[info@haddonstone.com](mailto:info@haddonstone.com)

Offices also in: California • Colorado

Circle 67 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

The perfect  
union of form  
and function.



VERSA-LOK® is the only  
solid, pinned segmental  
retaining wall system.

A single, trapezoidal  
VERSA-LOK® unit can  
be shaped and split to  
create virtually any form  
you can imagine. And its  
100% solid construction  
means years and years of  
maintenance-free function.



versa-lok.com

## letters

### Timeless Authority

Congratulations to Martin Schwartz and *Architecture* for the cover story on Jørn Utzon, a truly great architect (September 2003, page 51). Utzon has received little attention in this country, partly because he hasn't sought publicity, but also because his architecture doesn't easily lend itself to the simple stylistic discussions favored by the press. Even when he was awarded the Pritzker Prize this year, American critics barely noticed—a shame since his recognition was so long overdue.

His many writings on architecture (although in English, his second language) are invariably elegant, lucid, and free of pretension, and an expression of his personality and the way he designs. His buildings are always well organized, suited to their surroundings, and thoughtful essays in expressive construction. All of which gives his work an authority and timeless presence that would be nice to see in your pages more often.

**G. Mackenzie Gordon**  
*Lakeville, Connecticut*

### Synthetic Agenda

I was disappointed to see your magazine publish such antienvironmentalists as those from the American Plastics Council (September 2003, page 112). Their use of the words "sustainable," "science," and "environmental" hardly cover the industrial-political agenda they promote. Toxins in the environment were not mentioned, nor was the fact that the LEED green-building rating system does take the toxicity of materials into consideration. Leaving out that information can make the less attentive imagine that the rating system "remarkably contradicts its own intent." Energy consumption is only one of the criteria to consider; recycling the poison that is already threatening our environment is hardly a good thing. Architects are charged with the protection of public safety, and such bogus information about plastics and LEED ratings does the profession a serious disservice.

**Howard M. Switzer**  
*Linden, Tennessee*



09 | 2003

### Turkish History Lesson

Regarding the passage in "Mental Gymnastics" alluding to the deaths of Armenian people during the Ottoman-Russian War beginning in 1915 (September 2003, page 61): First, I would like to advise you not to publish material that is outside of the expertise of the authors and not properly researched and cited. It is misinformation at best and an ethnic slur at worst. Please maintain your standards of journalistic integrity and do not venture into areas of deep political controversy. I do not know what besmirching the good name of the Turks adds to an article that has perfectly good architectural content and that would otherwise be excellent material to recommend to students and practitioners of architecture.

**Ömer Akın**  
*Pittsburgh*

### Don't Be Square

Thank you for inviting me to submit a project to your Home of the Year competition (page 39).

Unfortunately, however, I must decline, because my submission would be curvilinear in form, and anyone can see by even a casual review of recent architectural publications that fear and loathing of the curve is the prevailing fashion of our time. In this climate of orthogonal orthodoxy, to submit a curvaceous project to your program would be like asking Republicans to hike taxes.

**Arthur Cotton Moore**  
*Royal Oak, Maryland*

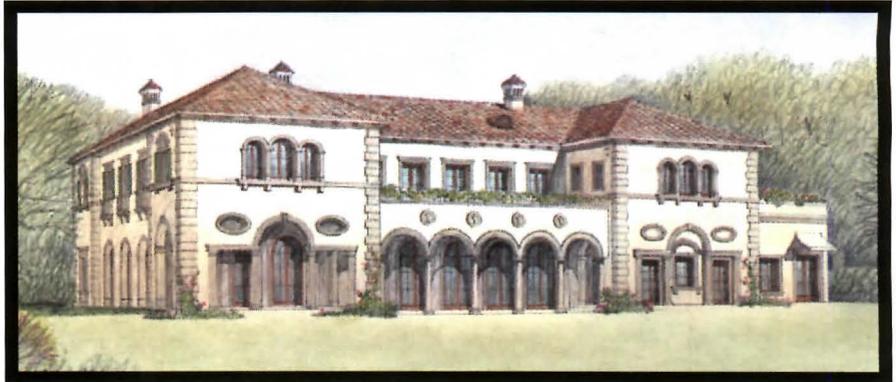
## "COPYCAT" CASE TO TEST COPYRIGHT LAWS



In what promises to be a true test of the Architectural Works Copyright Protection Act of 1990, Los Angeles-area Hablinski-Manion Architecture is pursuing a lawsuit over what it claims is illegal use of a set of home-design plans that were allegedly stolen almost right off the drafting table.

In January 2000, Hablinski-Manion principal William Hablinski designed a \$20 million Bel Air home (right) for real-estate mogul Fred Sands, which is now nearing completion. Hablinski was alarmed this April when two of his employees spotted what they thought was the Sands residence—but in Beverly Hills. The Tuscan-style house, believes Hablinski, "had been cloned."

Hablinski's lawyer, Peter Bezek, claims that the project manager for the Sands home checked the plans filed at the Beverly Hills building department for the other house and found that the name of the client on the papers—"Unity Family Trust"—was the same as the one that his firm (then named William Hablinski Architecture) had assigned, for privacy reasons, to Sands's house. The actual owners of this "copycat" residence, as Hablinski-Manion refers to it, are Joseph Elihu and his wife, Hayadeh. Elihu's brother Danny Elihu owns Amir Construction, the company building the second house. Complicating matters, Joseph Elihu's bath-



fixtures company, Euroconcepts, was a supplier on the Sands project.

Hablinski-Manion filed two actions in June, according to Bezek: one against Mahran Shahverdi, a draftsman at the architecture firm when the alleged copying took place; and another against Amir Construction, EuroConcepts, and five members of the Elihu family.

The suit against Shahverdi, also a former employee at Amir, was filed in state court and lists breach of employment and breach of fiduciary duty, among other complaints. "We're alleging he lifted the plans off our server and manipulated the files," says Hablinski. However, due to an agreement Shahverdi signed with the firm, the case against him has been dropped but the matter may go to mediation. Shehvardi's attor-

ney, Michael Fox, says his client feels the original charges "had absolutely no merit" and considers the matter closed. Bezek claims to be initiating mediation.

The suit against the Elihus and their companies has been filed as a copyright-infringement case in federal court and seeks unspecified damages. The case explores the reach of architectural copyright laws; before 1990, plans were protected by copyright, but buildings were not. Jurors and judges in such cases can now consider an edifice's general appearance and specific design details.

For his part, Danny Elihu claims that he and his family are innocent. "What they're saying is absolutely false," says Elihu of his accusers. "We did not know about the Fred Sands project." **Jamie Reynolds**

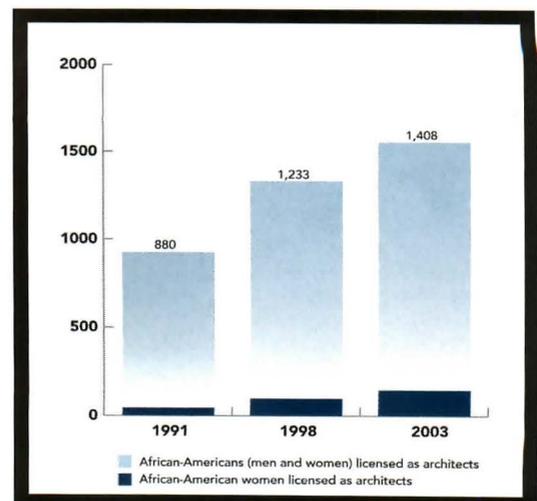
## MORE AFRICAN-AMERICANS JOIN THE RANKS



More African-Americans are becoming registered architects in the United States, with black women increasing their ranks most rapidly. Architects Dennis Mann and Bradford Grant, current and former faculty at the University of Cincinnati, respectively, are cocreators of an online directory of African-American architects ([www.blackarch.uc.edu](http://www.blackarch.uc.edu)), derived from data they've collected since 1991. Back then, they counted 880 licensed African-American architects. The number has since increased by 60 percent, to 1,408. While women accounted for 5 percent of the 1991 figure (the directory listed only 44),

their numbers have increased by 230 percent to 145 over the past 12 years. These findings are only estimates, however, as state registries for architects such as NCARB and AIA do not keep information on the ethnicity of their members; thus, Mann and Grant rely on a wide network of contacts (including the National Organization of Minority Architects) for their word-of-mouth data collecting. Mann says that, while the raised percentages appear dramatic, they are "just increasing by nature, not exploding," as more African-Americans become professionals across the board.

**Anna Holtzman**





Innovation. In the paint industry, it means constantly researching and developing. Creating new products that exceed expectations. Products that feature all the traditional paint qualities professionals expect, plus modern-day features of zero VOC, minimal odor and mildew resistance for commercial and industrial applications.\* Premium products like Pittsburgh Paints Pure Performance.™ Because,

\*On the surface of the paint film.

It's all about innovation.



© PPG Architectural Finishes, Inc. 2003, www.pittsburghpaints.com, 1-800-441-9695



PITTSBURGH  
PAINTS



You Work Too Hard To Paint With Anything Less.™

Circle 72 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

## LIBRARIES PUMP UP THE VOLUMES



⇒ Conservationists allege that the Taj Mahal may be in danger from a 72-acre pile of soil on the bank of the Yamuna River, across from the structure. They claim that in a flood, the soil, part of an aborted project to reclaim a part of the river, could cause a landslide.

⇒ Herzog & de Meuron has won the 2003 Stirling Prize for its design of the Laban Center in London, England. The \$33,000 award is given by the Royal Institute of British Architects.

⇒ World Trade Center developer Larry Silverstein has selected three more architects to work on the office towers planned for the Ground Zero site: Norman Foster, Fumihiko Maki, and Jean Nouvel.

⇒ The Art Center College of Design, in Pasadena, California, is now a United Nations-recognized nongovernmental organization, or NGO. The first design school to receive this designation, it will be available as a resource to the UN in dealing with urban housing, portable medical clinics, signage, and other issues.

COURTESY FREE LIBRARY OF PHILADELPHIA

It has slowed since 2001's peak of nearly \$690 million, but U.S. library construction recorded more than 200 major projects in 2003, revealing increased public use and larger private donations. And politicians and librarians recognize architecture as the key to improving services.

To accommodate new acquisitions and more visitors (up 24 percent from four years ago), officials at The Free Library of Philadelphia, for example, are planning a \$100 million reconfiguration of Horace Trumbauer's 237,000-square-foot Beaux Arts-style Central Branch (right) and a 180,000-square-foot addition. With \$30 million from the city and a fundraising study underway, officials formed a selection committee headed by urban designer Gary Hack. They reviewed 40 submissions, narrowing the list to four: Cesar Pelli, Moshe Safdie, Foster and Partners, and TEN Arquitectos, who made presentations of decidedly modernist compositions to the library and the public on October 22. A



winner will be announced by January 2004.

The Central Branch is located alongside Philadelphia's Benjamin Franklin Parkway; it will soon welcome the Philadelphia Museum of Art's Richard Gluckman-redesigned Perelman Building, the relocated Barnes Foundation, and Tadao Ando's Calder Museum.

"We are determined to open up the spaces," says library president and director Elliot Shelkrot, claiming the 1927 building compromises visitor service. "The beauty of a public library isn't just collections, it's the guided access that it provides, and that's what we are about." **Joseph Dennis Kelly II**

**Built to resist whatever the coast throws at it. Hurricane winds. Salt air. The new building codes.**



*Andersen® 400 Series windows and patio doors with Stormwatch™ protection. A full product line that's as rugged as it is beautiful. Even in the face of the new IRC building codes. Call 1-800-426-4261, ref. #4753. Or visit [andersenwindows.com](http://andersenwindows.com)*

LONG LIVE THE HOME® **Andersen** AW  
WINDOWS • DOORS

3072B. © 2003 Andersen Corporation. All rights reserved.

Circle 196 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

# Tile Wausau

The only domestic manufacturer of Cementitious Terrazzo Tile.



Make your ideas spring into vibrant, colorful life with precast terrazzo tile and accessories by Wausau Tile. We offer a palette of over 60 standard colors in a number of styles - or let us assist you in developing your own custom blend. In an effort to be environmentally conscious, Wausau Tile is introducing recycled glass terrazzo.

- Precast Concrete Pavers and Precast Accessories
  - Terrazzo Tile and Precast Accessories
  - NEW - Terrazzo Glass Tile & Accessories
  - NEW - Epoxy Terrazzo Accessories

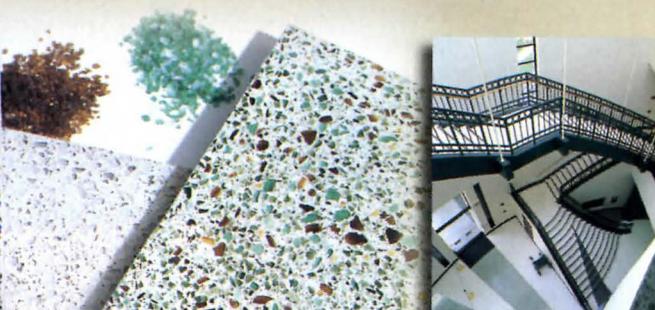
Call today for catalogs filled with products and ideas - 1-800-388-8728 or visit our new website at [www.wausautile.com](http://www.wausautile.com)



**WAUSAU TILE**

P.O. Box 1520  
Wausau, WI 54402-1520  
(800) 388-8728  
(715) 359-3121 FAX (715) 359-7456  
[www.wausautile.com](http://www.wausautile.com)  
Email: [wtile@ausautile.com](mailto:wtile@ausautile.com)

Circle 164 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)



⇒ Colombian architect Rogelio Salmona, designer of such works as Bogota's National Archive (1992), has been awarded the Alvar Aalto Medal. The prize is awarded by the Finnish Association of Architects.

⇒ The Farnsworth House, designed by Mies van der Rohe, is up for sale. The 1951 glass-and-steel pavilion near Chicago will be auctioned off on December 12 by Sotheby's on behalf of owner Lord Peter Palumbo. An alliance of conservation groups is trying to raise the estimated \$4.5 million–\$6 million needed to buy it.

⇒ Herbert Beckhard and Frank Richlan, partners at the New York firm Beckhard Richlan Szerbaty + Associates, both died in early September. John Wiebenson, a Washington, D.C.-area architect known for his work with social-services and nonprofit clients, died on a project site in late September. He was 70. Simon Breines, former principal of Pomerance & Breines and the first president of the Landmarks Conservancy of New York, died in September at age 97.

AP/WIDE WORLD

## SHANGHAI'S SINKING FEELING

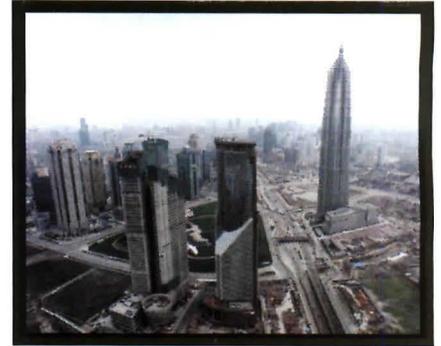


Shanghai, China's largest city, is sinking at a rate of about half an inch per year, due in part to a decade-long boom in skyscraper construction.

Built on a drained swamp, the city center covers 230 square miles, and has more than 3,000 high-rise buildings of at least 18 stories, including China's tallest, the 1998 Jin Mao Building at 1,380 feet (88 stories). Another 2,000 are planned or in construction, one of which, the Shanghai World Financial Center, slated for completion in 2007, will rise to over 1,600 feet, competing for "world's tallest" status with the 1,676-foot Taipei 101 building, completed last month.

Another factor causing the city of 15 million to subside is overuse of underground water. Since the 1920s, the city has sunk a total of 6.5 feet on average and up to 10 feet in some areas, with the two most densely built neighborhoods, Xuhui and Lujiazui, sinking the fastest in recent years. According to Fang Dingke, senior geology

expert with the city's National School of Administration, high-rises are responsible for roughly 30 to 40 percent of recent subsidence. For some 40 years, the city has been exercising controls—such as limits on the use of groundwater—to slow the sinking rate, and soon officials will announce a plan to cap the number of permits for new skyscrapers. Wei Zixin, chief engineer with the Shanghai Geological Survey Institute, says that the sinking can be slowed, but not reversed. **Anna Holtzman**



The window on the left  
was built in the 1930s.  
The one on the right, last week.  
Or was that vice versa?

*Andersen® 400 Series Woodwright™ double-hung windows blend traditional style with Twenty-First Century technology. For the perfect look, choose from oak, maple or pine in standard sizes or custom dimensions for renovations. Call 1-800-426-4261, ref. #4754. [andersenwindows.com](http://andersenwindows.com)*

LONG LIVE THE HOME **Andersen**   
WINDOWS • DOORS

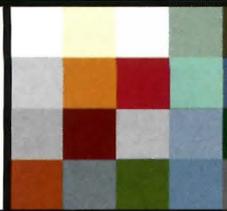
3071B. © 2003 Andersen Corporation. All rights reserved.

We have what it takes to be on

top.



- Superior Corrosive Resistance
- Vibrant New and KlassicKolors®
- Full Range of Design Profiles



The world's leading architects like Follansbee Roofing for as many reasons as there are new design ideas. But the three qualities that keep them coming back are Follansbee Roofing's superior corrosion resistance, and a range of colors and profiles that offer many design options. Combined, these three critical factors ensure that your vision stands the tests of time, the elements and the highest scrutiny. Contact Follansbee Roofing to learn more about how we can help you take your vision to new heights.

**Follansbee: There's Nothing Above Our Work.™**



**Follansbee® Steel**

Circle 28 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)



## VILNIUS: OLD TOWN VS. BOOMTOWN

\$\$



For centuries, church spires and domes have defined the skyline of Vilnius, the capital of Lithuania. But just across the river from the city's baroque Old Town, a gleaming new downtown is rocketing into the sky a decade after the country's independence from Soviet occupation.

As four high-rises near completion on Constitution Avenue, the market economy has brought new kinds of pressures. Developers apply fierce cost controls, says prolific Vilnius architect Audrius Ambrasas. And the deadlines are brutal: Designs that would take a year in Western Europe are expected in a month because nobody has time to wait for a return on their investment

in Europe's fastest-growing economy—expected to expand by another 7 percent this year. Modern office space in Vilnius is set to double by 2005 with more than 860,000 square feet of new construction scheduled.

Ambrasas's latest project with Lithuania's largest developer, Hanner, is a case in point. At 33 stories, Europa Tower will be the tallest building in the Baltic region. An office high-rise a 20-minute walk from the central cathedral square, the structure was conceived only in early 2002, but is ambitiously set to open in March 2004.

Europa Tower is a split cylinder, its offset halves separated by a concrete wall. Contrasting window and color patterns, as well as square elements on the roof, break up its mass. Ambrasas says he didn't want to dominate the landscape and upstage the Old Town. Yet the 423-foot-tall building must function as an axis for the new district, and so was designed to be boldly asymmetrical.

With an abbreviated design cycle, Ambrasas and his team worked all hours to

create a building with aesthetic integrity. Whether or not Europa Tower succeeds on its own, its relationship to its immediate neighbors may be uneasy. The office building is integrated with a 215,000-square-foot shopping center, also by Ambrasas. On one side, the monolithic, mirrored 23-story Vilnius municipality building is nearly complete; on the other will stand a residential tower whose developer is pushing to build nearly as high as Europa Tower.

Vilnius has an official plan that protects the historic areas and the green hills surrounding the city center. But outside those areas, new development initiatives have few restrictions. With developers in the driver's seat, will city officials step in to police the aesthetics of the new skyline? For a country eagerly embracing the West, that's unlikely. "In Stalin's time they controlled style, and we know very well that too much control is not good for a city's architectural identity," explains Danas Ruseckas, Vilnius's chief architect. **Andrew Page**



## Thousands of new choices. (Collect 'em all!)

Andersen now has even more products to help you create homes people want. You'll find new 400 Series sizes, a newly expanded 200 Series line, plus Andersen® architectural windows and doors in dramatic new shapes and sizes. Call 1-800-426-4261, ext. #4755. Or visit our website at [andersenwindows.com](http://andersenwindows.com)

LONG LIVE THE HOME™

**Andersen**  
WINDOWS • DOORS



Circle 198 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)



## **ScapeWEL<sup>®</sup>** Window Wells ...

- Add daylight and ventilation to lower-level living areas
- Meet IRC 2000 code requirements for emergency egress
- Are more cost-effective than site-built window wells
- Feature an attractive terraced step design that can be used as a planter
- Are constructed of an advanced composite material

## *Get More Out Of Your Basements*

*with Bilco Basement products*



## **Bilco Doors ...**

- Provide an extra large opening for easy basement access
- Meet IRC 2000 code requirements for emergency egress
- Feature quality construction and weathertight design
- Are equipped with lift assistance for easy operation
- Can be delivered and installed complete with concrete steps

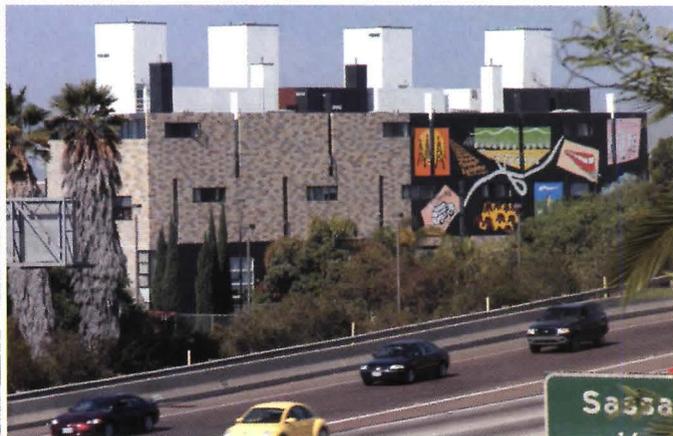
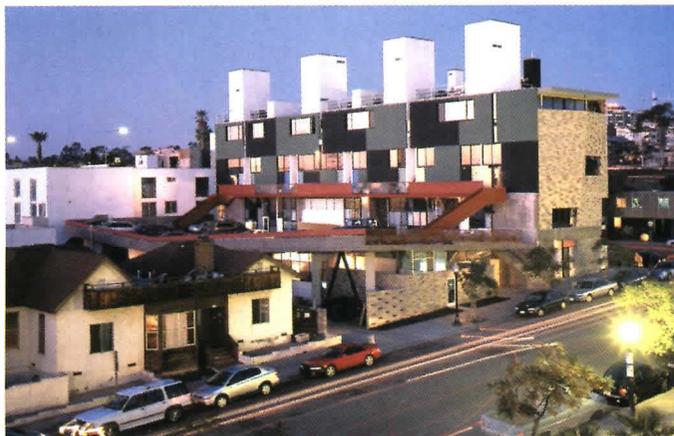
**Bilco<sup>®</sup>**

Circle 216 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

For more information  
Call 800-854-9724  
or log on to  
[www.bilco.com](http://www.bilco.com)

## BREAKING DOWN THE BOX

San Diego, a city experiencing a housing boom like few other American cities, continues to be a place where architects experiment with unconventional design—and development. by Ann Jarmusch



The architects of the U.S.S. Essex (above) modeled two housing schemes (below) to illustrate that replacing amenities such as a garage with a parking deck is a considerable cost-saver. A typical developer's high-density design is assumed to produce the most income with the largest possible wood-frame building; another model shows that the same profit can be made with two-thirds the density by dispensing with traditional features. A mural on the freeway side of the building depicts dueling urban lifestyles (above, right).

San Diego's national reputation as a fertile alternative-housing laboratory is fueled by a loyal band of architects and architect-developers who stretch conventional thinking and low budgets, and are not afraid of financing tactics. Whether designing market-rate multifamily housing or "affordable" units—the euphemism for subsidized housing in this city, one of the nation's most expensive residential markets—these architects strive to create a sense of community and vibrancy. Their infill projects for downtown and outlying areas are typically small—50 units or fewer—so they won't quickly solve the housing emergency declared by San Diego's city council in August 2002. Yet, these innovative designs for apartments, townhomes, and live-work lofts have influenced market-rate for-sale housing by making standard such features as private entrances, semiprivate porches, and high ceilings that create a sense of spaciousness in small quarters—a phenomenon that principals at Studio E Architects call "the trickle-up effect."

### ARCHITECT AS DEVELOPER

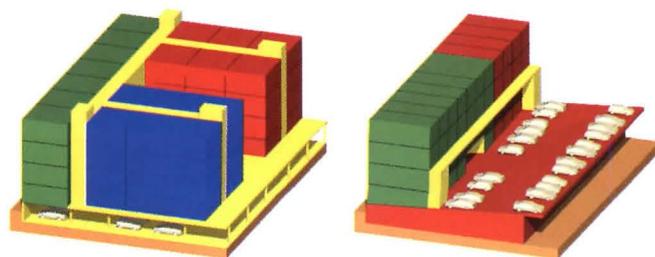
In the area of market-rate rental housing, Ted Smith, principal of Smith & Others Architects, and architect Lloyd Russell continue to challenge conventional developments on projects where they serve not just as architects, but as owners, developers, and contractors. They have moved away from the typical San Diego multifamily model of a four-story building over parking and toward designs that still afford the same or greater densities.

U.S.S. Essex, a 40-unit rental apartment building, was completed last year in Little Italy, an area that is the site of much activity today, experiencing both a housing boom and also attracting cre-

ative enterprises en masse. The Essex follows on the success of Smith and Russell's nearby U.S.S. Merrimac, which won a P/A Award citation (January 1997, page 86).

Smith and Russell's two projects differ from the norm by trading costly amenities and infrastructure—such as elevators, lobbies, and underground parking—for raw lofts with exposed concrete or masonry walls, large windows, and high ceilings, but without wasteful double-loaded corridors. What the architects save in construction costs large and small (such as reusing concrete forms from a previous construction job for added texture and character), they put into design. The projects are configured as perimeter block housing, with live-work units built around an uncovered parking area that also serves as shared open space.

The five-story Essex, named for an improved generation of aircraft carrier used during World War II, stores tenants' vehicles—instead of fighter jets—on its large parking deck, which is paved in a random pattern of three colors of concrete brick. Reached by a ramped driveway, the elevated deck doubles as the roof of some of





the units and provides a sweeping communal court with city and bay views. With one exception, the one- and two-level floor plans in the Essex are all unique. Each loft has its own exterior entrance and circulation system—typically a full flight of stairs to the living levels—a device that adds security, psychological space, and a long, tall wall for art, if not livable square footage. “If you’re not inventing another prototype, it’s boring,” says Smith.

As Spartan as the Essex may seem, it also appears whimsical and unpretentious. Four private stair towers, visible from nearby Interstate 5 and for blocks around, jut above the roofline like fortress lookouts. These towers lead to private roof decks and the pleasures they offer. Just below, freeway drivers and neighborhood strollers can take in the Essex’s large mural painted on a black portion of the façade by artists Kim MacConnel and Jean Lowe. The painters created vignettes of dueling lifestyles—contrasting depictions of a jammed freeway, for example, with that of a dance floor crowded with couples, and a dark forest with a sunny waterfront park.

One prowlike masonry façade leans gradually over the sidewalk, rising steadily until it meets the roof’s wide overhang. As the architects held their breath, masons built this wall in 2-foot lifts, rather than the usual 4- to 5-foot-tall lifts of block, to get its improbable angle right. “We made rules as we went along,” said Russell. “As soon as we made a rule, we would break it.”

#### URBAN BUNGALOWS

In contrast to Smith and Russell’s maverick trail, Studio E Architects has blazed a high road by navigating the budgets, grants, and tax credits crucial to the nonprofit sector. Studio E excels at designing dignified, cozy courtyard housing inspired by early twentieth-century Southern California bungalow courts, with communal gardens and amenities for low-income families. One of the firm’s newest projects, Eucalyptus View, is a cooperative for local farmworkers and their families developed by Community Housing Works in Escondido, a city in an agricultural valley about 30 miles northeast of San Diego.



At Eucalyptus View, semiprivate porches and patios encourage residents to occupy the zone straddling individual units and a communal courtyard (top). An oversized pergola emphasizes the pedestrian entry (above).

Eucalyptus View takes its name from the trees that were planted in rows on the site, a former orange grove. Studio E nestled four two-story buildings containing a total of 24 homes between rows of trees. The stucco-covered buildings, which include private entrances shaded by dark wood trellises and semiprivate porches and patios for each unit, hug three sides of a large lawn or “outdoor room.”

The fourth side of the lawn runs along a busy boulevard. As a buffer, the architects created a heroically scaled wood entry trellis flanked by shared facilities with active uses (laundry, computers, child care) and low front walls. Parking is relegated to the rear of the site, keeping cars separate from the living and playing areas. “We carefully choreograph these thresholds [from public to semiprivate to private zones] so residents will interact with each other,” says Eric Naslund, one of Studio E’s three principals.

To increase natural light and cross-ventilation and to add unexpected volume to the living spaces, Studio E designed these stacked, interlocking units with staggered ceiling heights. In section, the ceiling heights of each home jump from 8 feet to 10 feet,



**Housing Corridors on Imperial works within the existing fabric of its neighborhood's small streets and alleys, preserving the 50-foot by 140-foot lot size of the six contiguous parcels. Reconceived as landscaped passages, these streets will reinforce existing pedestrian movement, mixed uses, and semipublic spaces.**

an asset made possible here because the upper units need not be accessible to the disabled.

#### **ORGANIC PLANNING**

Another area firm, *estudio teddy cruz*, designed *Housing Corridors on Imperial*, a three-story development for a low-income, predominantly Latino neighborhood undergoing redevelopment east of downtown San Diego. This unusual project, which requires mixed-use zoning, density, and parking variances that are still pending, springs from the experiences of Cruz and his studio mates in their native cities: Guatemala City; Lima, Perú; and Medellín, Colombia. Parcel maps are less relevant and stimulating to the architects than the organic, unpredictable growth of cities into unauthorized nooks and crannies that residents find useful and necessary.

*Housing Corridors on Imperial* proposes to increase density and encourage small businesses by building 58 housing units laced with landscaped corridors and 9,000 square feet of retail space on five contiguous parcels. (The second phase requires the acquisition of a sixth parcel and would increase the number of dwelling units to 74.)

It would incorporate current streets and alleys—which Cruz and his cohorts consider underutilized land—as building sites, garage access, and pedestrian and retail pathways.

The housing units are conceived as vertical bays, which can be configured as one-, two-, or three-bedroom homes or as live-work studios, all with private entrances from the landscaped corridors. This original, tightly conceived plan seems likely to test the political will of the city's planning department, where officials have called upon architects to contribute creative solutions to help ease the housing crisis.

The bold and breezy designs of these three projects suit San Diego's casual lifestyle and growing urbanity, a disarming combination underscored by a mild climate that encourages indoor-outdoor living. They also reflect local cultural influences, from Mexican murals and bungalow courts to the Navy fleet. Perhaps their greatest contribution, however, is in demonstrating that allowing increased housing density can result in uplifting new architectural—and social—frontiers.

**Ann Jarmusch is the architecture critic of the *San Diego Union-Tribune*.**



# Introducing high performance technology that's also good for the environment.

Now you can burn more rubber and less gas. Toyota's revolutionary new Hybrid Synergy Drive® combines a gasoline engine with a powerful electric motor that never needs to be plugged in.

The result? Super-efficient, super-charged performance.

For example, Hybrid Synergy Drive will inject a V6 SUV with the power and torque of a V8. Remarkably, the SUV will also achieve the average fuel efficiency of a compact car with a fraction of conventional emissions.

This groundbreaking yet affordable technology has already hit the roads in the all-new Prius. And soon, Hybrid Synergy Drive will be available in more and more Toyota products – including SUVs.

One day, all cars may be quicker off the mark. And slower to leave a mark.

[toyota.com/tomorrow](http://toyota.com/tomorrow) ©2003

Circle 176 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)



TODAY

TOMORROW

TOYOTA

## SAVING SCHINDLER'S PARADISE

When building near an architectural landmark, what does it mean to be a good neighbor? by Michael Webb

Across the United States, small houses are being torn down and replaced, or overshadowed, by condominium complexes and megamansions. The "knockdown" phenomenon is especially pernicious in

Los Angeles, where there is a concentration of significant modern dwellings. A plan to build a condominium complex next door to Rudolph M. Schindler's own house, a 1922 experiment in cooperative living on

Kings Road with rooftop sleeping baskets, expands the issue of historic preservation of individual buildings to their surrounding physical context.

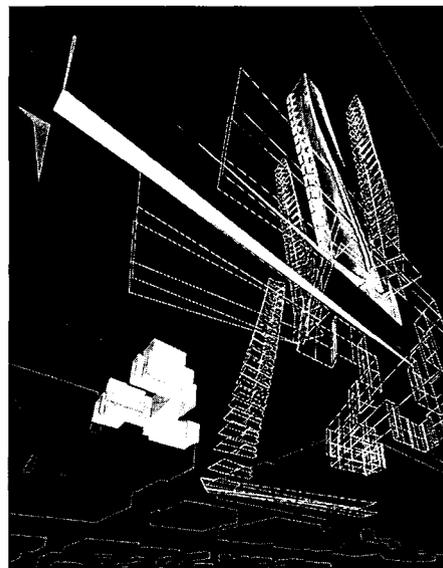
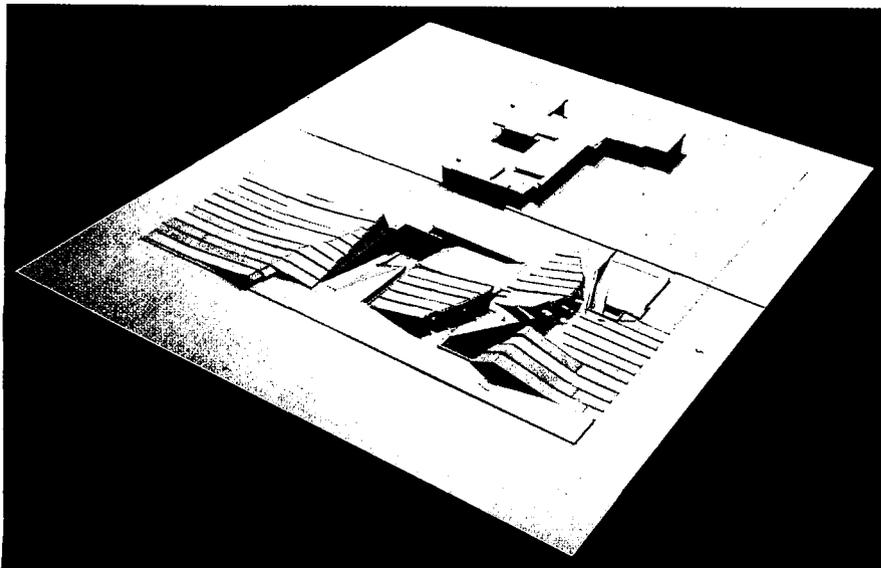
Built when West Hollywood was still rural and its nearest neighbor was Irving Gill's 1914 Dodge House a hundred yards up the street, the Schindler House remains the most radical dwelling in the city—rough-edged and hauntingly beautiful. It has also regained its former role as a mecca for the avant-garde thanks to the MAK Center for Art and Architecture, a private institution that has presented adventurous exhibits, symposia, and performances in the house since the center's establishment in 1994 as a satellite of the Museum of Applied Arts in Vienna. But Gill's house and most of the single-family dwellings in the neighborhood have given way to four-story apartment blocks, one of which looms over the Schindler property to the north. Today, a tall bamboo fence surrounds it, shutting out the neighbors and preserving the *illusion of indoor-outdoor living in the wilderness.*

### MEETING THE NEIGHBORS

In August 2002, developer Richard Loring bought the Colonial style house bordering the Schindler property to the south, intending to replace it with condominiums. The MAK Center and the Friends of the Schindler House, the nonprofit that has owned and preserved the property since 1976, feared that another large block would create a canyon effect and block sun from the house's garden. Loring, who has a master's degree in architecture and has hired well-regarded architects to design his group's first few housing projects, met with representatives of the Schindler House as soon as the sale was made. He assured them that he was sensitive to their concerns and would sacrifice half the permitted building volume to ensure that the new block would be as unthreatening as the



North of the house Rudolph M. Schindler built for his family in 1922 (top) is a flat-roofed condominium complex typical of the development that has risen around the architect's West Hollywood masterwork during the last half century. The 18-unit Kings Road Gardens (above) designed by Lorcan O'Herlihy is proposed for a site just south of the house.



Included among the premiated projects in the MAK Center's juried exhibition of alternative designs for the site south of the Schindler House are a series of striated roof buildings (left) by Eisenman Architects that peel up from the ground plane and a 21-story tower (right) by Zaha Hadid Architects that aims to leave the majority of the site untouched.

property it replaced.

By January, Loring had selected Lorcan O'Herlihy, a Los Angeles architect, to design a complex of 18 condominiums in a three-story block that steps down to two stories on the north side and is broken up by voids and an inner courtyard. Drawing on his admiration for Schindler and his own inventive house designs, O'Herlihy proposed to clad the taller section with horizontal wood battens and the lower wing in cement boards, with some colored panels to break up the mass. The result seems to *defer to its neighbor*, providing a model of restrained, sensitive design that could be adapted to similar sites across the city, or even to other urban locales.

But MAK director Peter Noever felt that Schindler would have wanted something more ambitious than a deferential neighbor, so he organized a juried exhibition, on view in the Schindler House this month, called "A Tribute to Preserving Schindler's Paradise," inviting celebrated architects to match the master's audacious inventions with schemes for Loring's property. "This is a very special site [with] a history which tells us what architecture is able to do, and I think what it needs is a dialogue," he declared. The jury of architects, artists, and educators—which included Frank Gehry, Art Center College of Design president Richard Koshalek, and Judith Sheine, who has written three books

on Schindler—premiated a slender, 21-story tower by Zaha Hadid as well as two ground-hugging compositions of folded planes, one by Peter Eisenman Architects and another by Paris-based Odile Decq + Benoit Cornette. Entries by Coop Himmelb(l)au and Next Enterprise, both of Vienna, reposition the Schindler House on a high plinth to give it a new horizon that would protect it from encroaching developments. Other entries ranged from sober clusters of habitable boxes to vertiginous geometries and inscrutable diagrams.

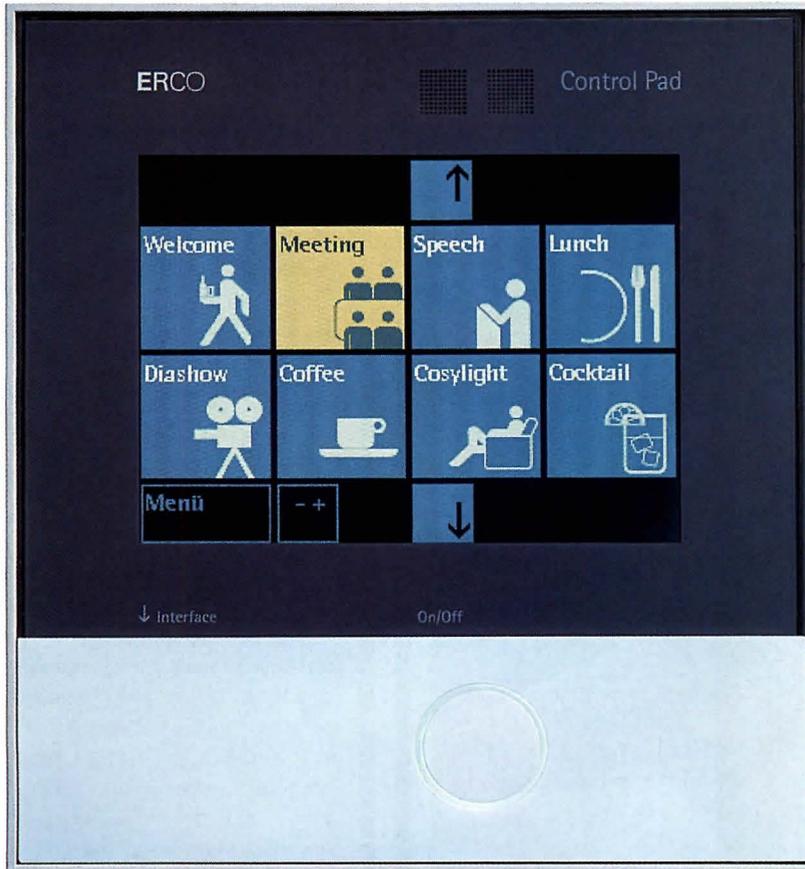
#### A NEIGHBORLY DEBATE

A symposium held the night of the exhibition opening in August stirred public debate and brought the house alive. Noever, scholar Carl Pruscha from Vienna, Decq, and local architect Eric Owen Moss argued the case for artistic daring. Would a 21-story tower not overwhelm the single-story Schindler House? asked a visitor. "No," said Decq. "It reinforces it. If it's natural, if it's ordinary, it kills the Schindler house." The moderator, journalist Greg Goldin, asked why MAK thought it could tell a neighbor what to do. "Most of the buildings on this street are built for conventional reasons by conventional people doing conventional things," Moss asserted in response. "We have to find a way to acknowledge a special architect who worked in an unusual way."

Loring also argued his case at the symposium, declaring that he had indeed reached beyond conventional solutions by hiring a well-respected architect and by studying the best multifamily housing in Europe. He found the exhibition entries interesting but many of them neither feasible economically nor permissible under existing zoning. "We don't have a social agenda," he remarked. "We're not trying to redefine architecture. We're just trying to do a good building."

Beyond the lively debate initiated at the MAK Center, the exhibition has provoked a flurry of press reports in the national media, enhancing the reputation of the Schindler House as a forum for original ideas. As the center's director, Kimberli Meyer, argues, "The developer is doing everything correctly. But we all have the right to think about property we don't own." While Meyer is planning to broaden the debate over landmarks and context by enlisting the Getty Center's support for an investigation of other vulnerable landmarks in the city, Loring expects to break ground on his Kings Road condominiums next summer.

**Michael Webb is the author of 20 books on architecture and design, most recently *Brave New Houses: Adventures in Southern California Living*.**



## SCHOOL OF ARCHITECTURE

MASTER OF FINE ARTS  
PROGRAM IN ARCHITECTURE



Register for Spring Classes  
Now through January 31, 2004

Artistic | Experiential | Environmental  
Technical | Professional | Enduring

Over 80% Job Placement  
upon Graduation



Design by NIX Puig, AAC MFA Student

**AcademyOfArtCollege**  
FOUNDED IN SAN FRANCISCO 1929

79 NEW MONTGOMERY STREET  
SAN FRANCISCO, CA 94105

1.800.544.ARTS | [www.academyart.edu](http://www.academyart.edu)

Nationally Accredited by ACICS, NASAD & FIDER (BFA-1AD)

firm

## THE UNTHEORETICAL JOYS OF DESIGN-BUILD

For many architects, the technical is invariably more fun than the theoretical. Materials are palpable and satisfying; assemblage, performance, and beauty are immediately sensed. Perhaps that's why more practitioners today are exploring building or development, often early in their careers. In fact, a sizable set of construction-oriented designers has emerged over the last few years, drawn to their hybrid craft by the desire to innovate, control the end-result, and explore the sensual pleasures of building.

"The approach allows you to think not just with your head, but with your hands," says Tim McDonald, an architect-builder and partner with his brother, a master plumber, in the Philadelphia-based firm **Onion Flats**, which designs and builds housing. "The act of drawing is a necessarily incomplete activity, and there's something about making things that you just can't think through," he adds.

Also fueling interest in the designer/contractor role is frustration with traditional hard-bid delivery: contractual limitations, perceived cost barriers, and the slow transfer of information to the field. "We don't embrace the clichéd and tired notion of the antagonistic relationship between architect and contractor," says Oliver Freundlich, a partner in **MADE**, a New York City-based design-builder of residential and commercial projects. "We communicate the intention of the design and then negotiate that—and it is a negotiation—with open-mindedness."

### DON'T SAY "DESIGN-BUILD"

Many of the newer design-build firms share **MADE's** philosophy (and even the four-letter moniker: **SHED** and **CAST Design-Build**, both of Seattle, for example), but they are reluctant to use the eminently suitable term "design-build" to describe their work. The main reason is its association with large-scale, contractor-led efforts that produce little of architectural merit. "The term carries so much baggage," says Alexander Kitchin, principal of **Tickle-Kitchin**, a design-build firm based in Charlottesville, Virginia.

"It's really unfortunate that they share the same name," says Steve Badanes, the Seattle-based cofounder of **Jersey Devil Design-Build**, an influential and pioneering firm formed in the early 1970s that, along with a few other loosely structured, socially motivated groups, helped foment a professional ethic (if not an aesthetic) in the area of small-scale, craft-oriented design-build. Others include San Francisco's **Ant Farm**, which disbanded in 1978, and the sustainability-focused **Yestermorrow School** in

## firm

Warren, Vermont, run by Jersey Devil's John Ringold, which offers professional courses in design-build techniques. More recently, **Rural Studio** in Auburn, Alabama, has inspired a new generation of activist design-builders concerned about economic equity.

While many newer firms share such social and artistic concerns, they also describe their goals in the same terms as those of the largest purveyors of "integrated delivery": They want to solve complex problems, control costs, and speed the plow. Some practitioners sound less like Rural Studio cofounder Sam Mockbee than a young John Portman, who donned a developer's cap in the early 1950s to make the now ubiquitous atrium hotel a reality. Today, entrepreneurial architects in Southern California, for example, speculate in new types of urban multifamily dwellings (see pages 25, 54, and 58). And just as large-scale design-builders focus on specialty buildings—arenas, warehouses, call centers—so do many small firms mine unique niche markets: energy-efficient residences (Randolph, Vermont-based **Terra Firma**); church facilities (**Crosspointe Architects**, Houston); funeral homes (**Miller Architects & Builders**, St. Cloud, Minnesota); and landscape architecture and contracting (**ApachEco**, Magnolia, Texas).

The explosion of smaller-scale design-build is broadening the definition itself. But expanding its application faces real barriers: among others, public procurement rules, bonding capacities, and even ethical concerns among some architects. These constraints still limit the application of design-build to its current polar extremes: small, craft-focused work on one hand, and big-money corporate and government contracting on the other.

### THEORETICAL DIVIDE?

The success of larger public design-build commissions by architect-led firms could help bridge the gap between the two camps. Between technique and theory, however, there are already strong links—links that began back when Jersey Devil first pitched a tent on a project site and literally lived through the construction phase, watching its progress and fine-tuning the design along the way. Kitchin and his partner, Evelyn Tickle, have defined an approach they call "elbow room": architecture derived not from *designing*, but from "reacting with an understanding of the environment." The firm has tested its premise with extensive research, a 2002 Rome Prize, and several open-minded clients.

"We like to make a move, react to a client's desires and requests, but then as the form and the space evolve, have the room to respond at a full scale," says Kitchin. "We are all about process. Architecture is an open-ended, evolving creature that should stimulate, inspire, and comfort." **C.C. Sullivan**

## WE MAKE IT TO FIT.

AT HALE, WE CREATE EVERYTHING FROM CUSTOM-MADE DOORS, DRAWERS, CABINETS AND BOOKCASES TO ELABORATE LIBRARIES IN THE FINEST WOODS. SO, WE CAN MAKE PIECES THAT FIT YOUR STYLE—AND YOUR BUDGET—EVEN WITH SHORT LEAD TIMES.

WITH COMPETITIVE BIDS, HIGH QUALITY, AND TALENTED, DEDICATED CRAFTSPEOPLE, HALE FITS THE BILL.

WWW.HALEBOOKCASES.COM  
E-MAIL: SALES@HALEBOOKCASES.COM  
PHONE: 800-USE-HALE (873-4253)  
FAX: 315-894-5046

HALE MANUFACTURING CO.  
PO Box 186  
FRANKFORT, NY  
13340



# HALE

## SINCE 1907

NATURE'S BEAUTY. OUR CRAFTSMANSHIP.

Circle 244 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

# HANOVER® ARCHITECTURAL PRODUCTS

Nothing quite adds charm to a building or home like stone. Hanover's Chapel Stone® Masonry Walling makes this beautiful characteristic affordable and available. Manufactured from the highest quality concrete with over a million pounds of pressure, the product has the same density and high compressive strengths of natural stone.

Chapel Stone® Masonry Walling is available in two colors: Tan Blend and Gray Blend. It is manufactured in two heights, approximately 3" and 6", with random lengths up to 18". This permits a variety of laying patterns. Each height is packaged separately to enable them to be used singularly or mixed in any proportion desired. All pieces are made with return ends for corners. Installation is quicker than natural stone because of the predetermined heights.

## chapel stone® masonry walling

a natural alternative to stone

prest® pavers

prest® brick

asphalt block

rockcurb®

garden walling

masonry walling



wall panels

accent panels

800.426.4242



Independence, Hoboken, NJ  
Architect: Walter Wolczynski Architects,  
East Hanover, NJ  
Size & Color: Chapel Stone® Masonry  
Walling, Gray Blend

**HANOVER®**  
Architectural Products

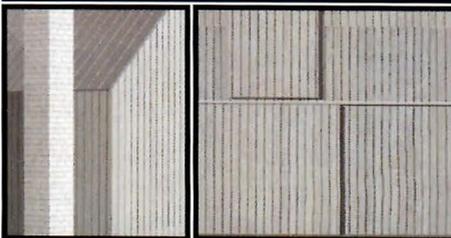
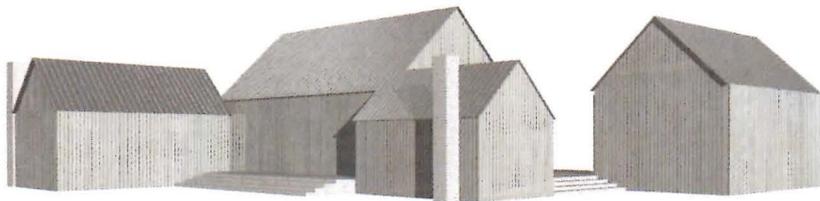
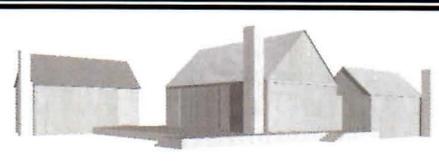
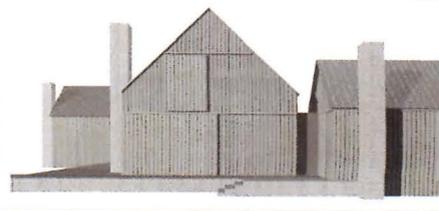
www.hanoverpavers.com

In the United States, there's no lack of rich, historical connections between presidents and their often stately private homes. Forget 1600 Pennsylvania Avenue—think instead of Thomas Jefferson's Monticello, George Washington's Mount Vernon, or even George W. Bush's ranch in Crawford, Texas. Hoping to mine this connection between commander-in-chief and home-on-the-range, *Blueprints*, the magazine published by the National Building Museum in

Washington, D.C., invited Studio Atkinson of Palo Alto, California, and Charleston, South Carolina's Huff + Gooden Architects to imagine homes where a future president could find sanctuary away from the White House. There were no constraints for style, size, budget, or even location—only the parameters that one would associate with the nation's highest political office: spaces for entertaining guests, press facilities, an office, and, of course, security.

#### STUDIO ATKINSON | A HOUSE FOR A (FUTURE) PRESIDENT

Set in an unspecified rural locale, Studio Atkinson's 2,800-square-foot scheme for the president's home is a retreat clad in an agrarian vernacular. Four wood-frame structures are sheathed in vertical wood siding. Simple, almost anonymous in design—firm principal Stephen Atkinson terms it a "generically American" place for an "Everyman" leader—the compound presents a combination of classical and new-world influences: the multifaceted Greek temple meets the Quaker barn. The only design element delineating the main house from its look-alike neighbors is a masonry base, allowing it to sit above the ground slightly, a subtle clue to its greater importance in the compound's scheme. Although warm and welcoming, the humble countenance of the buildings would be heightened when the residents are away: Large sliding shutters cover all doors and windows, leaving the compound faceless, visually quiet, and secure. **Jamie Reynolds**



#### HUFF + GOODEN ARCHITECTS | A HOUSE FOR A (FUTURE) PRESIDENT | CHARLESTON, SOUTH CAROLINA

Huff + Gooden imagine the hypothetical resident of their compound to be African-American. The would-be president's heritage also informed the project's location: a predominantly black and somewhat depressed neighborhood in Charleston's east side in which the occupant grew up. Comprising six buildings huddled around an intersection, the plan's most dramatic element is a transparent "living room," a large volume for public events designed to suggest the administration's stance toward the public. This would be attached to an existing typical Charleston "single house," a rec-

tangular home with one narrow side abutting the street and with a two-story porch. The five other structures on the compound would be renovated extant buildings, allowing a seamless integration of the presidential support staff into the area while broadly proclaiming his presence in this inner-city community. The issue of security would be handled by the very nature of this busy location and by the number of eyes on the street: "Protection was the investment in the community itself," says Huff + Gooden principal Ray Huff. **Jamie Reynolds**



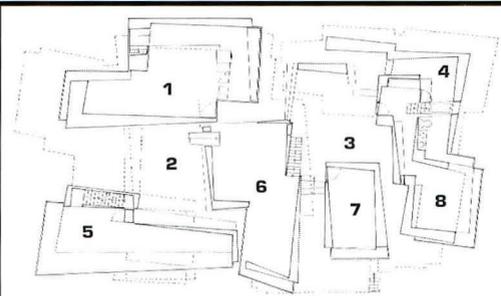
➔ RESOLUTION: 4 ARCHITECTURE | DREAM HOUSE | SAN DIEGO

New York City–based firm Resolution: 4 Architecture dubbed this 5,000-square-foot home “Dream House,” because its completion would fulfill their client’s desire to challenge the convention of a typical house in the American suburbs. When the project was conceived ten years ago, firm principals Joseph Tanney and Robert Luntz used building models and ink on mylar for the schematics. But as the project progressed they sought to challenge conventional 2-D and 3-D production of architecture and used form-Z and VectorWorks to render the house, a process consciously intended to be analogous to the client’s desire to thwart traditional suburbia. The project’s nonorthogonal design, of course, now betrays its software. When completed next year, its willy-nilly planes will be anchored in reinforced concrete.

During this long process, the unbuilt house moved from Groton, Connecticut, to California. At three acres, the current site is larger than the typical suburban lot, but it has always been the client’s intention to occupy a true “sub-urban” location, one that would be in suburbia, but outside the suburban graveyards of complacency. The actual site is outside of San Diego near a vast development called Eastlake, explains Tanney. In the move from East Coast to West, the only thing that really changed was eliminating radiant heating because of the warmer climate. **Bay Brown**



- 1 studio
- 2 auto court
- 3 entry court
- 4 dressing room
- 5 lap pool
- 6 art gallery
- 7 exercise room
- 8 bedroom



first-floor plan 9' ✓



➔ KEITH MITNICK | 2-WAY HOUSE | SAN FRANCISCO

You can’t have it both ways, unless you have 2-Way House, Keith Mitnick’s 2,250-square-foot, two-bedroom residence designed for a landscape architect and his young son on Bernal Hill in southeastern San Francisco. From the look of it, passersby might expect that the house is highly rational and cheap to produce—possibly even prefabricated (way number 1). Not the case. Its technological, structurally expressive exterior belies an interior of abstracted and homogenized surfaces (way number 2), rendered in varying shades of off-white paint. And the apparent geometrical rigor of the façade belies an interior of varying ceiling heights and unexpected interstitial spaces that break up the two-floor program. In its physical context, the house acts as a threshold between the densely packed streetscape and the panoramic bay views to the south. While cohering in scale with Bernal Hill’s modest structures, mostly clad in stucco and T-111 wood siding, 2-Way House upends this neighborly conception tectonically, with its articulated concrete-and-steel structure, louvered windows, and grey cement-board cladding. (Its lively roof might be the most jarring element, comprising four alternately sloping planes connected to the structure by clerestory.) Inside, however, Mitnick uses planar continuity and a neutral backdrop to offer an adaptable refuge to father and son. **C.C. Sullivan**





# ARCHITECTURE



## AWARDS

As the following pages show, the second time's a charm. Launched just last year, *Architecture's* Home of the Year Awards yield an ample harvest of new, powerful work by emerging designers as well as seasoned practitioners—a blessing indeed. And thanks to the high quality of the submissions (including dozens that did not earn awards) and the hard work of our five jurors (see below), the program also offers a vital inquiry into domestic life in turn-of-the-millennium North America. The results, we think, help define what it means to be “at home” in our complicated world—a delightful windfall from a new awards program created to honor design excellence.

All of the projects, for example, call for restraint and judiciousness in how we respond to the human need for shelter and comfort, without negating the natural desire to feather one's nest. And while the premiated entries hardly render the pastoral retreat ignoble or irrelevant, the results confirm the importance of developing livable urban cores for a sustainable future. Last, and perhaps most significantly, several of the projects' designers posit greater interconnection within and among dwelling forms, a device for achieving the greater goals of density, sustainability, community, and family.

In fact, the jury found the two latter arguments so compelling that they advised *Architecture* to include new categories for multifamily projects in the next call for entries, which we intend to do. While the single-family home may forever remain the nucleus of our societal identity, the emergence of new multiunit expressions and typologies seems central to our success as inhabitants of the earth. ■

## THE JURY

**CARLOS JIMÉNEZ** Born in San José, Costa Rica, Carlos Jiménez established his office in Houston in 1982. He is a professor at Rice University and has taught at many architecture schools, including those at Harvard and Tulane, and he lectures frequently in Europe and throughout the Americas. Jiménez joined the Pritzker Architecture Prize jury in 2000, and he has earned numerous design awards for such works as the Houston Fine Arts Press and the Spencer Art Studio at Williams College. His Whately House addition earned an inaugural Home of the Year citation last year.



**MICHAEL T. MALTZAN** In early 1995, Michael Maltzan established his Los Angeles-based firm, which has completed residential works in addition an award-winning temporary facility for the Museum of Modern Art in Long Island City, New York. His firm's work has appeared in many publications and exhibits, including the 2002 Venice Biennale and the 1999 traveling exhibit *Un-Private House*. Maltzan has taught at several architecture schools. Among his own premiated projects is the Scoville-Turgel Residence, which won *Architecture's* P/A Award this year.



**THOMAS PHIFER** A year after receiving a 1995 Rome Prize, Thomas Phifer founded his eponymous firm in New York City. Before that, he served as design partner on 27 commissions for Richard Meier & Partners, including the Museum of Contemporary Art in Barcelona and the acclaimed Canal+ headquarters. Phifer's recent residential commissions include Taghkanic House, which received a P/A Award citation in 1999. Drawing on local sensibilities in his works, Phifer infuses the modernist aesthetic with a heightened sense of proportion, humanism, and community spirit.



**DAVID SALMELA** A self-trained architect practicing in Duluth, Minnesota, David Salmela bridges the principles of modernism and his native region's immigrant vernacular. His house designs have won numerous awards, including a national AIA Honor Award for his Brandenburg's Ravenwood Studio and a recent award from the AIA's Center for Livable Communities for the community design of Jackson Meadow in St. Croix, Minnesota. Salmela's work, which includes numerous residential buildings, has appeared in scores of journals, publications, and exhibitions. He is a fellow of the AIA.

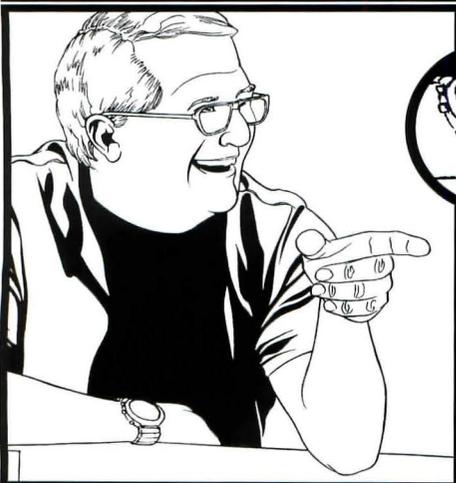


**GWENDOLYN WRIGHT** A professor of architecture, history, and art history at Columbia University, Gwendolyn Wright is author of *Building the Dream: A Social History of Housing in America*; *Moralism and the Model Home: Domestic Architecture and Cultural Conflict in Chicago, 1873–1913*; and *The Politics of Design in French Colonial Urbanism*. Wright cohosts the PBS series *History Detectives*, and she is working on books on new American housing and the cultural history of modern U.S. architecture. Her writing has appeared in exhibition catalogs, the *Journal of Modern History*, and the *New York Times*.





## DENSE URBANISM



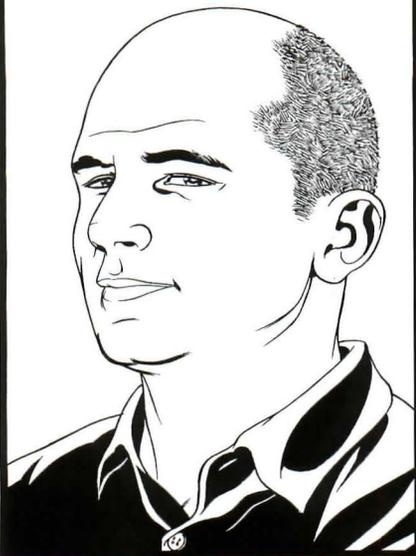
"Almost everything we saw was suburban or rural, yet almost everything we're premiating is urban," observed Gwendolyn Wright as she wrapped up her jury work for *Architecture's* Second Annual Home of the Year Awards. Yet this outcome was unintended, the jurors agreed, not the result of a deliberate attempt to draw conclusions or make a political statement. Instead, this surprising confluence of successful urban designs suggested to the jury the economic and ecological future of residential development. In most instances, not only is the city "so efficient and so affordable," said David Salmela, but it becomes "an armature for your life," added Michael T. Maltzan. A second attraction of the urban projects for the jury was the ability to consider the house as an organism within its surroundings, rather than merely as an object or a retreat from the world. Thoughtful "interconnections" with different landscapes and public spaces that come more readily in the city, said Wright, "augment the house," giving the notion of dwelling new value and meaning.

## MULTIFAMILY SOLUTIONS

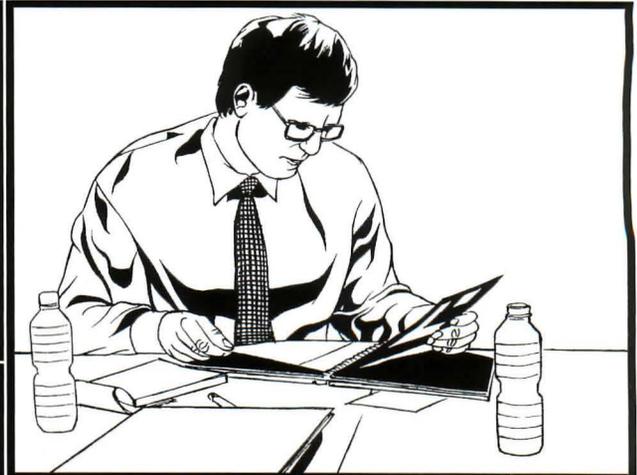
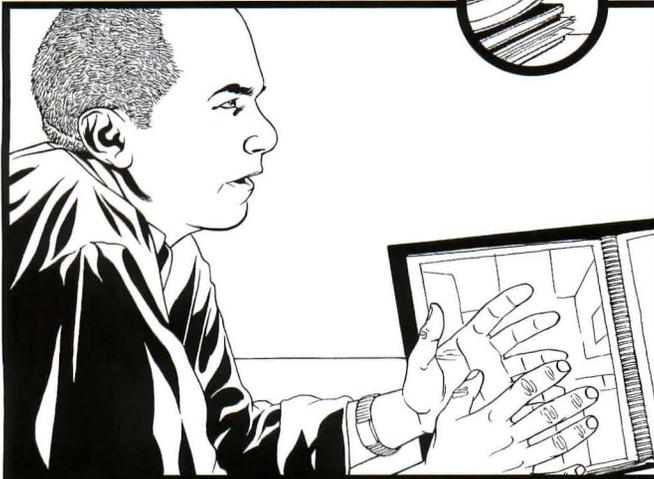


But mere sitting in an urban locale did not qualify a project for special attention. The jury was also drawn toward the "obsession"—that Carlos Jiménez noted in many submissions—with the idea that "individual units can be tempered and made into community." Several of these multifamily solutions manipulated each apartment or condominium to give each a unique identity—and often grouping them around common public areas, such as courtyards—while disguising their shapes within more unified footprints or façades that integrated them into their neighborhoods. The resulting assemblages were "more holistic buildings," said Thomas Phifer, expressed as rowhouses, duplexes, or garden apartments. Drawing a comparison with Rudolph M. Schindler's Kings Road House in Los Angeles (see page 29), Maltzan observed the importance of experimenting with hybrid living arrangements and novel housing types. The jury concurred, and agreed to premiate multifamily projects even though they were not specifically mentioned in the call for entries.

## “TRANSFORMATIVE” ARCHITECTURE



By suggesting alternatives to the prototypical house, for example, individual submissions transcended competency and fitness and opened up new possibilities in the lives of people and communities. This quality, the jurors determined, was a requisite for earning an award or citation. Beyond design excellence and formal novelty, the residential buildings had to be innovative—“transformative,” as Maltzan said, or as Wright meant when she used the word “compelling” in its most literal sense: something that makes you do something, such as behave or live in a new way. So at their cores, the premiated projects are experiments, with multiple layers of meaning that “collapse into new relationships,” said Jiménez. The resulting projects “elevate the status of dwelling” in its broader context, Phifer observed, as they elevate the lives of their occupants. “We’re jurors in a larger show, which is about the issue of the house today,” said Maltzan. “And we premiate what we’re seeing that we want to see more of,” said Wright. Salmela agreed: “Another objective of our selections is to communicate to the public what architecture—good architecture—is about.”



## INDULGENCE AND RESTRAINT

Many of the advances in the Home of the Year projects resulted from tectonic or material research, but others provided insights into types of dwelling, urbanism, and the human condition. While the jurors applauded such audacity and accomplishment, individual premiated projects were hardly extravagant or “self-indulgent,” said Jiménez. Most of the budgets were modest, noted Salmela, and the construction schedules were surprisingly short. Nor were the most compelling, transformative homes necessarily the most formally animated ones. As shown on the following pages, the jury found transformation by means of nuance: a subtle distortion, a delicate blurring of lines, the careful treatment of interstitial space. Such palpable restraint, the jurors agreed, seems an integral part of bringing design excellence and excitement to today’s residential architecture.





AWARD

## OPEN HOUSE

Architect Zoka Zola builds a house for her family and her Chicago neighborhood. **by Abby Bussel**



The brick house with the overscaled windows on a quiet block west of Chicago's Loop seems to absorb the rhythms of the neighborhood as much as it tries to transform them. This is because the house is designed by Zoka Zola not solely for her own family and studio but as a vital addition to the existing fabric and the lives of those who inhabit it.

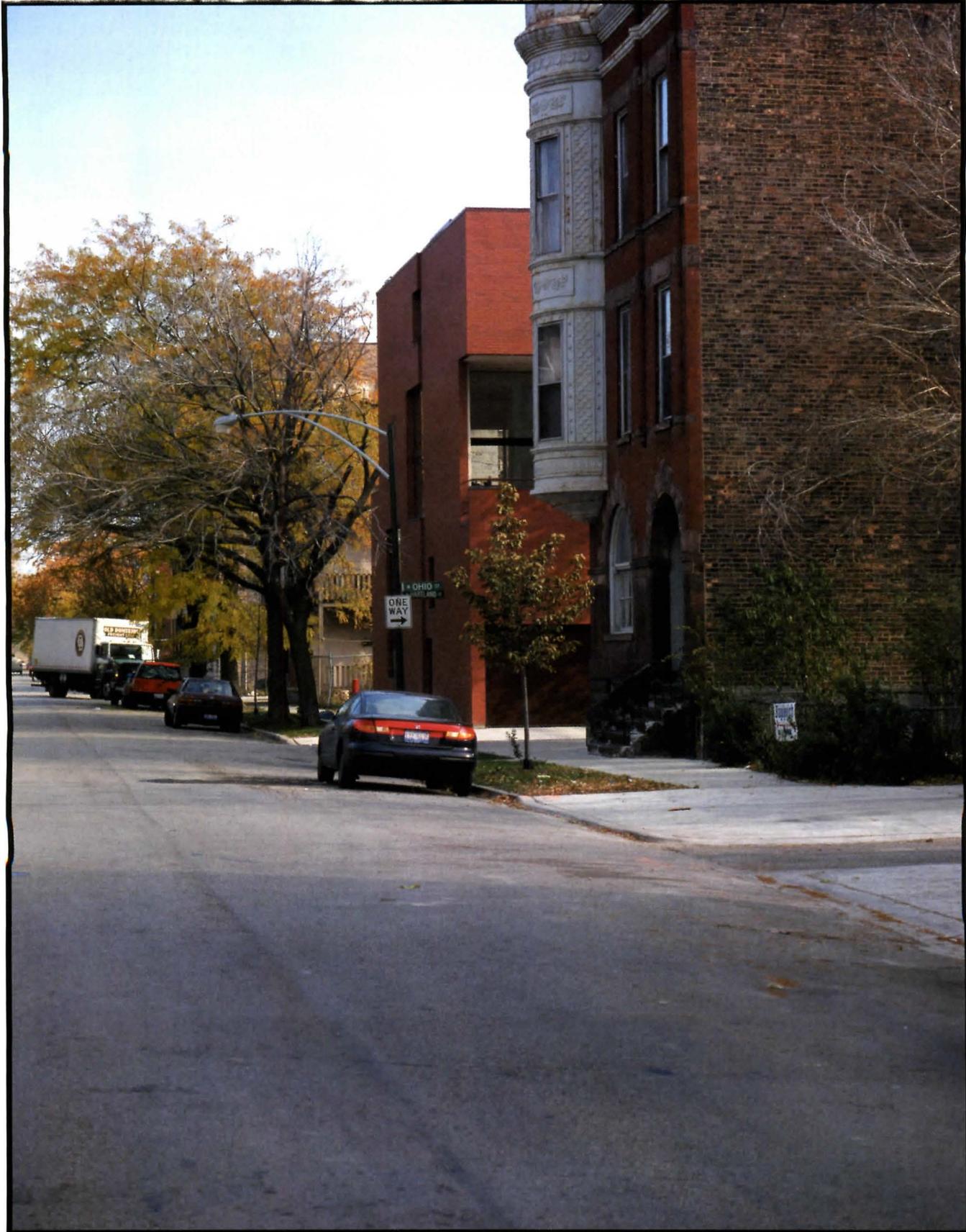
Located on a corner site in a residential neighborhood, the house's mass and materiality acknowledge the physical history of the city, where the grid and the brick wall have long held sway. But it flaunts conventional siting and fenestration with diplomatic politesse. Here, houses are typically placed squarely on their lots between front- and backyards; Zola pushes two sides of her 3,000-square-foot house flush with the sidewalk to the north and west, creating an L-shaped garden that doubles as a local shortcut.

This strategy of engagement is borne out by the large scale and location of windows and the absence of a fence around the property. Zola has stretched the dimensions of a typical double-hung sash window; placed in communal spaces—two each in her office studio and living room—they operate as something akin to two-way mirrors. From the studio floor, which rests below grade at the base of an open two-story volume, these windows turn into Alice's looking glass in reverse: one to the street and one facing onto a generous

side yard. On my recent visit, a hefty pickup truck filled the horizontal dimension of the roadside window, while a small group of local teenagers idled on the lawn outside the other.

Eschewing preconceived notions of what constitutes openness in architecture, the house proposes ways to reconcile public and private realms not solely between interior and exterior but within a single entity. In section, Zola's house operates vertically as a series of interlocking volumes, the studio being the most dramatic. Rooms don't so much spill off of a single, open staircase in the middle of the house, as they appear to snap into place at the end of each run of steps. One story above the street-level entrance, a library and guest bathroom mediate between the work area below and domestic sphere above. Another run of the staircase leads to a living room and west-facing sun room. A few steps above is the kitchen. Three modestly scaled bedrooms occupy the top floor; here the big windows are horizontally oriented, capturing the reflections of the city's roofscape, both near and far.

Zola, a Croatian-born architect who trained at the University of Zagreb and at London's Architectural Association, has written that her "house is designed not to feel owned. When [a] building feels owned, it's impoverished, because it has a flattened relationship with the rest of the world." She'll have none of that. ■



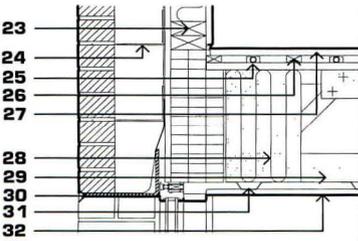
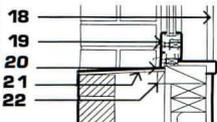
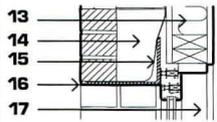
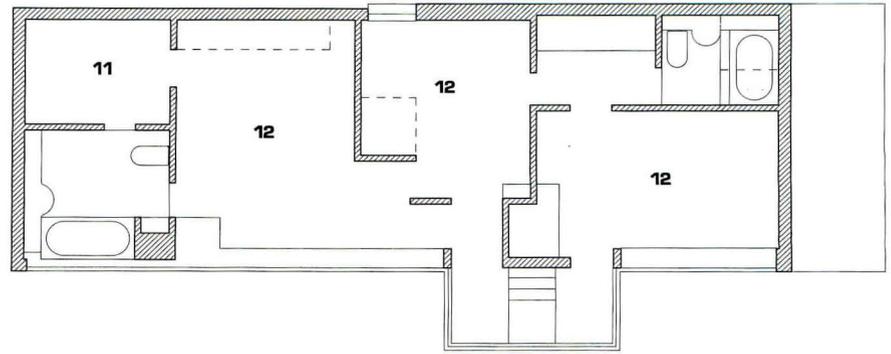
The stately rhythm of row-house fenestration in this Chicago neighborhood is strengthened by strategic interruption, as is evident, for example, in the two-story oriel (above). Pushing out into the public realm is an imperative for Zoka Zola, whose house injects itself into the community through an open-air sunroom and a series of irregularly placed, even overscaled windows (facing page).



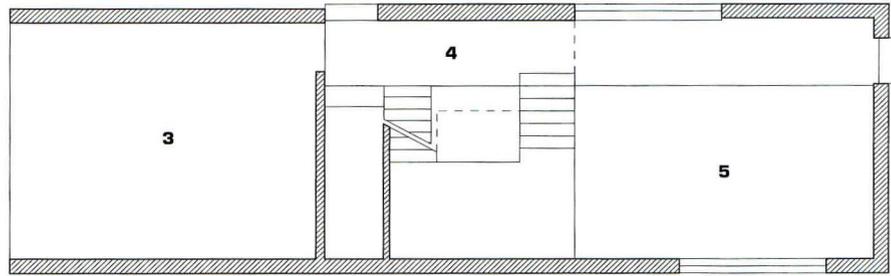
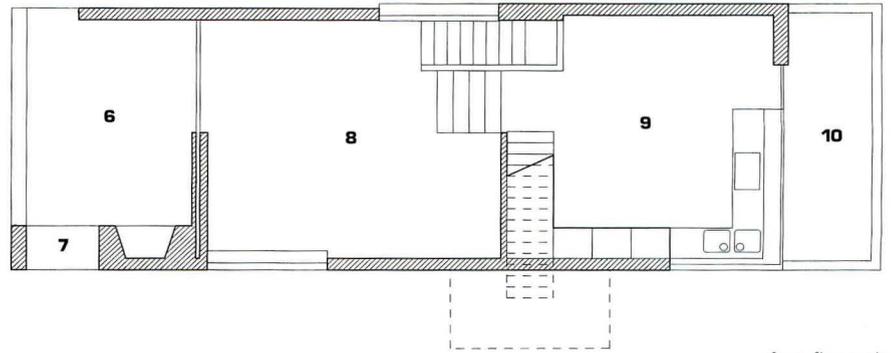


A single, open staircase organizes the interior. An entrance platform connects the front door and garage to the stair and Zola's studio, which sits several feet below grade. Rooms in the domestic realm are stacked and interlocked: The living room (facing page, bottom) is a few steps below the kitchen (facing page, middle), where the staircase continues up to the bedroom level (facing page, top). While far from being a glass house, visual connection to the outside world dominates even the most private of spaces.

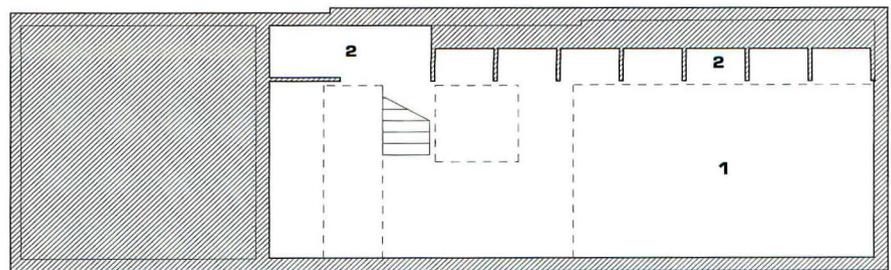
- 1 studio
- 2 storage
- 3 garage
- 4 entrance platform
- 5 open to below
- 6 sunroom
- 7 bench
- 8 living room
- 9 kitchen/dining
- 10 balcony
- 11 closet
- 12 bedroom

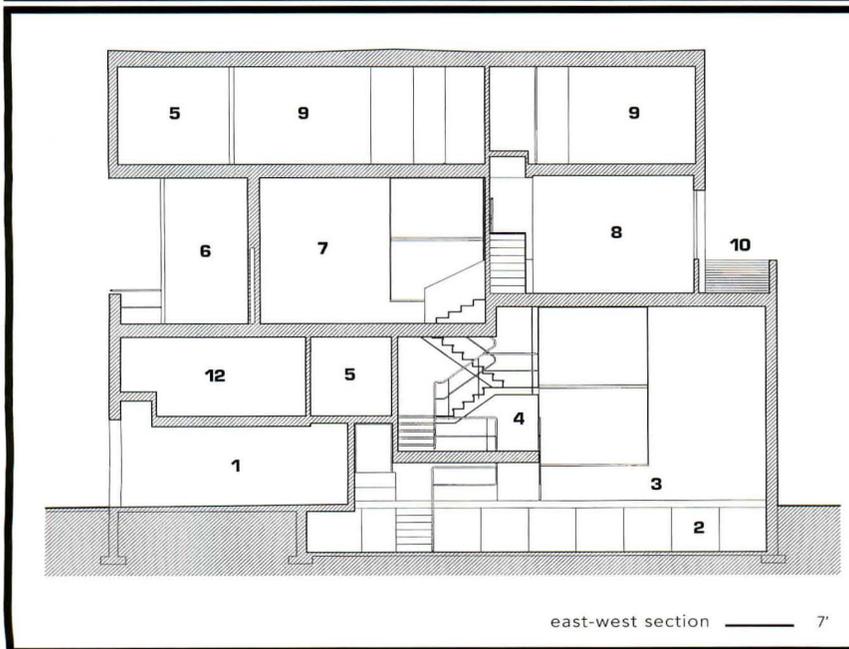
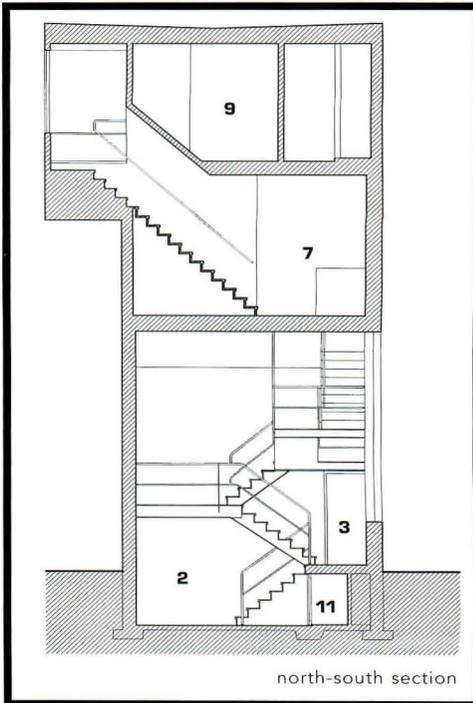
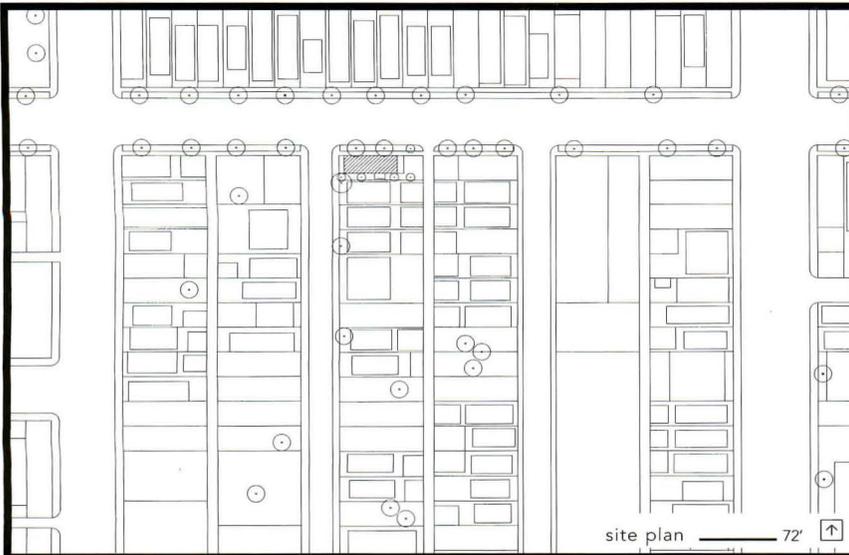


partial wall detail ——— 8"



- 13 butt insulation
- 14 6" air gap
- 15 pvc lintel flashing
- 16 steel lintel
- 17 white-oak window trim
- 18 gypsum-board metal "j" edge
- 19 aluminum window
- 20 copper window sill
- 21 1/2" sill support board
- 22 1/2" blocking support
- 23 wooden stud
- 24 hot-dipped galvanized ties
- 25 1/2" in-floor heating tube
- 26 plywood strips
- 27 3/4" white-oak parquet
- 28 batt insulation
- 29 floor truss
- 30 steel lintel
- 31 furring steel channels
- 32 5/8" painted gypsum board





- |                     |               |            |
|---------------------|---------------|------------|
| 1 garage            | 5 bathroom    | 9 bedroom  |
| 2 studio            | 6 sunroom     | 10 balcony |
| 3 entrance platform | 7 living room | 11 storage |
| 4 entrance hall     | 8 kitchen     | 12 library |

**Pfanner House, Chicago**

**client** | Peter Pfanner and Zoka Zola **architect** | Zoka Zola **structural engineer** | Hutter Trankina Engineering **landscape architect** | Christy Webber  
**general contractor** | Juniper **subcontractors** | Lesch Heating (HVAC); Mark Los (concrete); Alex Veksler (plumbing); Blazer Electric (electrical); Style  
 Rite (stainless-steel countertop); Kraina (copper); Stucco Systems (stucco); JS Construction (masonry) **area** | 3,000 square feet **cost** | \$580,000  
**photographs** | Douglas Reid Fogelson

**Specifications**

**masonry** | Jenkins Brick **glass** | Gastaldello, Alumilex **skylights** | Velux **door handles** | Peter Emrys-Roberts (design); HAF (fabrication) **hardware** |  
 Hager; Hafele **flooring finish** | Livos **tile** | Ceramica Bardelli **lighting** | Limburg, Artemide (interior ambient); Erco (downlights) **plumbing fixtures** |  
 Grohe; KWC; Just; Kaldewei; Duravit; Zurn



AWARD

## SEEING THE FOREST FOR THE TREES

Saia Barbaresse Topouzanov's design for a rural retreat north of Montreal inserts essential domestic forms into the wilds of nature. **by David Theodore**



Maison Goulet melds two distinct lineages. Its asymmetrically composed, zinc-clad façades broadcast updated, boxy, postwar modernism. But the symmetrical stone chimneys and metal-covered gable roof create a look as vernacular and elemental as a house in a child's drawing. The result is tantalizing: familiar, urbane, rough, and precise, all at once.

The 2,500-square-foot house is in prime cottage country, an hour drive north of Montreal, Canada, in the Laurentian Mountains. The sprawling 80-acre property, which slopes steeply from the access road to the nearby Lake Grenier, features birch and maple, deer, moose, mosquitoes, and, in late August, chanterelles. (An older cabin and garage sit near the lake, while the new structure is nestled on a plateau a ten-minute walk uphill.)

The structure's dual aesthetic continues on the inside, notably in the use of materials. Walls, ceilings, and openings are all covered in lightly varnished sheets of half-inch-thick fir plywood. The plywood has a warmth and amber glow that evokes the rustic feeling of a log cabin, but precise detailing—there are no moldings, base, or trim—brings out the modularity of the sheets, creating a clear and rigorous architectural order. In turn, that order is balanced against the exigencies of country life. "We've used plywood on floors before, but it wears out quickly," says design architect Mario Saia. So the floors are made of sawed stone downstairs and yellow birch upstairs. The cabinets in the kitchen and bedrooms are constructed of sturdy Russian ply.

Saia designed the house for himself and his wife, an art historian. He is a principal of Montreal-based Saia Barbaresse Topouzanov, a firm better known for their work on complex institutional projects in urban settings—like the recent (and controversial) addition to the Palais des Congrès, Montreal's downtown convention center. Their deft touch with the domestic and the rustic comes as a surprise. Still, the firm's purified precision has its price: At one point the architects rejected almost 400 sheets of plywood, and construction stopped for two months while the carpenter waited for another

shipment. And the house has an austere simplicity that demands a certain commitment from its inhabitants. "We're not big on curtains around here," says Saia, by way of example.

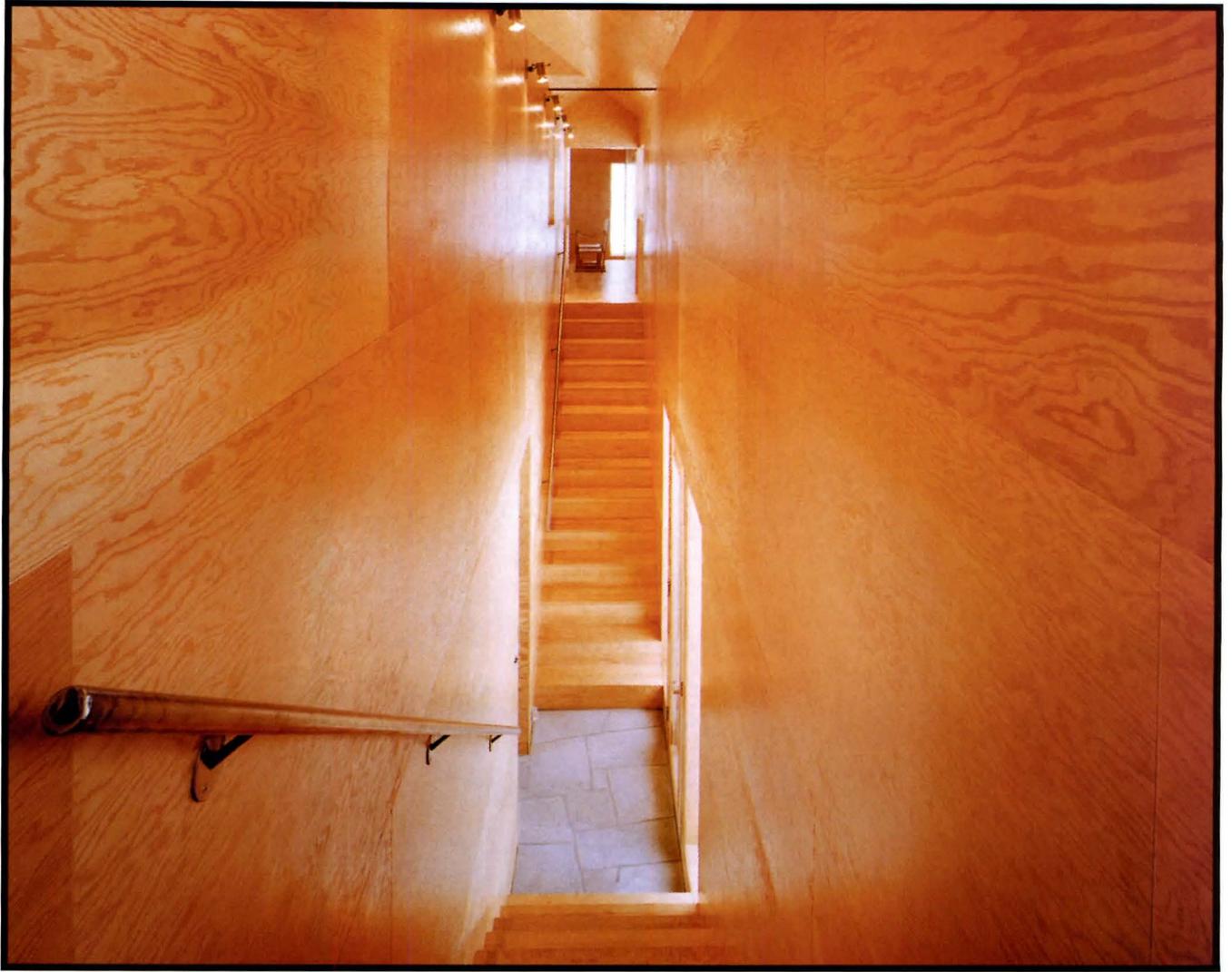
In order to make the rough country life function comfortably within this distilled design, the basement is carefully outfitted. An exterior door large enough for a snowmobile to fit through, a shower, a fireplace, and a workshop, as well as ample storage space for skis and snowshoes, help manage the grime, sweat, and equipment that come with outdoor living. In the more formal spaces, the house is organized as a series of simple, sculpted volumes. The main rooms, upstairs and down, have dramatic cathedral ceilings, and the central full-height living area is anchored by a massive limestone fireplace. Two screened-in outdoor spaces plunge the inhabitants directly but gracefully into the landscape: beyond the kitchen, through a set of glass doors, is an outdoor breakfast room. At the other end of the living space, similar glass doors lead to the other outdoor enclosure, which features a second stone fireplace.

The architects tuned the design to the cyclical rhythms of the surrounding forest. The master bedroom and breakfast room receive morning light, while the second-floor home office and ground-floor living areas face west. Fifteen generous, tall windows along the south façade frame the landscape, their mullions casting shadows that track the progress of the sun throughout the day. "The house is oriented on an east-west axis, because we had the good luck to have the best views and the slope both facing south," explains Saia. In summer, the foliage is thick enough to hide the views to the lake and filter direct sun. In winter, however, the prospect stretches to the twinkling lights of distant ski slopes. Another architect might simply have cut down some of the woods so that the lake was in plain view all year long. But with Maison Goulet, the emphasis is on living in the forest, rather than just looking at it.

**David Theodore is a research associate at McGill University's School of Architecture in Montreal.**



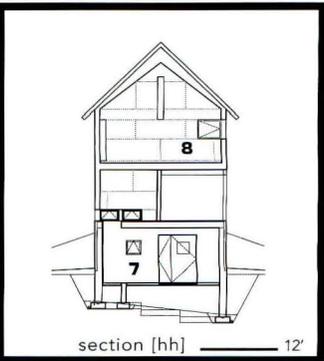
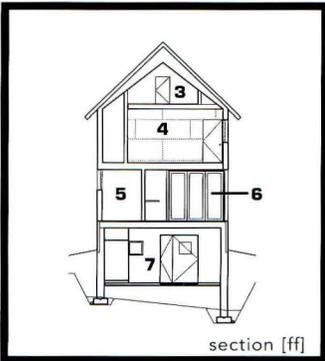
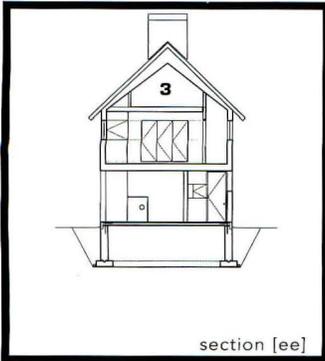
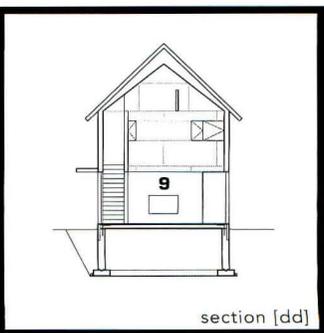
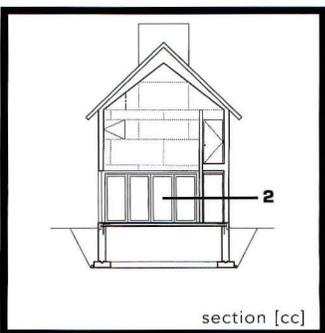
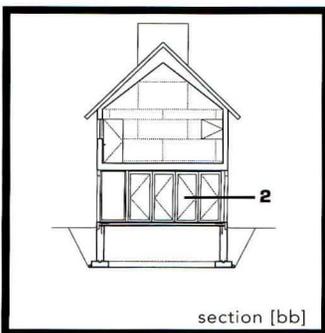
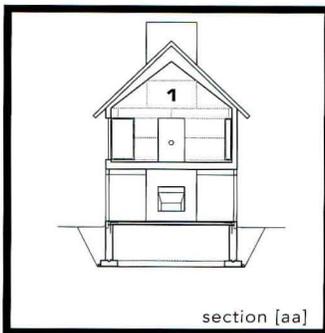
Maison Goulet sits in an undisturbed stand of birch and maple trees about an hour drive north of Montreal (facing page). Lightly stained half-inch-thick plywood lends both log-cabin warmth and a rigorous order to the interior spaces (above). The dramatic but spare office area centers on a wood stove and limestone slabs.



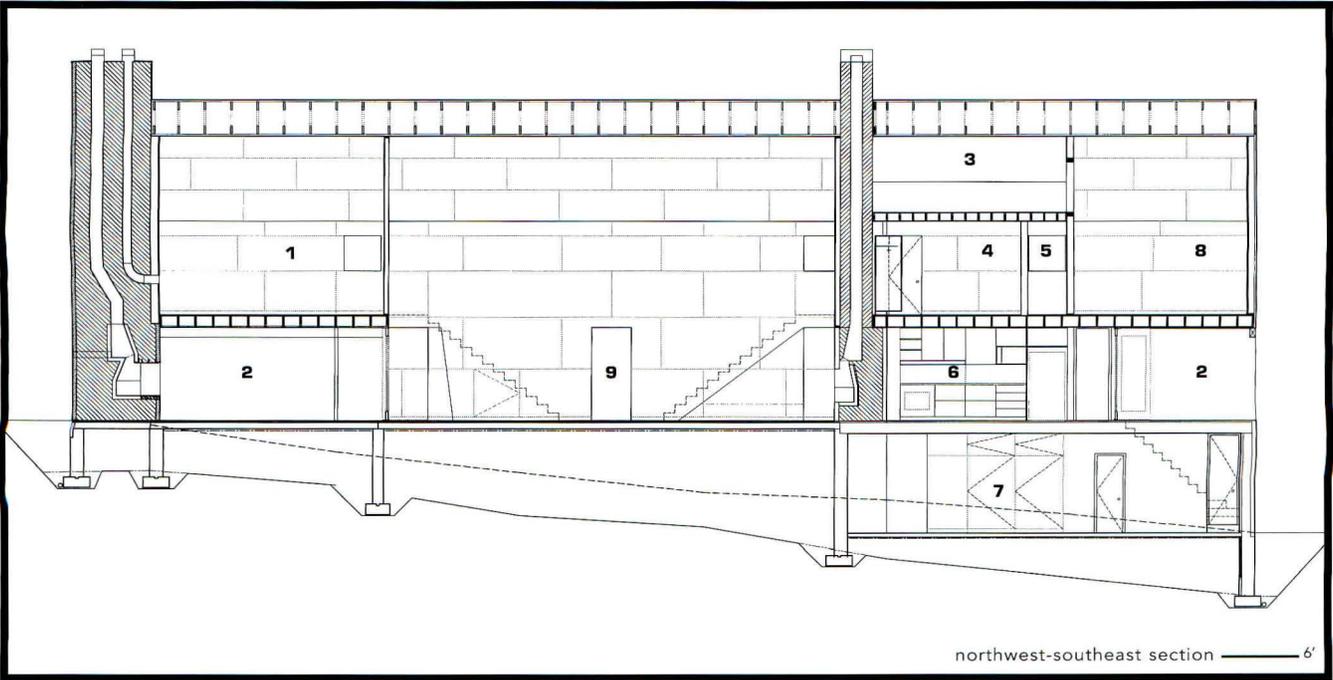
A mirrored, double-height staircase joins the first and second floors (top). In the downstairs public spaces, the architects specified a sawed stone for the floors (above left) while upstairs, a yellow birch prevails underfoot (above right). Some 400 sheets of plywood were rejected for not being of high enough quality for the walls and ceilings, causing a two-month delay in the project.



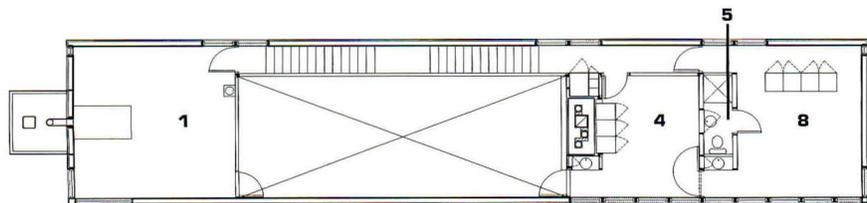
Though the view is limited by foliage in the summer months, the winter vista extends for miles (top). One of two screened-in "outdoor rooms" allows the residents close contact with nature, sans mosquitoes (above left). The zinc-clad façade and metal-covered gable roof contribute to Maison Goulet's elemental appearance (above right).



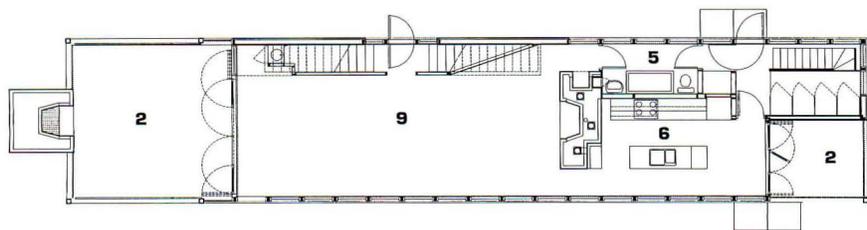
- |             |            |                  |
|-------------|------------|------------------|
| 1 office    | 4 bedroom  | 7 storage        |
| 2 porch     | 5 bathroom | 8 master bedroom |
| 3 mezzanine | 6 kitchen  | 9 living room    |



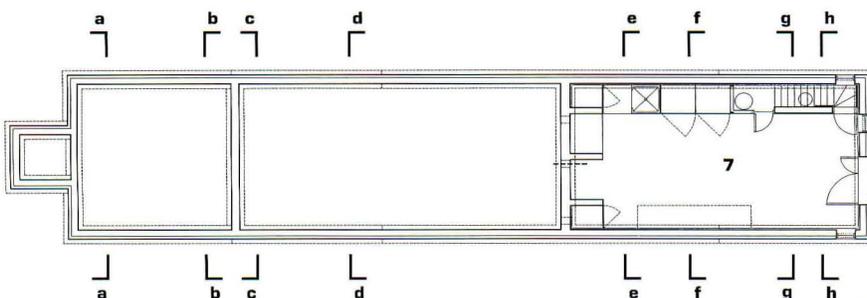
- |             |            |                  |
|-------------|------------|------------------|
| 1 office    | 4 bedroom  | 7 storage        |
| 2 porch     | 5 bathroom | 8 master bedroom |
| 3 mezzanine | 6 kitchen  | 9 living room    |



second-floor plan

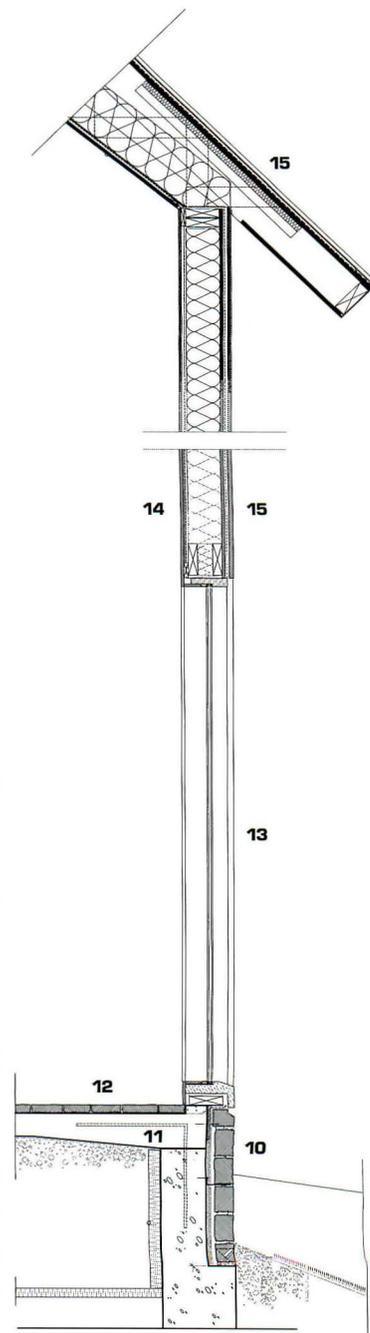


first-floor plan



basement plan 9'

- |             |                          |                     |
|-------------|--------------------------|---------------------|
| 1 office    | 6 kitchen                | 11 slab on grade    |
| 2 porch     | 7 storage                | 12 stone flooring   |
| 3 mezzanine | 8 master bedroom         | 13 glazed bay       |
| 4 bedroom   | 9 living room            | 14 interior plywood |
| 5 bathroom  | 10 stone over insulation | 15 metal cladding   |



south wall detail 11"

**Maison Goulet, Ste-Marguerite du Lac Masson, Quebec, Canada**

**client** | Marlène Goulet **architect** | Saia Barbarese Topouzanov Architectes—Mario Saia (design partner); Marc Pape (construction drawings) **structural engineers** | Saia Deslauriers Kadanoff **general contractor and construction manager** | Michel Riopel **subcontractors** | E. Paquin (windows); Daniel Catman (electrical) **landscape architect** | Claude Cormier **plumbing contractor** | Centre des pompes St-Donat **ceramic installation** | Michel Gervais **area** | 2,500 square feet **cost** | withheld **photographs** | Frédéric Saia; Marc Cramer

**Specifications**

**metalwork** | Faut le Fer Ornamental **zinc supplier** | Canadian Brass & Copper **metal cladding and panels** | Ajusteur Construction **plumbing fixtures** | Batimat **hardware** | Schlage **wood flooring** | Yves Godbout **lighting** | Novus **stonework** | Les Gratits Montval **ceramic tiles** | Céragres **construction materials** | Réal Riopel Renovation Center **plywood** | Gardian **windows** | Bonneville **oak windows and doors** | E. Paquin **electrical systems** | Daniel Catman **cabinetry** | René Russel; Atelier Glaf



AWARD

## A STUDY IN CONTRASTS

Two townhouses designed by MS-31 anchor a street corner in San Diego's Little Italy, affirming the area's role as fertile ground for innovative design. **by Ann Jarmusch**



For Sebastian Mariscal, an architect-developer-builder, time is money—and much more. He believes time is an enemy that today's architects must reckon with, as surely as cannon balls called for stone walls in the past.

Mariscal, a Mexico City native, devised a building system that would cut construction time on his rigorously modern designs. He used this system to construct a pair of four-story townhouses in downtown San Diego in just four months. The mirror-image twin houses fill a 1,550-square-foot lot at the corner of Date and State streets in Little Italy, a former working-class neighborhood that has become home to the city's creative forces, from ad agencies to architects with a penchant for experimentation. Mariscal estimates his method cut the standard construction time in half; the tradeoff was an extra month he spent on intricate shop drawings, which—wall by wall—detailed the houses, clad varyingly in stained redwood siding and stainless-steel panels.

This level of detail focused the construction crew's attention on perfecting one wall at a time, instead of a room or entire house, affording efficiency and precision, Mariscal maintains. The method also allowed work by different trades to overlap, saving even more time. The walls were built in sequence, from the top floor down, and stored on an adjacent vacant lot until ready to be bolted in. A crane then hoisted the walls into place until the shell was completed and attached to the wood framework.

Mariscal loosely describes the wall-building as an "assembly line," but the analogy falls short, as he required complex, varied fenestration to frame views of a downtown church and park, and the San Diego Bay. The two contrasting cladding materials define precincts in the houses: Stained redwood siding covers the vertical volume, devoted to living or sleeping rooms, in the front of

each house, while stainless-steel panels wrap the four-story stairwells at the rear that ultimately lead to roof decks. As constructed, these two volumes are separated by two 9-foot-square decks, or "outdoor rooms," just off the dining-kitchen areas. The houses boast a number of additional efficiencies: nearly identical floor plans, the same materials and colors throughout, and a single, shared plumbing wall.

The architect designed this project two years ago, when he founded his firm, MS-31. The name echoes the coding on industrial parts, using his inverted initials and his age at the time. He now lives in the townhouse that occupies the corner opposite a landmark church and community park with his wife and two small children. His business partner, David Baum, lives in its twin. Each home has a street-level office with its own entrance and two-car garage.

On the north façade, the stainless-steel panels wrapping the stairwells provide a mercurial and moody foil for the warm, domestic redwood siding, which envelops the office, living room, children's bedrooms, and, on the top floor, the master bedroom. These two materials play different games with the changing light, though both turn rosy at sunset.

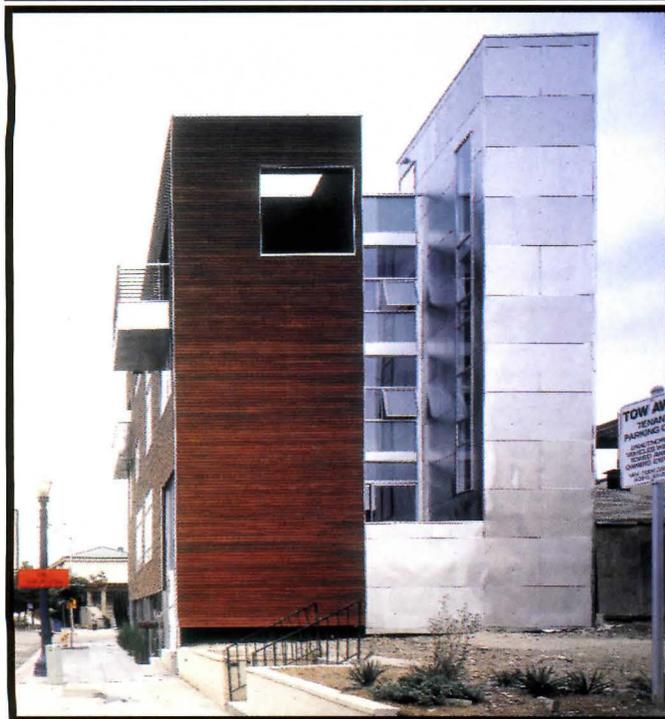
Inside, the architect favors contrasts within the simple, flowing spaces: maple floors made more luminous in the company of dark-stained oak cabinetry; tight-grained black granite countertops abutting a translucent green-glass backsplash; polished stainless-steel handrails and frosted-glass doors.

"Contrast helps you see the beauty in different materials," says Mariscal.

**Ann Jarmusch is the architecture critic at the San Diego Union-Tribune.**



MS-31 served as architect and builder for these two townhouses. By combining these roles and by prefabricating walls, the designer reduced construction time to four months. This functionalism is reflected aesthetically as well: Nails and screws march in lines up all four stories of redwood and stainless steel. Disciplined detailing is about as expressive as this restrained architecture gets.





Mariscal challenged himself to simplify every detail of the house, whether functional or aesthetic, because he wanted the space and the walls to speak loudest (above): "I am 100 percent against decoration," he proclaims. The kitchen was designed "like a piece of furniture," he says, with built-in cabinets and lighting (below).



**Date & State, San Diego, California**

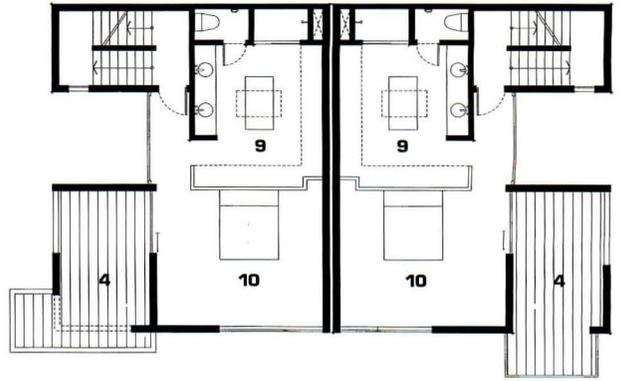
**client** | Maricarmen and Sebastian Mariscal, and David Baum **architect and general contractor** | MS-31, San Diego—Sebastian Mariscal (principal); Maricarmen Mariscal (administrator); Jorge Gracia (project manager); Jessica D'Arcy (process coordinator); José Ramos (construction manager) **structural engineer** | Omar Mobayed **consultants** | Wendy and Jonathan Segal (development); Andrew and Kandice Schultz (media system) **subcontractors** | Archkinetics (cabinetry, wood floors); Barner Electric (electrical systems); Bruce Markey (concrete); Ideal Mechanical (sheet metal and HVAC); RFG (metal railings) **area** | 5,600 square feet **cost** | \$600,000 **photographer** | Hisao Suzuki

**Specifications**

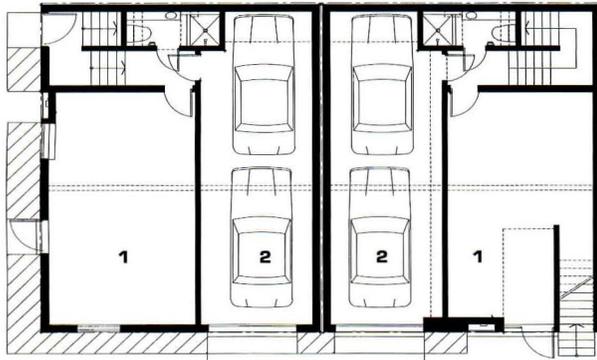
**wood framing/redwood cladding/wood doors** | Dixieline **wood joists** | Trus Joist **stainless-steel cladding** | Ideal Mechanical **built-up roofing** | BLW Roofing **glazing/sliding doors** | Milgard Windows **hardware** | Dixieline (locksets); Archkinetics (cabinet hardware) **furnishings** | Design Within Reach; Boomerang; Archkinetics



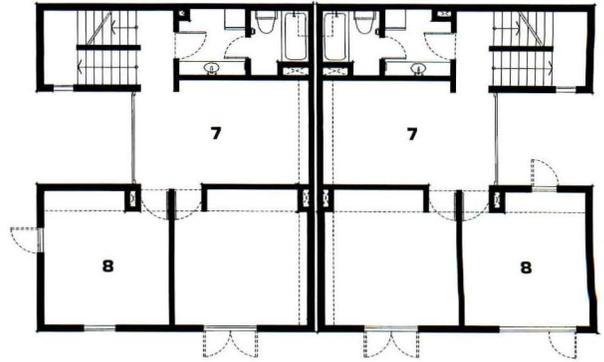
second-floor plan



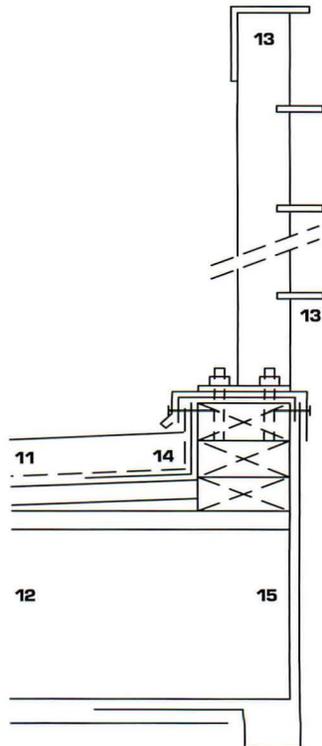
fourth-floor plan



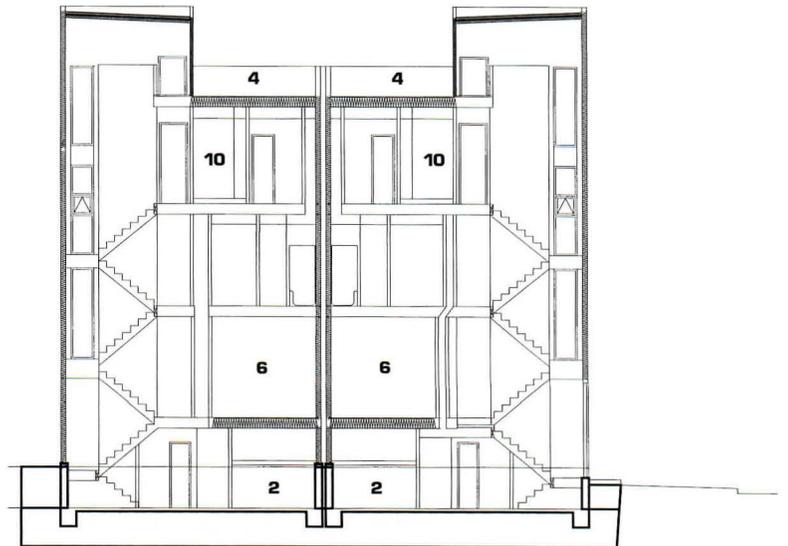
ground-floor plan



third-floor plan 6' ←



balcony guardrail detail 4"



north-south section 6'

- |           |                   |                          |
|-----------|-------------------|--------------------------|
| 1 studio  | 6 living          | 11 concrete floor        |
| 2 garage  | 7 tv room         | 12 wood joist            |
| 3 kitchen | 8 bedroom         | 13 stainless-steel plate |
| 4 deck    | 9 bathroom/closet | 14 membrane/flashing     |
| 5 dining  | 10 master bedroom | 15 stainless-steel panel |



AWARD

## THREE-PIECE SUITE

Los Angeles architect and developer Lucas Rios-Giordano adds density to his Santa Monica neighborhood. **by Anna Holtzman**



For half a century, the site of this three-family residence in Santa Monica, California, held a large garden and a small nineteen-fifties-era house. But when architect Lucas Rios-Giordano decided to clear and develop the lot, he wanted to maximize the use of land, extending both the height and area of his new building to their zoning limits. "Los Angeles needs to be more densified," he says. So instead of one unit, he built three, including one for his own family.

Describing his design evolution, Rios-Giordano relates that, while some of his earlier work was quite expressive and organic, recently he has taken a more rationalist approach—in this case, deriving the building's form from key program requirements and site conditions. One was the need for parking. A subterranean garage would have been too expensive, so he placed space for six cars on the ground level. This move necessitated that the second floor be cantilevered over the parking, creating sheltered outdoor areas in front of each unit, partially separated from one another by sliding wood screens.

Zoning codes also inform the massing. Current Santa Monica rules allow a height of two stories plus a mezzanine and a sloped roof. To maximize space, the architect divided the building lengthwise, creating two stories and a flat roof terrace for the street-facing half of the structure and three levels and a sloped roof for the back half. Each of the three units has a unique layout—tailored to individual family needs—which elegantly interlocks with the others in section. Sprinkled throughout the project are small interior alcoves, outdoor terraces, and gardens that contrast with more cavernous spaces inspired by New York City lofts, so Rios-Giordano calls the apartments "hybrid lofts."

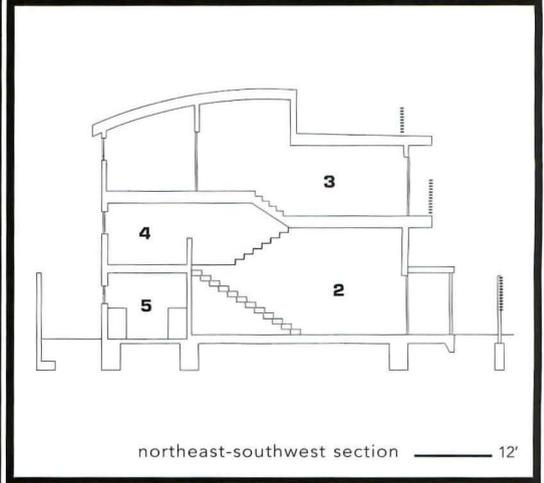
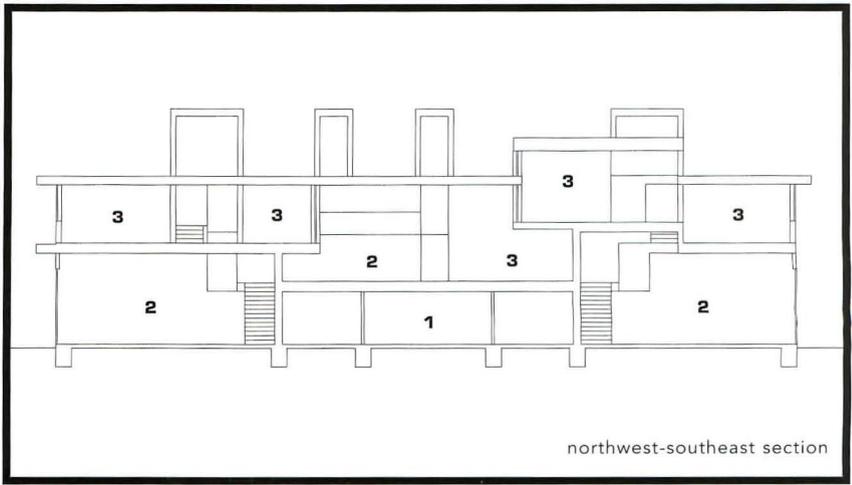
The architect occupies the southeast end-unit with his wife and two young children. The large ground-floor volume contains dining and living areas and a foyer, as well as bike storage and a terrarium for his children's pet geckos. His office is on the second-floor mezzanine adjoining an outdoor terrace where he conducts meetings, while the upstairs is given over to a more conventional layout of bedrooms and bathrooms. The middle unit, where a film producer lives, is a large, open-plan space; the northwest end-unit, where a surgeon and his wife reside, is similar to the architect's apartment but slightly smaller.

The building is all wood-frame construction, but the exterior is a study in finish materials and textures. The sectional interlocking of units is expressed outwardly by a second layer of cladding punctuating the stucco—railings and louvers in wood and steel, and glazing. "It's an additive process," says Rios-Giordano, who supervised construction intensively, often determining surface colors on site, blending the tones of the building with the sky, ground, and foliage. A casual painter himself, the architect took color inspiration from California abstract expressionist artist Richard Diebenkorn's *Ocean Park* series and from the work of his countryman, Uruguayan painter Joaquín Torres-García.

But far from treating his buildings as pristine works of art, the architect welcomes inhabitants to appropriate them as they wish. The residents in the northwest end-unit, for example, have placed a large toy dinosaur on the roof, visible from the street. "I have no problem with that," says Rios-Giordano. "I welcome people's expressions. If the architecture is strong enough, it can withstand these things." ■



Surface materials and textures outwardly reflect the three interlocking apartments of this Santa Monica residence (facing page). Parking areas for each of the units are partially separated from one another by sliding wood screens, which can be extended to the edge of the concrete-paved front patio for greater privacy (above).



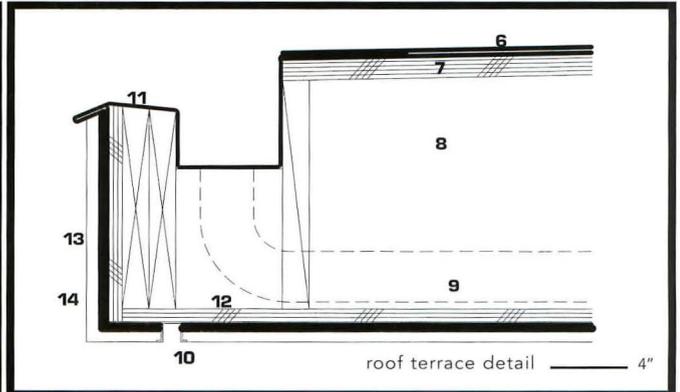
The three units feature multipurpose spaces containing dining and living areas (top left). The architect made the most of the massing that zoning codes would allow, creating three levels and a sloped roof on one side of the building, and two stories with a roof terrace on the other (above left).

### Hybrid Lofts, Los Angeles

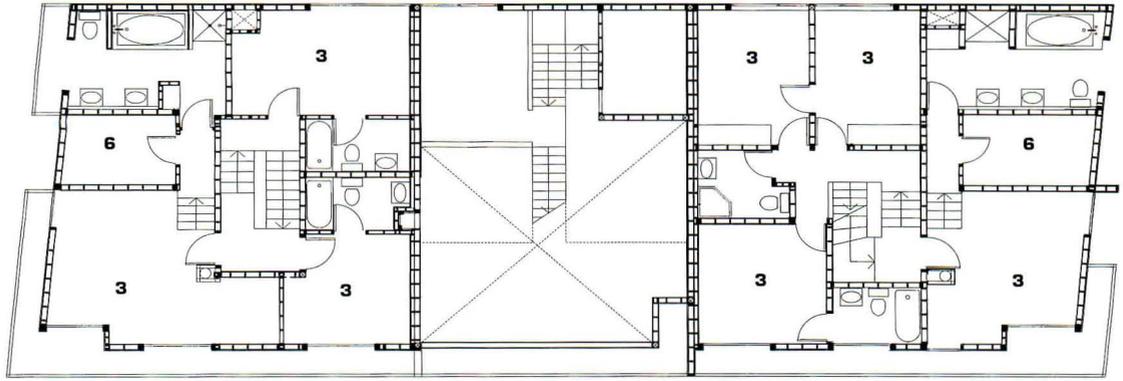
**client** | A Couple of Lofts **architect** | Lucas Rios-Giordano, Los Angeles; Ronen Sigall (project associate) **landscape architect** | Disabatino-Lem Architects **engineers** | Soly Yamini (structural); Gary Safronoff (civil) **consultants** | Ammco (steel structure); Solair (air conditioning); Singleton Fire (fire sprinklers); Arturo Yepes (roofing, sheet metal); Commander Plumbing (plumbing); Crystal Wynn (hardware design) **general contractor** | Chris and Jerzy Construction **subcontractors** | Les Baran (concrete); Eddie Carrillo (stucco); New West (flooring); Bronze Age (metal fabricator) **construction manager** | Eloy Lopez **area** | 7,000 square feet **cost** | \$1.1 million **photographs** | Marvin Rand

### Specifications

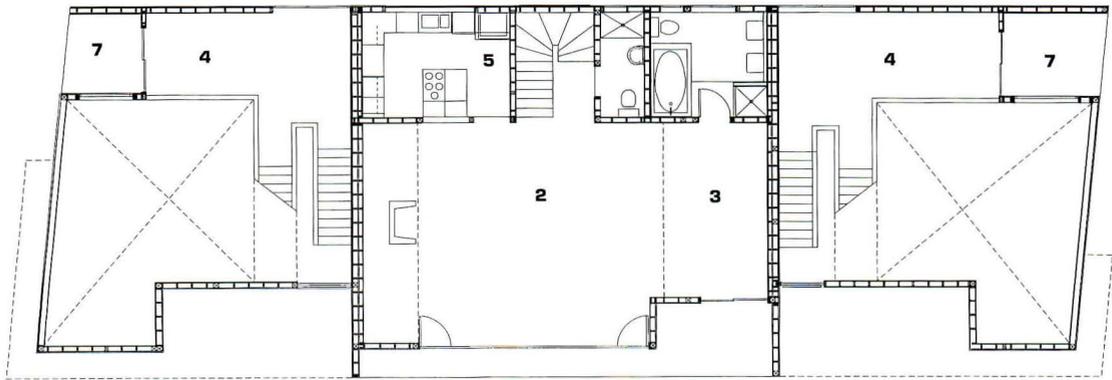
**structure** | wood, concrete block **metal railings** | galvanized steel **wood railings** | ironwood **curtain wall** | bonderized metal; windows **cladding** | steel-troweled stucco **roofing** | elastomeric coating **windows** | double glazing; aluminum mullions **doors** | galvanized steel **hardware** | chrome metal **locksets and cabinet hardware** | Omnia **custom woodwork** | 13-ply plywood **flooring** | maple hardwood; concrete **countertops** | stainless steel **appliances** | Miele **lighting** | halogen (interior); fluorescent (exterior) **plumbing fixtures** | Toto; Duravit; Grohe



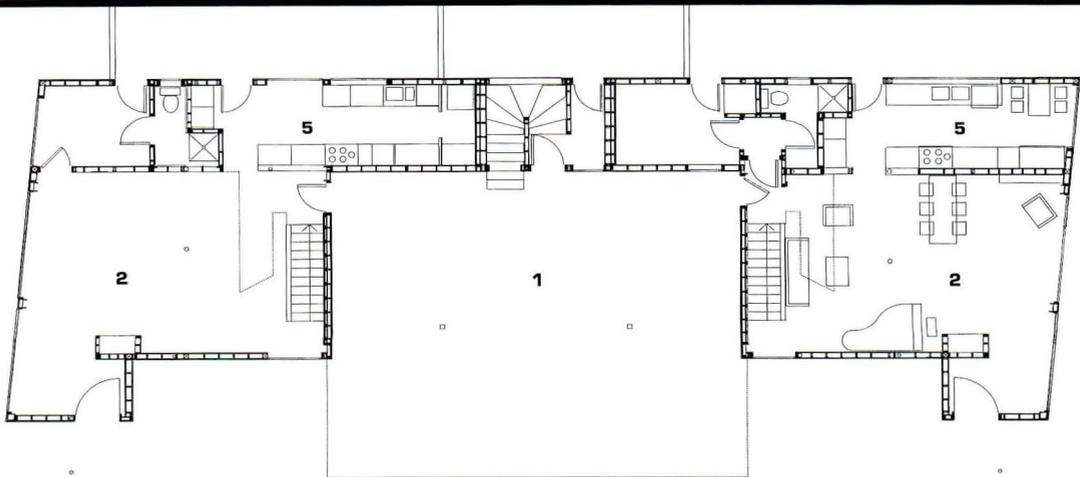
- |                             |                                     |
|-----------------------------|-------------------------------------|
| 1 parking                   | 9 drain                             |
| 2 living area               | 10 aluminum reglet                  |
| 3 bedroom                   | 11 sheet-metal gutter               |
| 4 office                    | 12 plywood                          |
| 5 kitchen                   | 13 expanded metal and asphalt paper |
| 6 elastomeric waterproofing | 14 steel-troweled stucco            |
| 7 tongue-and-groove plywood |                                     |
| 8 wood rafter               |                                     |



third-floor plan



second-floor plan



first-floor plan ——— 10' 

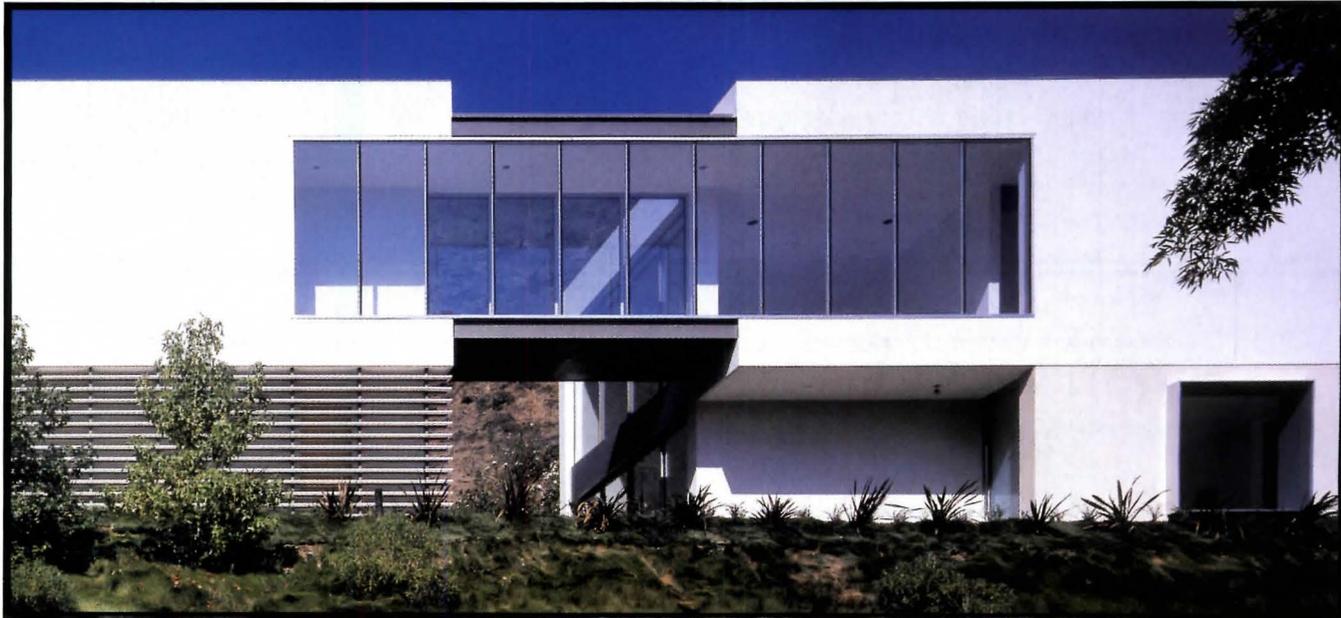
- |               |           |
|---------------|-----------|
| 1 parking     | 5 kitchen |
| 2 living area | 6 closet  |
| 3 bedroom     | 7 balcony |
| 4 office      |           |



AWARD

## VIEW FROM THE HILL

SPF:a's Zoltan Pali designs a Los Angeles bachelor pad for an industrial designer. **by Anna Holtzman**



After driving up the winding roads of the Bel Air hills toward the Oshry house, visitors arrive at a vision of cool California modernism right out of a James Bond film—a long, white, two-story building interrupted in the center by an open-air court and a glass bridge. This impression of cinematic perfection is bolstered by the near-obsessive detailing of exterior windows, railings, and louvers, the crisp definition of planes, and the rigorously calibrated proportions. Architect Zoltan Pali of Los Angeles-based SPF:a designed the home for Scott Oshry, an industrial designer whose penchant for neatness complements his modernist aesthetic. On entering the house, visitors find that not only do the architecture and furniture conform to a Miesian grid, but so, it appears, does every carpet fiber and piece of paper.

Pali and his partners, Jeffrey Stenfors and Judit Fekete, have a history with Oshry, having first worked with him on an office for his design firm. Oshry is also part of a real-estate development partnership, Habitat Group Los Angeles, which is working on a series of residential developments designed by local architects, including SPF:a. With a relationship already in place, the client had few directives for Pali when it came to building his own home.

The house scheme was initially generated from basic site parameters. First was the topography of the narrow ledge on a steep hillside. The plot is certified fill, so the foundation, which has 16 caissons that are up to 90 feet deep, had to be very strong, extending down to bedrock. To reduce the expense of this foundation, Pali attempted to minimize the footprint as well as the piles, which are placed around the edges of the plan "like cleats on a shoe," he says. Spanning the piles are grade beams. "I see the beauty in restraints," states the architect, explaining

how limiting factors often guide his design process.

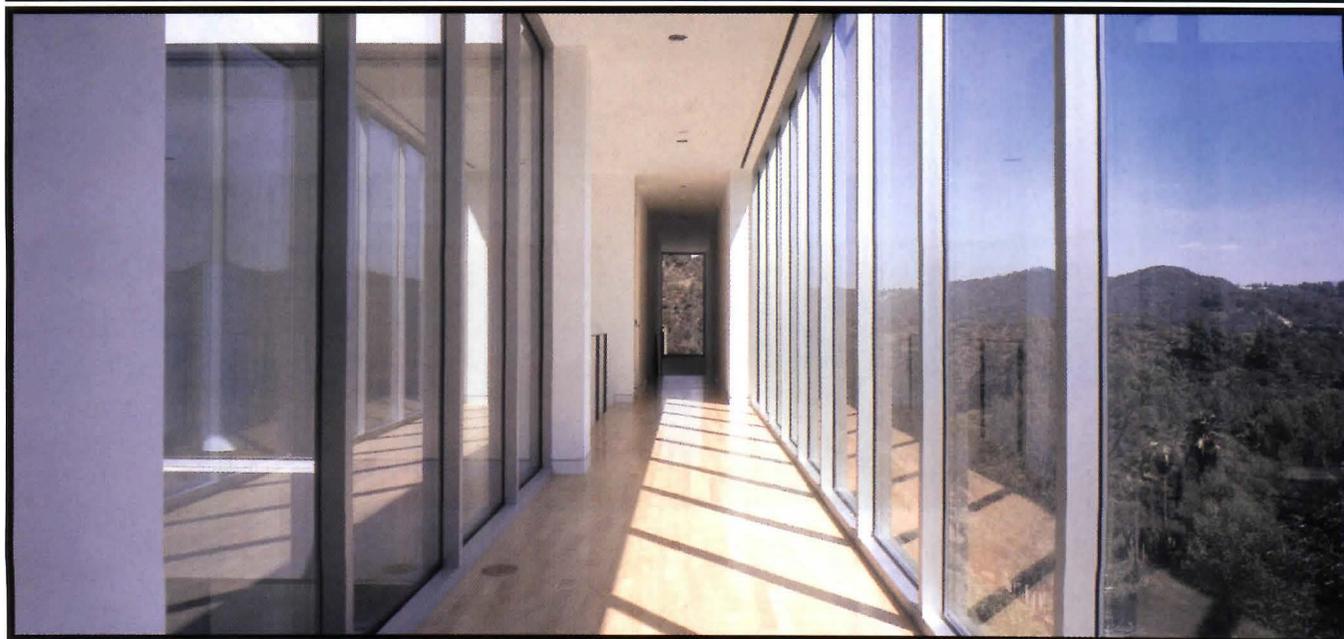
The second factor influencing this project was the view. The architect wanted his client to experience the exterior surroundings as he moved through the house. "People always put the best view in the bedroom," says Oshry, "but all you do is close it off and go to sleep." Thus, Pali kept perimeter walls free from abutting interior partitions and pushed most of the circulation, including the stairs, against the eastern façade, a transparent skin exposed to expansive downhill views.

The building is divided into two side-by-side two-story masses clad in limestone and steel-troweled plaster. One volume houses an office, guest bedrooms, an exercise room, and a garage; the other contains more social spaces—the kitchen and living room—as well as the master bedroom. An outdoor court on the ground level and a narrow, glass-enclosed bridge on the second floor link one volume to the other. Oshry says that the design forces him to go out of doors more often, though when asked in which part of the house he spends most of his time, he replies, "the office."

Inside the house are well-edited modern furnishings and more of the architect's fastidious detailing—like a custom wood screen that slides along the master bedroom walls and folds out across floor-to-ceiling windows to block early morning sun. "Oshry is very design oriented, so for the interiors, we participated, but only to an extent," says Pali. Later, he good-naturedly chides his client about a model Oshry built—and prominently displays in his office—of the house Pali designed for him. It seems a fitting metaphor for the give-and-take relationship between this architect and client. ■

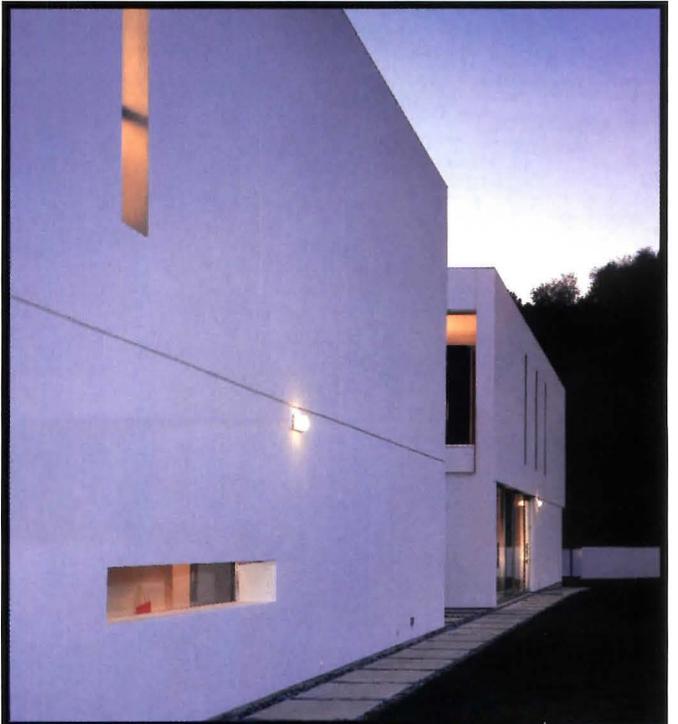


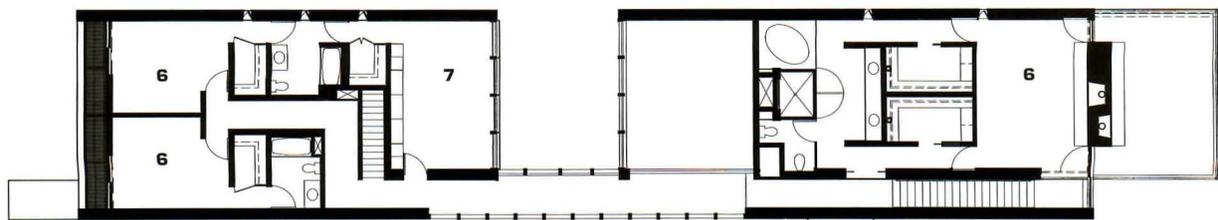
Louvers on the east façade of the Bel Air residence are made of limestone. Architect Zoltan Pali told the contractor, who had never before installed stone louvers, to "think of them as a bunch of countertops" (facing page and above). The glass-enclosed second-story bridge takes advantage of expansive, downhill views (below).



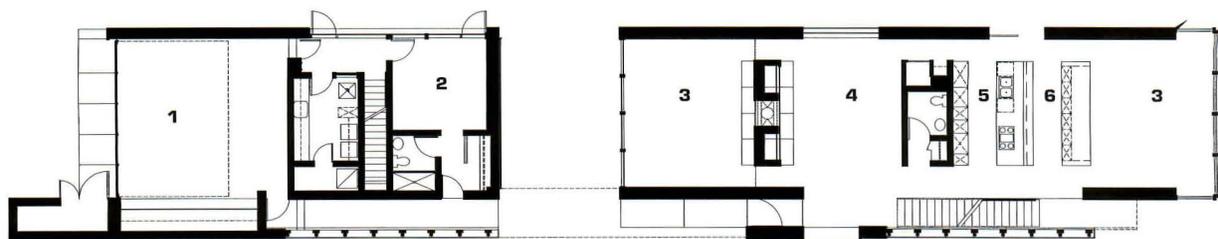


Visitors first approach the house's south façade along a path of concrete pavers and small stones (above). Exterior stone louvers provide shade and diffuse light within (below left). At the rear of the building, a wall is perforated by slender, vertical windows that let in natural light but protect the client's privacy from his neighbor to the west (below right).

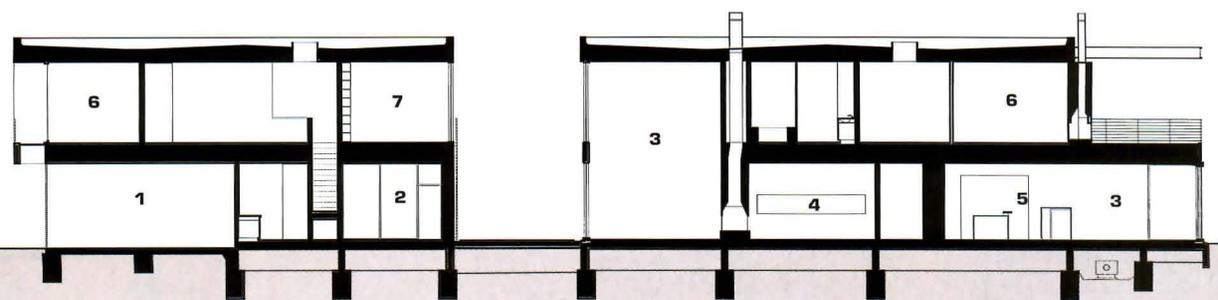




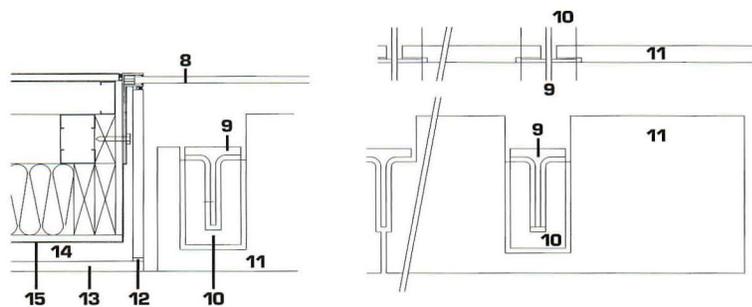
second-floor plan



first-floor plan 9'



north-south section 9'



louver details at terminations (plan) 10"

- |                        |  |
|------------------------|--|
| 1 garage               | 10 steel plate welded to steel column underneath |
| 2 exercise room        | 11 limestone louver                              |
| 3 living room          | 12 mortar joint                                  |
| 4 dining room          | 13 limestone veneer                              |
| 5 kitchen              | 14 thick mortar                                  |
| 6 bedroom              | 15 lap building paper and plywood backer board   |
| 7 office               |  |
| 8 clear tempered glass |  |
| 9 steel column         |  |

### Oshry Residence, Los Angeles

**client** | Scott Oshry **architect** | SPF:a, Los Angeles—Zoltan E. Pali (principal in charge); Judit Fekete, Jeffrey Stenfors (principals); Gregory Fischer, Shaheen Seth, Malina Palasthira, Greg Hill, Brian Cavanaugh (project team) **landscape architect** | Blue Door Gardens **engineers** | Philip Huang & Associates (structural); Kerr-Pali & Associates, Electrical Design Associates (M/E/P) **general contractor** | Archetype **area** | 5,000 square feet **cost** | \$1.2 million **photographs** | John Edward Linden

### Specifications

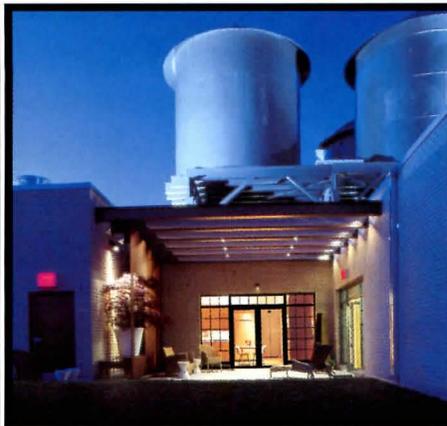
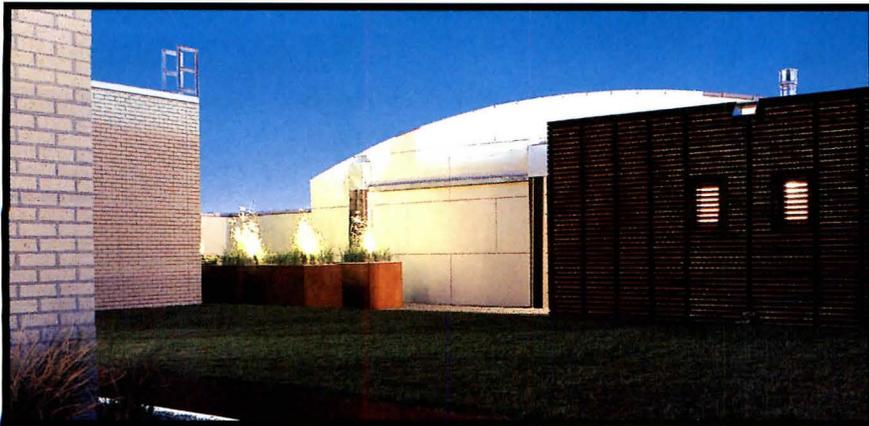
**exterior metal/glass curtain walls** | Arcadia **exterior metals** | Barnett-Bates **stone** | Stone Resources **glass** | Trident **skylights** | Dur-Red Products **wood doors** | T.M. Cobb **sliding doors** | Fleetwood **locksets** | RSA **hinges** | Hager **cabinet hardware** | Accuride; Blum **cabinetwork/custom woodwork** | T & R Carpentry **paints and stains** | Sinclair **flooring** | Esh Flooring **lighting** | Iris/Lightolier (downlights); Bega (exterior) **plumbing fixtures** | Kohler; Grohe; Metropolis; Franke



CITATION

## FIGURE AND GROUNDS

A Minneapolis rooftop loft by Anmahian Winton Architects inverts expectations of landscape and living room. **By Thomas Fisher**



In a rehabilitated Minneapolis flourmill, this elegant, airy penthouse, designed by Boston architects Anmahian Winton and Minneapolis landscape architect Thomas Oslund, inverts our idea of figure and ground. Architects typically design figures on the ground, but here, the building itself is the ground, its rooftop providing the base upon which exterior and interior elements stand.

Oslund treats the lawn as a figural platform framed in steel. He does the same with steel-framed terraces and planters, each sitting on a gravel base that recalls both roof ballast and Japanese gardens. Two meditation rooms, wrapped in black-stained mahogany slats, stand as another figural element, set against the parapet's white cement-board cladding.

This "objectified" landscape, as Oslund calls it, continues inside. He and Nick Winton worked closely to ensure continuity between exterior and interior. "We raised the floor to be level with the garden," says Winton, a move that ensured spatial flows and room for the mechanical runs. The Douglas fir floor and ceiling provide a rich, reddish surface in the living space for a series of "islands," with rugs and cabinets defining areas for eating, conversing, and relaxing. A prow-shaped library stands as the most prominent feature in the room, with a curved, elevated wall directing visitors from the front hall to the rear seating area.

The raised floor also enhances the view through the large windows to the nearby Mississippi River and Minneapolis skyline. The dynamic activity outside those windows makes them vertical figures of their own, with a sliding fir-clad wall, designed for artwork, that also serves as a screen against the western sun.

Also in fir, the kitchen "pod," as Winton calls it, separates the entry vestibule from the living area, while a set of nested figures-within-figures characterizes the private quarters. Winton envisioned the carpeted bedrooms and corner study "as a Pullman car," with perimeter circulation along the window wall and interior, and automated drapes and shades providing privacy. An inner circulation path among these rooms also highlights the figural character of the central bathroom, service, and storage block.

This play of figure-as-ground and ground-as-figure seems appropriate in a city that has thrived on having "objectified" the agricultural land of the Midwest, turning that ground into vast stretches of fenced-off, food-producing figures. Architect and landscape architect accomplish something extraordinary: They remind us that we've been inverting figure and ground for a very long time.

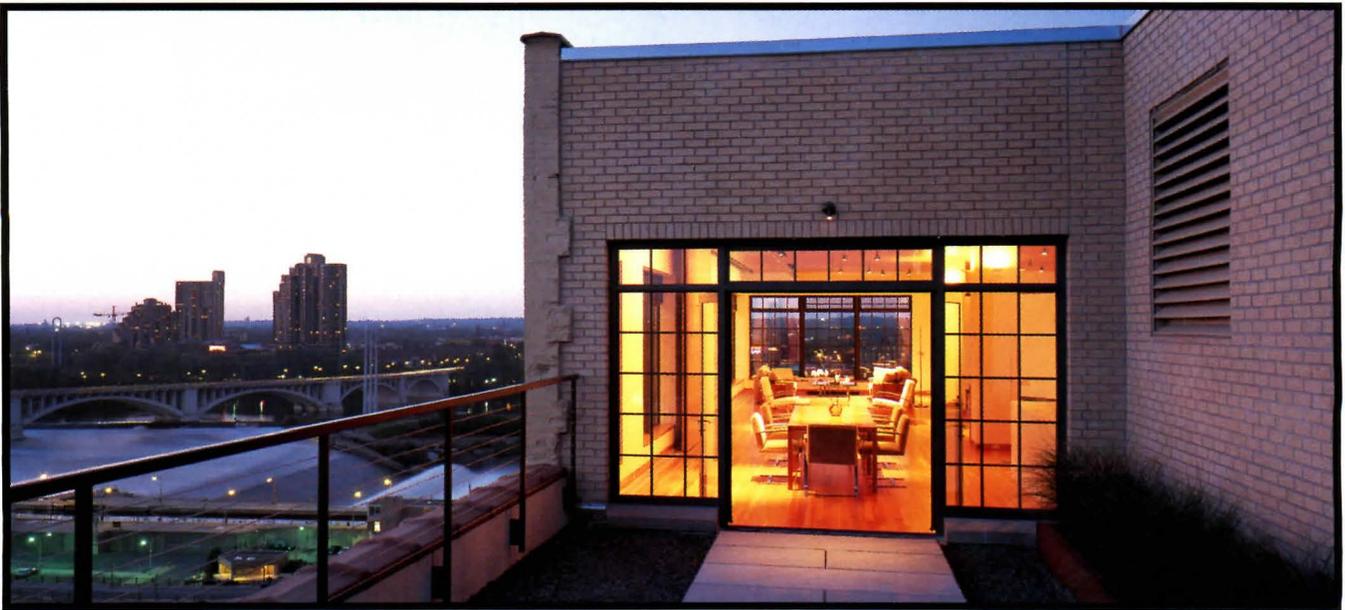
**Thomas Fisher is dean of the College of Architecture and Landscape Architecture at the University of Minnesota.**

### Loft and Terrace, Minneapolis, Minnesota

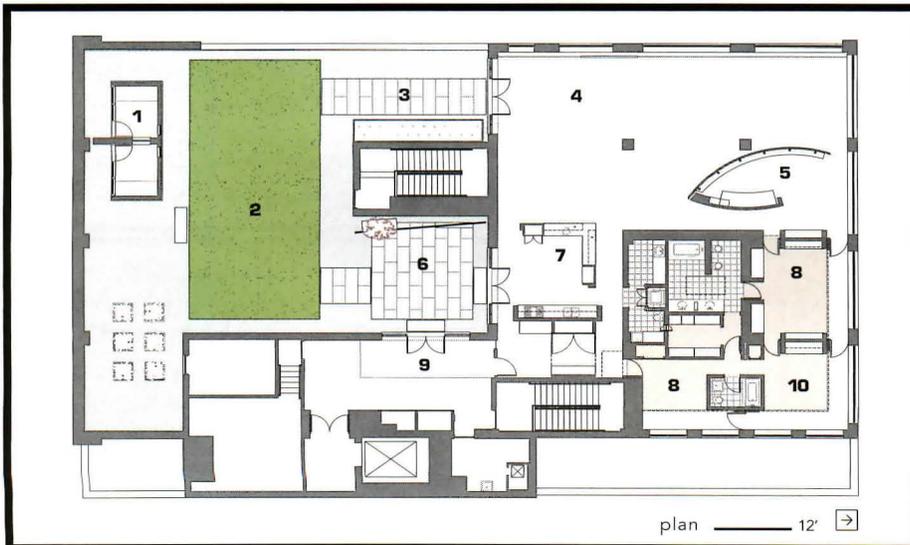
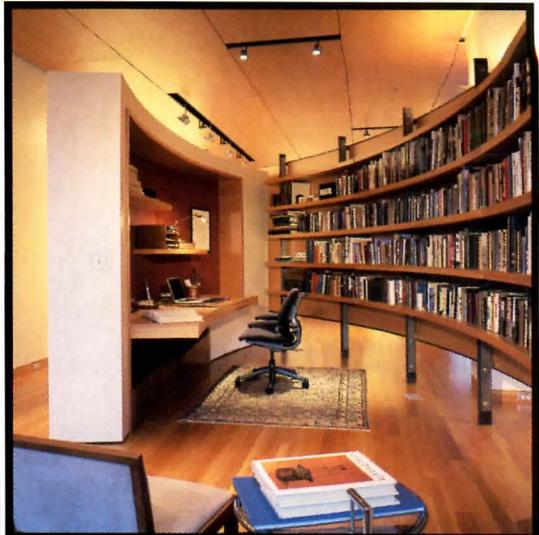
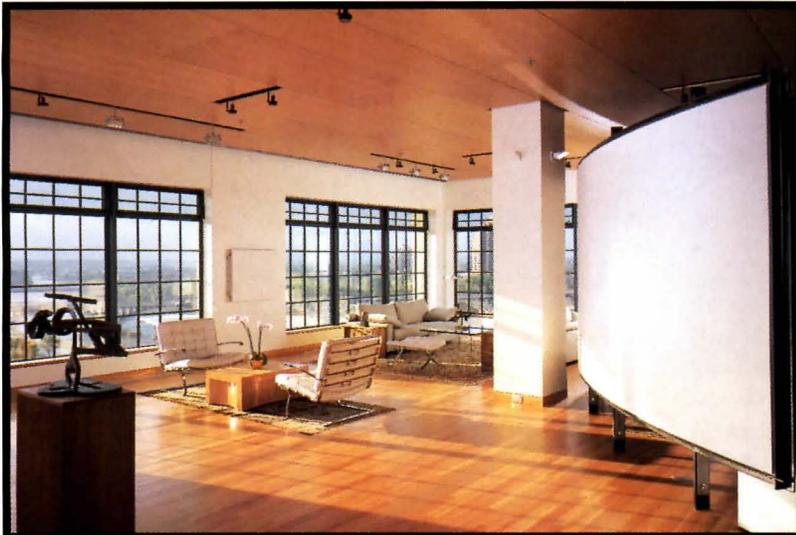
**architect** | Anmahian Winton Architects, Cambridge, Massachusetts—Nick Winton, Alex Anmahian (principals); Cornell Anderson, Gary Rohrbacher, Aaron Stavert, Lilly Smith, Andrea Korber (project team) **landscape architect** | Oslund & Associates, Minneapolis, Minnesota—Thomas Oslund (principal); Peter Vevang (project designer) **interior designer** | Gunkelmans **associate architect** | James Dayton Design, Minneapolis **engineers** | Gregorian Engineers, Mattson MacDonald Engineers (structural); Atlantic Heating, NewMech (M/E/P) **consultants** | Lam Partners (lighting) **general contractor** | Kraus-Anderson **area** | 7,200 square feet **cost** | \$1.5 million **photographs** | George Heinrich

### Specifications

**metals** | Corten steel **wood** | Douglas fir; mahogany lattice **pavers** | precast concrete **cement panels** | James Hardie **waterproofing** | American Hydrotech **stone** | Dresser Trap Rock **skylights** | Wasco Products **locksets** | FSB **carpentry** | Marcon **cabinetry** | O'Keefe Woodworking **cabinet hardware** | Colonial Bronze **carpet** | Weskuske **drapery** | Boussac **furnishings** | Flexform; Knoll; Mario Bellini **uplights** | Belfer **downlights** | Lightolier; Elliptipar **task lighting** | Artemide **plumbing fixtures** | Duravit; Dornbracht



A restrained and fairly common intervention—the rooftop loft—gives near-iconic status to existing water tanks and a new elevated green (facing page). A sculptural library element and perimeter circulation relieve an otherwise static interior (below). The indoor-outdoor program connects occupants in new ways to the urban landscape (above).



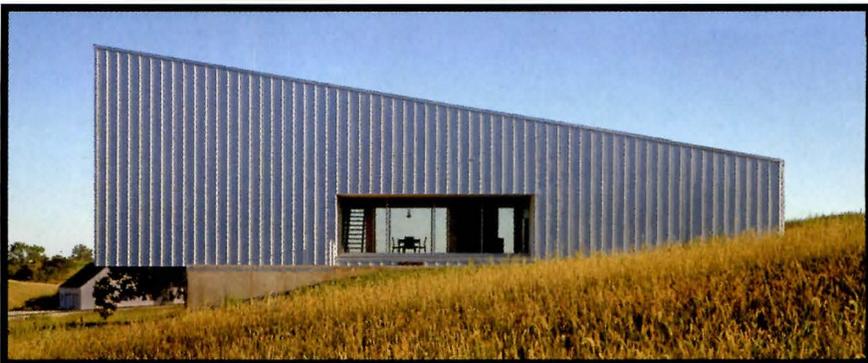
- 1 meditation rooms
- 2 lawn
- 3 dining terrace
- 4 living/dining
- 5 library
- 6 kitchen terrace
- 7 kitchen
- 8 bedroom
- 9 lobby
- 10 sitting room



CITATION

## PRAIRIE PAGEANT

A little house by Herbert Lewis Kruse Blunck in rural Iowa makes a big impression. **By Julia Mandell**



When Mike and Jaxine Corum decided to build a house, they were not interested in quantity of space, unlike so many suburban home owners today, but in quality. Breaking with the norm did not come easily. "Sometimes I would look at an aspect of the [proposed] design and think that we could have had a few more rooms instead," recalls Mike Corum. While sacrificing floor space, they got an elegantly organized, striking home, the likes of which Pella, Iowa—a close-knit company town dominated by the window manufacturer of the same name—has never seen.

Set on a hillside in a new but mostly undeveloped subdivision four miles west of town, directly across the street from the only other house in the area, a neat Colonial, the Corum Residence is a single, monumental volume focused on a bucolic view of a small pond and a copse of windblown shrubbery. This single-volume strategy offered several advantages, says principal-in-charge Paul Mankins of Herbert Lewis Kruse Blunck, Des Moines: "Part of the reason was cost, but we also wanted to design a building that reflected the utilitarian structures you see around Iowa." Those structures—barns, warehouses, and cone-capped grain elevators—have stark geometries that stand out on the gently rolling prairie, but their relationship to the Corum Residence might not be apparent to the casual observer.

To fit the desired program comfortably into the funnel-shaped volume, Mankins approached the design with a rationalist's eye. The width of the building derives from the minimum size needed for a two-car garage that occupies the north end of the building. Inside, discrete functions carefully unfold along a centerline, unit-

ing small spaces into a greater whole.

The interior seems bigger than it is. Inset floor-to-ceiling side windows line the kitchen and dining area, keeping the space from feeling narrow. The monumentality of the volume also contributes to a sense of spaciousness: The looming presence of the large funnel-end makes the intimate inner rooms seem as though they are surrounded by much larger spaces, when in fact the entire house is only 2,200 square feet.

The funnel works differently at its southern end, where it culminates in a full-height space 26-feet square; a monumental window wall splits the area into a living room and an exterior balcony. The balcony, which extends to the very end of the giant tube, is a dramatic and imposing presence. This is not necessarily a negative: Standing at the open funnel-end is an exhilarating experience. However, the full-height living room on the other side of the glass is less successful—the tall, narrow, open-ended volume gives the living room the feeling of a hallway or atrium, a space to move through rather than settle in.

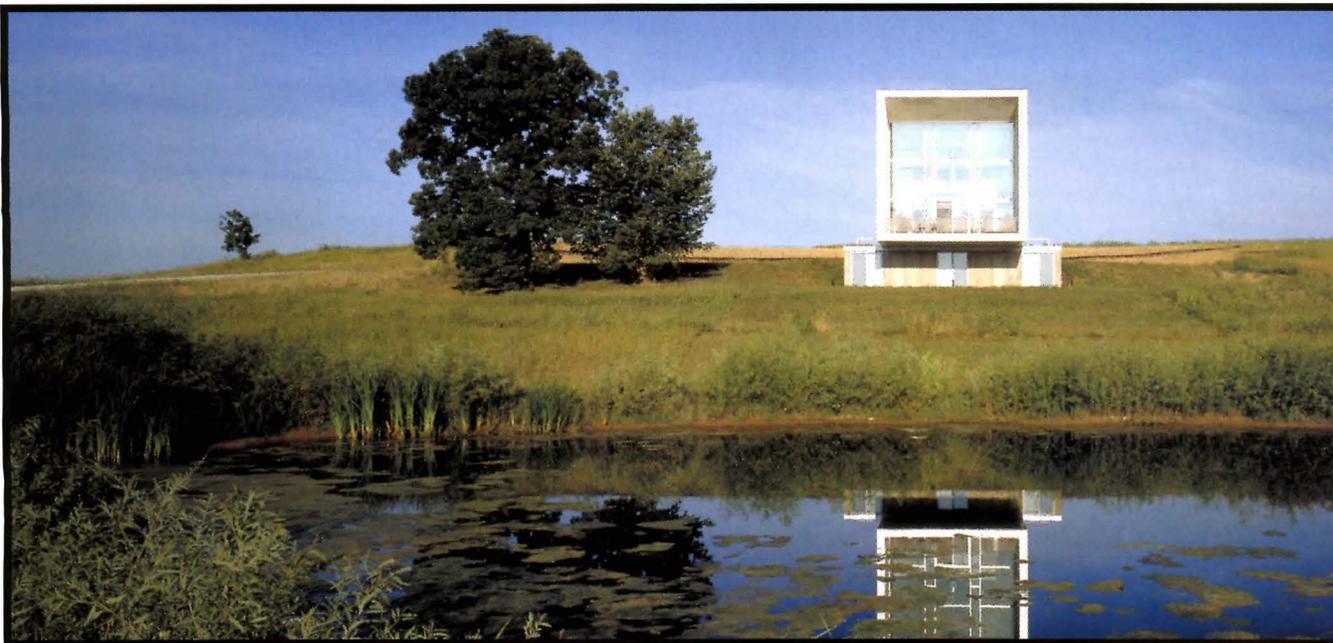
The Corum house is a bold attempt to introduce a strong exterior geometry into a gentle landscape and to take full advantage of a small interior space. Despite a few tenuous aspects, the house works, providing the owners with a small home that feels dramatic and spacious. Pella is a conservative place, especially when it comes to maintaining the town's public image, but since the Corums have moved in, they have had a steady trickle of visitors. "Everyone wants to see it," says Jaxine. "And once they come inside, they understand."

### Corum Residence, Pella, Iowa

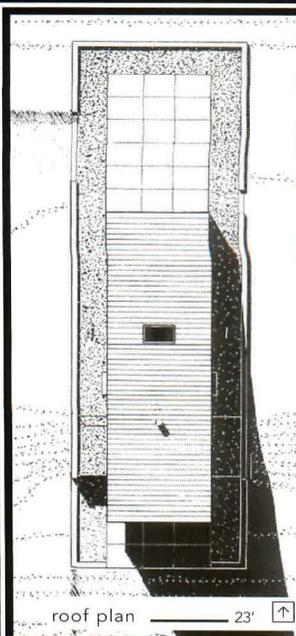
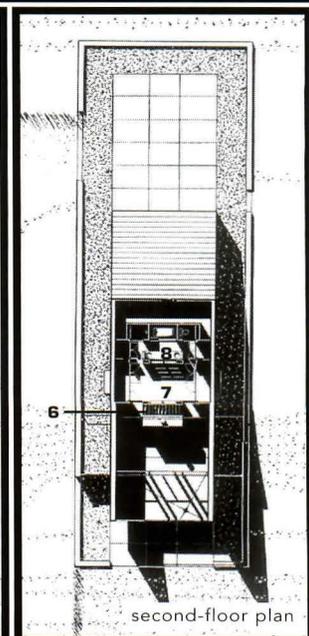
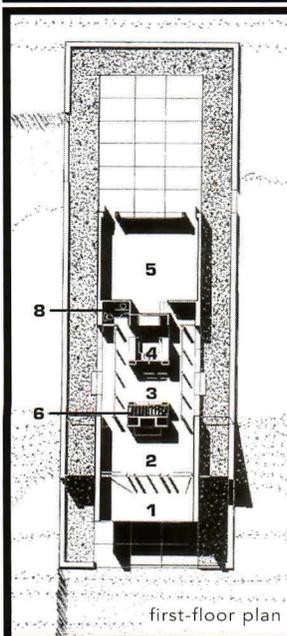
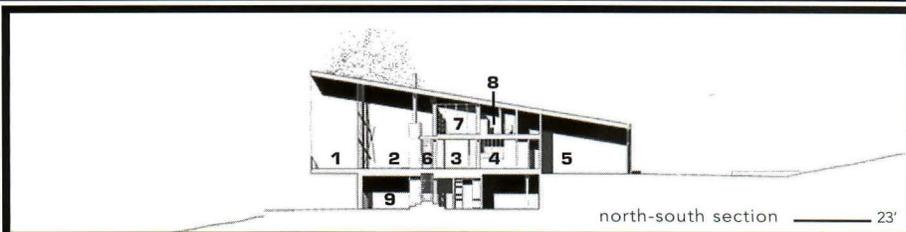
**client** | Mike and Jaxine Corum **architect** | Herbert Lewis Kruse Blunck, Des Moines—Paul Mankins (principal-in-charge); Erin Olson-Douglas (project architect) **engineers** | Charles Saul Engineering—John Paul Goedken (structural engineer) **general contractor** | Legacy Builders **area** | 2,200 square feet **cost** | \$400,000 **photographs** | Bob Shimer/Hedrich-Blessing

### Specifications

**standing-seam metal siding** | Galvalume **asphalt shingles** | Certaineed **plastic glazing** | Lumasite **wood floors** | Bruce Hardwood Floors **sky-lights** | Velux **cabinet hardware** | Kroin; Hafele **paints and stains** | Iowa Paint **resilient flooring** | Marmoleum **carpet** | Karastan **lighting** | Lightolier (downlights); Flos (specialty) **plumbing fixtures** | Kohler; Delta



The formal rationalism of the Corum house extends to the dimensions of side window openings (below, left and facing page, right), which are determined by the length and height of the upper floor plate, seen in section (below). The slope of the building's roof mirrors the slope of the site (facing page, left) to accommodate a full-height window oriented toward a pond to the south (above).



- |               |           |                  |
|---------------|-----------|------------------|
| 1 balcony     | 4 kitchen | 7 master bedroom |
| 2 living room | 5 garage  | 8 bathroom       |
| 3 dining area | 6 stairs  | 9 bedroom        |

seamless

durable

code-compliant

renewable

PERHAPS THE FIRST TIME “

” AND “STYLISH” HAVE BEEN UTTERED IN THE SAME SENTENCE

MEN'S  
LTH

CENTRO  
DE SALUD  
PARA MUJERES

**Introduce DuPont™ Corian® solid surfaces to your healthcare environment.**

Address your infection-control issues with a surface that looks great and performs even better. A nonporous material, Corian® won't support the growth of mold, mildew or bacteria. Plus, it's virtually seamless and easy to clean with no gaps or grout lines. Corian® also meets stringent building codes because it's Class 1 fire rated, NSF/ANSI 51 food-contact certified and can be made with no sharp edges or corners for ADA compliance. And because it's durable, Corian® protects walls from damage by gurneys and other equipment.

For more information, visit [www.corian.com](http://www.corian.com) or e-mail us at [coriancml@usa.dupont.com](mailto:coriancml@usa.dupont.com).

Another great product from DuPont Surfaces, the makers of DuPont™ Bath Surfaces and DuPont™ Zodiaq® quartz surfaces.

Corian® is a DuPont registered trademark for its solid surfaces. Only DuPont makes Corian®.

Circle 51 or [www.architecturmag.com/productinfo](http://www.architecturmag.com/productinfo)

DuPont™  
**CORIAN**  
SOLID SURFACE



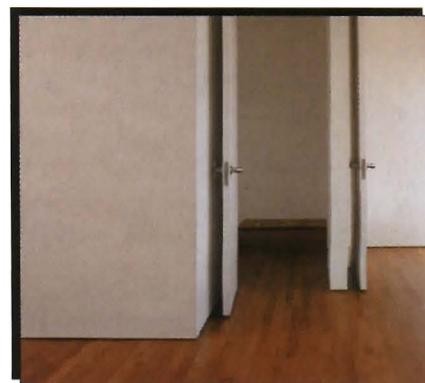
*The miracles of science*

## interior domains

If there is a theme running through the interiors of our Home of the Year projects, it is a comfortable, livable take on modernism: simple, sleek forms softened by warm tones and textures. From the exterior, the Oshry House in Bel Air, for example, embodies a stark, space-age aesthetic (page 62). Inside, however, the architect and client collaborated to create spaces that, while modern, are also homey and inviting. In the living room, a series of three mod, white coffee tables from **Diva** ([www.divafurniture.com](http://www.divafurniture.com)) are offset by pale wood flooring and warm red rugs, while an elevated fireplace by **Majestic** ([www.majesticfireplaces.com](http://www.majesticfireplaces.com)), framed by white panels that match the tables, adds literal warmth to the room. In the Pfanner House in Chicago (page 42), interior spaces are furnished with careful but unpretentious detailing: for example, elegant yet sturdy door hardware such as *Oblique*, a cross between a knob and a lever designed by Peter Emrys-Roberts of **ERA** ([www.erastudio.com](http://www.erastudio.com)). At Maison Goulet in Quebec (page 48), plywood wall paneling of British Columbian fir reveals an aesthetic that is simultaneously cozy and structural. The shapes of the knot-free panels are evocative of Japanese origami paper sculptures, while the tone of the pale wood gives the spaces a bright, sunny atmosphere. An adjustable-height, blond beechwood-top coffee table called *Crescendo*, from **Ligne Roset** ([www.ligne-roset.com](http://www.ligne-roset.com)), matches the light hues of the wall panels, while its steel and lacquered-aluminum frame and legs blend with the tones of the stone slab floor. At Date & State in San Diego (page 54), two Yolanda Side Chairs made by **Ukao** ([www.ukao.com](http://www.ukao.com)) add a bit of low-key design to a bedroom with their curved, bent-plywood, cut-out forms and pale bamboo veneer. Together, these interior details contribute to environments that, each in their own way, show that simple design does not have to be cold, and that modernism can work in a domestic setting just as well as in a corporate or institutional one.



Origami-like plywood wall paneling made of British Columbian fir lends a playful tectonic to the interiors of Maison Goulet in Quebec, as a beech-topped coffee table from Ligne Roset reflects the walls' light hue (above left and right). The pliability of wood is also demonstrated by chairs from Ukao at the Date & State home in San Diego (below left).



Hybrid handles/levers by ERA add a simple elegance to doors at the Pfanner House in Chicago (above right). In Bel Air, the Oshry House's living room is warmed by a fireplace from Majestic and furnished with tables from Diva (below).



## cook and clean

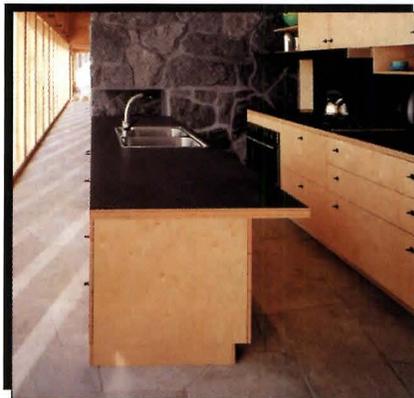
Kitchens and bathrooms can, of course, take a big bite out of a residential budget. Multi-island kitchens, restaurant-sized stoves, and spalike bathrooms such as those fetishized on HGTV are not to be found in any of the projects premiated in *Architecture's* second annual Home of the Year Awards. The winning houses share a more modest approach to the accommodation of cooking and cleaning rituals: small and efficient spaces, thoughtfully detailed cabinetry, home-appropriate appliances and plumbing fixtures, and bathtubs considerably smaller than swimming pools.

Appliances by **Miele** ([www.miele.com](http://www.miele.com)) are a popular selection among this year's houses. Lucas Rios-Giordano, for example, specified several of the company's products for his kitchen in Santa Monica, California (page 58): the electric oven, a 24-inch-wide model with single-knob operation available in black, white, or stainless steel; and the dishwasher, which holds up to 14 place settings and features a cutlery tray. In Chicago, Zoka Zola also outfitted her own kitchen (page 42) with Miele appliances, including the dishwasher and cooktop, with concealed infrared controls, a black Ceran surface, white burner rings, and a stainless-steel frame. She also selected a 30-inch-wide refrigerator from **SubZero** ([www.subzero.com](http://www.subzero.com)) that is fitted out with wood-veneer panels to blend in with cabinet doors: Model 611, with 16 cubic feet of storage capacity, can be ordered with an overlay, framed, or in stainless steel.

Wood and dark-colored laminates appear in several of the kitchens. At Maison Goulet (page 48), the countertop is finished with "Black Grit" from **Arborite** ([www.arborite.com](http://www.arborite.com)), a Canadian-made high-pressure plastic laminate manufactured to be resistant to scratches, stains, and chemicals. Cabinetwork in the Minneapolis loft by Anmahian Winton Architects (page 66) is in **Douglas fir**. Cabinetwork and custom millwork at the Bel Air, California, Oshry Residence by SPF:a (page 62) was fabricated by the firm **T & R**

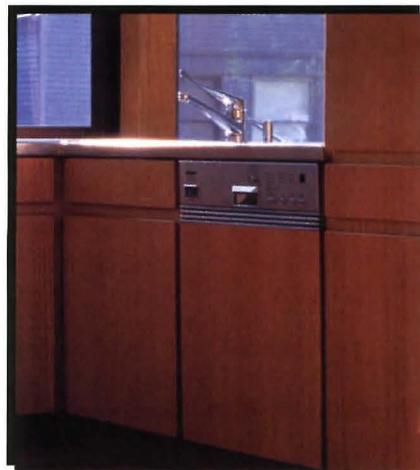


Zoka Zola's kitchen appliances are finished in stainless steel from Miele (bottom); the sink faucet is from KWC. Good views are in ample supply from the master bath, which is outfitted with a Kaldewei tub (above). The view is far more woody outside the kitchen of Maison Goulet, a country home by Saia Barbarese Topouzanov, where an Arborite countertop resides (below left). In Lucas Rios-Giordano's California home, a Miele does the cooking (below right).



**Carpentry**. In San Diego, MS-31 commissioned **stained oak and red lacquer cabinets** from **Archkinetics** (page 54).

Clean-lined plumbing fixtures dominate the scene. For her kitchen, Zola chose the Orcino faucet and Primo soap dispenser from **KWC** ([www.kwcfaucets.com](http://www.kwcfaucets.com)), while Saia Barbarese Topouzanov chose products by **Grohe** for Maison Goulet, as did Rios-Giordano in Santa Monica. The Bel Air house also features fixtures by Grohe, as well as **Kohler**, **Metropolis**, and **Franke**. Popular toilet selections in the winning houses include products from **Duravit** and **Toto**; bathtub selections include the Rondoform from **Kaldewei** ([www.kaldewei.com](http://www.kaldewei.com)).



# CROWNING ACHIEVEMENT

Introducing the new industry standard in piston technology - the CROWN® II Flushometer from Sloan.

The Crown® II is the perfect choice for today's "green" building environments.

- Fixed Volume Accuracy – improved design for consistent volumes and water conservation (1.6 closet, 1.0 urinal)
- Engineered Excellence – accurate water delivery, protection from harsh water conditions and unsurpassed "O" ring protected piston operation

Add a personal and distinctive touch to your "green" restroom with accent rings in Brushed Nickel, Lustre Gold, Polished Brass or Satin.

Specify the Crown II today!



**SLOAN**®

800.9.VALVE.9

[www.sloanvalve.com/crown](http://www.sloanvalve.com/crown)

Circle 153 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

## floors with flavor

The natural warmth of hardwood flooring makes it a perennial favorite for residences, but judging by the Home of the Year Award winners, maple must be the flavor of the year. Underfoot at the Corum Residence in Pella, Iowa (page 68), is prefinished maple flooring by **Bruce Hardwood Floors** ([www.bruce.com](http://www.bruce.com)), a division of Armstrong that offers four maple species in solid or engineered versions with clear urethane finishes that resist ultraviolet degradation. A family of natural wood finishes noted for sustainability and low toxicity is the **Livos** line of floor sealants, which Zoka Zola chose for her house in Chicago (page 42). While Livos products are still hard to find in the United States, the plant-based finishes include a nonslip paste product that also works for linoleum, brick, terra cotta, and porous stones. For Santa Monica's Hybrid Lofts (page 58), 2-1/4-inch strips of first-grade Canadian maple were finished with a tough, low-VOC waterborne polyurethane by **BonaKemi USA** ([www.bonax.com](http://www.bonax.com)) that is designed for high-traffic situations. The Culver City, California-based contractor **New West Wood Floors** built the floors as well as the squared-off stair treads, window frames, and mantelpieces, all given a slight bevel. The woodwork helps lend the house its crisp rectilinearity.

Solid maple floors also enhance the Oshry Residence in Bel Air, California (page 62), and the Date & State duplex in San Diego (page 54), by local contractors **Esh Flooring** and **Archkinetics**, respectively. In addition to maple flooring, Date & State received a deep blue stone by **International Bath & Tile** ([www.ibt-sandiego.com](http://www.ibt-sandiego.com)) on bathroom floors and walls, and the Oshry house has ceramic tiles by **Dal-Tile** ([www.daltile.com](http://www.daltile.com)). Zola's ceramic tiles were sourced through **Ceramica Bardelli** ([www.bardelli.it](http://www.bardelli.it)), Milan, a purveyor with a large selection of decorative motifs by 14 designers, including the legendary Gio Ponti.

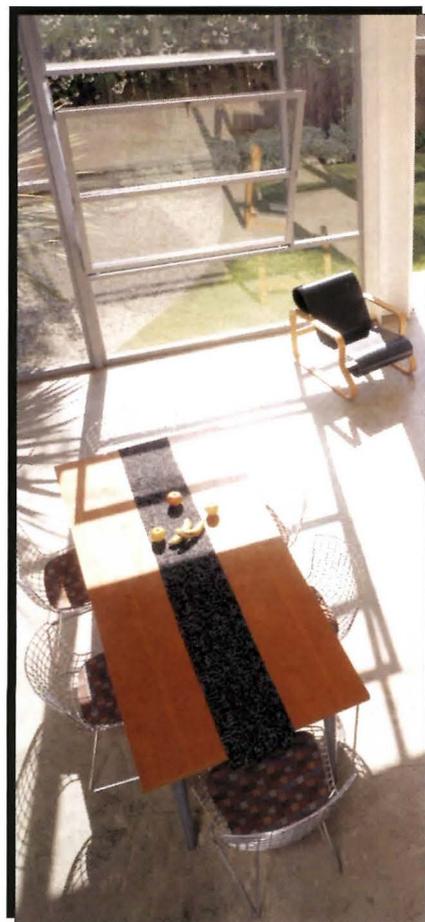
On the softer side, the Corum Residence incorporates a subtly ornamental carpet by



Urethane finishes that are low in volatile organic compounds, or VOCs, seal the wood flooring at Zoka Zola's house (above), the Corum Residence (below left), and the Hybrid Lofts (below right), complemented by areas of concrete and carpeting.



**Karastan** ([www.karastancontract.com](http://www.karastancontract.com)), in addition to classic linoleum tile by Forbo's **Marmoleum** division ([www.marmoleum.com](http://www.marmoleum.com)) in bath and laundry areas. Elsewhere, designers at Herbert Lewis Kruse Blunck specified stairs of Baltic Birch plywood and a kitchen floor of black mica granite.



TOP: DOUGLAS; MID: FOSSEDON; BOTTOM LEFT: BOB SHIMMY/ERIC-BLESSING; BOTTOM RIGHT: MAXWELL WARD

Can you spot the acoustic ceiling in this picture?



**The Eurospan® System. Looks beautiful. Performs beautifully.**

When a design calls for acoustical materials, the *Eurospan System* lets you stretch your imagination. It gives any wall or ceiling an attractive, seamless look that's indistinguishable from plaster or drywall, while providing superior noise absorption. And it's flexible to allow installation in most spaces—flat, domed, barrel vaulted, coffered, floating clouds or even as high walls. The *Eurospan System* comes in a choice of colors, meets or exceeds the Class 1 fire performance rating and has a full 10-year limited warranty.\* The *Eurospan System* is from Wall Technology—a leading manufacturer of unsurpassed acoustical solutions since 1982.

\*Limited warranty details available upon request.

©2003 Owens Corning.

For a free brochure, visit  
[www.owenscorning.com/eurospan](http://www.owenscorning.com/eurospan) or call 1-800-GET-PINK.

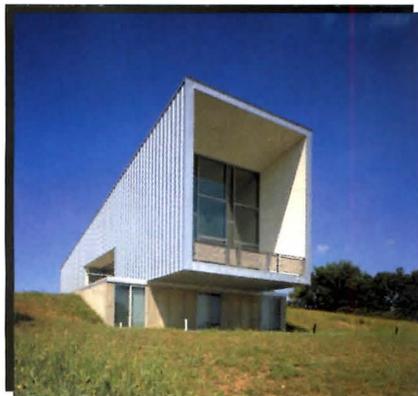
Circle 180 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)



**Wall  
Technology**  
An Owens Corning Company



## rooms with a view



Many of the designers behind our Home of the Year projects customized their fenestration schemes, using standard windows and accessories in unusual ways. In the Corum Residence in Pella, Iowa (page 68), **Vistawall** HP175 aluminum portals ([www.vistawall.com](http://www.vistawall.com)) are stacked to create a dramatic full-height window-wall in the living room, and set floor-to-ceiling on both sides of the kitchen/dining area. Maison Goulet in Quebec (page 48) also features standard-issue windows from **Bonneville** ([www.bonnevillewd.com](http://www.bonnevillewd.com)) and **E. Paquin** ([www.e-paquin.com](http://www.e-paquin.com)) placed in striking horizontal bands and interesting juxtapositions.

Another playful take on the standard window appears in the Pfanner House in Chicago (page 42), where aluminum windows from **Gastaldello** ([www.gastaldello-sistemi.it](http://www.gastaldello-sistemi.it)) and Montreal-based **Alumilex** create double-hung windows of different scales. There is even a custom aluminum-framed sliding door that mimics a double-hung window. The project also includes skylights from **Velux** ([www.velux.com](http://www.velux.com)).

For the Date & State townhouses in San Diego (page 54), **Milgard** windows ([www.milgard.com](http://www.milgard.com)) are placed to capture specific views, and sliding doors, also by Milgard, lead to exterior balconies contained within framing by **Dixieline Lumber** ([www.dixieline.com](http://www.dixieline.com)). The house's window scheme also includes floor-to-ceiling velvet drapes from San Diego-based **Pacific Drapery**, which cover much of the neigh-



The customized window arrangements created for the Homes of the Year include a stacked window-wall for the Corum Residence in Iowa (left), horizontal wood-framed window bands for the Maison Goulet in Quebec (above), and double-hung windows of different scales for the Pfanner House in Chicago (below).



boring wall space. Anmahian Winton Architects' Minneapolis loft (page 66) also includes drapery that defines spaces, in this case automated rollshades by **MechoShade** ([www.mechoshade.com](http://www.mechoshade.com)) with linen and silk drapes by **Boussac** ([www.boussac-fadini.fr](http://www.boussac-fadini.fr)) that act as room enclosures.

A different type of sunshade is used at the Oshry House in Bel Air (page 62), where

customized stone louvers made of Mocha Crème Portuguese limestone grace the windows on the lower floor. Elsewhere in the house, curtain walls by **Arcadia Window** ([www.arcadiainc.com](http://www.arcadiainc.com)) sleekly line the upper story, including a glass-enclosed bridge between the building's two volumes, and skylights from **Dur-Red** ([www.dur-red.com](http://www.dur-red.com)) bring light into the interior.

PETERSEN EVENTS CENTER: Pittsburgh, PA

ARCHITECT: Apostolou Associates/Rosser International – Joint Venture Partnership

PRODUCT: Solarban® 60 Glass

GLASS FABRICATOR: Pdc Glass and Metal Services, Inc.

GLAZING CONTRACTOR: Phoenix Glass

OWNER/DEVELOPER: University of Pittsburgh

# LOOKS ARE STILL EVERYTHING.

Straddling a near-vertical hillside, the Petersen Events Center brings order to its setting with a beautifully sweeping five-story asymmetrical lobby. Designs like this require all of an architect's ability to handle space and mass. This time, it also required a call to a member of the *PPG Certified Fabricator*™ Program.

Complex buildings with multiple glass sizes can be a scheduling nightmare – especially when specifying high-performance glass. But specifying *Solarban*® 60 solar control low-E glass through a *PPG Certified Fabricator* makes it easy to get the right glass at the right time.

Specifically engineered to look like clear, uncoated glass while controlling solar heat gain and minimizing cooling costs, *Solarban 60* – like the entire family of *Solarban* solar control low-E glass products – is an ideal choice whenever you need glass that looks great – and performs even better. Call the PPG Solutions Hotline today for a sample or the name of a *PPG Certified Fabricator*™ near you: 800-377-5267.



Glass Technology  
Since 1883

[www.ppgglazing.com](http://www.ppgglazing.com)

Circle 193 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

Photography: copyright © Callison Architecture/Chris Eden  
Solarban, the PPG logo and the "See It's PPG" logo are trademarks of PPG Industries, Inc.

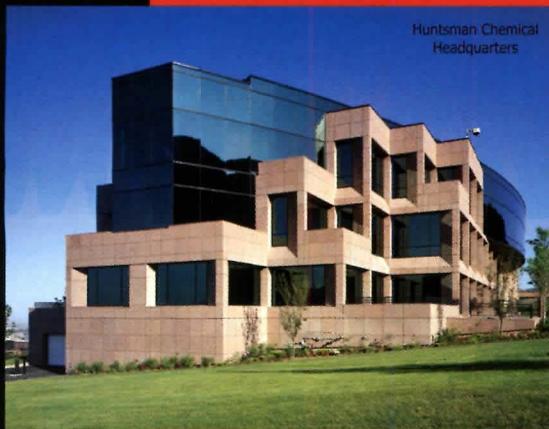
SEE  
IT'S  
PPG  
™

# KEPCO+

Architectural  
Cladding Systems

**WE'VE COVERED IT ALL:**

- ☒ GOVERNMENT
- ☒ HOSPITALITY
- ☒ RELIGIOUS
- ☒ **OFFICES/HEADQUARTERS**
- ☒ SITework/PAVING



Huntsman Chemical  
Headquarters

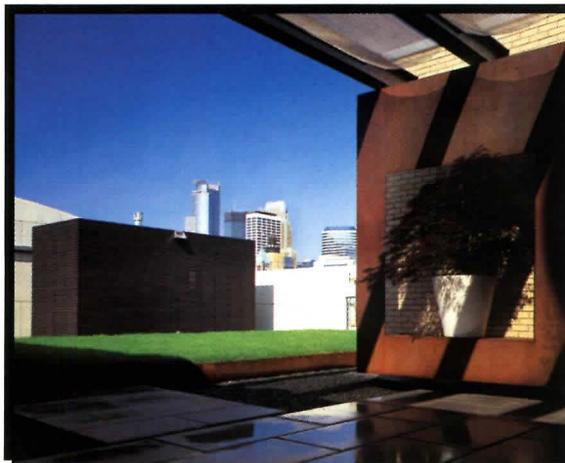
Photo Credits: W&A Tomlinson

[WWW.KEPCOPLUS.COM](http://WWW.KEPCOPLUS.COM)

Circle 66 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

## sources

## the great outdoors



The rooftop terrace of this Minneapolis loft features minimalist plantings and automated irrigation.

The contextual extremes of our Home of the Year winners—pastoral, country dwelling, on the one hand; industrial, urban life, on the other—offer a pronounced, if slightly unexpected contrast in landscaping trends. The rural residences, which have the most room and natural opportunity for environmental intervention, are the most restrained. The urban homes, with much less room for green space, are the aggressive ones.

Two country properties—Maison Goulet (page 48) and the Corum House (page 68)—are essentially clean-cut insertions into the landscape. In both cases, existing plant species—**maple, birch, and beech trees** in Quebec; a **hickory tree** in Iowa—coexist alongside manmade structures. At Corum House, where lawn and façade meet, **cast-in-place concrete** and **Cold Spring black granite** serve as patio materials. Coincidentally, both properties are illuminated by **Lightolier** outdoor fixtures ([www.lightolier.com](http://www.lightolier.com)).

At the other end of the spectrum is a Minneapolis loft (page 66), where landscape architect Thomas Oslund carved a seminatural environment from the rooftop of a former factory. A lawn, badminton court, custom-made **Corten-steel waterwall**, and meditation space are all part of this elaborate outdoor terrace. Oslund had to provide not only the look of nature, but its workings too: Rainwater is stored and irrigates the lawn and minimalist plantings—Japanese maple, Miscanthus grass, lime grass, yellow groove bamboo—thanks to a subsurface system from **Evaporative Control Systems** ([www.ecsgreen.com](http://www.ecsgreen.com)). At night, this rooftop garden is illuminated by exterior lights from **Bega** ([www.bega-us.com](http://www.bega-us.com)) and **BK** ([www.bklighting.com](http://www.bklighting.com)) while fiber-optic strands from **Fiberstars** ([www.fiberstars.com](http://www.fiberstars.com)) glow from beneath the edge of the lawn planter.

# LEED™ POINTS

*Sustainability, Economics & Aesthetics*



- **Recycled Content**
- **Stormwater Management**
- **Reduced Heat Island Effect**
- **Water Use Reduction**
- **Erosion/Sedimentation Control**
- **Reduced Site Disturbance**
- **Water Efficient Landscaping**
- **More....**



**Invisible Structures, Inc. • 800-233-1510**  
[www.invisiblestructures.com](http://www.invisiblestructures.com)

Circle 54 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

FOR INFORMATION, CIRCLE 131 ON PAGE 97.

## Flat Files in Cyberspace

Managing project data is still a piecemeal procedure. Can electronic document management help firms integrate and organize? by Julia Mandell

While it's true that the A/E/C industry has mostly gone high-tech—we've adjusted to the benefits of CAD and e-mail, to name just two of the digital revolution's life-changing aspects—this new computer culture has not yet changed the way most building projects are managed. The average firm has no integrated system for managing electronic data and communicating it with consultants, clients, and contractors. A number of project-management software programs and Internet services facilitate this type of organization, but they are vastly underused. Experts in design technology estimate that among larger real-estate developers, who tend to drive the use of construction-management software, less than 20 percent use any such systems at all.

Too bad for them. Internet-connected electronic document-management (EDM) systems can guide and control work-flow, keeping text documents and drawings together, so no time is wasted tracking down xrefs, specifications, and correspondence. They also allow different levels of access for different personnel, and they can track and archive project changes. Alan Paris, CAD administrator for the 20-person Burkavage Design Associates in Clarks Summit, Pennsylvania, uses Synergis Adept document-management software and says that newcomers to his office are often amazed to discover the EDM program's benefits. "As soon as they see it, they love it," Paris insists. "They know exactly where everything is."

So what's holding up wider adoption? One issue is economics. Robert Green, a document-management consultant for the A/E/C industry based in Lawrenceville, Georgia, notes that

architects are not updating their technology. "Most firms are holding off on that right now," he says. "There is not a lot of money floating around, so things are being postponed." At anywhere between \$1,000 and \$2,000 per seat, the new programs are viewed with a skeptical eye by firm principals.

### NOT JUST COST, BUT CULTURE

The other issue holding up the use of EDM is cultural. "The issue with technology is work habits," says Anthony Hauk, senior principal in charge of technology for Einhorn Yaffee Prescott, a 400-person Albany, New York-based firm. "Using these tools requires a cultural shift." Acknowledging this difficulty, larger firms have integrated digital working methods to varying degrees, usually cobbled together in house, while most smaller firms just get by without high-tech organizational systems. "It would be advantageous for the institutions we work with to implement one of these systems for their projects," says Robert Rogers, principal of the 25-person New York City-based Rogers Marvel Architects, "but the working method is hard to establish. Switching over is a huge undertaking."

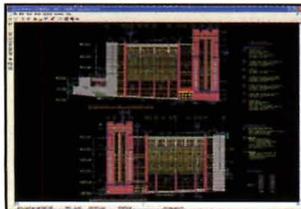
Even firms already using EDM software may not be getting all they can from it. While Paris's firm is already using Adept internally, they have yet to take advantage of its Internet-based collaborative aspects, which would allow them to manage projects on-line with their consultants and contractors. "We haven't had time to figure out how we can use the Internet part," says Paris. "I need to learn more about how to fit it into projects." ■

## EDM Ways and Means

There are indeed EDM and project-management programs out there that are relatively easy to implement, have a quick learning curve, and can help manage projects collaboratively online. Assessing their benefits means weighing cost and ease of use and implementation. Cultural issues may inhibit full usage, and none of these software packages seems to perfectly solve the manage-



→ MERIDIAN TEAMWORK  
→ [www.cyco.com](http://www.cyco.com)



→ SYNERGIS ADEPT  
→ [www.synergis-adept.com](http://www.synergis-adept.com)

ment of electronic data flows, but—according to software experts, current users, and IT directors—they are worth looking into.

**Meridian Teamwork**, from Cyco Software, and **Synergis Adept**, from Synergis Technologies, are both affordable, Internet-capable EDM systems that are intended for workgroups of 30 users or fewer. Teamwork, which is compatible with AutoCAD and Microstation, can link files to facilitate project organization, while Adept relies on "FTP vaults" for secure document storage and supports all AutoCAD applications. Both allow for revision control and different levels of user access.

Bentley and Autodesk each offer Internet-based services for project management and collaboration. Bentley's **ProjectWise** ([www.bentley.com](http://www.bentley.com)), which interfaces with both AutoCAD and Microstation, is an EDM system that allows for different levels of automation: Everything from printing to web publishing can be programmed into it ahead of time. Autodesk's **Buzzsaw** ([www.autodesk.com](http://www.autodesk.com)) is a web-based subscription service that houses documents at a remote server supported by the software maker's technical staff, and it can speed up the submittal process and cut the cost of shipping drawings. ■

more than a divider...



Rosedale Hotel, Hong Kong  
**Cascade Coil Drapery**  
[www.cascadecoil.com](http://www.cascadecoil.com)  
 800-999-coil

Circle 235 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

Architectural  
 Lighting  
 Handcrafted  
 in Milwaukee  
 Since 1974

**BRASS LIGHT  
 GALLERY**

1-800-243-9595 • [www.brasslight.com](http://www.brasslight.com)

Circle 58 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

# ARCHITECTURE

United States Postal Service  
**Statement of Ownership, Management, and Circulation**

1. Publication Title: ARCHITECTURE MAGAZINE  
 2. Publication Number: 0 0 0 0 0 0 0 0  
 3. Filing Date: October 1, 2003  
 4. Issue Frequency: Monthly  
 5. Number of Issues Published Annually: 12  
 6. Annual Subscription Price: \$59 per year US  
 7. Complete Mailing Address of Known Office of Publication (Not Printer) (Street, city, county, state, and ZIP+4):  
 VNI Business Publications  
 770 Broadway  
 New York, NY 10003-6995  
 Contact Person: Neil Eisenberg, Circulation Director  
 Telephone: (846) 654-7224  
 8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not Printer):  
 VNI Business Publications  
 770 Broadway  
 New York, NY 10003-6995

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do Not Leave Blank)  
 Publisher (Name and Complete Mailing Address):  
 Susanne Tross Haber  
 770 Broadway  
 New York, NY 10003-6995  
 Editor (Name and Complete Mailing Address):  
 C. C. Sullivan  
 770 Broadway  
 New York, NY 10003-6995  
 Senior Editor (Name and Complete Mailing Address):  
 Ray Brown  
 770 Broadway  
 New York, NY 10003-6995

10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)  
 Full Name: VNI Business Media, Inc. a wholly owned subsidiary of  
 Complete Mailing Address: 770 Broadway, New York, NY 10003-6995  
 Full Name: VNI, Inc. a wholly owned subsidiary of  
 Complete Mailing Address: 770 Broadway, New York, NY 10003-6995  
 Full Name: VNI, N.V.  
 Complete Mailing Address: Ceylanspoort 9-25, P.O. Box 4028, 2000 EA Harlem, The Netherlands

11. Known Bondholders, Mortgagees, and Other Security Holders Owring or Holding 1 percent or more of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box  None  
 Full Name: \_\_\_\_\_  
 Complete Mailing Address: \_\_\_\_\_

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)  
 The purpose, function, and nonprofit status of this organization and the exempt status for income tax purposes:  
 Has Not Changed During Preceding 12 months  
 Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)  
 PS Form 3526, October 1999 (See Instructions on Reverse)

13. Publication Title	14. Issue Date for Circulation Data Below		
Architecture Magazine	September 1, 2003	Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
15. Extent and Nature of Circulation			
a. Total Number of Copies (Net press run)	8092	8092	8092
b. Paid and/or Requested Circulation (Sum of 15b(1) through 15b(5))			
(1) Paid or Requested Outside County Mail Subscriptions Stated on Form 3541 (Include advertiser's proof and exchange receipt)	8640	8640	8786
(2) Paid or Requested In-County Subscriptions Stated on Form 3541			
(3) Paid or Requested Outside County Mail Subscriptions Stated on Form 3541			
(4) Paid or Requested In-County Subscriptions Stated on Form 3541			
(5) Other Classes Mailed Through the USPS	0	0	0
c. Total Paid and/or Requested Circulation (Sum of 15b(1), 15b(2), 15b(3), and 15b(5))	8640	8640	8786
d. Free Distribution (Sum of 15d(1) through 15d(4))			
(1) Outside County as Stated on Form 3541	818	818	818
(2) In-County as Stated on Form 3541			
(3) Other Classes Mailed Through the USPS	0	0	0
(4) Free Distribution Outside the Mail (Samples, complimentary, and other free)	0	0	0
e. Total Free Distribution (Sum of 15d(1) and 15d(4))	818	818	818
f. Total Distribution (Sum of 15c and 15e)	9458	9458	9604
g. Copies Not Distributed	2734	2734	2734
h. Total (Sum of 15f and 15g)	8092	8092	8092
16. Publication of Statement of Ownership			
(1) Publication of Statement of Ownership	Yes	Yes	Yes
17. Signature and Title of Editor, Publisher, Business Manager, or Owner			
Neil Eisenberg, Circulation Director		10/1/03	

**Instructions to Publishers**

- Complete and file one copy of this form with your postmaster annually on or before October 1. Keep a copy of the completed form for your records.
- In cases where the stockholder or security holder is a trustee, include in items 10 and 11 the name of the person or corporation for whom the trust is being maintained; the names and addresses of individuals who are stockholders who own or hold 1 percent or more of the total amount of bonds, mortgages, or other securities of the publishing corporation; in item 11, if none, check the box "Not known" from the instructions on the reverse side of this form.
- We have a limited circulation information called for in item 15. Free circulation must be shown in items 15d, e, and f.
- Item 15b. Copies not Distributed, must include (1) estimated copies originally stated on form 3541, and returned to the publisher; (2) estimated returns from news agents, and (3) copies for office use, leftovers spotted, and all other copies not distributed.
- If the publication had Periodicals authorization as a general or requester publication, this Statement of Ownership, Management, and Circulation must be published or must be printed in any issue in October or, if the publication is not published during October, the first issue printed after October.
- In item 16, indicate the date of the issue in which this Statement of Ownership will be published.
- Item 17 must be signed. Failure to sign or publish a statement of ownership may lead to suspension of Periodicals authorization.

PS Form 3526, October 1999 (Previous)

## FREE PRODUCT INFORMATION

RS #	ADVERTISER	PAGE
230	Academy of Arts College	32
63	AISC	C3
196,197,198	Andersen Windows	19, 21, 23
53	ARCAT	90
99	Architectural Lighting Master Classes	87
101	ARMA	84
102	Armstrong World Industries	84
—	Autodesk	37
26	Belden Brick (East, Midwest)	80
216	The Bilco Company	24
58	Brass Light Gallery	82
103	Bruck Lighting	84
235	Cascade Coil Drapery	82
238	Centria	2-3
62	Ceramic Tiles of Italy Design Competition	79
48	Domco Tarkett	38
51	DuPont Surfaces	70
104,211	Eldorado Stone	84, C4
47	ERCO (Regional)	31
105	Eurotex	84
106	FAAC International	84
28	Follansbee Steel	22
107	G Squared	85
108	The Gage Corp.	85
67	Haddonstone (USA) Ltd.	13
109	Hager Companies	85
244,110	Hale Manufacturing	33, 85
71	Hanover Architectural Products	34
111	Inclinor Company of America	85
54	Invisible Structures	78
66	Kepeco	78
—	Kolbe & Kolbe Millwork	10
56	Lightolier	16
33	Marvin Windows	4-5
112	Musson Rubber Co.	85
30	NALSA	8
180,113	Owens Corning	75, 86
77	Pemko	94
4	PGT Industries (Florida region)	32A-32B
187	Pilkingon	9
72, 193	PPG Industries	18, 77
114	Prima Lighting	86
163	Reilly WoodWorks	95
153	Sloan Valve	73
118	SPI Lighting	86
176	Toyota	28
115	Vermont Structural Slate	86
100	Versa-Lok	14-15
116	W.A.C. Lighting	86
117	Walker Display	86
164	Wausau Tile	20
60	Westcrowns	12
69	Wilsonart International	C2-1

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.

## ➔ Sketch and Snap, in Color and on the Go



➔ ALIAS SKETCHBOOK PRO  
➔ [www.alias.com](http://www.alias.com)

The tablet PC—made by everyone from Compaq to Fujitsu—has changed field work forever. Now, using one of a growing number of CAD-related sketching programs, architects can draw digitally in the office, in client meetings, and on the construction site.

**Alias SketchBook Pro** is a simple freehand drawing program that works as well for schematic design and doodling as it does for redlining. By means of a layer system, users can mark up digital photographs or screen captures of CAD drawings. A menu system designed to match the ergonomics of a hand holding a pen makes things even easier.



➔ ZiPCAD  
➔ [www.zipcad.com](http://www.zipcad.com)

For PDA users who don't want to invest in a tablet PC,

there is now **ZiPCAD**, an application for handheld devices using the Palm operating system. Developed by a software-designer-turned-architect, the program is intended for on-site drafting of existing conditions and construction details, and it allows users to import and export DXF drawings to and from traditional CAD programs, so the transitions from handheld to desktop and back again are seamless.



➔ COLORSPLASH CAMERA  
➔ [shop.lomography.com](http://shop.lomography.com)

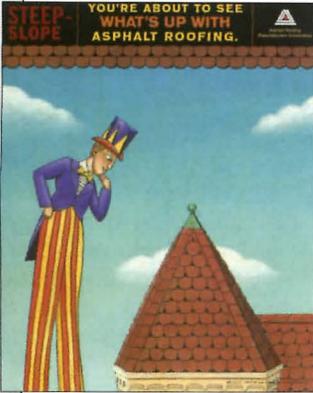
Much lower-tech but quite possibly much more fun, is the **Colorsplash Camera**, one of a number of specialty cameras offered by the International Lomographics Society, an arts group that promotes documentary photography in everyday life. The Colorsplash comes with 12 tinted flash filters to inject vibrant chroma into point-and-shoot photography. The camera, which takes 35 mm film and requires normal film processing, comes with a battery, film, extra color filters, and a bag.

FOR INFORMATION ON  
COMPUTER PERIPHERALS,  
CIRCLE 133 ON PAGE 97.

# ARCHITECTURE PRODUCT REVIEW

To Advertise contact Michael Parrish at 646 654 5763 (phone) or 646 654 5816 (fax)

## ARMA



Request a free new brochure from ARMA on the aesthetic sophistication and high performance of steep-slope asphalt roofing products. The brochure, designed specifically for the needs of architects, covers topics such as: asphalt roofing's benefits vs. the competition; the 4 types of asphalt shingles; colors, styles, textures and dimensionality; manufacturers of asphalt-based roofing; and more! For your free copy (or to request the companion low-slope brochure), visit [www.asphaltroofing.org](http://www.asphaltroofing.org). **Circle 101**

## ELDORADO STONE



Eldorado Stone is considered one of the most believable replications of natural stone in the world. Through the talents and tenacity of our craftsmen, it has become an ideal choice for creating beautiful home exterior and interiors. Versatile, beautiful, lightweight and affordable — let us help you create the look you desire. For more information, visit [www.eldoradostone.com](http://www.eldoradostone.com). **Circle 102**

## ARMSTRONG



Infusions, a new collection of canopies from Armstrong Ceiling Systems, add visual impact to signature spaces. Even though the look is custom the system uses standard components, providing designers

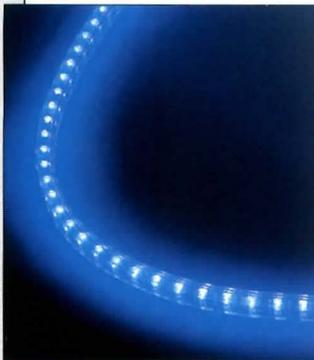
with a variety of choices in textures and sizes at an affordable cost. The palette of visuals ranges from moirés to translucents. For more information, call 1-877-276-7876 or visit [www.armstrong.com/infusions](http://www.armstrong.com/infusions). **Circle 102**

## EUROTEx WALL CARPET



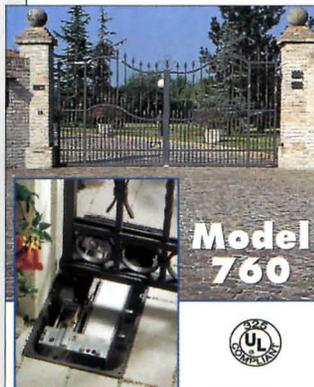
**Wall carpet muffles sound**—It also reduces operating costs by protecting walls. Concourse wall carpet is flatweave from Eurotex. Its flameproof back earns it a Class A rating for resistance to fire and smoke. No tearing or scuffing. Occasional light maintenance preserves the crisp new look. Studies prove savings vs. painted surfaces. Rolls and cuts made to order. Shipping within 24 hours. Tel: 800.523.0731, fax 215.423.0940, or go to [www.eurotexinc.com](http://www.eurotexinc.com). **Circle 105**

## BRUCK LIGHTING



The ORION Belt is a flexible transparent PVC encapsulating bin-sorted LEDs for precise color match. It is maintenance free and with up to 100,000 hours of lamp life, is ideal for difficult to access locations. The Belt is water resistant and operates with very low heat and low power consumption with no UV emission. Available in cool or warm white, blue, green, red, and amber. **Circle 103**

## FAAC INTERNATIONAL, INC.



**Invisible Swing Gate Operators**—FAAC is the world's largest specialized manufacturer of hydraulic operators for swing, slide and barrier gate systems. The Model 760 hydraulic swing gate operator designed specifically for in-ground installation for residential and light commercial applications. Its power and total invisibility make the 760 ideal for large, ornate gates. Call 1-800-221-8278 for a complete FAAC product brochure or visit [www.faac.com](http://www.faac.com). **Circle 106**

# ARCHITECTURE PRODUCT

To Advertise contact Michael Parrish at 646 654 5763 (phone) or 646 654 5816 (fax)

## G SQUARED FUNCTIONAL ART



Have you been looking for well-designed ceiling fans? The San Francisco ceiling fan is one of the GOOD DESIGN award-winning fans by Mark Gajewski. Quiet, powerful, reliable and beautifully finished, this timeless design is available with or without a light. Order at [www.g2art.com](http://www.g2art.com) or call toll free 877 858 5333. Please visit our website for more selections including contemporary lighting.

**Circle 107**

## HALE MANUFACTURING COMPANY



**Stackable Solid-Wood Files With Glass Display Options**—Hale 300 Series stackable solid-wood lateral files, with leaded glass display options, offers lasting design qualities: Solid hardwoods; raised moldings; four-edge tops and bases; hand finishing; modest pricing.

Phone: 1-800-USE HALE

Fax: (315) 866-6417

E-mail: [sales@halebookcases.com](mailto:sales@halebookcases.com)

Website: [www.halebookcases.com](http://www.halebookcases.com)

**Circle 110**

## GAGECAST™



Gagecast™ is a cast metal wall surfacing material suitable for a variety of interior architectural applications. Twenty-four designs are standard; however, custom collaboration is encouraged. Gagecast™ is one component of Gage Vertical Surfacing. Contact the factory for product literature and selected samples. The Gage Corporation, Intl. PH: 800-786-4243 or 608-269-7447, FX: 608-269-7622, E-mail: [Gage@centurytel.net](mailto:Gage@centurytel.net)

**Circle 108**

## INCLINATOR



**The Most Custom Residential Elevator**—Inclinator's Elevette® residential elevators offer nearly endless design possibilities. From clear panels in a free-standing elevator to elegant raised exotic wood panels. Choose from five cab styles and customize until you have an elevator that fits your design. Drive systems provide proven performance and reliability. Inclinator backs Elevette® with an industry-leading 2-year parts warranty.

[www.inclinator.com](http://www.inclinator.com)

**Circle 111**

## HAGER® COMPANIES



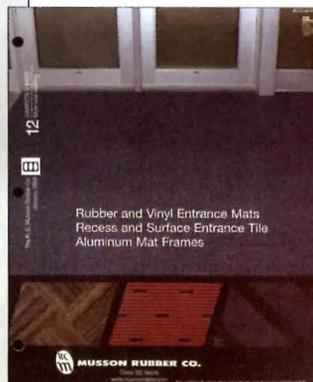
Condensed Door Hardware Catalog Available From Hager® Companies  
Hager® Companies, a manufacturer of hardware & accessories for the building industry, has released a 96-page door hardware catalog. The catalog details architectural, residential and continuous hinges; trim & auxiliary; thresholds & weatherstripping and sliding doors. Each category is color-coded and organized by part-number, contains product illustrations, specifications and dimensions.

[www.hagerco.com](http://www.hagerco.com)

Phone 800-325-9995

**Circle 109**

## MUSSON RUBBER



**Entrance Matting and Frames**—Brochure details our complete selection of quality heavy-duty entry matting and carpet-like tile. Musson has the experience to guide, the ability to customize, and the facilities to produce surface or recess mats that meet your specific needs. Sample products are made of rubber, vinyl and nylon carpet fibers. Others include fluff cord and traffic tiles, cocoa, Quill-Tuft and aluminum/vinyl roll-up mats. For more information: 1-800-321-2381, [info@mussonrubber.com](mailto:info@mussonrubber.com), [www.mussonrubber.com](http://www.mussonrubber.com)

**Circle 112**

# ARCHITECTURE'S

# PRODUCT REVIEW

To Advertise contact Michael Parrish at 646 654 5763 (phone) or 646 654 5816 (fax)

## OWENS CORNING



**Soundsoak® Wall System**  
A Quiet Revolution in Sound Control. Revolution in Sound Control. Soundsoak is a complete line of ready-to-install vinyl or fabric-wrapped acoustical panels. The Soundsoak wall system plays an important role in creating quieter, more effective spaces in commercial, educational or institutional

buildings. For more information visit [owenscorning.com](http://owenscorning.com) or call for a free brochure, 1-800-GET-PINK. Soundsoak is a registered trademark of Armstrong Industries. **Circle 113**

## QUICKCONNECT SERIES FROM W.A.C. LIGHTING



Integrated with the new Low Voltage Monorail System, the versatile QuickConnect Series feature stunning pendants and fixtures, an innovative ceiling canopies and accessories. Perfect for monopoint, multipoint, track and monorail applications, QuickConnect pendant and accessories ensure design continuity and installation efficiency for both retrofit and new construction. Tel. 800.526-2588.

Website: [www.waclighting.com](http://www.waclighting.com)  
**Circle 116**

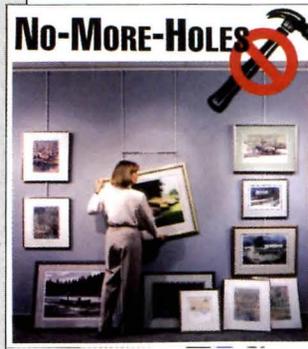
## OPUS BY PRIMA LIGHTING



**Sunrays**  
Exceptional in both form and functions, Sunrays brighten any area. The light glows from the fixture's 12 glass wings and softly illuminates the area below. Sunrays can be used in low voltage monorail, cable, and mono-point / multi-point canopy system. Options of polished chrome and silver finish. Max 50W JC Xelogen bulb. For more information, call toll free 866-885-4915 or visit [www.primalighting.com](http://www.primalighting.com).

**Circle 114**

## WALKER DISPLAY



Walker Display helps you design an efficient system for exhibiting artwork anywhere. The functional no-nails design works on all wall surfaces, allowing creativity and easy rearrangement of artwork. Perfect for the office, gallery, conference room or the home. Download us at [www.walkerdisplay.com](http://www.walkerdisplay.com) or call for a FREE catalog. Walker Display, 800.234.7614  
[www.walkerdisplay.com](http://www.walkerdisplay.com) **Circle 117**

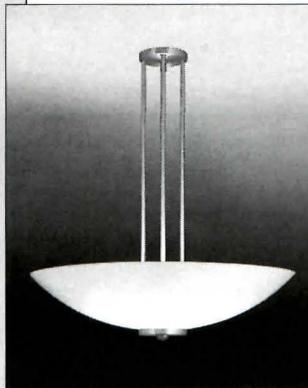
## VERMONT STRUCTURAL SLATE



ARONOFF CENTER FOR THE ARTS, ARCHITECT: CESAR PELLI AND ASSOCIATES, PHOTO: JEFF GOLDBERG/ESTO

2002 and 2003 ACE Award winner, we have been recognized by architects for our expertise in custom architectural projects and high standards. We have quarried top-quality unfacing Vermont slate for almost 150 years and utilize our expertise to offer select stones from around the world. For our binder and boxed full range of samples call 1-800-343-1900 or visit [www.vermontstructuralslate.com](http://www.vermontstructuralslate.com). **Circle 115**

## SPI LIGHTING, INC.



**Advent Architectural Lighting from SPI Lighting, Inc.**—The clean lines of the Longstreet pendant, just one of the exciting products in the NEW Advent catalog, are perfect for a host of applications including offices, hospitality spaces, and health care facilities. Visit our website at [www.spilighting.com](http://www.spilighting.com) or call 262-242-1420 today to order your NEW Advent Architectural Lighting Catalog. **Circle 118**

**EXHIBITION** *Somewhere Totally Else: The European Design Show* | Design Museum | London | Through January 4

Biennials abound. There are now more than 25 worldwide, and London's Design Museum ups the ante with the first European biennial of design. Unlike art biennials, a "best of" design exhibition problematically celebrates, and is complicit with, the zeal of commodity culture: It reproduces the cyclical, planned obsolescence of desirable objects. *Somewhere Totally Else*—named after an essay by the late Reyner Banham—even looks like a commercial showroom, a hodgepodge exposition divided into themed rooms: working, sleeping, reading, playing, bathing, dressing, traveling, and eating. It combines established brand names such as Marc Newson's Qantas Airways Sky Bed and Jean Paul Gaultier's haute-couture dresses with younger, more "edgy" practitioners such as the French furniture designers Erwan and Ronan Bouroullec and bathroom producer Phytolab. Although much of the exhibition is interactive—you can sit on objects, read printed matter, and look at various Web sites—the dismal installation and cramped spaces make the show seem unwelcoming. Perhaps they'll do better next time around. **David Bussell**



**BOOK**

*Brave New Houses* | Michael Webb | Rizzoli

In his new book on California residential architecture, Michael Webb, a contributor to *Architecture*, laments the dearth of innovative, contemporary design in the Golden State. To set his own gold standard, the author selects 35 projects that have, as he writes, "the taste and courage to break loose and give talent a chance."

In making his choices, Webb displays a propensity for box-office names (Gwathmey-Siegel, Richard Meier, Stan Allen), and Brutalist forms paired with overpumped proportions (the architectural analogue to California's new governor?)—for example, Morphosis's 1995 Blades House. Striking similarities run through many of the projects: large, expensive-looking estates, such as the 1991 Luskin House by Edward Niles, and interiors with an abundance of satin-finish wood cabinetry, the requisite chair designs by Corbusier and Mies, and the nautical-looking stair railings favored by Richard Meier in the eighties. A welcome respite is offered by some quieter projects, including the modest, pavilion-like Weil House by Godfredsen Sigal Architects (below), and Barton Myers's house for himself, a slender rectangle with a series of retractable, corrugated-metal garage doors across one façade. **Anna Holtzman**



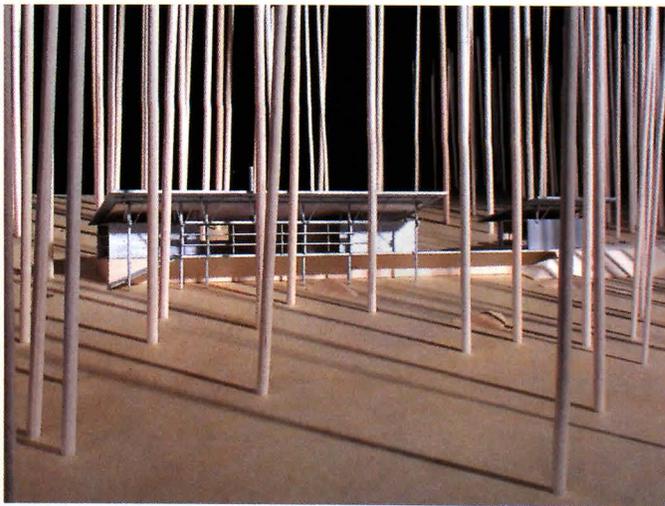
TOP: COURTESY DESIGN MUSEUM, LONDON; BOTTOM LEFT: COURTESY RIZZOLI; BOTTOM RIGHT: COPE BAILEY

**EXHIBITION**

*Glenn Murcutt: The Simpson-Lee House* | Brazos Projects | Houston | Through November 16

Glenn Murcutt's first one-person exhibition in the United States is on display at Brazos Projects, a storefront gallery affiliated with Houston's independent Brazos Bookstore. Director Karl L. Kilian recruited local architect (and 2002 *Architecture* Home of the Year honoree) Carlos Jiménez as guest curator of the exhibition, which focuses on a single building, the 1994 Simpson-Lee House in Mount Wilson, New South Wales, Australia.

Jiménez chose to highlight Murcutt's design process. Wall panels are covered with the architect's color photographs and drawings of the house. The panels are displayed in reverse chronological sequence, proceeding from images of the completed house to annotated sections from Murcutt's construction documents to the architect's section and elevation sketches and, finally, to sketch plans. For Jiménez, the section is key to understanding how Murcutt conceived and developed the Simpson-Lee House design. (The one item not produced by Murcutt is a freestanding site model by Rice University architecture student Cope Bailey, below). Photographs, and drawings especially, emphasize the house's arresting profile. Murcutt's responsiveness to site and program, material refinement, and technical ingenuity imbue the pavilionlike house with its affective intensity, even in reproduction. **Stephen Fox**



## BOOK

**The Organizational Complex: Architecture, Media, and Corporate Space** | Reinhold Martin | MIT Press

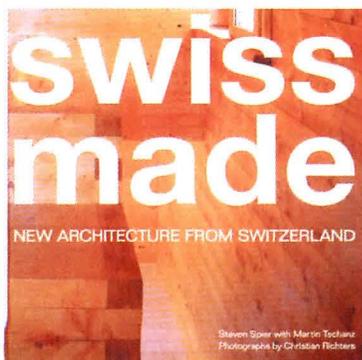
As corporate America implodes in the wake of one scandal after another, the façade of corporate governance—long hidden behind tinted-glass curtain walls—has crumbled. This phenomenon makes Reinhold Martin's dissection of the aesthetic and technological dimensions of the post-World War II "military-industrial complex" particularly timely. Although written in a dense academic style, the text makes provocative case studies of Eero Saarinen's projects for General Motors and IBM, as well as of office buildings by Skidmore, Owings & Merrill. In them, the ubiquitous modular skin is seen not simply as a conveyor of corporate identity, but as an organizational device meant to humanize (perhaps disingenuously) the relationship between producer and consumer. The book is good reading for today's white-collar cons. **Abby Bussel**



## BOOK

**Swiss Made: New Architecture from Switzerland** | Steven Spier, with Martin Tschanz | Princeton Architectural Press

Steven Spier tees up his survey of the last five years of immaculately detailed Swiss minimalism—chronicled in stunning photographs by Christian Richters—with a condescending essay that will turn off even the most open-minded ugly American. (In case you're unaware, Swiss architects are humble, tolerant, innately modern, practical builders that produce decisive and "hand-crafted" works and believe that "the entire profession in Europe is slowly being destroyed under the influence of American models.") This Swiss moment owes debts to Aldo Rossi, artist/architect Max Bill, Alfred Roth's 1940 book *The New Architecture*, and polytechnic coursework at Switzerland's Federal Institute of Technology, as well as architectural peers in Spain, Portugal, and Italy (but emphatically not the United States). Enough grumbles: The distilled orthogonal forms, mainly found in Basel and Zurich, confirm the preeminence of certain designers—notably the reclusive Peter Zumthor and the better-known Herzog & de Meuron—



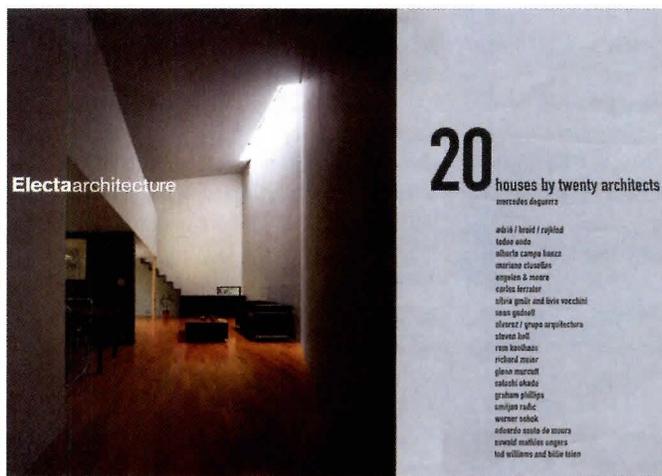
and latent talents, such as the subtly contextual work of Bearth & Deplazes, the high corporate art of Diener & Diener, and the adaptable oeuvre of Gigon & Guyer. A pragmatic overview of the Swiss scene, by Martin Tschanz, offers an illuminating and unpatronizing epilogue.

**C.C. Sullivan**

## BOOK

**20 Houses by Twenty Architects** | Mercedes Daguerra | Electa

*20 Houses by Twenty Architects* is a serious investigation into "the theme of habitation," as Mercedes Daguerra writes in her introduction. An architect's coffee-table book with gorgeous pictures of luxurious, well-turned out residences, it can be appreciated on a purely aesthetic level, but the well-documented selection of recent projects from an international array of architects explores multiple avenues of practical and theoretical investigation into the domestic realm. The book includes work by well-known figures such as Stephen Holl, whose Y House in rural upstate New York reworks plan and section in delightful ways to privilege natural light; as well as by emerging architects such as Sean Godsell, the Australian designer of the House in Victoria, which features an operable skin of shadow-casting wooden slats. **Julia Mandell**



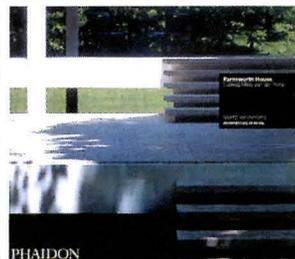
## BOOK

**Farnsworth House: Ludwig Mies van der Rohe** | Maritz Vandenberg | Phaidon

A modest volume at just 60 pages, this monograph on one of twentieth-century America's most iconic modern houses, Mies van der Rohe's 1951 Farnsworth House in Plano, Illinois, is not a glam coffee-table book but instead scholarship in brief. While it attempts no particular thesis, it is both a social history and a design primer on Mies. There are only a few full-page photos—some historic and some new ones by Peter Cook—but what the pages lack in imagery they make up for with a wealth of drawings: It is an architect's architecture book.

The publication is timely—on December 12, Sotheby's will auction the house in New York City for its current owner, Lord Peter Palumbo. The National Trust for Historic Preservation, the Landmarks Preservation Council of Illinois, and the Friends of the Farnsworth House are hoping that together they can raise the \$4 million or more needed to purchase the house, so they can turn it into a museum.

An homage to industrialism, the little steel-and-glass pavilion on pilotis is also an extension of nature with "an aura of high romance," as Lord Palumbo describes his beloved home in the book's foreword. The house itself—or at least its conception—even prompted a romance between the architect and the client, Edith Farnsworth, which did not end well: It's rumored to have led to the architect's elimination of window screens in this swampy, mosquito-rich site. Author Maritz Vandenberg recalls a description of Mies attributed to Edith Farnsworth: "simply colder and more cruel than anyone I have ever known." Mies himself is to have explained their frosty relations thus: "The lady expected the architect to go along with the house." This is one of those books where the footnotes are a good read. **Bay Brown**



ARCHITECTURE

You're in good company.



Architecture magazine  
**winner**  
2003 Circulation  
Excellence Award

**Business Magazine Circulation 50,000 to 99,999** We all know what they say about the company you keep...With *Architecture's* total circulation of over 88,000—including 69,000 registered architects—you can trust the company you're with.

As a winner of *Circulation Management Magazine's* 2003 Circulation Excellence Awards, we'd like to express our sincerest thanks to our subscribers.

EXHIBITIONS

**BERLIN**  
**Daniel Libeskind**  
 The Jewish Museum of Berlin honors its architect with a survey of both his famous and lesser-known works.  
 JEWISH MUSEUM BERLIN  
 www.jmberlin.de  
 Through December 14

**BERLIN**  
**The Crescent Moon**  
 Domestic design in the Arab world, from nomadic tents to twentieth-century architecture.  
 VITRA DESIGN MUSEUM BERLIN  
 www.design-museum.de  
 Through January 18



**DAYTON, OHIO**  
**Eyes on Architecture**  
 An interactive exhibit introducing the layperson to the basic tenets of architecture.  
 DAYTON ART INSTITUTE  
 www.daytonartinstitute.org  
 November 2–Fall 2005

**GHENT, BELGIUM**  
**Gaston Eysselinck**  
 A retrospective on the twentieth-century Belgian architect, including his tubular furniture designs.  
 DESIGN MUSEUM GENT  
 www.design.museum.gent.be  
 Through December 7

**LONDON**  
**Home**  
 A history of modern design in residential architecture, from the early twentieth century through today.  
 DESIGN MUSEUM  
 www.designmuseum.org  
 November 1–January 30



**LONDON**  
**Outreach**  
 Design ideas for a mobile HIV/AIDS health clinic for Africa, organized by Architecture for Humanity.  
 ROYAL INSTITUTE OF BRITISH ARCHITECTS  
 www.architecture.com  
 November 6–December 6

**MIAMI**  
**Museums**  
 Drawings, photos, and models of 25 recently designed museums from around the world.  
 MIAMI ART MUSEUM  
 www.miamiartmuseum.org  
 October 3–January 4

**NEW YORK CITY**  
**Conserving Preah Khan**  
 An exhibition on this temple in Angkor, Cambodia, organized by the World Monuments Fund.  
 WORLD MONUMENTS FUND GALLERY  
 www.wmf.org  
 Through January 7

**PHILADELPHIA**  
**Contexts/Concepts**  
 Recent work by architect Bernard Tschumi that illustrates his contextual approach.  
 TEMPLE UNIVERSITY GALLERY  
 www.temple.edu  
 November 17–December 13

**PITTSBURGH**  
**Strangely Familiar**  
 A survey of contemporary design, organized by the Walker Art Center in Minneapolis.  
 CARNEGIE MUSEUM OF ART  
 www.cmoa.org  
 November 8–February 15



**PRINCETON, NEW JERSEY**  
**Italian Renaissance City**  
 Rare books, prints, and maps from the Italian Renaissance.  
 PRINCETON UNIVERSITY ART MUSEUM  
 www.princetonartmuseum.org  
 Through January 11

Circle 77 or www.architecturmag.com/productinfo

style  
 security  
 innovation

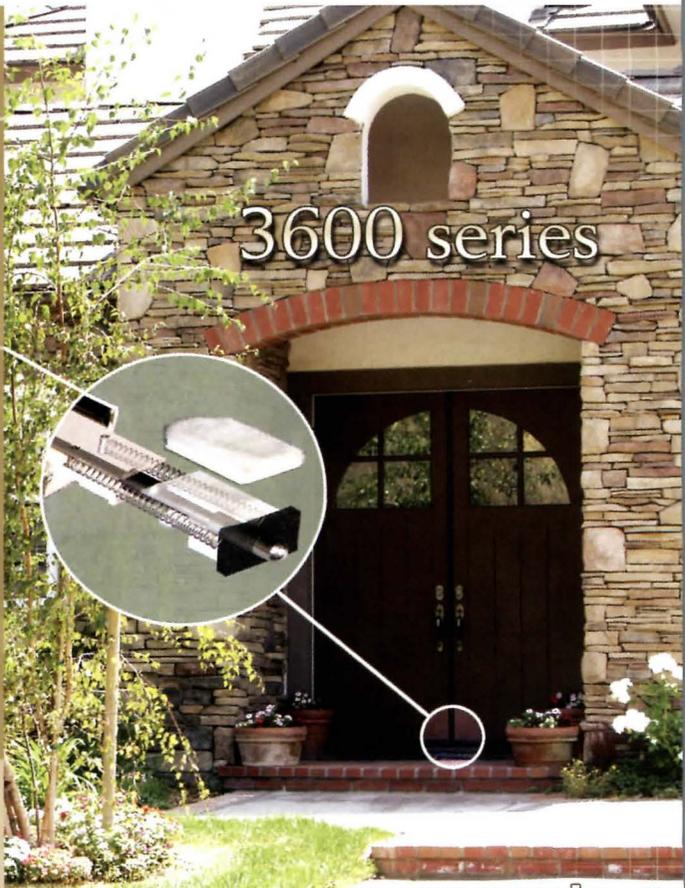
Pemko introduces its patented **heavy-duty 3600 Series Residential Spring Bolt Astragal**, featuring the following innovations:

- Self-Adjusting weatherseal "boot" throws into position with the lower flush bolt, and "floats" with Pemko's patented technology, to achieve the optimal compression against the threshold.
- Improved adjustable strike mounting blocks stay in position via Pemko's patented spring mechanism for ease of installation.
- Aluminum cover plates, instead of plastic, preserve the true anodized aluminum finish for a richer appearance on the door edge.

U.S. Patent Numbers 5,350,207 & 5,328,217. US & Canadian Patents Pending.  
 The **3600** is the **NEW STATE OF THE ART ASTRAGAL** for Style, Security and Innovation from **PEMKO**.  
 Call the factory for details.

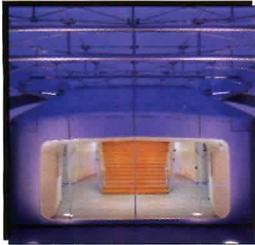


**Ventura / Whittier, CA**  
 ph: 1.800.283.9988 fx: 1.800.283.4050  
**Memphis, TN**  
 ph: 1.800.824.3018 fx: 1.800.243.3656  
**Abbotsford B.C. - CANADA**  
 ph: 1.877.535.7888 fx: 1.877.535.7444



www.pemko.co

**ROTTERDAM**  
**Asymptote**  
 Work by architects Hani Rashid and Lise Anne Couture, who also designed the exhibition.  
**NETHERLANDS ARCHITECTURE INSTITUTE**  
[www.nai.nl](http://www.nai.nl)  
 Through January 18



**SAN FRANCISCO**  
**John Dickinson**  
 Twentieth-century furniture designs by the idiosyncratic San Francisco master.  
**SAN FRANCISCO MUSEUM OF MODERN ART**  
[www.sfmoma.org](http://www.sfmoma.org)  
 Through March 7

**SKOVVEJ, DENMARK**  
**Oscar Niemeyer**  
 A retrospective on the renowned Brazilian architect.  
**ARKEN MUSEUM FOR MODERN ART**  
[www.arken.dk](http://www.arken.dk)  
 September 27-February 1



**WASHINGTON, D.C.**  
**Masonry Variations**  
 An exploration of masonry materials and applications, curated by Chicago's Stanley Tigerman.  
**NATIONAL BUILDING MUSEUM**  
[www.nbm.org](http://www.nbm.org)  
 October 18-April 4



**ATLANTA**  
**Greenprints**  
 Conference on sustainable building.  
**WESTIN PEACHTREE PLAZA**  
[www.greenprints.org](http://www.greenprints.org)  
 March 18-19

**ORLANDO**  
**A/E/C Systems**  
 Design technology products and seminars for architects, engineers, and construction professionals.  
**ORANGE COUNTY CONVENTION CENTER**  
[www.aecsystems.com](http://www.aecsystems.com)  
 February 17-19

**ORLANDO**  
**Coverings**  
 Trade event for ceramic tile, natural stone, flooring, and related products.  
**ORANGE COUNTY CONVENTION CENTER**  
[www.coverings.com](http://www.coverings.com)  
 March 23-26

**TORONTO**  
**IDS**  
 The annual Interior Design Show, featuring manufacturers, distributors, retailers, and designers.  
**NATIONAL TRADE CENTRE**  
[www.interiordesignshow.com](http://www.interiordesignshow.com)  
 February 12-15

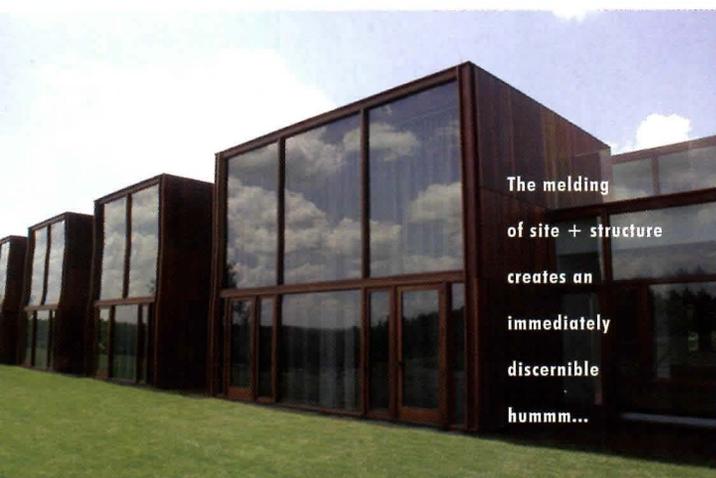


**Gypsum Association**  
 Awards for excellence in the design and execution of projects featuring gypsum board.  
[www.gypsum.org](http://www.gypsum.org)  
 Deadline December 31

**Rotch Scholarship**  
 Travelling scholarship for professional architects from the United States ages 35 and under.  
[www.rotchscholarship.org](http://www.rotchscholarship.org)  
 Deadline January 5

**INREB**  
 Sustainable-design ideas competition for international architects, organized by INREB Faraday Partnership.  
[www.inreb.org](http://www.inreb.org)  
 Deadline January 16

ALL IMAGES COURTESY OF THE NATIONAL ARCHITECTURE INSTITUTE



TEL 631 208 0710 | [WWW.REILLYWOODWORKS.COM](http://WWW.REILLYWOODWORKS.COM)

**REILLY** WOODWORKS

ARCHITECTURAL WOOD WINDOWS & DOORS

Circle 163 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

FINE CUSTOM WOOD PRODUCTS FOR UNIQUE ARCHITECTURE



ARCHITECT: THOMAS PHIFER + PARTNERS

# AGAINST THE NOTION THAT MASS-PRODUCED HOUSING HAS NO ARCHITECTURAL WORTH. AGAINST THE CONSEQUENT LACK OF DISCOURSE BETWEEN ARCHITECTURE AND MASS-PRODUCED HOUSING. AGAINST THE DIVISION BETWEEN HIGH ARCHITECTURE AND EVERYDAY LIFE.

by Alex Gino and Jason Griffiths

Architecture has never forgiven mass-produced housing for breaching the clean lines of the industrial aesthetic with all the flimflam spawned by choice. The two camps remain entrenched within their own beliefs.

From October 2002 through April 2003 we spent 178 days covering 22,382 miles by road, making 134 suburban house calls, and taking 2,593 photographs looking exclusively at the world of American communities of mass-produced dwellings. It is a project we call "Manifest Destiny." Our experiences lead us to suggest that the means for creating architecture for middle-income earners lies within a reevaluation of what currently forms the mainstream: fast-track construction, affordable financing options, popular ornament, and mass repetition. Within the seemingly limitless swathes of banality, we found moments of unlikely beauty and potential.

## A WINDOW

This is a window on the side of a double-wide manufactured home in Phoenix (top). The shutters are false and serve no purpose other than to remind us about shutters. Such fakery is hardly unusual in this context. However, this window presents a new level of discrepancy brought about by the desire for decoration and the need for convenience: One shutter spans the divide between two sides of the marriage wall!

Such consequences offer a clue to the manner in which middle-income architecture unwittingly acknowledges its indigenous character. The anomaly forms part of the discourse between a building's proximate users and the methods of fast-track, low-cost construction. From our investigations we suggest that architecture appears when it is rendered conscious of this ambiguity.

## AN INTERIOR

This is an interior of an "add-an-extra-room" structure for sale on Highway 80 outside Selma, Alabama (center). The inside of this shed has a spatial beauty completely *sans* design that evokes qualities of Swiss minimalism so much of the now. The repetition of the structure, reflection from the aluminum panels, and symmetry stage an asymmetrical cast of daylight. We found it far from the reaches of architectural publication—an idea dropped from a plane carrying Jacques

Herzog or Peter Zumthor to Los Angeles.

This is typical construction: cheap, fast, and yet unintentionally fetching in its rhythm, light, and proportion. It is indigenous and, for us, potentially an element in a new language of middle-income housing.

## A REAR FAÇADE

This is the side and rear of a house on a corner lot in a Las Vegas gated community (bottom). Its reduced, blank elevation has an accidental beauty afforded by a double misfortune. First, it is one in a row of houses whose neighbor usually conceals the indifferent handling of the sidewalls. Second, it is in an area with so little urban design that these cold façades have survived unnoticed.

For us it demonstrates the point at which extreme indifference begins to engage in a mute beauty—a beauty further enhanced by the block wall. Imagine this house with a careful arrangement of windows, more refined roof tiles, and a double height interior. Would it then qualify as a piece of high architecture? Look again and think of Swedish classical modernism. How does a place apparently abandoned by good architecture foster a building that so closely approaches a refined architectural sensibility? We conjecture that its indigenous qualities would take little alteration of the existing methods of construction to bring it within the realms of architectural aesthetics.

It is estimated that 4 percent of all houses in the United States are designed by architects. Outside this, the world of mass-produced housing surges forward unchecked. We offer these moments as a breach of the divide between the high culture of architecture on the one hand and the bulk of the built environment on the other. These examples illustrate our speculation that potential sources for contemporary American housing lie in an evaluation of mainstream building and popular taste "as found."

Robert Rauschenberg's axiom about art should equally apply to architecture—make it from what you find on your own block!

**Alex Gino and Jason Griffiths, partners in the London-based Gino Griffiths Architects, are currently producing "Manifest Destiny," an exhibition, lecture, and publication about suburban environments.**



# ON DESIGN-BUILD

**ROOTS** What's interesting, having gone to engineering school and worked as an engineer, is the point of view I gained as an architect about design-build. Usually, design-build puts architects and professionals in what appears to be initially a bad position. The contractor has the contract. They say, "I didn't anticipate this," and push it back at you. It becomes a pushing thing. Architects have to learn to be pushed, and how to push back – gently if they want to do design-build.

*John Ciardullo, RA, NCARB. Principal-in-Charge. John Ciardullo Associates. Architect. Engineer. Educator. Earned a Master of Architecture from Harvard and Civil Engineering degree from Bradley. His design-build work includes the largest public school construction project in the country – the Glen Oaks Campus in Queens, New York. A man for all seasons in the season of design-build.*



**SCHOOL** I went to Bradley in Peoria, Illinois to study engineering. And then I went to Harvard to study architecture. I worked as an engineer while going to school. So I show up to get credit for structures, and they find out I'm an engineer and invite me to teach engineering. "Would you pay my tuition," I asked? They did.

**TEACHING** I meet my class. "Oh, you're the engineer," a guy says. I had my portfolio, which of course they wanted to see. "How did you learn how to draw," they asked? "I went to art school," I said! So, since I was the only guy in my class who could draw, I would teach drawing to them as well as engineering!

**BUSINESS** I started my own business in 1970. We have 47 people, multi-talented. A lot of our work is for the NYC School Construction Authority. We've completed over 100 new construction or capital improvement projects. We do everything, except for MEP design.

**DESIGN-BUILD** New York City wanted to build these schools fast. Contractors contacted us as well as other firms with a schematic. The school authority would release it, and it didn't have any real detail to it. So, the job was bid, and a contractor would win. But then what? No one would want to do it! Well, we did. They just didn't know how to approach it. But if you want to get jobs up fast, there's no substitute for design-build. The Glen Oaks project is going to be completed in a little over two years from initial design to occupancy. That's a \$206 million high school for teaching professionals, two elementary intermediate schools on 19 acres of the existing 32-acre site.

**EARLY INVOLVEMENT** All I did was give the contractor a foundation plan so they can get some firm numbers. And that's what I would do. We would start winning every one of these things. As it progressed, people started to understand. If you did the preliminary design, you can get better pricing. That's how we got into it. If you don't know what the final design will be, you fly blind. It can put the architect and professionals in a very precarious position – unless you have the ability to communicate. It's that pushing and being pushed thing I was referring to.

**OWNERS** The owner has to know what he wants and will accept in terms of quality on design-build. Because it's going so fast, the quality may go down, and you have to try to hold the line. To do that, you have to have an idea of what the owner really wants. When someone asks for your approval, you have no power like in a design-bid-build. The contractor hired you, and that makes it precarious. You have to know how to work together to assure the quality. It's tricky.

**RELATIONSHIPS** The key to design-build is the team approach. We have good relationships with our contractors. We are there to help them. When I first started, the contractors did some of the work themselves, but now? They are so busy running the job, they have no time for the work. So we do it. We become their "partners" and the job gets done. And we partner with everyone – the general down to the subs.

**FABRICATORS** Each steel fabricator has unique ideas. In design-build, you have a chance to deal directly with the specialty contractors like fabricators. You can get some real insight from them. They send us their details, and that's what's wonderful about design-build. The subs will come over and the next thing you know we're having a meeting that turns into something grand.

**EXPERIENCE** The design-build project has to be occupied at a certain time. Quality can suffer if not handled right, and right means with experience. The sequences... you have to control the sequences of construction. Somehow, it all gets done. Look for people with experience. I've learned that nothing substitutes for experience.

**STEEL** When it comes to design-build, steel works extremely well. What we try to do is get the structural framing resolved while the foundation is still in the works. The programs we have today, well, it's a lot easier (I used to do that by hand!). If you program right, in a weekend, you can have the design. Steel is flexible, and that makes it ideal for design-build. Steel is by far the fastest and best. You can come back and modify it. So it's been the mode of building for schools, and with the new requirements, steel is just beating concrete. When I talked to the contractor, they were comfortable with steel, and it was the most cost effective. The period of time was really short, too, and you had to get a system. Steel is that system.



[www.aisc.org](http://www.aisc.org)

866.ASK.AISC

*Structural Steel: The Material of Choice*

Circle 63 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

SEE IT. BELIEVE IT. SPEC IT.



To the untrained eye it's real stone but it's the trained eye that's even more impressed. Eldorado Stone is more than just another manufactured stone veneer. It's a veneer so believable many consider it the best replication of natural stone available. And with the most innovative stone products created by the most talented craftsmen in the business, Eldorado Stone is the choice for anyone who wants the look and feel of real stone at a fraction of the cost. Call today for your free catalog of Eldorado Stone.

ELDORADO  STONE

800.925.1491 [www.eldoradostone.com](http://www.eldoradostone.com)

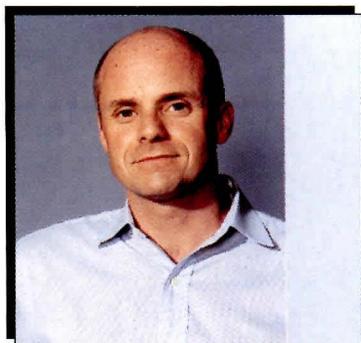
Circle 211 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)







A New Year, new designs and new ways to make a statement are just around the corner. Until then, celebrate warm holiday traditions with family and friends. Season's Greetings from Chip and all of us at Wilsonart Laminate.



## THEY'D RATHER BE IN PHILADELPHIA

BY C.C. SULLIVAN

Architects in Philadelphia are like architects in most other cities. They work hard on their craft. They strive to innovate and serve client and community needs. They recognize and respect their local legacy. And they are highly vocal as both defenders and critics of their hometown.

But today, Philadelphia's architects seem especially introspective and self-critical. Feeding their insecurity are an enfeebled local economy and polarizing politics, as well as questions about the city's ability to attract intellectual talent. These concerns feed a broader anxiety about the city's great tradition as a center of architectural innovation. It's daunting to work in the long, legendary shadows of Paul Phillipe Cret, Louis Kahn, and Romaldo Giurgola (not to mention Venturi and Scott Brown down the street), yet broader issues eclipse that dynamic. Most notable is a pervasive ambivalence about Philadelphia's heritage as a nexus of internationalism and regionalism. From the City Beautiful movement to Cret's beaux-arts perfection to Kahn's heroic modernism, global artistic and social concepts have attained great heights in this milieu of brickwork and humane scale, social planning and technical creativity—and William Penn's inexorable grid.

Today's unresolved tension between the universal and the local stirs not excitement but an unsettling debate that pits a conservative regionalism against transcultural influences. Some Philadelphia architects see their role as contributing to a global charrette; many others call for a return to roots so that a new "Philadelphia School" (as Jan Rowan called the influential scene in a 1961 issue of *Progressive Architecture*) may once again flourish.

A few weeks ago, I visited Philadelphia and saw firsthand how this debate plays out. The city's regional legacy and its history as a place that embraces outside influences have become disengaged—yet I came away feeling optimistic that the tide was shifting. Bookending my day were two encounters with the universal: a morning visit to a transcendent new airport terminal by Kohn Pedersen Fox (see page 111) and evening presentations by Cesar Pelli, Moshe Safdie, Enrique Norten, and Foster & Partners, who were competing for an expansion of the Julian Abele-designed Central Branch of Benjamin Franklin's

brainchild, the Free Library. In between, I met with local leaders and senior architects, most of whom expressed little interest in these momentous projects by outsiders. Leadership on design seemed reserved for elite local institutions, such as trusts, universities, and hospitals.

But there were also signs that Philadelphia's decades-old chasm might no longer be widening. First, a vibrant professional dialogue has emerged, as I found at a salon organized by Mitchell/Giurgola's successor firm, MGA Partners, and hosted by University of Pennsylvania art historian David Brownlee; for several intense hours, local architects talked frankly about whether "place matters," particularly the place called Philadelphia. Second, this renewed discourse has taken on prominence through Center City District, a self-taxing business-improvement coalition, and the fast-growing Design Advocacy Group, which promotes high-quality urban design at a time when the Philadelphia Planning Commission has little political clout. Third and most hopeful, however, are the stirrings of a new architectural language with an unmistakable local identity, rich materiality, and technology-driven inquiry.

If the new "Philadelphia school" will be defined by its activist core and by a few practitioners, so be it. Major movements, like those that emanated from or flourished in Philadelphia's illustrious past, may grow from an unfamiliar seed—but they thrive on healthy local soil.

### READERS NAME NAMES

Have you ever worked with a supplier whose input on a project came early, often, and at the most critical junctures, even when the pressure was on? And can you single out a manufacturer whose name is synonymous with innovation and service? If so, you'd probably refer them to other architects. And you might have checked their name on the ballot for *Architecture's* ACE Awards. ACE stands for "Architects' Choice for Excellence," an annual survey-based awards program that asks readers to select manufacturers they value for customer service and product design. (The results start on page 13.) We think this important survey recognizes companies for the right reasons: because architects trust and respect them.

**WE WANT TO HEAR FROM YOU.** Our editorial policy is to publish diverse opinions, including ones that dissent from views presented here. Send letters by e-mail to [csullivan@architecturemag.com](mailto:csullivan@architecturemag.com), or by mail to the address found on page 5.

### Big plan on campus

Your October 2003 issue, largely devoted to campus architecture, is both welcome and sobering. It is depressing to learn that campus imagery is now passing into the hands of formulaic planners and revivalist architects. Still worse, superficial design guidelines will ultimately be enforced by civil servants narrowly focusing upon questions of style and the adherence to arbitrary rules. The outcome will be a soulless academe possessing "correct" architecture that ironically obscures history.

**James A. Gresham**

*Tucson*

I particularly enjoyed "Campus = Context" (October 2003, page 41) and the simple lessons it offers architects. Organizing different approaches to campus design by means of thematic categories was useful, though "Reverence" for the new building at Harvard Business School struck me as the dark side of context in that it blurs what is real and what is not—even after three generations of Georgian architecture.

**Edward O. Nilsson**

*Salem, Massachusetts*

### Loyal to Logue

After enjoying your display of education facilities, I was shocked to find a needless slam at Edward Logue in "Just Say Yes" (October 2003, page 96). As the architectural critic for *The Boston Globe*, I saw firsthand how Logue introduced citizen participation in both urban design and architecture to Boston. His planners isolated residential neighborhoods from through-traffic, resisted the ghastly inner-belt throughway, cleaned up a soiled city hall, and put a stop to the very kind of development that the author quite properly detests.

**Joseph L. Eldredge**

*Vineyard Haven, Massachusetts*

### Suburban mod

Regarding "Classicism vs. Modernism" (September 2003, page 31): Why should the solution to urban sprawl lay only in the hands of neotraditional architects? Modern architecture and intelligent urban planning are not mutually exclusive. We don't need new neighborhoods that look traditional; we need compact, mixed-use, livable communities overlaid on our outmoded 1960s

sprawl. To say that this can only be done with buildings that look 100 years old is like saying the only way to have good ice cream is to eat it out of a hand-crank bucket that's surrounded by ice and salt.

**Angela Brooks**

*President, Livable Places, Los Angeles*

### Vinyl word

The continuing-education unit on the environmental considerations of specifying vinyl building materials (September 2003, page 97) was a poorly disguised infomercial serving the interests of its sponsor, the American Plastics Council. The authors use NIST's "BEES" software to claim that vinyl composition tile (VCT) gets a better ecological score than glass-ceramic tile or linoleum. This is misleading; VCT gets this score because it is less expensive and because the authors equally weight cost and ecology. A more detailed BEES analysis shows that the ecological toxicity of VCT is relatively high, compared with almost zero for the other two materials.

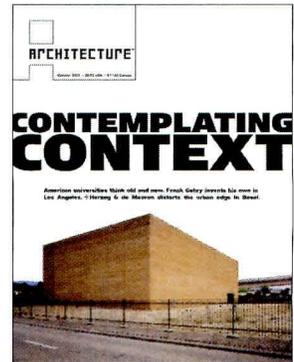
**David Lehrer**

*Berkeley, California*

*From the editors: The learning unit was an advertisement paid for by the American Plastics Council and sanctioned by the AIA.*

"Sustained by Science" (September 2003, page 112) would have advanced our education on the LEED green-building rating program if it had lived up to its headline—but it didn't. First, ground-source heat pumps are not "renewable energy" sources; they consume energy rather than produce it from the earth. Second, large hydroelectric dams destroy fisheries and riparian habitat, inundate farmland, force human resettlement, and cause salinization and waterlogging of local soils—none of which are characteristics of truly renewable sources. Third, lumber cannot be a renewable resource if forests are not managed for ecosystem health and if old-growth trees, which cannot be replaced, are not distinguished from general lumber. LEED and Forest Stewardship Council certification are the only ways to take this into account.

The LEED program is not easy and is far from perfect, and I agree with the authors that life-cycle analysis should be included when feasible. But I strongly disagree that



10 | 2003

LEED has been unduly "influenced" by environmental groups. Where better to include a strong environmental voice if not on these critical issues?

**Raphael Sperry**

*San Francisco*

### Engineered monopoly

Through the years, engineers have sealed architectural work under the caveat in license rules for work "incidental" to a project (September 2003, page 27). Architects supposedly have the same leeway for "incidental engineering," but engineers have contested the incidental nature of our actions. This is unfair. Perhaps we should educate public officials on guidelines for engineers who take on architectural work.

**Harold Humphrey**

*North Wilkesboro, North Carolina*

### Conference call

My thanks and praise for *Architecture* magazine's excellent and very useful conference "Building Better Schools" (October 2003, page 11). I am fully convinced of what is wrong with the industry: Architects are no longer the professional leaders of the construction industry; we are just vendors for a narrowly confined specialty.

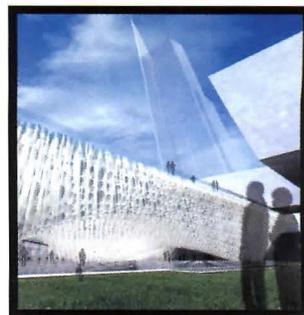
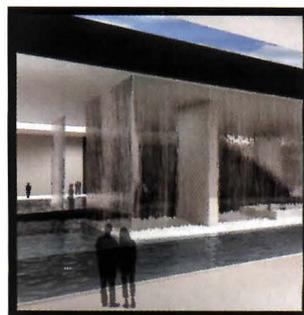
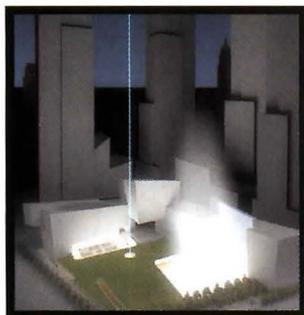
**Allan Anderson**

*Rye, New York*

### CORRECTIONS

In the October issue, three photographs of U.C. Riverside's Fine Arts Building are mistakenly credited. The images at the top of pages 56–57, and on pages 58 and 59, are the work of Santa Monica's Tom Bonner. Also, the Harvard Business School building on page 44 is in Boston, and the gas station on page 16 is in Cloquet, Minnesota.

## WTC MEMORIAL COMPETITION FINALISTS SELECTED



The long and challenging process of memorializing the World Trade Center victims has taken a substantial step forward with the selection of eight finalists in an open competition sponsored by the Lower Manhattan Development Corporation. Guided by a mission statement and program, 13 jurors—a family member and professionals from the worlds of art and architecture among them—“sought designs that represent the heights of imagination while incorporating aesthetic grace and spiritual strength.”

While the competition program set specific site-related and technical parameters, the mission statement served as the overarching brief for the 5,201 entrants from 49 states and 63 countries. It called for proposals that honor those killed in New York City, Washington, D.C., and Pennsylvania

on September 11, 2001, as well as the victims of the 1993 trade center bombing. The brief also asked that submissions acknowledge the site as sacred, recognize the endurance of survivors and courage of rescuers, and reaffirm respect for life and freedom while inspiring an end to hatred in the world. More specific requirements included the victims' names, access to bedrock, and a private space for families.

Designed by relatively unknown artists, architects, landscape architects, and educators, the schemes share a vocabulary of trees, water, light, and subterranean spaces, and all focus on the towers' footprints. Some are prescriptive in how they provide a venue for mourning—for example, a field of glass columns, like a cemetery, each with a timeline of events in a victim's life—while others offer abstract platforms—reflecting

pools, sculptural illumination—for individual forms of contemplation. The finalists are (clockwise from top left): “Suspending Memory” by Joseph Karadin with Hsin-Yi Wu; “Inversion of Light” by Toshio Sasaki; “Dual Memory” by Brian Strawn and Karla Sierralta; “Lower Waters” by Bradley Campbell and Matthias Neumann; “Passages of Light: The Memorial Cloud” by Gisela Baurmann, Sawad Brooks, and Jonas Coersmeier; “Votives in Suspension” by Norman Lee and Michael Lewis; “Reflecting Absence” by Michael Arad; and “Garden of Lights” by Pierre David with Sean Corriel and Jessica Kmetovic.

The November 19 announcement also marked the first day of an exhibition of finalists at the World Financial Center, on view until the jury selects a winner by the end of the year. **Abby Bussel**

## 2004: “TRANSITION” PERIOD IN REAL ESTATE



COURTESY LOWER MANHATTAN DEVELOPMENT CORPORATION

Investors' outlooks on the American commercial real estate market for next year range from “at best less sanguine” to “cautiously pessimistic”—at least according to a recent survey released by the Urban Land Institute (ULI) and consultant PricewaterhouseCoopers.

The 25th edition of the annual report *Emerging Trends in Real Estate* polled more than 350 commercial-property authorities and found that 2004 is largely perceived as a “transition” period. Although the real estate market will shift toward a slight recovery,

the survey says, this will be countered by a lack of new jobs being created in the United States, an increasing number of jobs going overseas, and governmental financial difficulties.

The study expects rents and values to stay flat in most markets, with the office sector suffering the most. Apartments and hotels, however, should show a *minor improvement*. The flow of capital will stay solid initially, adds the report, but may weaken as a stronger stock market draws investors away from property. **Jamie Reynolds**

## CONFERENCE SHOWS HOW LEED GROWS



Since its founding in 1993, the U.S. Green Building Council (USGBC), the organization behind the LEED rating system, has seen notable success, establishing its green certification program on a national scale and seeing membership grow from 300 member organizations in 2000 to over 3,500. The group's second annual GreenBuild Expo, held last month in Pittsburgh at the new Rafael Viñoly-designed and "LEED gold"-certified David E. Lawrence Convention Center (above), drew more than 5,000 people.

The week-long event included discussion of efforts to expand LEED internationally, initially to India and China, and to additional building types. The original LEED system, applicable only to new con-

struction—now renamed LEED-NC—will be joined by programs for existing buildings (LEED-EB), homes (LEED-H), and commercial interiors (LEED-CI), among others. These additional options are currently being developed and tested, and will be individually launched over the next two years.

Such rapid organizational growth could have produced growing pains, but Christine Ervin, the USGBC's president, believes her group has taken to expansion well. "We were worried about losing the intimate nature of the early meetings, but in Pittsburgh there was a very strong sense of collegiality," she says. Next year's GreenBuild will be held in November in Portland, Oregon. **Julia Mandell**

## UTZON'S ENCORE



Thirty years after it opened, the Sydney Opera House (above) is slated for a \$47 million renovation, or, more accurately, rebirth. The building was only half complete when architect Jørn Utzon left Sydney in 1966, blackballed by the regional government in a budget-related,

politically charged controversy. The interiors, executed by a local architect, Peter Hall, in Utzon's stead, have been criticized as cramped and insensitive to the original design.

While Utzon has never returned to Sydney Harbor—and according to recent press reports in Australia and Britain, has no plans to do so—he is back at work on the opera house. Along with his son, architect Jan Utzon, and Sydney-based Johnson Pilton Walker, the Pritzker Prize-winning architect has

been commissioned to transform several spaces, including the reception hall and opera theater. In the former, long-observed folded concrete beams will be exposed and finished with a mica glaze, and an Utzon-designed chandelier and tapestry will also be installed. Work on the hall is expected to take six months; other aspects of the renovation may involve structural changes and are, therefore, on a longer timeline.

**Abby Bussell**

⇒ A recent AIA study has shown that the number of women architects has jumped over the last several years: The percentage of licensed architects who are female rose to 20 percent in 2002, up from 1999's figure of 13.7 percent. The portion that comprises woman partners or principals rose to 20.7 percent, compared to only 11.2 percent three years earlier.

⇒ Civil engineer Terry Hill has been named chairman of the international engineering firm Arup Group, where he has been since 1976. And the American Society of Civil Engineers (ASCE) has named its first-ever woman president, Patricia D. Galloway.

⇒ Roger Montgomery, the former dean of University of California, Berkeley's College of Environmental Design and a long-time advocate of affordable housing, died on October 25. He was 78. Lynn S. Beedle, founder of the Council on Tall Buildings and Urban Habitat, and an expert on skyscraper design and construction, has died at age 85. And Eason H. Leonard, the longtime managing partner at I.M. Pei & Partners, now called Pei Cobb Freed & Partners, passed away at age 83.

⇒ Moshe Safdie has won the commission to design the addition to the Central Branch of the Free Library of Philadelphia (November 2003, page 19).

⇒ The dean of the Harvard Design School, Peter G. Rowe, has announced he will be stepping down from his post after 12 years. A replacement has not been named.

⇒ David J. Neuman, former university architect and vice provost at Stanford University, has been named campus architect for the University of Virginia.

⇒ Laurels: Tod Williams and Billie Tsien have won the Award for Architectural Design at the fourth annual Smithsonian's Cooper-Hewitt, National Design Museum's National Design Awards. Other winners included I.M. Pei, recipient of a lifetime achievement award, and the U.S. General Services Administration, which received a special commendation for its Design Excellence Program. Also, the Chicago Building Congress has given its 2003 Award of Honor to Sidney Epstein, chairman of the A/E firm A. Epstein and Sons, of Chicago.

## NEW BUILDING SPEC: WARREN BUFFETT



For your next project, you can specify Warren Buffett, investment genius and chairman of the Omaha-based holding company Berkshire Hathaway. Starting in August 2000, Buffett began a major land grab for the construction materials industry by snapping up Fort Worth, Texas-based Acme Brick, followed quickly by paint maker Benjamin Moore. Since then, the unassuming "value investor" has bought carpeting (Shaw Industries), roofing and insulation (Johns-Manville), structural systems (MiTek Indus-

tries), and, in August, modular housing (Clayton Homes).

So why is the legendary holder of blue-chip stocks like Coca-Cola and American Express—and owner of household brands like Geico and Dairy Queen—suddenly so interested in building materials? Manufacturer insiders have speculated that Buffett is vertically integrating the stalwart residential sector (he also owns realtors, property insurers, and furniture suppliers) or preying on companies weakened by asbestos litigation, or both.

While experts concede that, as a huge insurer of hard-to-price risk, Berkshire Hathaway holds a competitive advantage in acquiring asbestos-tainted businesses, they're sure that its investment strategy is hardly nefarious.

"Buffett looks 20 years down the road to see if these companies will still be around and still have their competitive positions," says an analyst at a mutual fund. "He likes Shaw and Benjamin Moore because of their replacement business: Carpet wears out, paint wears out."

"What Warren Buffet looks for are strong brand names that compete in mature industries where there is little risk of technological obsolescence," says Zeke Ashton, who runs Dallas-based investor TMF Centaur Capital.

So it's bricks, not clicks, that push Buffett's buttons. And during the dot-com bubble, Buffet found lots of good deals. "The so-called 'old economy' was left for dead by investors," says Ashton, adding that many busi-

nesses approach Berkshire Hathaway to be acquired, because of its reputation as a hands-off owner that isn't looking for magical "synergies"—and that rarely fires people.

Regardless of Buffett's motivations, his newfound hankering for construction products has got the titans of the building-products industry buzzing over his next move. When a maker of interior finishes with some asbestos in its history hesitated to renew its distribution contracts recently, the gossip was that Buffett was ready to pounce. The company has a great brand and seems a nice long-term investment, so could it be true? "Not a chance," pooh-poohs one analyst. "That company's just too small for Buffett."

C.C. Sullivan

## southern ridges BRIDGE DESIGN COMPETITION

The Urban Redevelopment Authority, Singapore, in consultation with the National Parks Board and the Singapore Institute of Architects, is organising a Design Competition for two pedestrian bridges in the Southern Ridges of Singapore.

The Competition calls for suitable designs that will complement the rustic character of the Southern Ridges' natural landscape, respect the terrain of the park setting and give a memorable experience to the visitors of the hill parks.

For each bridge, the Winner will be appointed as the Project Consultant for the development of the bridge.

### ELIGIBILITY

The Competition is open to teams, local or foreign, consisting of architectural and civil & structural engineering firms (sole proprietorships, partnerships, or corporations) qualified and licensed to provide professional services in Singapore. Foreign firms who do not meet this requirement must collaborate with licensed architectural and civil & structural engineering firms.

### PROGRAMME

**Submission Deadline:** Thursday, 18 March 2004  
**Announcement of Winners:** May 2004

### AWARDS

For each bridge - Winner: S\$20,000  
Two merit prizes: S\$8,000 each

### REGISTRATION

Registration forms are available from

The Promoter  
Southern Ridges -  
Bridge Design Competition

Urban Redevelopment Authority  
Customer Service Counter  
1st Storey, The URA Centre  
45 Maxwell Road, Singapore 069118

or at website address  
[http://www.ura.gov.sg/sr\\_bridges/index.htm](http://www.ura.gov.sg/sr_bridges/index.htm)

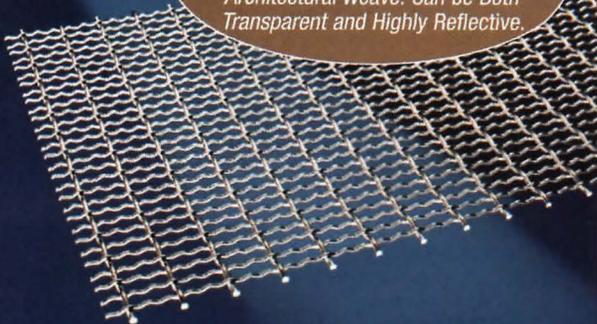
**REGISTRATION DEADLINE**  
Thursday, 8 January 2004, 12 noon (Singapore date and time)



OUR MISSION  
To make Singapore a great city to live, work and play

## W.S. TYLER ARCHITECTURAL WIRE CLOTH

*Featuring Dokawell-Mono  
Strength, Rigidity and Large Openings  
Make it Perhaps the Most Widely Used  
Architectural Weave. Can be Both  
Transparent and Highly Reflective.*



Available in a Variety of Styles and Woven Metals!

Applications include:

- Facades
- Ceiling Design
- Decorative Panels
- Sound Absorption
- Sun Protection



Mentor, Ohio, U.S.A • St. Catharines, Ontario, Canada

**W.S. TYLER**  
Quality • Service • Value

[www.wstyler.com](http://www.wstyler.com)

E-mail: [wstyler@wstyler.com](mailto:wstyler@wstyler.com)

New in the States!

# Lantor Condenstop®

...for metal roofing panels!

Lantor CondenStop® is especially designed to control condensation and prevent dripping of water in metal buildings.

All leading European corrugated steel and aluminium roof panel manufacturers have already been experiencing the advantages of this product for almost 20 years by applying Lantor CondenStop®.

Tested and approved by renomated European institutes: fire resistance, ageing test, chemical resistance, water and sound absorption, resistance to moulds.

Due to the high quality self-adhesive layer, the high-tensile strength and the extensive roll length Lantor CondenStop® can easily be integrated economically in your roof panel production line.

## Typical examples of application areas are:

- Power plants
- (Waste) Water pumping stations
- Outside canopies (service stations, carports etc.)
- Sport stadiums
- Industrial buildings
- General warehouses
- Cattle stables and other agricultural buildings
- Parking houses



A structural solution to control condensation

Interested?

[www.condenstop.nl](http://www.condenstop.nl)

## For further information

Lantor Construction

P.O. Box 45

3900 AA Veenendaal

The Netherlands

Tel.: +31-318 - 537111

Fax: +31-318 - 537420

E-mail: [info@lantor.nl](mailto:info@lantor.nl)

Circle 35 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

Lantor CondenStop® is currently available in the USA through selected roof panel manufacturers.



Chicago's architectural identity is found somewhere in the mix of neoclassical traditionalism, local modernism, and more recent works by out-of-town practitioners, such as New Haven-based Cesar Pelli's Ratner Athletic Center (above) at the University of Chicago.

## A CITY OF TWO TALES

**Locals versus imports. Old versus new. Midwestern versus cosmopolitan. Chicago's architectural landscape is a study in not-so-gentle contrasts.** by Edward Keegan

In spite of Chicago's reputation as a first city of architecture, its practitioners have often lapsed into periods of provincial sleepiness. Recent projects, some very high profile and others more local in appeal, point to a renewed awakening of creative energy that might signal an important new chapter in the city's illustrious architectural history.

The at-times rancorous reception accorded to the renovated Soldier Field during its nationally televised Monday Night Football debut in late September was a microcosm of the current debate within Chicago's architectural community. The stark contrast between the seven-decade-old, classically ordered stone colonnades and the asymmetrical glass-and-steel seating bowl by Wood + Zapata, with Lohan Caprile Goettsch Associates, drew howls from preservationists and conservative viewers who painted it as a worst-case example of adaptive reuse. But progressive practitioners lauded it as a breath of fresh air in a city that has long promoted traditional aesthetics in its public projects.

Opening almost simultaneously was Rem Koolhaas's first completed U.S. building, The McCormick Tribune Campus Center (see page 102) at the Illinois Institute of Technology (IIT). Constructed beneath Chicago's fabled elevated train line, the broad single-story structure with bright orange glass and a lozenge-shaped tube on its roof is an overheated party crasher on the coolly modernist campus that features more than 30 seminal buildings by Mies van der Rohe.

Multiple architectural legacies form the template for Chicago's current situation. Daniel Burnham's 1909 Plan of Chicago—which envisaged the early-twentieth-century city as a Parisian paradise of well-mannered traditional structures and formal parks and boulevards—is the traditionalist's model. This has often been countered by the advocates of innovation, whose local pedigree is strengthened by the esteemed examples of Louis Sullivan, Frank Lloyd

Wright, Mies van der Rohe, Harry Weese, and Bertrand Goldberg.

### RISE OF THE IMPORTS

Despite its perceived predilection for tall buildings, Chicago's 225 square miles remain relatively low in scale, filled mostly with two- and three-story structures with the exception of the downtown Loop and the high-rent zone along Lake Michigan's shoreline. It's a decidedly Midwestern city that has long depended on local talent for the vast majority of its admired architectural production. But since the acclaimed 1983 debut of Kohn Pedersen Fox's sleek green-glassed building at 333 Wacker, developers and builders have made out-of-town firms an increasingly popular choice.

Recently completed projects for the University of Chicago include an athletic center designed by New Haven-based Cesar Pelli and a residential complex by Mexican Ricardo Legorreta. Frank Gehry has a stainless-steel-ribbanded bandshell currently under construction in downtown's Grant Park for a 2004 opening, while fellow Pritzker laureate Renzo Piano has begun working drawings for an elegant limestone and glass addition to the nearby Art Institute of Chicago.

Though carpet-bagging now seems a permanent part of the architectural landscape, Donald Trump chose to commission SOM's Chicago-based partner Adrian Smith to design his first local project. The 86-story, 1,125-foot-tall Trump Tower Chicago features a broad face that follows the north bank of the Chicago River. Its intricate glass curtain wall steps back in a series of dramatic formal gestures that culminate in a soaring spire that will be the fourth tallest building in the city when completed in 2007.

### A PUBLIC APPETITE FOR ARCHITECTURE

Mayor Richard M. Daley (son of the legendary Richard J. "Boss"

Daley, who ruled Chicago from 1955 until 1976) has led the city's government since 1989 and has actively promoted the city's beautification. He has planted thousands of trees in public parks and along-side streets, and overseen the renovation of major downtown thoroughfares including State Street and Wacker Drive. Critics have decried the mayor's preference for traditional aesthetics, but his staunch defense of Wood + Zapata's bold design for Soldier Field, as well as his choice of Gehry for the new bandshell, has shown Daley to be a somewhat more inclusive patron than previously thought.

Two infrastructure projects demonstrate the pervasive theme of old and new. Hundreds of Robert A.M. Stern-designed bus shelters featuring vaulted roofs and classically inspired columns sprouted throughout the city this year. But the renovation of a mass transit station and the adjacent automobile/pedestrian bridge by Gensler's Chicago office suggests more contemporary influences. Spanning a dozen lanes of freeway traffic on 35th Street near the IIT campus and the White Sox U.S. Cellular Field, its canted frame of galvanized steel surrounds the existing concrete bridge. This creates a subtle sense of enclosure over the structure's sidewalks that suggest a modern riff on the traditional colonnade. Portions of the steel extend over the expressway and create carefully composed billboard spaces for the school and the sports franchise.

It's a commonly held belief that cab drivers in this 2.9-million-person city are among the most vociferous and knowledgeable architecture critics. Another long-time standard-bearer that's putting architecture in the public eye is the 37-year-old Chicago Architecture Foundation (CAF), which conducts several daily walking tours and mounts an ever-increasing number of lectures and exhibitions on both historical and contemporary work. Public events focused on architecture are also sponsored by such varied cultural institutions as the Museum of Contemporary Art (MCA), the Art Institute of Chicago, and the Graham Foundation for Advanced Studies in the *Fine Arts*. In recent years the art institute has supported young local practitioners by commissioning architectural exhibition installations by talented architects including Doug Garofalo and Jeanne Gang. And this past summer the MCA launched an annual program to enliven its stairs and plaza with an installation by Garofalo.

An organization that merits watching is the Congress for New Urbanism (CNU), which moves from San Francisco to Chicago in January. New Urbanist-inspired projects have been built throughout the city in recent years, from market-rate townhouses in tonier neighborhoods to thousands of pedestrian-friendly homes that are replacing notorious high-rise housing projects—such as the Robert Taylor Homes and Cabrini-Green—through the Hope VI program.

The CNU's new president will be John Norquist, who actively used New Urbanist precepts during his time as mayor of Milwaukee. One can only speculate how this new organization and its politically oriented leader will influence the local scene.

#### TOWERING MEDIOCRITY

The building boom of the 1990s is apparent in almost all of the city's 198 neighborhoods, but the most drastic change is visible in the area that sits just north of the downtown Loop and west of the upscale North Michigan Avenue shopping district. Large portions of the neighborhood called River North still comprise surface park-



Wood + Zapata and Lohan Caprile Goettsch's renovation of Soldier Field is a microcosm of the contrasts that shape Chicago.

ing lots, and, until quite recently, many street corners had stop signs in lieu of traffic signals.

Today the area is populated by relentlessly banal, market-rate concrete apartment towers—many more than 40 stories in height—raised on eight- to ten-story parking garages that darken the streets even during the day. It's as if an entire bedroom community was constructed overnight according to the cookie-cutter designs of bottom-line developers who have overlooked all urban amenities. The situation is worsened by the street-life-killing parking that is mandated in such stacked abundance by an outdated zoning ordinance that doesn't recognize the existence of mass transportation.

Two fresh entries that demonstrate a much higher architectural standard than the developer-driven residential boxes are local architect Lucien Lagrange's *Erie on the Park* and the *Sterling* by Solomon Cordwell Buenz (SCB). Lagrange's design reinterprets the John Hancock Center's exposed diagonal steel bracing in a 24-story parallelogram tower. At the *Sterling*, SCB imaginatively rethinks a 48-story concrete apartment structure as two interlocking shafts, one curvilinear and one rectilinear.

#### A NEW CHICAGO SCHOOL?

While the homogenizing effects of Daniel Burnham's master plan and Mies's modernist efforts of the mid-twentieth-century still have their advocates, the diversity of Chicago's present-day population suggests a more eclectic approach. Despite the city's multiple architectural legacies, mediocrity is still a normative condition for much new development.

The question remains: How will Chicago architects, developers, and public-policy makers translate the city's rich architectural legacy into forms that are authentic to our times? In recent years, the successful implantation of work by imported architects has stirred the local design scene. When this decidedly provincial Midwestern city finds a contemporary expression for its unique location in the middle of the country, it may once again claim its place as an architectural leader, rather than follower.

Edward Keegan is a Chicago-based architect and a regular contributor to *Architecture* and *Chicago Public Radio*.

## CASTING A WIDE 'NET

firm

Unlike websites for other kinds of businesses, those for architects can be remarkably nonfunctional. "An architect doesn't sell anything" in the retail sense, says Roberto de Alba, a principal at New York City's Splitwise Design, which has designed sites for the likes of Polshek Partnership and Philip Johnson. But even if an Internet presence doesn't yield a flood of calls, successful architectural sites are more than digital brochures.

◊ **Who is your audience?** De Alba finds most architects' sites serve three functions: showing work to prospective clients who know of the firm, announcing accomplishments to colleagues, and recruiting employees. A clear sense of audience is key. For example, Chicago-based architect Zoka Zola is launching her own site. "It's not specifically for the clients," she claims: She's aiming it at students and colleagues.

◊ **What's the basic structure?** The online journal *Entablature.com* runs an awards program for architecture sites. Founder and editor Kriss Pettersen emphasizes four areas good sites touch on: a design statement or staff description; a portfolio of past works; a section for current projects; and contact information. Customized navigation between these areas can express identity. "What makes a site more successful is the way things are organized and how that speaks to the way a firm approaches its work," Pettersen says. Venturi, Scott Brown's site, he points out, is whimsical in its organization; a large cor-

porate firm might prefer a more easy-to-follow site map.

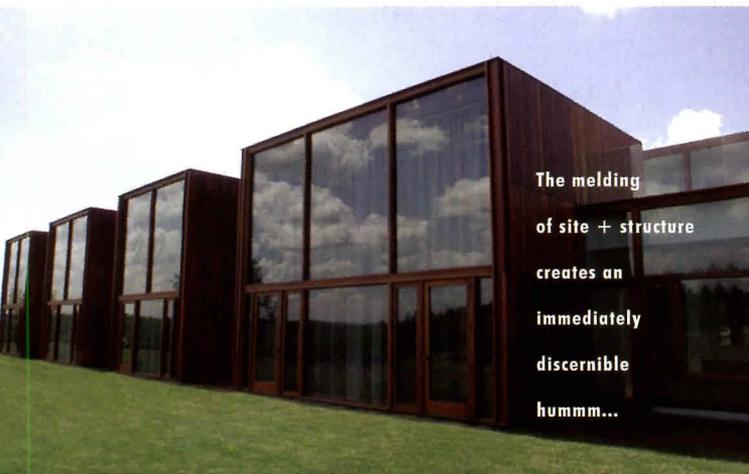
◊ **What are the pros and cons of the technology?** Many of de Alba's clients don't have a full grasp of the animation, sound, and streaming-video options that the Web offers. Conversely, others come to him touting unrealistic examples that they hope to emulate. "Clients say, 'We've been looking at the Guggenheim site,'" says de Alba, but such high-end setups can cost millions of dollars. (Most clients settle for a custom-designed, partially maintained site in the \$40,000 range.)

Too many bells and whistles can distract viewers, adds Pettersen: "One thing architects try to portray is interactivity," but forcing a visitor to sit passively through a 5-minute Web film doesn't achieve that.

◊ **How do you pace the information?** De Alba suggests a layering approach, positing a "need-to-know" strategy to projects: Allow visitors to click through to deeper levels if their interest warrants it. Pettersen concurs: "Sites are unsuccessful if it is thrown at you all at once."

◊ **Last, be ready to do your homework.** "In the process of putting a website together, firms shake a lot of dust off the files," de Alba says. Tracking down and digging up old drawings and outdated storage media for a comprehensive website can mean an at-times frustrating walk down memory lane.

**Jamie Reynolds**



The melding  
of site + structure  
creates an  
immediately  
discernible  
hummm...

TEL 631 208 0710 | WWW.REILLYWOODWORKS.COM

**REILLY** WOOD  
WORKS  
ARCHITECTURAL WOOD WINDOWS & DOORS

Circle 163 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

FINE CUSTOM WOOD PRODUCTS FOR UNIQUE ARCHITECTURE



ARCHITECT: THOMAS PHIFER + PARTNERS

“Light is the most powerful tool  
of architects and interior designers.”

# Architectural Lighting Master Classes

March 11-12, 2004



#### when and where

March 11-12, 2004  
John Jay College  
899 10th Avenue  
at 58th Street  
New York City

#### speakers include renowned lighting experts

Howard Brandston  
KEYNOTE SPEAKER  
Paul Gregory  
Jonathan Speirs  
Fred Oberkircher  
Ann Kale  
Willard L. Warren  
Ray Grenald  
Robert Prouse

#### who should attend

Architects  
Interior Designers  
Lighting Designers  
Electrical Engineers  
Team Leaders  
Project Managers  
Owners  
Students  
Educators

Be inspired. Foster ideas. Gain a competitive edge.

The Architectural Lighting Master Classes educate, inform and inspire today's design community on how to enhance projects using creative lighting design. Developed by an international, award-winning team of lighting experts, this intensive two-day seminar engages you in the creative process of using lighting to define the character and emotional experience of your space.

ALMC offers 10 intensive seminars to train architects and designers and includes a Manufacturers Showcase with the newest lighting products.

Produced by **Sonny Sonnenfeld**, *Architectural Lighting* and *Architecture*

Creative Consultants **Paul Gregory** and **Jonathan Speirs**

Co-sponsored by the American Institute of Architects, New York Chapter



Earn 16 AIA\* credits as well as 12.5 NCQLP credits

#### registration cost

\$550 Early Bird (before 01/01/04)

\$595 Regular Registration

#### \*AIA member special rate

\$500 Early Bird

\$545 Regular Registration

Presented by:



architectural  
lighting

ARCHITECTURE

Circle 99 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

For a list of session topics or to register, go to [www.lightforum.com/masterclasses](http://www.lightforum.com/masterclasses)  
or contact *Christina Mendez* at 800.950.1314 x 4581, 646.654.4597 fax, [cmendez@vnubuspubs.com](mailto:cmendez@vnubuspubs.com)  
770 Broadway, New York, NY, 10003

## ARCHITECTURE ON THE GO

Most architects make things that stand still. Others find satisfaction in spaces that move. by Alan G. Brake



Airstream trailers are noted for their rounded aluminum shells. Architect Christopher Deam has imbued a new line of the company's trailers, the International CCD series, with an appropriately Streamline Modern interior and all the amenities required by modern-day road warriors, including optional flat-screen televisions and Internet hook-ups.

Architectural assignments usually require consideration of how people move through space. But some require the opposite: designing spaces that literally move people. To achieve optimum efficiency, architects who design vehicles and aircraft interiors, for example, tend to belong to a "less is more" kind of crowd. Be it on the ground, in the air, or suspended from a cable, mobile spaces pose unique challenges for professionals typically in the business of ensuring that their projects stay in one place.

### ON THE ROAD

San Francisco-based Christopher Deam is an entrepreneurial architect. Following the successful development of furniture lines for his design company, CCD, Deam initiated a relationship with two well-established brands, recreational vehicle-maker Airstream and laminates manufacturer Wilsonart International. The result? Five models of Airstream trailers, all marketed under the name International CCD. The collaboration was put in motion in 2000, when Deam approached Wilsonart about designing a new trade-show booth for them using a vintage Airstream trailer. He saw the aluminum-clad Airstream as an underappreciated design icon, so he pitched the idea of retrofitting one with predominantly Wilsonart products. The laminate maker embraced the idea, and when the booth attracted both attention and awards at the International Contemporary Furniture Fair in New York City the following year, the architect believed it was time to bring the idea of a redesigned trailer to Airstream itself. "I knew there was an untapped group of buyers out there," says Deam. "Airstream just didn't know how big."

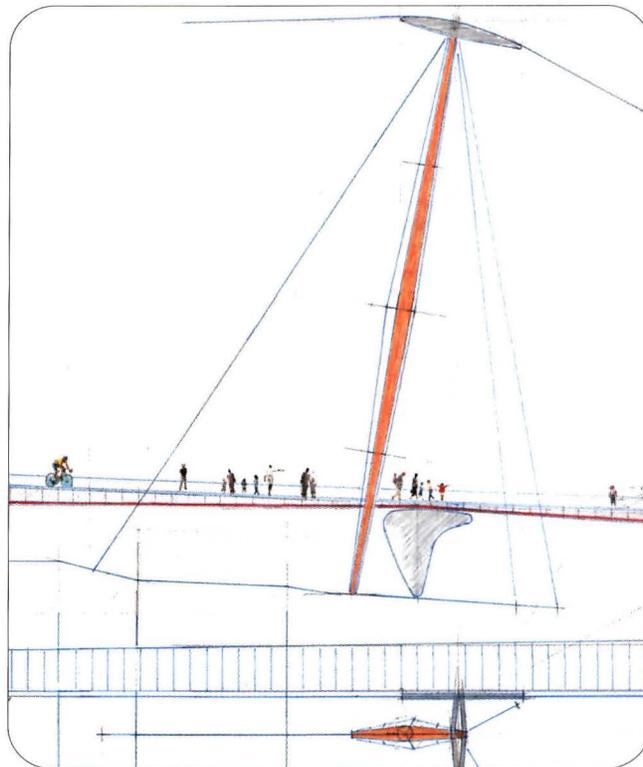
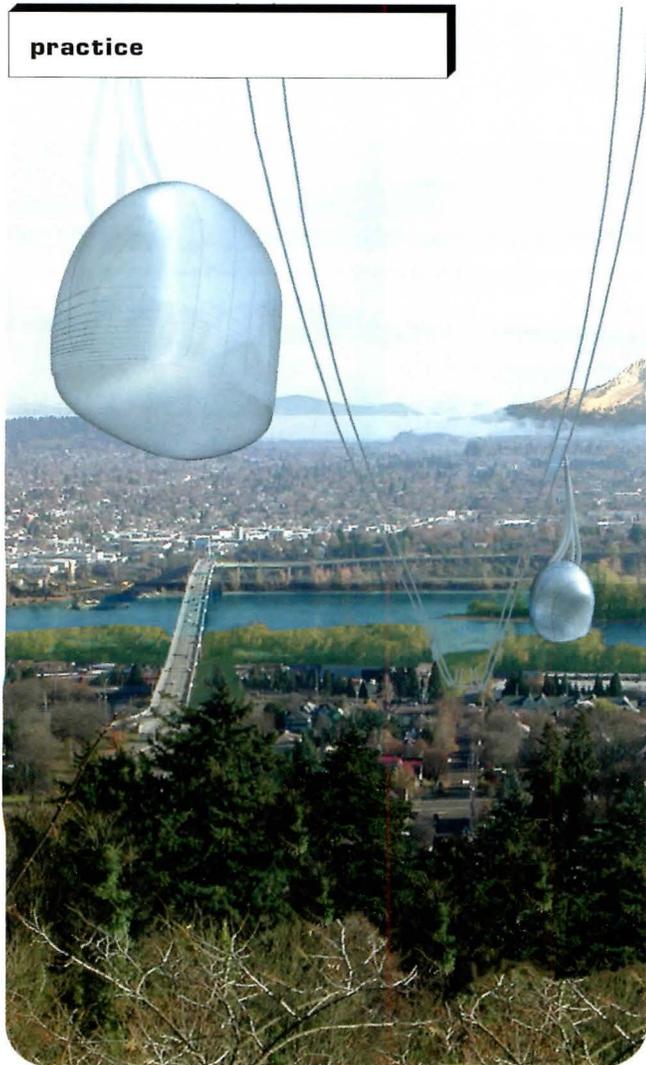
Deam was correct. According to Airstream, which is based in Jackson Center, Ohio, the International CCD is its best seller, with three new models added to the line last summer. "It was simply a mat-

ter of bringing the interiors in line with the exterior, which was modern and sleek," says Deam, adding that, "the old interiors looked like seventies mountain cabins." The International CCD line couldn't be farther from the lodge look: The new interior has an abundance of curves and smooth surfaces (many of them laminated, of course) and reveals the camper's structure and aluminum shell. Peeling away the old interior allowed the ceiling to be a few inches higher, an important gain in a compact space. "We thought a lot about how people will move through [the trailers], about the experience inside, so we tried to open them up as much as possible within the confines of the shell," he says. Deam made the interiors so appealing that some International CCDs are even used as guesthouses and pool pavilions. "People think of it as a mobile piece of architecture," says Deam.

### IN THE AIR

New York City-based firm Keenen/Riley also used a pared-down approach to design the interior of a 16-seat Gulfstream V airplane for a businessman and his family in 2001. "We wanted to reveal the [cross] section of the fuselage, so we raised the ceiling to allow the roundness to show," says John Keenen, principal designer on the project. To echo this curved form, Keenen stripped the oval windows of their rectangular frames, giving them a portholelike appearance. But there were serious limitations to the architect's design license. "Working on airplanes is all about safety and weight," says Keenen, who had to work to Federal Aviation Authority (FAA) standards. "When you are designing for passengers on long flights," he says, "tiny details make a huge difference in terms of the quality of the experience." Keenen/Riley altered the cushions of the plane's existing, FAA-compliant seat frames, designed fabrics and carpeting, and even customized drinking

practice



A new tramway scheme for Portland, Oregon, calls for a 185-foot wood and steel mast (top, right) and, in an effort to minimize the project's visual impact, two glass "bubble" tram cars (above, left), both by Angelil Graham Pfenninger Scholl. Visual impact is more overt in the private plane interior by architect John Keenen of New York City-based Keenen/Riley (above, right).

glasses to fit into standard cupholders. The firm also refitted the interior with a galley kitchen, a small meeting area, and a private lounge that converts into a bedroom complete with a full bathroom.

Angelik Graham Pfenninger Scholl (AGPS), winner of a 2003 invited competition for new tramway stations and cars in Portland, Oregon, didn't have the FAA to contend with, but the firm did face a community actively engaged in issues of public architecture and urbanism. For principal Sarah Graham, the challenge was in knowing when to follow and when to ignore the competition brief established by the city.

When completed in 2006, the tramway—with two terminals, a central support stanchion, and two cars—will run above a neighborhood of Victorian houses, connecting a hillside university hospital with the South Waterfront District. "Portland is taking the unique approach of using quality design to sell an infrastructure project to its residents," says Graham. "I went to public meetings and heard people saying, 'I want you to make this disappear.'" These comments ran counter to the city's belief that a dramatic design would help sell residents on the project. The tramway does not perform any Houdini tricks, but the AGPS scheme does emphasize mini-

malism over monumentality, and uses local timber and stone in combination with tensile steel to create what Graham calls a "forward-looking, indigenous" design. The one-story lower terminal will have a vegetated roof, making it "of the earth," as she describes it, while the slender upper terminal, located some 14 stories higher on Marquam Hill, will have glass façades and photovoltaic panels, making it "of the air." Moving between the two are spherical, steel-and-glass "bubble" tramcars. Graham, whose firm collaborated with Arup on the tramway, believes that this modern, contextual approach makes the design more sensitive to its site and, therefore, a better and less obtrusive neighbor.

Like Deam's and Keenen's work, Graham's project offers an elegant, minimalist approach to structure and function. Their designs celebrate the technology used to move people: For Deam and Keenen, this meant alleviating the claustrophobic qualities associated with travel; for Graham, it lay in pleasing those walking on the streets below the tramcars as much as riders inside them.

**Alan G. Brake writes for a variety of design publications including *Azure*, *Interior Design*, and *Metropolis*.**

LOWER RIGHT: PETER ANDREW/ISTO

# DENSE DEBATE

An East Coast conference sparks national dialogue on high-density urbanism. by James McCown

"The way is up," wrote essayist E.B. White in *Here Is New York*, a 1949 paean to Gotham and its skyscrapers. In the five decades since, however, the way for most Americans has been out, out, and farther out. With suburban sprawl having made its way into the popular lexicon, an early autumn conference in Boston, sponsored by the Boston Society of Architects (BSA), was billed as the first-ever symposium on a subject at the very heart of the debates surrounding sprawl, New Urbanism, and transit-oriented developments (TODs): density.

The issue of promoting density in urban design is highly contentious. Some architects and planners envision dense, mixed-use developments as a way to recapture a sense of community, sharply reduce encroachment into rural areas, and foster harmony among racial and socioeconomic groups. Others feel just as passionately that the limitless horizons of growth, the freedom provided by the automobile, and the much-maligned strip malls and McMansions are nothing less than the expansive American spirit writ large in steel, glass, and concrete. To them, "mandated density" is just another in a long list of discredited social-engineering initiatives.

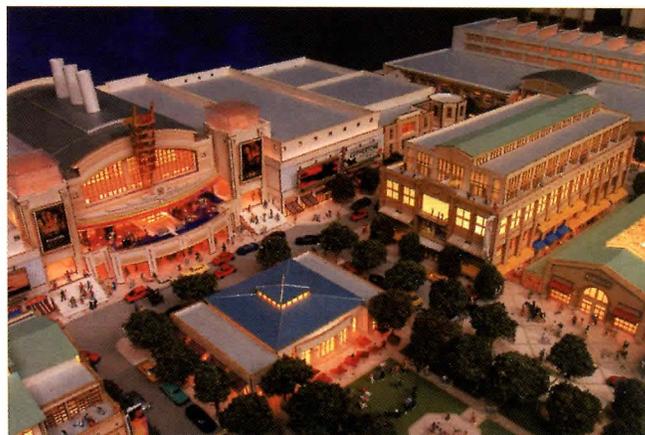
With 170 architects and planners in attendance from around the country, the Boston meeting felt like a religious revival of sorts, with the faithful exhorted to go forth and spread the message in the hinterlands. "We need a new American dream, and density needs to be a part of it," said outgoing BSA president David Dixon in opening the series of symposia and exhibits. A number of subsequent speakers, however, stopped well short of suggesting that density would be another battle in the nation's culture wars.

"I don't think this is a Red America/Blue America thing," said Bruce Katz, director of the Center on Urban and Metropolitan Policy at the Brookings Institution, Washington, D.C. "In most parts of the United States, the addition of higher-density, transit-oriented developments introduces a new choice. In places like Atlanta and Dallas, you have to offer that urban choice in order to stay competitive and attract talented, educated people to your region."

## STATISTICALLY SIGNIFICANT

As was repeated often at the conference, only roughly 3 percent of the 2.3 billion acres in the 50 states is urban or suburban. If that sounds the opposite of dense, Philadelphia-based urban planner and author of *The Fractured Metropolis*, Jonathan Barnett, cautions that at present land-development and population-growth rates, the figure will double to 6 percent by 2050. "Compare that to Japan's current rate of being 4-percent urbanized; everyone considers that an extremely densely populated country," Barnett says. "If the U.S. population grows by 40 percent over the next half-century, we'll be using a lot of land per person."

Planners and developers highlight the somewhat perverse nature of high-density development in the United States in 2003. For example, despite its image as the epitome of suburban sprawl, greater Los Angeles is the densest metropolitan area in the United States, at



Dense enough for you? Atlanta's transit-oriented megaproject, Atlantic Station, mixes high density with high-end entertainment.

5,725 people per square mile, according to the Texas Transportation Institute at Texas A&M University. Additionally, in suburban-oriented places like Atlanta and Dallas, TODs—mixed-use, high-density centers built largely around mass-transit stations—are benefiting from their novelty factor, some enjoying popularity that surpasses even rosy projections. By sharp contrast, the seemingly enlightened high-density designs being introduced in traditionally urban places such as Boston's South End and Chicago's West Loop are being greeted with neighborhood resistance, mainly from residents who immediately equate higher density with more automobiles.

In Atlanta, where regional shopping malls and suburban office parks stretch almost endlessly across the horizon, Atlantic Station is a large mixed-use, high-density project under construction near the city's center, designed in part by Baltimore's Development Design Group. Located on the 138-acre site of an old steel mill just northwest of Atlanta's downtown, the site will be serviced by the region's Metropolitan Atlanta Rapid Transit Authority (MARTA) rail system. Over the next decade it will grow to more than 20 million square feet of residential, office, and retail space.

"The demand is simply much higher than we expected," says Jim Jacoby, chairman of Atlantic Station. The project's urban planner, Brian Leary, says that places like Atlanta become starved for the city sophistication put forth in pop culture. "It's the chic of urban living, like in *Friends* and *Seinfeld*," Leary notes. "After all, they don't call the show *Sex and the Suburbs*."

The city of Plano, Texas, amidst the sprawling suburbs north of Dallas, also sensed an unmet demand for urban living. So it formed a tax-increment-financing (TIF) district and teamed with private developers, Womack + Hampton Architects of Dallas, and Baltimore's RTKL to build Plano Transit Village, a 1,000-unit TOD linked to that region's Dallas Area Rapid Transit (DART) rail system. "It's a niche market in Texas, but the project has 95 percent occupancy,"

says Frank Turner, assistant city manager. "There has been hardly a hint of opposition" from city residents, he says.

Compare that to the reaction developer Roger Cassin got in Boston's South End, a gentrified neighborhood of 100-year-old townhouses. His Columbus Center project is to be built on a massive platform, essentially covering an expressway that divided the neighborhood decades ago. "We got booed down the first time," he recalls. "Now after two years, many concessions, and \$10 million, we're still six months away from starting construction," Cassin says. Not faring much better is Thrush Companies of Chicago, which is trying to build a 12-story, 400-unit dense development in the up-and-coming West Loop area, where industrial buildings have been slowly converted into lofts. The project is meeting with stiff community opposition. "It's a vocal minority," says the project's architect, David Brininstool of Chicago's Brininstool + Lynch, "and density is their biggest issue."

#### OF DENSITY AND SOCIAL DETERMINISM

While few speakers at the Boston event voiced contrarian views, some academics and practitioners express cautious misgivings about the density dogma pouring forth from the conference and elsewhere. One naysayer is Ivonne Audirac, associate professor of regional planning at Florida State University in Tallahassee. "We designers are trained to think that what we create can influence behavior," says Audirac. "Just as the modernists preached 'form follows function,' we now think that cultural and social relations follow form. But much of

this determinist approach has been discredited. Planners are starting to realize how complex the question is. We're dealing here with uniquely American cultural factors."

Kenneth J. Dueker, a former professor of urban studies at Portland State University in Portland, Oregon, is a "smart-growth" apostate in a city that has emerged as sort of a Jerusalem of that movement. "Density is something we can and should foster," Dueker says. "But mandating density often puts the zoning before the market. If the land values can't support the density, you shoot yourself in the foot. Developers will not be able to justify building and will go elsewhere." As to the contention that density reduces automobile use, Dueker counters: "Density will increase traffic faster than any corresponding pedestrian or transit use will reduce it." Nonetheless, he concedes, "The combination of upzoning and minimum density requirements are reducing land consumption by up to 40 percent."

The issue of tax and regulatory policies privileging one form of development over another was woven throughout the Boston conference. Katz, for example, insists that prodensity policies now in place—such as tax abatements—are still vastly overshadowed by ones that favor detached single-family homes and auto travel, such as federal highway programs.

"We are still subsidizing sprawl," says Katz.

**James McCown is a Boston-based writer who contributes frequently to *Architecture*, *Architecture Boston*, and *Metropolis*.**

Some of us can dig holes.

Others can't.



Our NEW overhead concealed closer gives you another option.

Not every door application lends itself to digging a hole for a floor closer. But what if you don't want to sacrifice aesthetics for functionality?

Rixson's NEW 70 Series overhead concealed closer does it all. With a centering arm, it's one of the most efficient closers on the market. One product fits many different sizes of doors, including those up to 350 lbs. And installation preparations are kept simple.

So quit digging for architectural hardware solutions. Let Rixson handle the hole thing. Circle 248 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

**RIXSON**

Rixson Specialty Door Controls  
1-800-777-2667  
[www.rixson.com](http://www.rixson.com)

engineered solutions

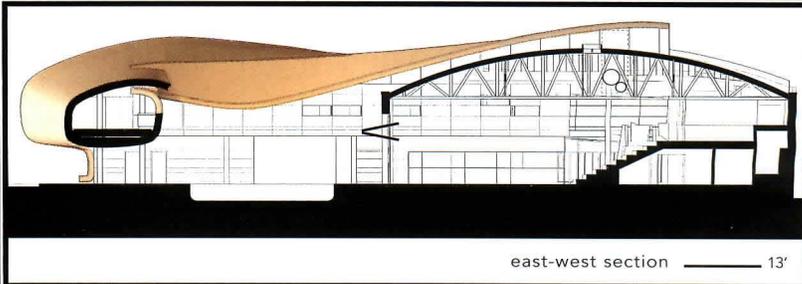
➔ **GRIFFIN ENRIGHT ARCHITECTS | VARIETY BOYS' AND GIRLS' CLUB | LOS ANGELES**

The Variety Boys' and Girls' Club in the Boyle Heights area of East Los Angeles has been offering after-school programs to 7- to 17-year-olds for more than 50 years. Located one block from the neighborhood's main thoroughfare, Cesar Chavez Avenue, the existing complex includes a swimming pool, a vacant lot, and a 1915 bow-truss building that has served the club since the 1940s. Local firm Griffin Enright Architects was commissioned to renovate the original building and expand it into a 19,500-square-foot structure housing arts and athletic facilities, a library, a media lab, dining and recreation spaces, and administration offices.

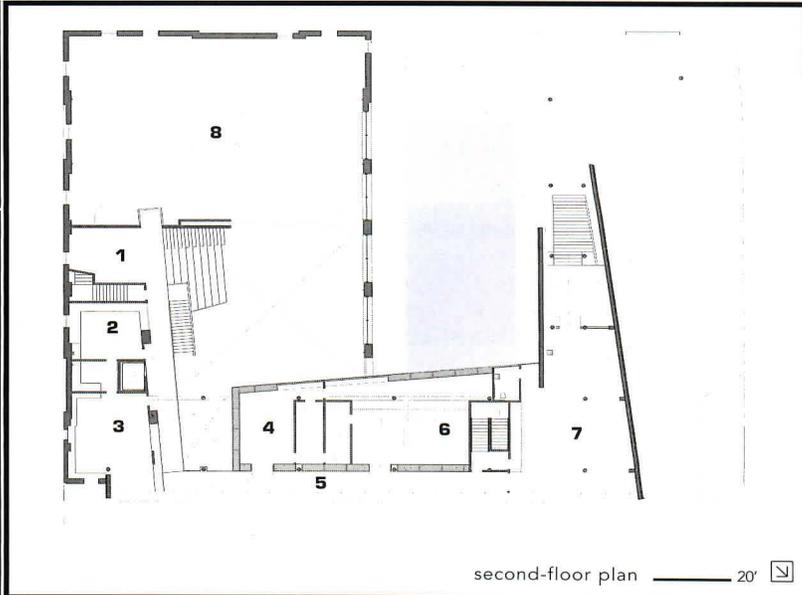
The client wanted to simultaneously honor the organization's history, increase its public presence, and update its identity. The

nonprofit group's staff also wanted to provide more services and improve supervision and interaction between *children and staff* members through better visibility and circulation. In order to restructure the flow of interior spaces, the architects gut the existing building but leave its shell intact, and use its curved top as inspiration for the addition's swooping sheet-metal-clad roof.

The addition overlaps with the existing building and partially encircles the swimming pool, creating a courtyard area protected from the street, while leaving part of the site open to the public. To maximize the amount of outdoor space for recreation and parking, the designers lift most of the indoor program to the second story, where the addition cantilevers over the main entrance. A glass façade addresses the street, and serves as a display case for the children's artwork, creating a vital street presence. The projected start date for construction is January 2005. **Anna Holtzman**



- |               |                          |
|---------------|--------------------------|
| 1 teen center | 5 display hall           |
| 2 media lab   | 6 arts-and-crafts center |
| 3 library     | 7 community room         |
| 4 shop        | 8 existing building      |

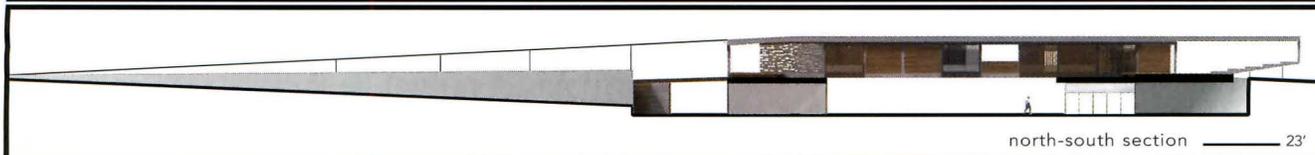


➔ **EIGHT INC. | MALAMA LEARNING CENTER | KAPOLEI, HAWAII**

To celebrate Hawaii's natural and cultural heritage through the performing and visual arts, a progressive public high school and the state chapter of The Nature Conservancy, a nonprofit preservation group, envisage a highly sustainable, 25,000-square-foot educational complex with studios, theaters, classrooms, and a conservatory. San Francisco- and Honolulu-based Eight Inc.'s winning proposal, to be built over the next three years at a cost of up to \$6 million, meets the unusual nonprofit-public partnership's desires for a building that possesses a "straightforward character," uses materials efficiently, and shows reverence for Hawaiian culture and for the natural qualities of the coastal Oahu site. To architecturally undergird the facility's role in encouraging nature conservancy, the designers extend the slope of the grade

with three engineered sod roofs featuring teaching gardens, which insulate and enclose classrooms below. The main entrance to the center runs perpendicular to the three long roofs, organized as a descending garden path that terminates in a grassy, terraced amphitheater. Along both sides of the entry axis are landscaped areas and entrances to the main buildings, as well as indoor and outdoor classrooms. The slatted-wood and glass structures, with linear accents of metal fascia and trim, reinforce the structure's metaphor—and the learning center's mission—of harmoniously bridging the natural and human-made spheres.

As a beneficiary of the recently discontinued New Public Works initiative of the National Endowment for the Arts, the open competition for the Malama Learning Center was designed to produce such stellar results. Jurors included community leaders; the University of Hawaii's architecture dean, W.H. Raymond Yeh; as well as Billie Tsien, Patricia Patkau, and Stanley Saitowitz. **C.C. Sullivan**



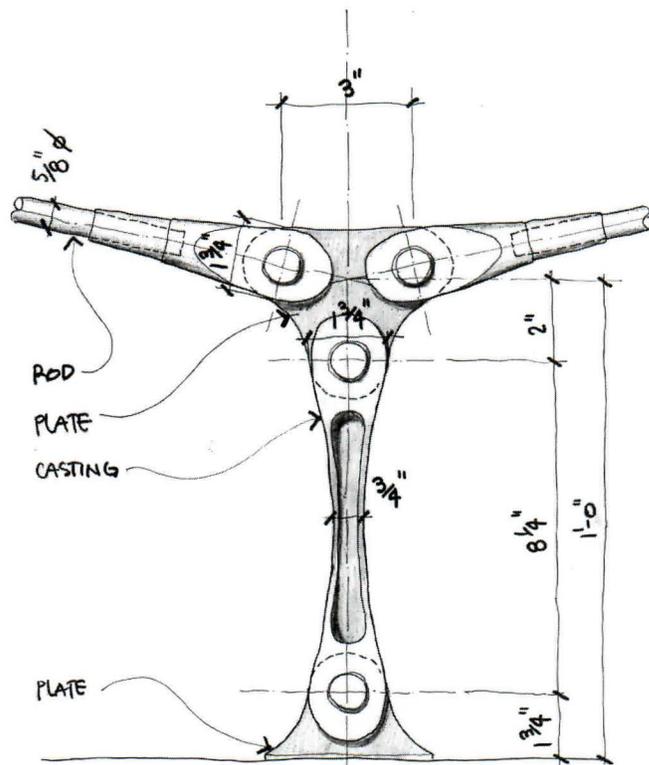
➔ **WEISS/MANFREDI ARCHITECTS | BARNARD NEXUS | NEW YORK CITY**

Barnard College, the women's liberal-arts school of Columbia University, has commissioned New York City-based Weiss/Manfredi Architects to design a new 110,000-square-foot multifunctional campus building called the "Nexus," the college's first new freestanding structure in 15 years. It replaces the 40-year-old McIntosh Student Center, designed by Vincent G. Kling & Associates, which is to be demolished in March 2005.

Sited on Broadway, the Nexus integrates a range of academic and social programs, including a multilevel library, a 900-seat event space, a café, and areas for study, meetings, seminars, and cultural events. The structure represents a major change for the low-profile campus, creating a dramatic public presence and views from the street to an existing interior lawn, which is currently concealed by trees and a monolithic concrete student center. The architects take as their focus the campus green—an oasis in the school's upper-Manhattan neighborhood—which they extend with both a stepped garden of indoor greenery on the building's east front, visible from the street, and with an outdoor, terraced lawn on the west side, at the interior of the campus. Firm principals Marion Weiss and Michael Manfredi wanted to create a building that was consistent with the college's existing architecture, but without resorting to historicism. To address this context, they continue the campus's masonry palette in their brick-paneled façade. Construction is slated to begin August 2005. **Anna Holtzman**



# CONNECT THE DOTS



Rem Koolhaas plots out his design of the McCormick Tribune Campus Center at Illinois Institute of Technology using student-worn paths that once ran across the former parking lot. Renzo Piano tracks the sun across the full-block site of his Nasher Sculpture Center, designing cast-aluminum sunscreens—and their support hardware (above)—to pour ambient northern Texas light through vaulted-glass gallery ceilings. To realize the three giant shells of his Jubilee Church, Richard Meier employs a system of post-tensioned precast-concrete blocks with a complex joint pattern of horizontal radial lines and vertical parallel lines.

In these projects, modern master designers, whose reputations sometimes outshine their oeuvre, outshine their reputations, producing tectonic schemes that go beyond mere formal imagery or one-liner gimmickry. Even the corrugated-metal-clad commuter-train tube that Koolhaas imposes upon the rectilinear sanctity of Mies van der Rohe's campus escapes easy dismissal, accepting the messiness of urban life and producing an architectural solution that dampens, but does not devalue, its effects.

Each project—a university building in Chicago, a cultural institution in Dallas, and a parish church in Rome—seamlessly connects structure to program and site. Each warrants study, and, like all significant buildings, a visit.



# THESE BOOTS ARE MADE

Dallas is the quintessential amorphous city, where towers and parking structures sit cheek-by-jowl with highways and byways. Sidewalks are moats around buildings, not pedestrian thoroughfares. Coffee bars are few and far between. The mall and the shopping center seem to be privileged above all else.

The city's 62-acre arts district—its slow gestation underway since the early 1980s—aims to chip away at the status quo, making a walkable precinct of culture and associated commerce. This is a tall order in any car-happy town, but the area's potential for success got a boost in October with the opening of the Nasher Sculpture Center, a museum and garden which happens to have a very good café. The arts district, just south of the submerged Woodall Rogers Freeway and intertwined with the city's commercial core, already holds Edward Larabee Barnes's Dallas Museum of Art (1983) and

I.M. Pei's Morton H. Meyerson Symphony Center (1989), among other institutions. And there are more high-profile projects in the works: a theater by Norman Foster, a performing arts center by Rem Koolhaas, and the expansion of an arts high school by Brad Cloepfil. For the moment though, it is the Nasher that holds the greatest promise of activating this cultural corridor.

## URBAN PHILANTHROPY

The name on the door belongs to Raymond Nasher, a real estate developer with a passion for three-dimensional art and a strong desire to share his world-class collection—50 years in the making—with the public. Long before his sculpture center came to fruition, many of the pieces collected by the developer and his late wife Patsy were on display at his company's NorthPark Center, one of



# FOR WALKING

DALLAS GETS A DOSE OF URBANISM FROM  
A SCULPTURE MUSEUM AND ITS GARDEN.  
BY ABBY BUSSEL | PHOTOGRAPHS BY ADAM FRIEDBERG

the nation's first indoor malls when it opened in 1965. So the man who brought the mall to Dallas is now showing the city how to put its boots back on the ground. And he's put his money where his mouth is, buying the land (formerly a parking lot) and funding the design and construction of this 55,000-square-foot project that sits on a full downtown block.

The Nasher Foundation, which oversees the 300-piece collection, hired Renzo Piano Building Workshop to design its museum and landscape architect Peter Walker to lay out a 1.5-acre sculpture garden for large-scale installations such as Richard Serra's 50-ton *My Curves Are Not Mad*. The building parti is nothing short of pedestrian. And that's a good thing. Five 112-foot-long pavilions, defined by six travertine-clad sidewalls, sit perpendicular to Flora Street, where the main entrance is located. End walls are low-iron

glass, visually connecting the street through the serene pavilion interiors to the garden. In contrast to the outscaled acrobatics of the city's postmodern skyscrapers, Piano's design brings a human scale and a civic posture to ground level. One misstep here is in the travertine walls that surround three sides of the garden. Meant to enclose an oasis in the concrete desert, the walls have few openings, fostering more of a fortress feel than that of an Edenic respite. Blocking out the roads and parking lots and other visual noise is a necessity, but it may also undermine the ability to integrate this urban park with the other buildings planned for the arts district.

The single-story pavilions do, however, connect land and sky in a way few high-rises can. The pavilion roofs are curved glass vaults, supported by steel ribs and rods. Above these wall-to-wall skylights reside cast-aluminum sunscreens that funnel ambient northern light

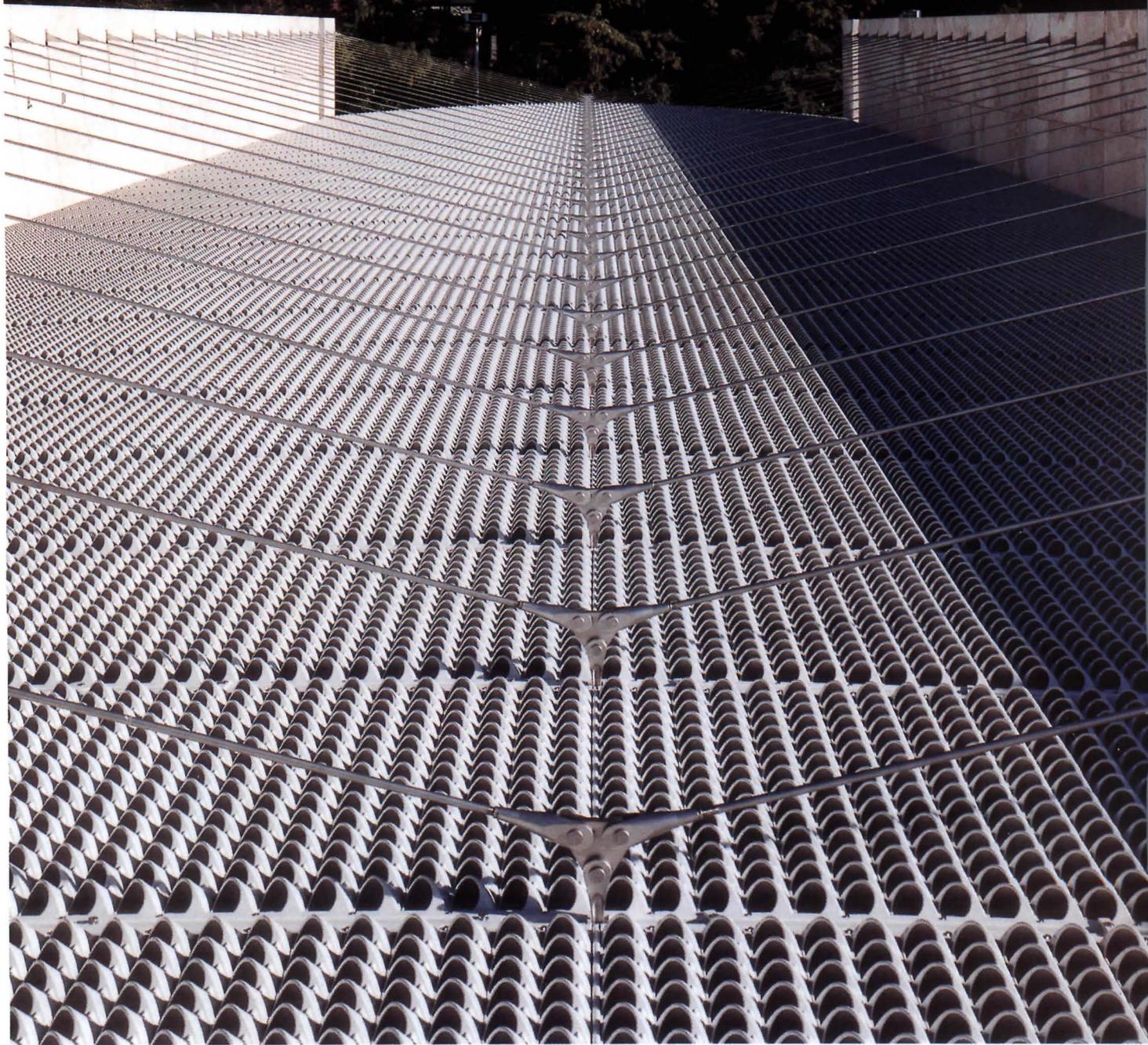


into the galleries (see "Protective Membrane," page 91). Beyond its pragmatic role, the sunscreen device, with its field of tiny hooded cones, serves as a kinetic sculpture, changing its pattern as the viewer moves beneath it. (Piano, of course, is well-schooled in the manifestations of Texas light, having engineered innovative rooftop filtering systems to tame the sun over Houston for the Menil Collection in 1986 and the Cy Twombly Pavilion in 1995.)

The multiple perspectives afforded by the sunscreens echo the way in which Nasher wants visitors to view his collection—in the round. This project is about seeing all sides of a work—and, perhaps, a city. The garden is a conducive, if imperfect venue for alighting on what he likes to refer to as "three-hundred-and-sixty views"

of each sculpture. Here, a linear landscape of allées, hedges, and plinths serves as an extension of the strong, simple geometry of the pavilions. Indeed, visitors are encouraged to walk on the grass, although the axial pathways seem to send the opposite message. And the green granite paving stones are a few shades too dark against the creamy travertine pavilions and garden walls. In time, however, the already substantial oak, elm, pine, and willow trees will mature into a robust microforest, and the prescriptive landscape design will likely feel less formal.

With few architectural patrons in this country outside the corporate world, Nasher's example should hold national interest not simply for his extraordinary collection—including works by Rodin,

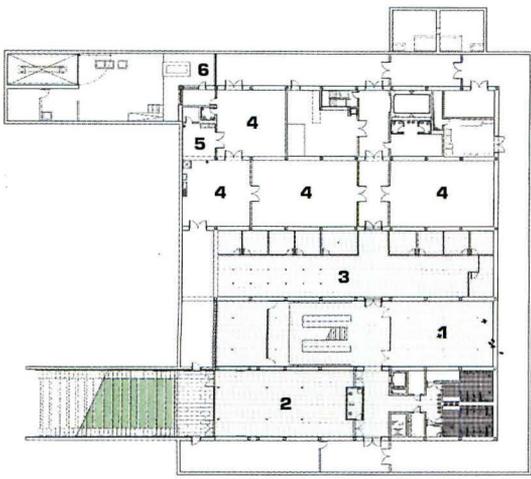


Picasso, Matisse, Giacometti, Miró, Moore, Kelly, and di Suvero, among others—but because he has made it clear that design matters, especially where it meets the street. He's also shown that when building in a city, modesty is as valuable as majesty, even in a state the size of Texas. ■■■

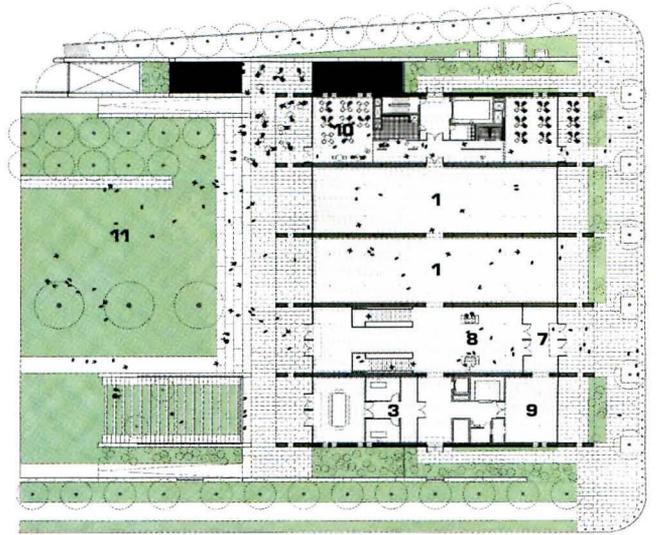
**Nasher Sculpture Center, Dallas, Texas**

**client** | The Nasher Foundation **architect** | Renzo Piano Building Workshop, Genoa, Italy—Renzo Piano (principal); Emanuela Baglietto (partner-in-charge); Brett Terpeluk, Shunji Ishida (senior partners); Bettina Bauer, Leonardo Pelleriti, Susanna Scarabicchi (partners); Andreas

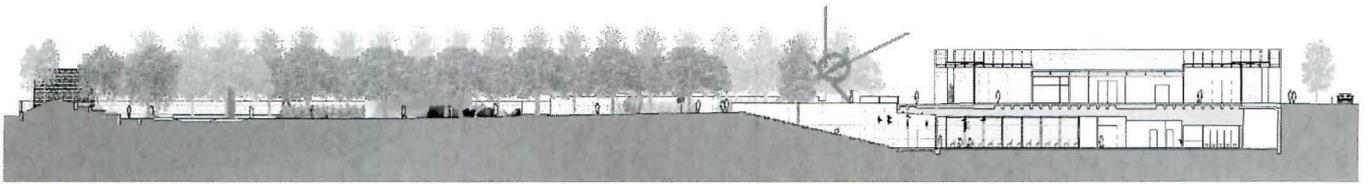
Symietz, Elisabetta Trezzani, Giovanna Langasco (CAD); Yoshihito Kashiwagi, Fausto Cappellini, Stefano Rossi (models) **consulting architects** | Beck Architecture; Interloop A/D **engineers** | Ove Arup & Partners International (structural, M/E/P); Datum Engineer (associate structural engineer); Arjo Engineers (associate M/E/P); Halff Associates (civil) **consultants** | Peter Walker & Partners (landscape architecture); Ove Arup & Partners (lighting); Horton Lees Brogden Lighting Design (outdoor lighting); 2X4 (graphics) specialty contractors/suppliers | AEC (ceiling system); Archiglaze (glass fabrication); Haley-Greer (glass installation); Moore Fabricators (light channels/diffusers); Supreme Systems (roofing/waterproofing); Dee Brown (stone) **general contractor** | HC Beck **area** | 55,000 square feet (building); 62,000 square feet (garden) **cost** | \$70 million



lower-level plan



ground-level plan — 25' 

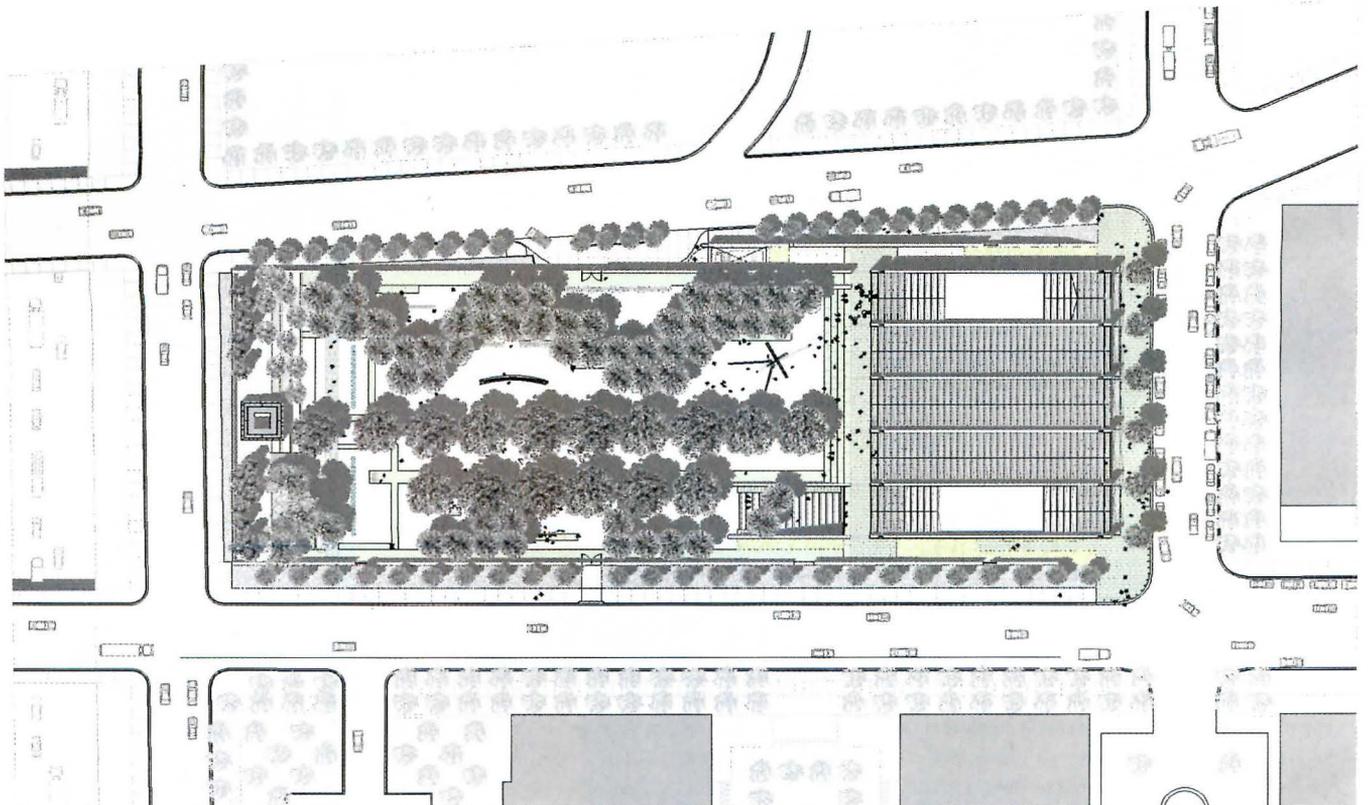


east-west section — 25'

- 1 gallery
- 2 auditorium
- 3 offices
- 4 storage

- 5 workshop
- 6 loading dock
- 7 entrance
- 8 ticket sales

- 9 gift shop
- 10 café
- 11 garden
- 12 amphitheater



site plan — 45' 

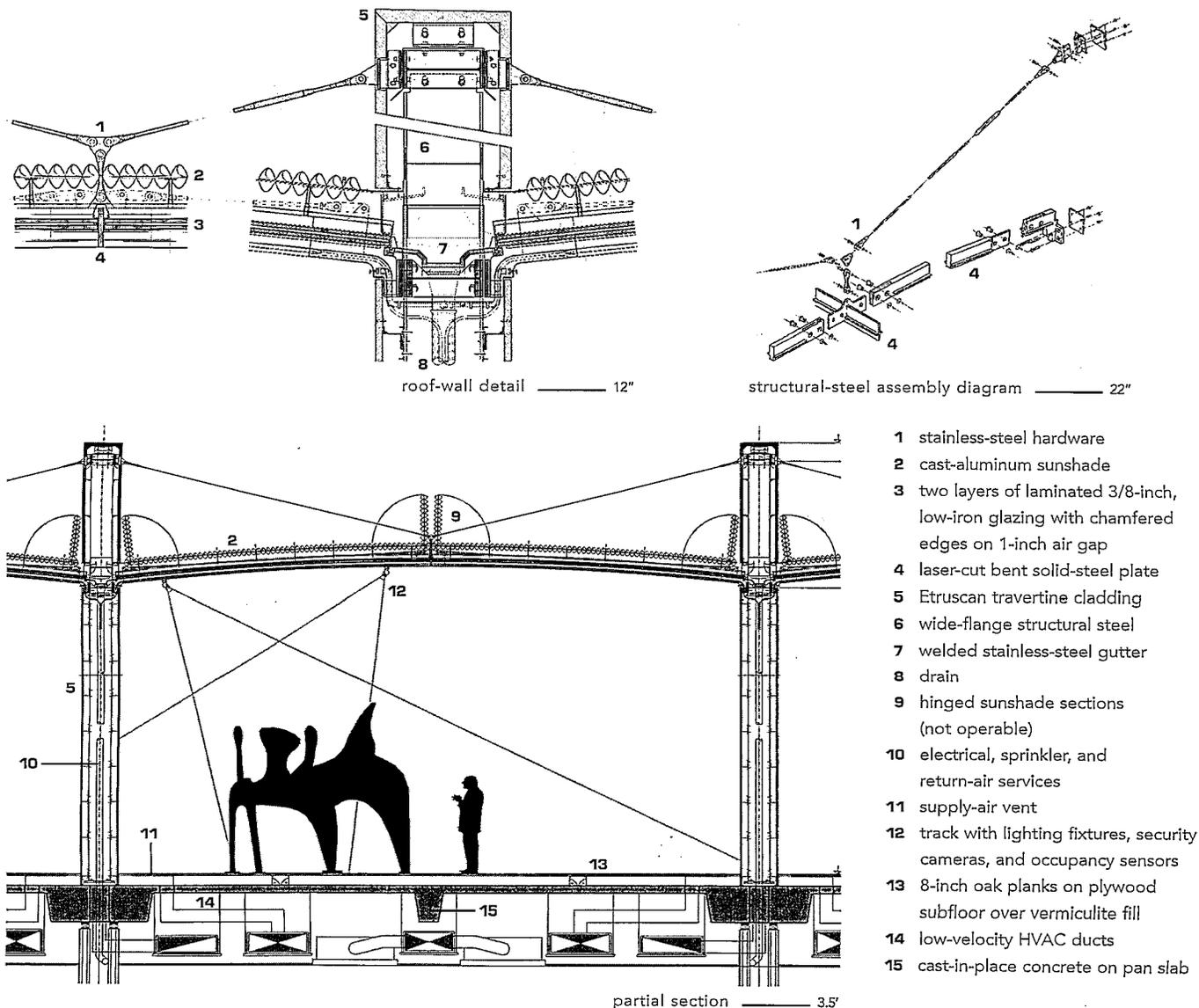
## PROTECTIVE MEMBRANE

Five parallel pavilions, divided by long walls of rusticated travertine and terminating in delicate glass partitions, define the Nasher Sculpture Center. On the street, passersby have a view of the sculpture gardens within. Between observer and observed, however, is something less noticeable: Interior spaces appear open to the elements, but they are captured and rigorously controlled, with steady levels of diffuse natural lighting as well as temperature and humidity.

Against all conventions, the roof is glass. Architect Renzo Piano hangs shallow barrel vaults of 4-foot-by-16-foot low-iron glass panels 17 feet above the galleries from stainless-steel tendons anchored to structural steel behind the Etruscan marble. Then he defies nature: An unusual cast-aluminum sunshade with small cone-shaped apertures shields most of the glass arcs from harsh ultraviolet rays; heat-trace elements below the glass prevent condensation; and rainfall is diverted into ample stainless-steel gutters in the wall assemblies. Cameras and smoke detectors—camouflaged as track lighting—protect against less natural threats.

The novel sunscreens are highly visible and, with the travertine, define the building's character. Assembled from hundreds of 4-foot-square sections, the shading element rides 6 inches above the glass, its 3-inch openings facing due north to admit only reflected and diffracted illumination. Hand-cast stainless-steel hardware and tension rods reach through the sunscreens to laser-cut steel plates and gently curving ribs. The resulting membrane protects the museum while admitting the highest possible levels of ambient northern light.

In building this roof, Piano displays a predilection for his native Italian craft and engineering. Of the 18 subcontractors coordinated to construct the roof assemblies, several were imported: The "extra-white" glass systems are by Padua-based Sunglass; Bergamo's Gipponi provided the laser-cut structural steel; and the coup de grace, the sunscreen, is the handiwork of Bologna's shop La Societa Sider. **C.C. Sullivan**



- 1 stainless-steel hardware
- 2 cast-aluminum sunshade
- 3 two layers of laminated 3/8-inch, low-iron glazing with chamfered edges on 1-inch air gap
- 4 laser-cut bent solid-steel plate
- 5 Etruscan travertine cladding
- 6 wide-flange structural steel
- 7 welded stainless-steel gutter
- 8 drain
- 9 hinged sunshade sections (not operable)
- 10 electrical, sprinkler, and return-air services
- 11 supply-air vent
- 12 track with lighting fixtures, security cameras, and occupancy sensors
- 13 8-inch oak planks on plywood subfloor over vermiculite fill
- 14 low-velocity HVAC ducts
- 15 cast-in-place concrete on pan slab



The Nasher's interior walls are clad with 2-inch-thick slabs of travertine, which have been honed to remove the rough outer layers of the stone (above), while exterior walls are coarse and pitted for a weathered finish. Garden and building meet at an indoor-outdoor amphitheater used for both public programs and private events (below).





## From Rodin to Calder: Masterworks of Modern Sculpture from the Nasher Collection

Through January 2004

From Rodin to Calder: Masterworks of Modern Sculpture from the Nasher Collection is the largest exhibition for the major galleries of the Nasher Sculpture Center. It highlights the rich scope of the Nasher Collection in early modern sculpture and also the beautifully harmonious environment for the display of sculpture that is evident in every aspect of the building's design. The more than 20 different artists, including primarily sculptors but also a selection of painters, paired with other works by the same artists.

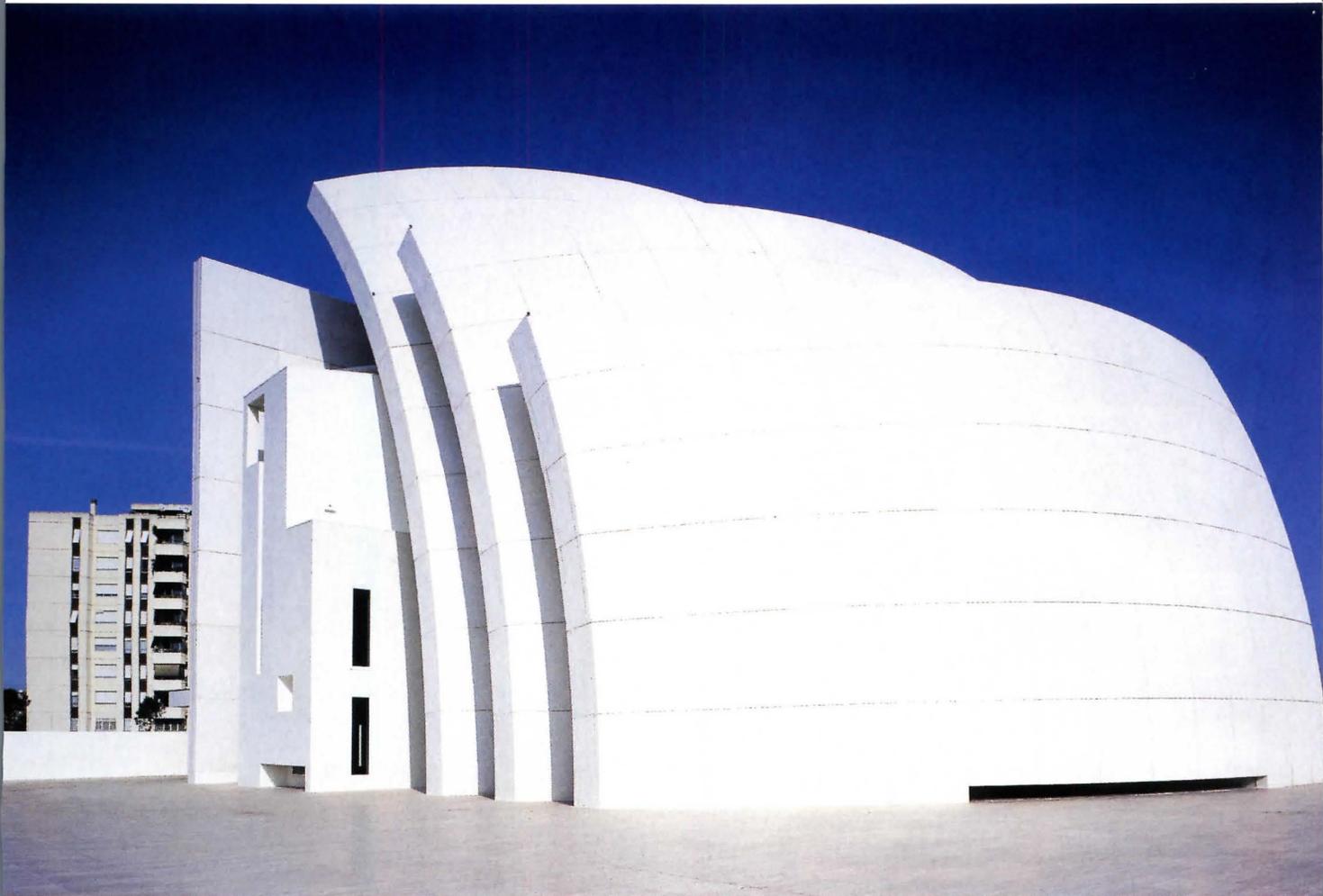
Patsy and Raymond Nasher began collecting sculpture seriously in the mid-1960s. Early purchases of works by such masters as Joan Miró, Henry Moore, Barbara Hepworth, and Alexander Calder set a high standard of excellence for subsequent acquisitions in the fields of both modern and contemporary art. By the mid-1980s, the collection had reached a size and importance that began to attract international attention, and a traveling exhibition of key works organized by the Dallas Museum of Art toured from Dallas to Washington, D.C., Madrid, Florence, and Tel Aviv. A later tour traveled to San Francisco and New York. Gradually, Raymond and Patsy Nasher began to dream of turning their private passion into a public treasure. Patsy passed away in 1988, but her spirit lives on in the new Nasher Sculpture Center, which represents the realization of that shared dream.

Today the collection numbers over 160 sculptures, the most selective from which will rotate through the Nasher Sculpture Center along with other special exhibitions. The current show draws many of the key inventive forces that shaped the history of modern sculpture, from the visionary futurists of Auguste Rodin through such dynamic movements as Cubism, Constructivism, and Surrealism, to the poster constructions of Calder and the formalist masterpieces of David Smith. Particularly notable is the extensive representation of such artists as Pablo Picasso, Henri Matisse, Alberto Giacometti, and David Smith, whose multiple talents provide an overview of each sculptor's historical significance. With this exhibition, the Nasher Sculpture Center offers a true celebration of the creative, emerging spirit of modern sculpture as it diverse formal and thematic investigations.

Steven A. Nash  
Director

Natural light is even and soft in the galleries, filtered through the vaulted glass ceilings and sunscreen apertures above them. Works on paper and other light-sensitive pieces of the Nasher Foundation's collection are displayed in a lower-level gallery space, opposite the main staircase (below).





# WHEN IN ROME

RICHARD MEIER HELPS THE VATICAN CELEBRATE THE MILLENNIUM.

BY PAUL BENNETT | PHOTOGRAPHS BY LUIGI FILETICI

In the early 1990s the archdiocese of Rome realized something at once shocking and embarrassing: Here, in the seat of the Catholic religion, more than half a million worshippers lived in communities without a parish church, many of them in impoverished areas at the city's edge. In response, the Vatican embarked on an ambitious building program: 50 churches by the start of the millennium.

This year, the city inaugurated Richard Meier's competition-winning design for La Chiesa del Dio Padre Misericordioso, or the Church of God Our Merciful Father—also known as Dives Misericordioso and as the Jubilee Church. "We wanted to draw attention to the [Catholic] church's investment in its home turf," explained Monsignor Luigi Moretti, a spokesman for the archdiocese, at a press conference for the unveiling of the building. "We decided to use architecture as a way to actively promote this idea."

Standing between two 1970s-era housing projects in Tor Tre Teste, a neighborhood on the city's eastern fringe, Dives Misericordioso appears like a shimmering white art object amid Rome's peripheral sprawl. Forming the most salient feature of the building are three skyward-reaching concrete shells, counterbalanced by a rectangular mass that houses the building's secular components, such as offices and meeting rooms. With the sanctuary at the intersection of these polar geometries, the symbolism is clear: God is liminal, existing at a threshold between extremes.

As with all of Meier's buildings, the church is clad completely in white, a noncolor summation of the colors of the spectrum that creates a resonant canvas for the architect's manipulation of light and space. Part of the effect is created by the use of different tones of white. The concrete shells are of a patented mixture developed by manufacturer Italcementi that, when exposed to sunlight, is self-cleaning due to photocatalytic particles that oxidize atmospheric pollutants. Meier used Tivoli travertine throughout the sanctuary: Stone cut with the grain for the floor and cut against the grain for the walls creates a dialogue between the material treatments, as well as between the church and its geological context. (Tivoli is only 10 miles away.)

### STRUCTURING SHELLS

The shells themselves are an engineering marvel. Hovering seemingly unsupported above the rectangular part of the building, they comprise post-tensioned precast blocks in the form of partial concentric spheres (see "New Twist on Thin Shells," page 97). "Nothing like this had ever been done," remarks Meier. "Each shell is literally freestanding and cantilevered from the ground." He adds that the machine developed by Italcementi engineer Genarro Guala to place the pieces and then tension them "was itself a work of art."

This high-wire act of shell design and engineering is, in part, the reason that Meier's "millennium church" was the last to be completed, nearly four years after the Jubilee. There is also the fact that the Catholic church, beset around the world by problems including the recent scandals in the United States, has had to tighten the reins on many of its ambitions. In the middle of the project, for example, the archdiocese put out a call to contractors and suppliers to make in-kind donations so that the church could be completed.

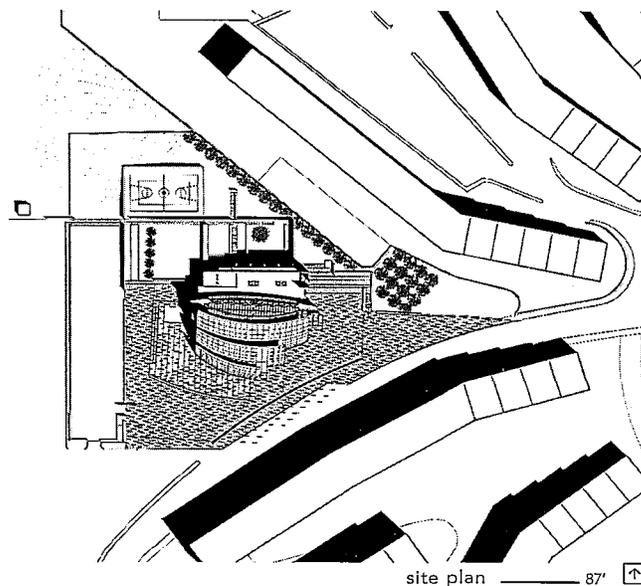
Meier shrugs off any criticism of the extended timeline. "I think of Santa Maria in Cosmedin, which, if I remember correctly, has a seventh-century bell tower, a twelfth-century nave, and a sixteenth-century interior," he says, referring to a well-known medieval church near the Tiber River in the center of Rome. "This is the way that churches have developed in Rome. I think it has taken us a very short time to make this one."

### MAKING HISTORY

Designing a church in Rome places Meier in elite company, along with Raphael and Michelangelo. The American modernist feels a particular affinity for the work of Francesco Borromini, and specifically to the Baroque architect's chapel Sant'Ivo alla Sapienza located inside the confines of the old Rome University. Both architects share an interest in overt symbolism and theatricality. As well, the way Sant'Ivo's ornate and curvilinear form seems to explode from within the confines of Giacomo della Porta's subdued rectilinear Palazzo Sapienza is almost perfectly echoed by Dives Misericordioso's dazzling relationship to its context.

But it is Borromini's treatment of light and space that attracts Meier most. "The best churches in Rome have a quality of light that you experience in Sant'Ivo," says the architect, who briefly resided at the American Academy in Rome in the 1970s. "You walk in and you can't help it, but your head is drawn up."

Some suggest that the church might break too dramatically with tradition, however. Cinzia Abbate, who teaches architectural histo-

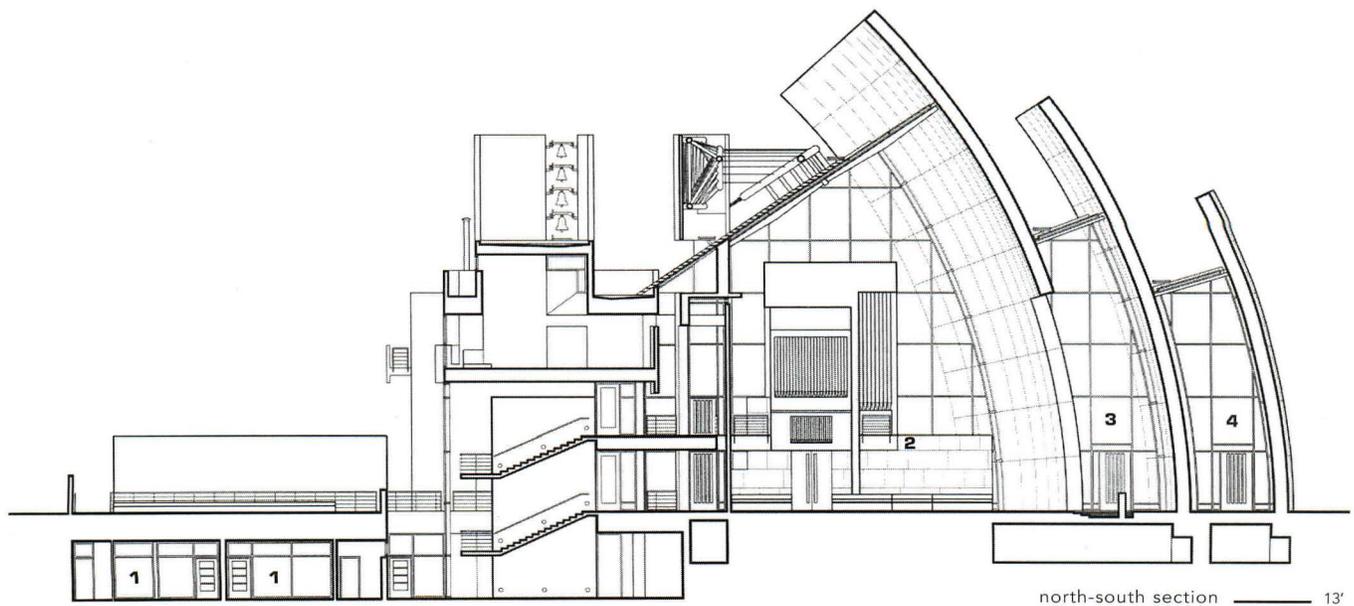


ry at Rensselaer Polytechnic Institute's Rome program, for example, says, "We are used to light in churches, but it's always more subtle. This one has an extraordinary amount that penetrates into every corner. The church is much more public, more transparent, than Rome is used to." In fact, accessibility was one of Meier's design mandates. The Vatican realized that the people it wanted to reach lived mostly in poor neighborhoods like Tor Tre Teste. Thus, from the beginning, the commission and competition briefs for the 50 churches required architects to accommodate varied programs that included community facilities such as meeting rooms, activity centers, and even spaces for theatrical productions in addition to the typical components (sanctuary, altar, chapel, bell tower). In this way, the Vatican hopes to modernize the idea of a parish church by expanding its mission with more secular agendas.

Just how open to the community the Jubilee will be remains a question, however. Because their new building stands out like a gleaming white target in this graffiti-covered terrain, parish leaders are concerned about vandalism. They requested that a large steel and concrete perimeter wall be erected around Meier's structure. Despite its usefulness, the wall could make the strongest architectural statement of all. ■■■



Meier's brilliantly white, three-shelled church sits on what was a barren lot between two housing projects on Rome's eastern fringe.



- |                |              |
|----------------|--------------|
| 1 meeting room | 3 baptistery |
| 2 nave         | 4 chapel     |

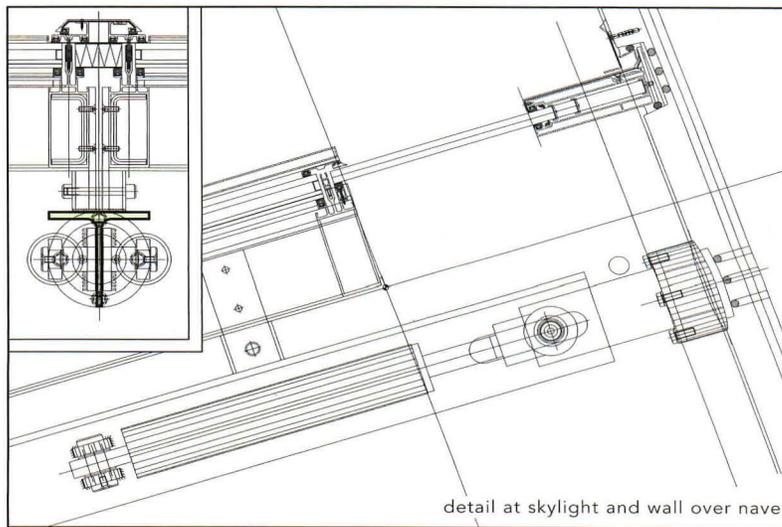
## NEW TWIST ON THIN SHELLS

To bathe Rome's latest church with heavenly light, Richard Meier shakes up a mature technology: thin-shell construction. Meier considered several structural approaches for three brilliantly white, freestanding segments of concentric spheres: Early on, ceramic-clad steel panels vied with poured-in-place or precast concrete alternatives, all to get a white stucco finish. But then came Italcementi, the Bergamo, Italy-based concrete manufacturer. Inspired as much by the idea of an exposed concrete structure as by Rome's history of stacked-stone cathedrals, the company's engineers suggested a novel system of post-tensioned precast-concrete blocks. The approach would precisely control the production of the complex curved-block geometries and deliver consistent, bright-white surfaces. (Pier Luigi Nervi used the photocatalytic, self-cleaning cement mix for one of Rome's Olympic venues, Palazzetto dello Sport, in 1958).

The suggestion was so appealing that Meier chose not only to expose the concrete, but also to articulate the joints. "We wanted to express each panel, yet minimize the joints and keep them tight for weatherproofing and for the expression of the shells," says Meier. The final joining pattern combines two disparate geometries: Horizontal radial lines from the three concentric spheres intersect parallel vertical lines derived from minor spheres. The ingenious scheme repeats vertically but not laterally, ideally complementing Italcementi's construction method: 365 blocks were hoisted and stacked by a gantry on rails and temporarily shored. Predrilled and fitted with steel bearing plates, the 8-ton, 30-inch-thick blocks were then post-tensioned under several tons of pressure.

Unlike other thin-shell concrete techniques invented in Europe, however, the high-tech stone stacker is unlikely to find much application elsewhere. While entertaining to watch, its rate of two blocks per day might be considered a bit sluggish by today's standards. **C.C. Sullivan**

Joints at skylights, glass ceilings, and window walls accommodate the independent movement of the relatively stiff shells, caused primarily by temperature effects on their southern exposures and also by wind and seismic loads (above). An arched steel truss, held back with a series of horizontal rods, supports the center of the glass roof over the main nave (top).



detail at skylight and wall over nave

Joints at skylights, glass ceilings, and window walls accommodate the independent movement of the relatively stiff shells, caused primarily by temperature effects on their southern exposures and also by wind and seismic loads (above). An arched steel truss, held back with a series of horizontal rods, supports the center of the glass roof over the main nave (top).

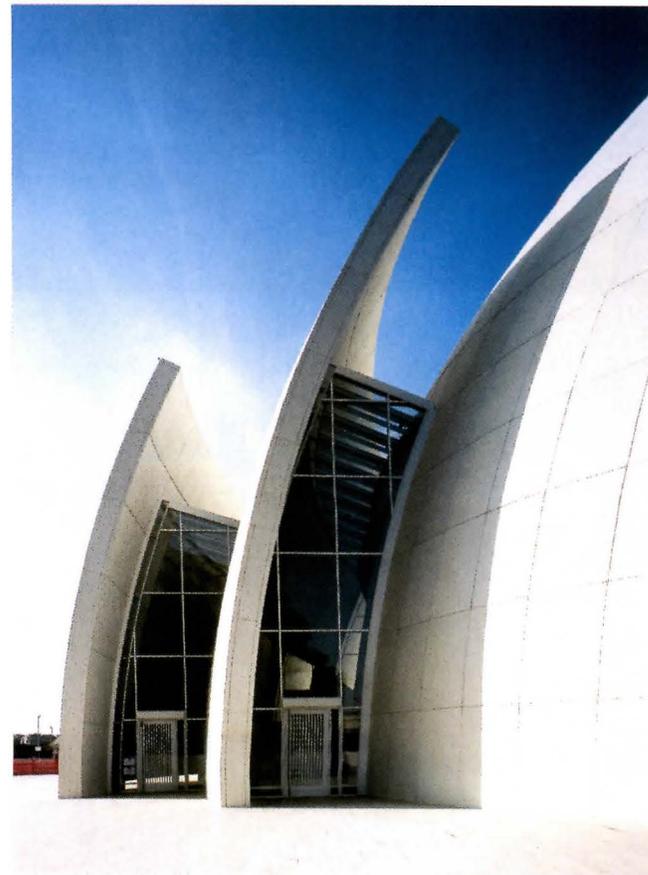
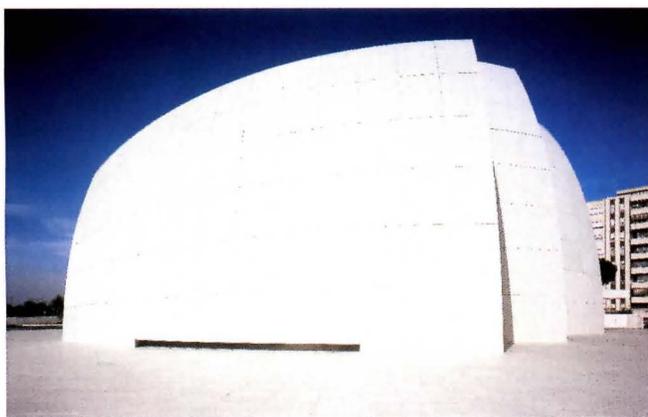


The nave is clad in travertine from nearby Tivoli. Along one side of the space, a slatted hemlock panel conceals a second-story walkway.





*Like many elements of the church, the pews were donated (above). A garden graces the north-west corner of the site, concealed by a wall along the building's northern façade (facing page, top left), while the south side presents an impenetrable, windowless face to an empty lot (facing page, middle). Inside, the shells accommodate a chapel area just south of the nave (facing page, top right). From the east, curtain walls separating the shells offer glimpses into the baptistery (facing page, bottom right).*

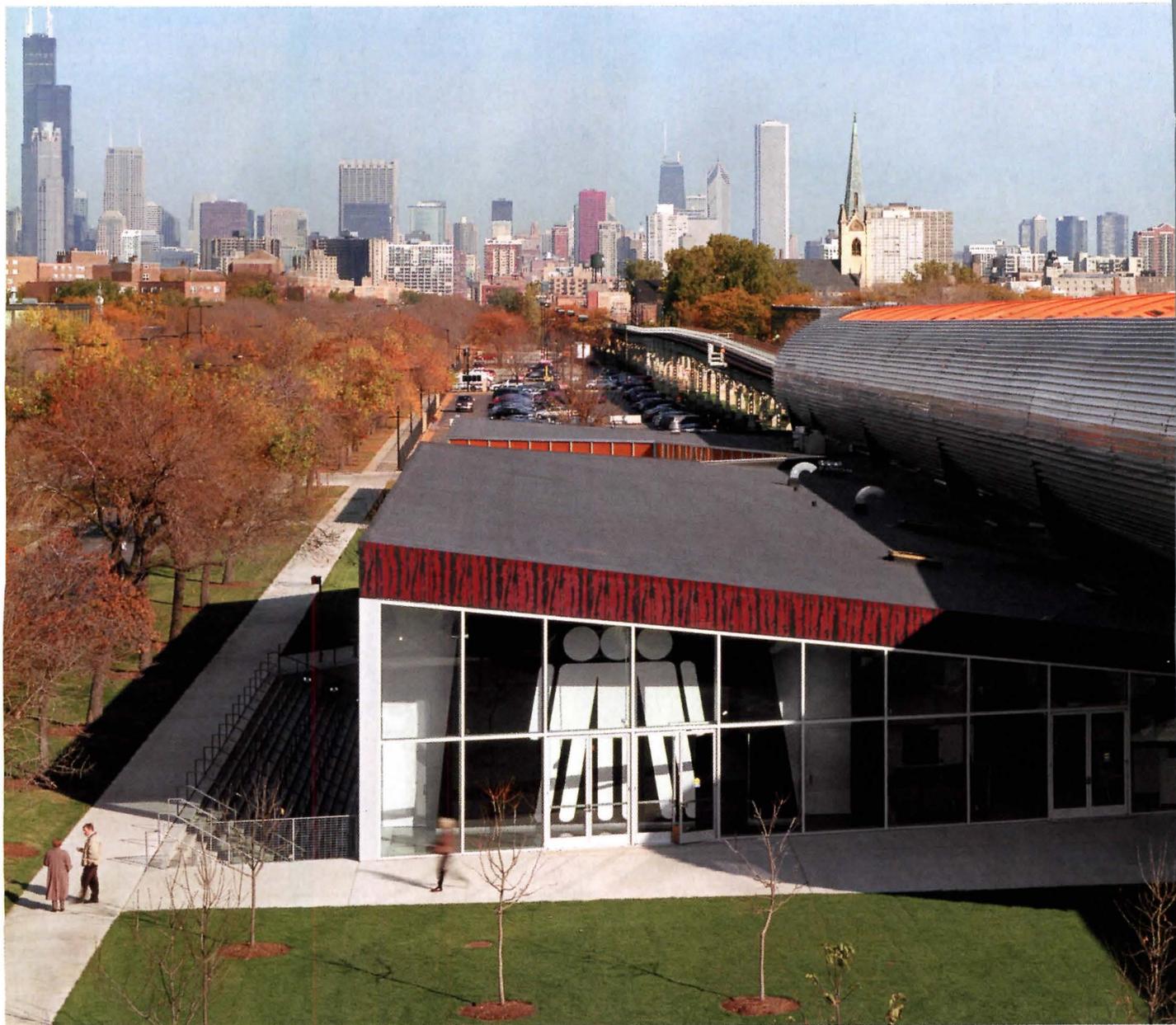


### Jubilee Church, Rome

**client** | Opera Romana per la Preservazione delle fede e la Provvista di Nuovo Chiese in Roma **architect** | Richard Meier & Partners, New York City—Richard Meier (principal); John Eisler, Matteo Pericoli, Alfonso D'Onofrio (design team); Nigel Ryan (Rome) **engineers** | Arup; Guy Nordenson and Associates (structural and M/E/P, design phase); Studio Tecnico Dottore Ingegnere Luigi Dell'Aquila (M/E/P, construction phase); Italcementi Gruppo (structural, construction phase) **director of works** | Ignazio Breccia Fratadocchi (general); Danilo Campagna (structure) **construction manager** | Studio Tecnici Michetti **contractor** | Lamaro Appalti Spa **consultants** | Enel Hidro (research and materials testing); Rita Pellegrine (seismic studies); Frener & Reifer (curtain wall and skylight); Fisher Marantz & Stone (lighting); Italcementi Gruppo (assembly, technical sponsor) **area** | 108,000 square feet **cost** | withheld

### Specifications

**curtain wall and skylight** | Schüco International (window frames); Pilkington (glass) **stone** | Carlo Mariotti & Figli **lighting** | Erco **stucco** | MAPEI **door hardware** | Valli & Valli **church pews** | Caloi Industria organ | Organaria Romana **acoustical project** | Bose Spa; Harmonia **precious metals** | Bulgari

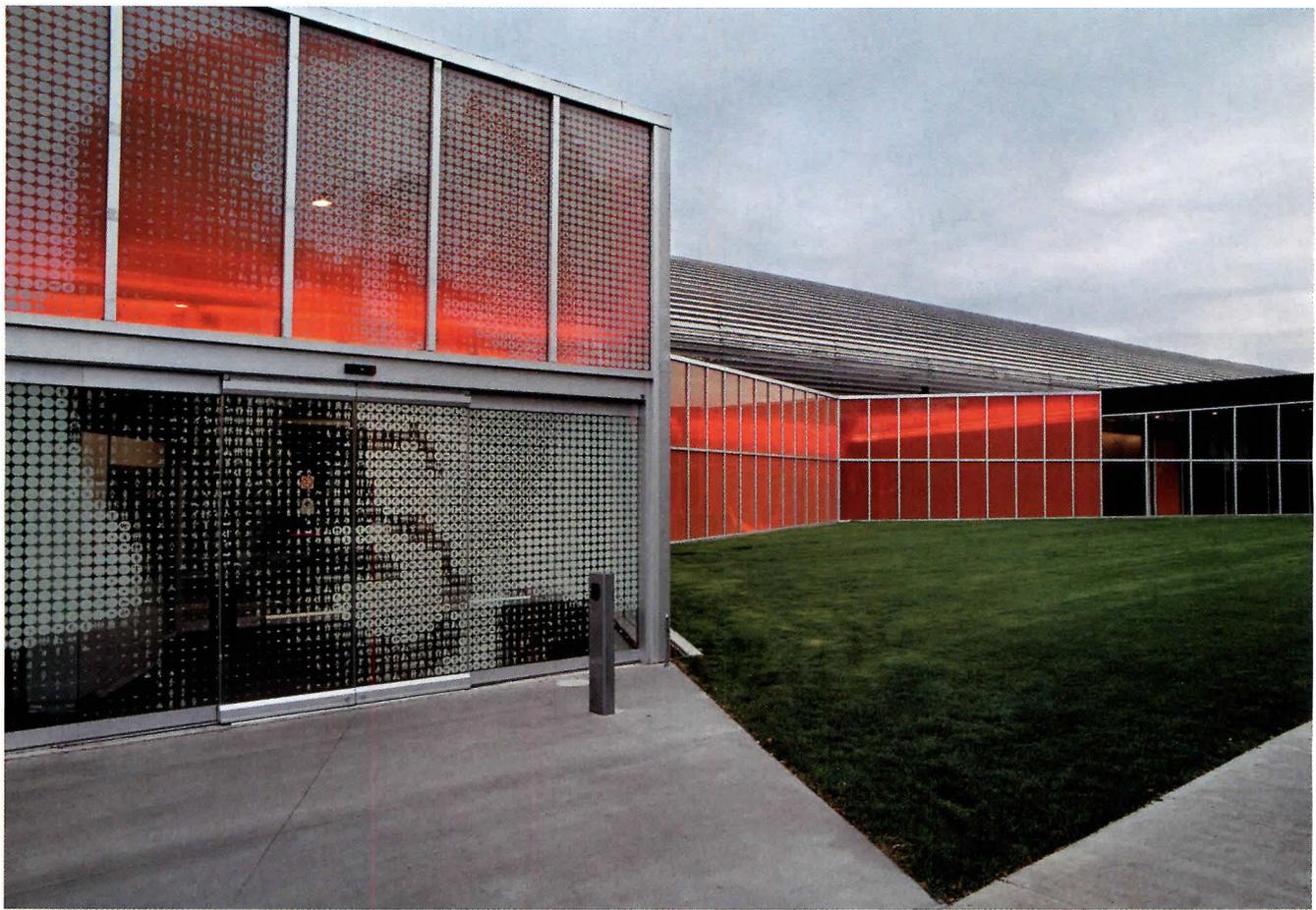


# TUNNEL OF LOVE

REM KOOLHAAS'S STUDENT CENTER AT THE ILLINOIS INSTITUTE OF TECHNOLOGY SHOWS ADMIRATION FOR THE UNIVERSITY'S PATRON SAINT, MIES VAN DER ROHE, BUT NO RESPECT.

BY NED CRAMER | PHOTOGRAPHS BY FLOTO + WARNER





A 20-foot-tall portrait of Mies van der Rohe marks the door to the campus welcome center (above); visitors and students enter the building through his mouth. A west-facing courtyard breaks the street wall but is sealed off from the building by a bright orange curtain wall.

In the nineteenth century, architects freely roamed the urban landscape of Chicago. Today, Frank Lloyd Wright, Louis Sullivan, and John Wellborn Root are gods, their crumbling temples guarded by tweed-robed preservationists. Thousands of buildings—even whole neighborhoods—have been landmarked or listed. The design guidelines that inevitably accompany such designations encourage imitation rather than innovation, as though contemporary architects can't be trusted to do the right thing. So, in the past two decades, prairie-style libraries, beaux-arts parks, and art deco skyscrapers have risen in the city, with little or no irony to redeem them.

Thankfully, this year may mark a turning point for Chicago architecture. Several practitioners of note are working on, or have completed, projects that offer progressive solutions to the challenge of designing in a historical context, from the renovation and expansion of the neoclassical Soldier Field by Wood + Zapata and Lohan Caprile Goettsch to a new University of Chicago business-school building designed by Rafael Viñoly for a site across the street from Wright's Robie House. The most fascinating and complex solution arrived in September, when the Illinois Institute of Technology (IIT) opened its McCormick Tribune Campus Center, designed by Rem Koolhaas. In much the same way that Italian mannerists played with the standards established by their Renaissance predecessors, Koolhaas toys with the fundamentals of Ludwig Mies van der Rohe's architecture—knowingly, carefully, and, best of all, irreverently. "I do not respect Mies," Koolhaas maintains. "I love Mies."

#### MEETING OF THE MINDS

A block-wide strip of parking bisected by an elevated commuter train line separates the core of the IIT academic campus—where Mies conducted his radical experiments in steel-frame construction and open planning during the 1940s and 1950s—from a group of slightly later, Mies-inspired dormitories to the east. According to Donna Robertson, dean of IIT's architecture school and champion of the campus-center project, what initially distinguished Koolhaas's competition-winning scheme in the minds of the jury was his proposal to wrap the noisy elevated train in a corrugated-metal tube and to squeeze the roof of the campus center under it and across the entire block, creating an architectural connection between the residential and academic areas.

Just one building previously existed on the block, the 1950s commons designed under Mies's supervision by Gene Summers, an architect in his office. Koolhaas's L-shaped, 110,000-square-foot design attaches to it on two sides; together the buildings form a rectangle in plan. The prospect of this abutment enflamed a group of local, preservation-minded architects, who, in their blind faith, apparently saw no contradiction in defending an outdated building that was conceived according to modernist ideals of technology, progress, and clean-slate development. In the end, the old and new campus centers touch at only two points, and Koolhaas provides a courtyard-wide gap between them, so that students in the addition can muse on the old master's buff-brick exterior.

They probably won't bother, however, given the attention-deficit nature of the campus-center interiors. Koolhaas extended



The Founder's Wall depicts seven founders of IIT, including Mies (above). The floor-to-ceiling heads are built up from small, circular icons. When viewed up close, the circles become discrete graphics, each portraying the international symbol of a human being in a range of activities—all based on functions housed within the campus center.

the structural grid of the original center into his addition, where the exposed-steel members mingle with two separate rows of piers supporting the elevated tracks and the new steel tube, respectively. Large spaces such as a sunken central food court as well as an auditorium along the west façade frequently disrupt the grid. In fact, the new campus center's internal organization owes less to the grid than to a lattice of diagonal lines of circulation through the building. These are indicated by sight lines between entrances on the east, west, and south, and by partitions and depressions in the floor. Koolhaas drew the diagonals—"lines of desire," as planners call them—according to the paths that students habitually walked across the site, when it was empty, on their way from the dorms to class and back again. The diagonals also form two edges of an irregular, faceted courtyard on the west side of the building. Like a traditional European plaza, it reconstitutes the free-plan campus across the street, but counterintuitively it serves no other function, allows no entrance to the building, and offers no place to sit.

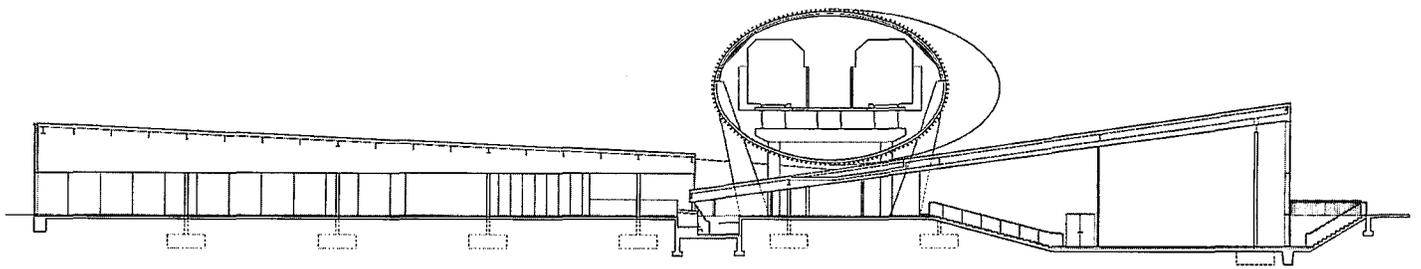
Koolhaas's façades are largely made of stock storefront glazing, the twenty-first-century equivalent of Mies's generic steel, brick, and glass. Pushing the parallel to an unparalleled conclusion, Koolhaas ignored the high standards of assembly that Mies established at IIT (and that Helmut Jahn attained in his delicate new dormitory down the street from the campus center), and let the fabricators and tradesmen do their mediocre best. God has forsaken the details. Koolhaas found him instead in the gloss: supersized graphics installations by Michael Rock of the New York City design firm 2x4, and psychedelic wallpaper and curtains by Dutch designer Petra Blaisse.

#### JUNK MODERN

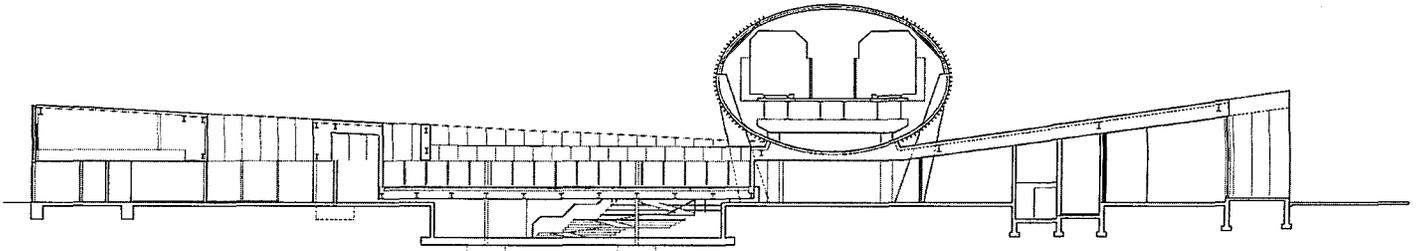
Every year, the local chapter of the American Institute of Architects gives a "Divine Detail" award, in an obvious homage. The IIT campus center can't possibly win one—the local criticism of the building focused on its poor-quality construction—but maybe AIA Chicago will be moved to invent a "Sacred Surface" prize just for the occasion. If they did, though, Koolhaas wouldn't take it either. There's nothing sacred about his building. It's a deliberately crass, commercial enterprise, intended to attract students to a campus that once ranked the ugliest in a nationwide poll.

The campus center, with its food court, Internet café, and pool tables, has more in common with casinos and shopping malls than it does with Mies. After all, Mies conceived and built a poetic "universal space" out of the generic structural-steel grid, only for developers, architects, and space planners to degrade the idea during the latter half of the twentieth century into a sub-architectural condition characteristic of every mall, office park, and airport on the planet—a condition Koolhaas calls "junkspace": "The product of an encounter between escalator and air-conditioning, conceived in an incubator of Sheetrock." The McCormick Tribune Campus Center constitutes nothing less than the return of junkspace to its birthplace, and out of the reunion Koolhaas has conceived a perverse new poetics of cool. Call it what you will: Miesian Mannerism, Funkspace, Junk Modern. Call it anything but Divine.

Ned Cramer is curator of the Chicago Architecture Foundation.

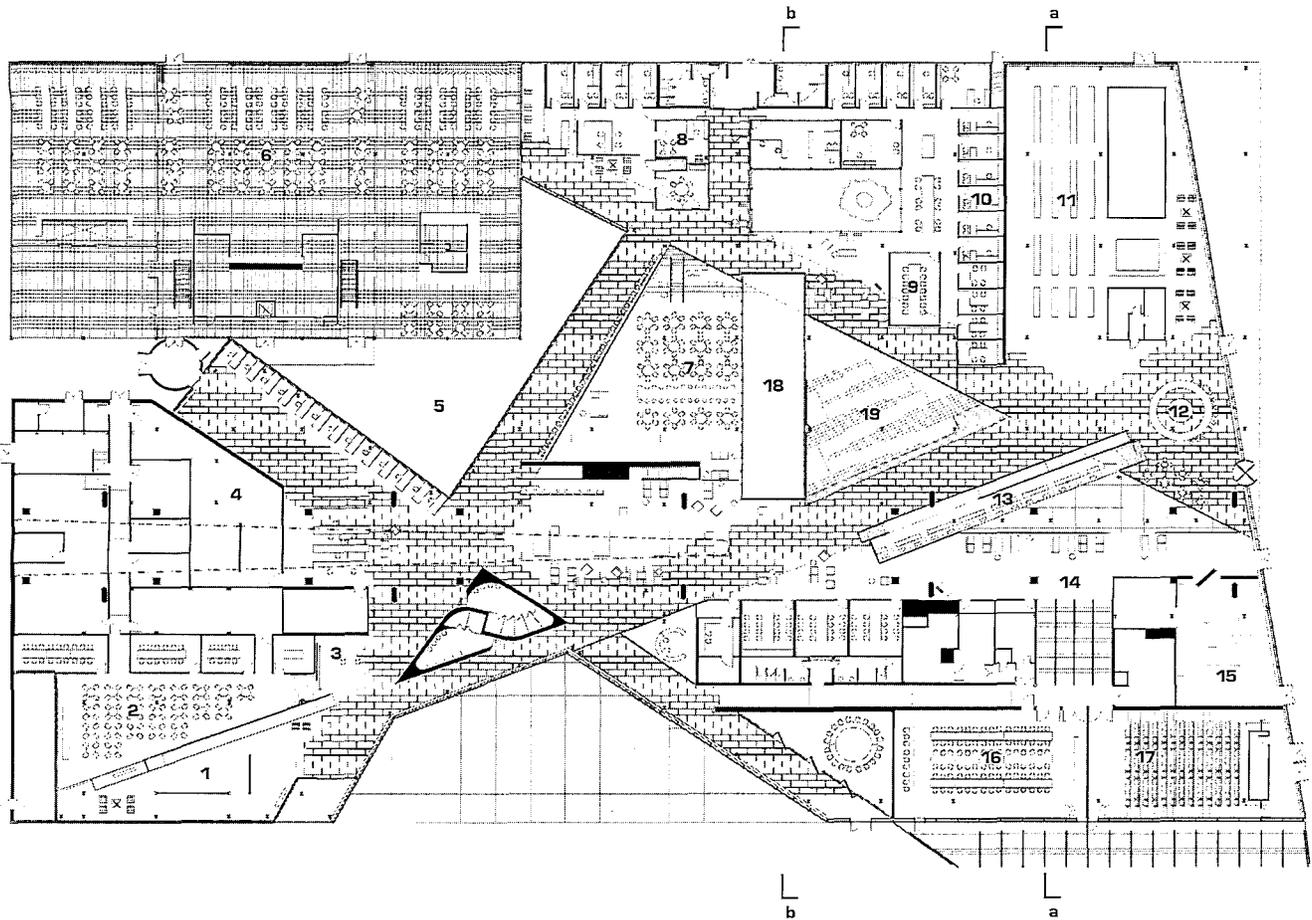


section [aa]



section [bb] ——— 24'

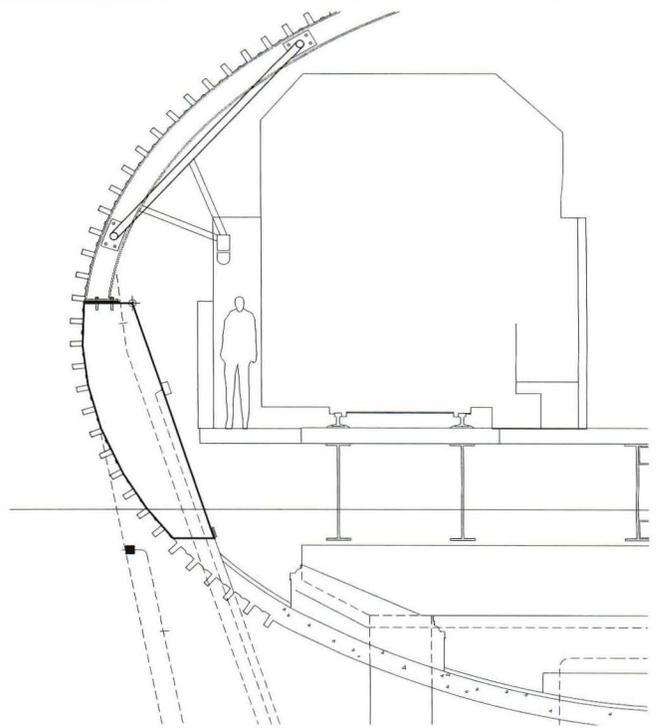
- |                             |                                 |                      |
|-----------------------------|---------------------------------|----------------------|
| 1 welcome center            | 8 campus information center     | 15 convenience store |
| 2 university club           | 9 student meeting room          | 16 ballroom          |
| 3 reception                 | 10 student organization offices | 17 auditorium        |
| 4 copy/postal center        | 11 bookstore                    | 18 hanging garden    |
| 5 Mies courtyard            | 12 café                         | 19 ramped seating    |
| 6 existing commons building | 13 computer stations            |                      |
| 7 recreation/dining         | 14 lounge                       |                      |



ground-floor plan ——— 39' ↙

## SOUND STUDIES

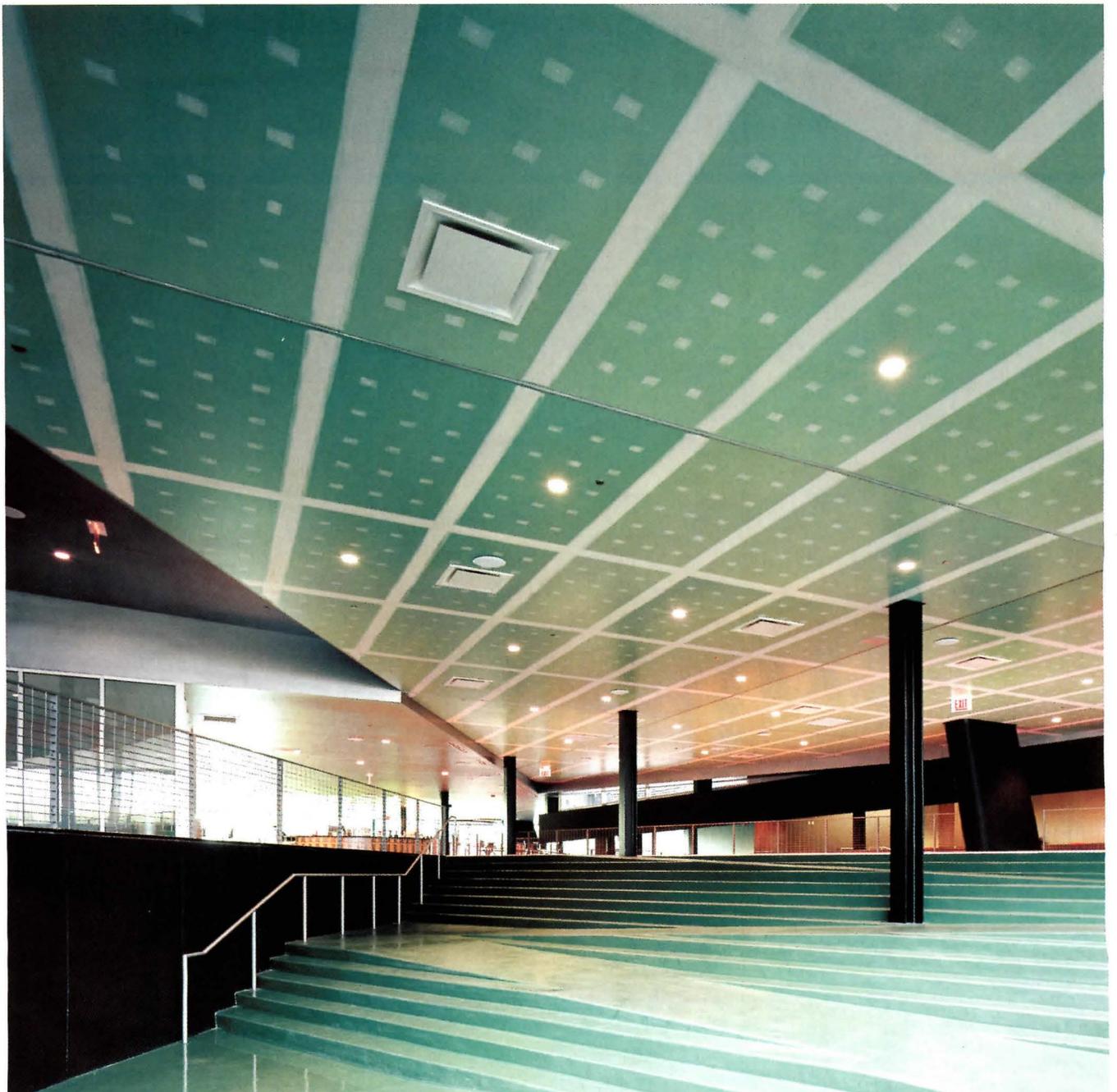
Rem Koolhaas likes friction; when disparate activities rub together, urbanism ignites. The elliptical tube muffling the roar of elevated trains over IIT's Campus Center is borne of such contravention. Conceived as 530 feet of cast-in-place concrete wrapped in a corrugated metal decking that doubled as formwork, the tube dips into Koolhaas's "main federating element": a folded concrete roof slab. (Actually, only the areas of the double-cantilevered roof over acoustically sensitive interiors are concrete mass. And while the tube's underbelly appears to serve as both roof and ceiling in a lounge area, the structures are necessarily independent, separated by up to 6 inches to allow for slab creep and live loads.) Other acoustical measures help reconcile mass transit and student life: Steel columns supporting the trestlework's plate girders, for example, were replaced with tapered columns of vibration-damping concrete. Some curtain walls sport mismatched glazing thicknesses on the same units—the differential helps cut off more sound frequencies—as well as insulating glass units filled with fluorescent-orange polyester tubes. Inside the center, the isolation techniques are more prosaic: Box-in-box construction, for example, protects a student radio station transmitting from within a few feet of Chicago's notoriously noisy "El."





A recreation area (above) sits directly below the stainless-steel tube that encloses the elevated train tracks, although the exposed corrugated metal is merely a symbolic gesture announcing the activity above. Roof and floor planes, which should be flat according to Miesian gospel, create an interior landscape of expanded and compressed spaces such as the computer center (below) and a ramped seating area (facing page).





**The McCormick Tribune Campus Center, Chicago**

**client** | Illinois Institute of Technology **architect** | Office for Metropolitan Architecture, Rotterdam, The Netherlands—Rem Koolhaas (principal); Dan Wood (project director); Kristina Manis, Jonilla Dorsten, Anne Filson, Sarah Dunn, Jeffrey Johnson (project architects); Gary Bates, Frans Blok, Gro Bonesmo, Eliot Bu, Becca Dudley, Martin Felsen, Adrienne Fisher, Bruce Fisher, Christina Fuchs, Laura Gilmore, Uwe Herlyn, Matthias Hollwich, Fernando Romero Havaux, Krystyan Keck, Adam Kurdahl, Vanessa de Assis Lamounier, Julien Monfort, Christian Müller, Matteo Poli, Julien de Smedt, Tuomas Toibonen, Angela van der Zee, Oliver Schütte, Joshua Ramus (project team); Erik Schotte, Bill Price (research and development); Vincent de Rijk, Bert Karel Deuten, Marc Guinand, Gaspar Libedinsky (models) **architect of record** | Holabird & Root, Chicago—Frank Castelli, Greg Grunloh, Dennis Vovos, Lyndsey Gemmeil, Bryce Hanna, Michael Pancost, Jennifer Snyder, Ji-Hun Jun (project team); Han Ying Lee, Michell Dremmer (interiors team) **engineers** | Ove Arup & Partners (structural); Terra Engineering (civil); Skidmore, Owings & Merrill (M/E/P); TNO/Renz van Luxemburg; Kirkegaard Associates (acoustic) **consultants** | 2x4; McGinty (graphics); Independent Telecommunications (telecommunications); Inside-Outside, Petra Blaisse with Kate Orff/Peter Lindsay, Schaudt Landscape Architecture (landscape); Inside-Outside (interiors); Studio Gang Architects, Chicago—Mark Schendel, Lynda Dossey (construction administration, welcome-center interiors); Sako & Associates (security) **construction manager** | Gilbane Building Company **area** | 110,000 square feet **cost** | \$48.2 million

**Specifications**

**roofing** | Neogard **curtain wall** | Neogard, American Grating **aluminum framing** | Wausau **ceilings** | Tectum, USG **paint** | Sherman-Williams **wall coverings** | DesignTex, Wolf-Gordon **acoustic panels** | Illbruck **aluminum flooring** | Power Stretch **toilet partitions/translucent glazing** | Panelite



©2003 EFCO Corporation

WINDOWS ARE JUST THE BEGINNING.

CURTAIN WALLS

ENTRANCES

STOREFRONTS

HERITAGE

EXPERIENCE

QUALITY

INNOVATION

VALUE

SERVICE

PERFORMANCE

TRUST

VISION

BEGINNING OUR NEXT ERA OF EXCELLENCE.

INGENUITY

While EFCO has taken time this year to look back on our fifty years in service to our customers, we've also been looking forward more eagerly than ever. The industry continues to change, and we're more than ready to take on the challenges and opportunities it has to offer, with new products and services arising from the commitment our first five decades were built on. As we mark the end of our big anniversary year, we'd like to mark the beginning of the next EFCO era by offering our thanks to you for making it all possible. In 2004 and beyond, bright ideas are in your future. Look to EFCO and see what's next.

Contact your EFCO representative, call 1-800-221-4169, or visit [efcocorp.com](http://efcocorp.com).

Circle 22 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)



The passenger drop-off is spanned by 190 feet of brightly illuminated, silvery composite panels, supported by a large truss above it. The underside of the carport features eight soffited bulges showing where conveyor belts rise to the baggage-claim area. The narrow main terminal is highly transparent, admitting light and allowing ample views between programmatic elements and to the outside.

## MAKING CONCESSIONS

Kohn Pedersen Fox | US Airways International Terminal One | Philadelphia

by C.C. Sullivan

Philadelphia's new 780,000-square-foot international terminal for US Airways by Kohn Pedersen Fox (KPF)—which, the *Philadelphia Inquirer* crowns, “lifts the city out of its bleak airport past”—succeeds by flaunting airport planning conventions. For example, rather than burying the arrivals sequence underground as is done at most airports, the so-called “sterile corridor” that leads arriving passengers to customs inspections is an elegant, glass-enclosed bridge on the third floor, drenched with sunlight and views of runways, departure gates, and even the ticketing hall and curbside drop-off. Rather than sitting under the departures hall, the skylit baggage claim is an elevated, ceremonial space that suggests the true significance of this international gateway. Instead of a rectangular arrivals hall, travelers enjoy an iris-shaped room topped with an impressively sloped space frame. And rather than a traditional “hammer-head” gate, a slender concourse pier resolves into a slick passenger scoop. Similarly gratifying programmatic inversions are found throughout. All of these innovations, and the systems that make

them work, are fully expressed tectonically, down to the fine detailing one comes to expect from KPF. If international travelers know Philadelphia at all, they will pinch themselves to make sure they're not dreaming: Until the new 13-gate terminal opened in September, this airport was the ugliest duckling of big-city aviation.

Alas, no good deed goes unpunished. This dazzlingly modern, fast-tracked feat of engineering and travel technology is undermined in insipid—though not uncorrectable—ways by its very own client, a four-headed beast led by US Airways. (The airline may at least be commended for selecting KPF solely on the basis of a verbal interview.) The other supposedly expert owners included a construction manager, a program manager, and Philadelphia's Division of Aviation, known ever so suitably as DOA.

Without trivializing an important new building that transforms Philadelphia into a cosmopolitan hub for the jet set, it's useful to examine the laundry list of client lapses that undermine the design's experiential intent and, in isolated cases, obliterate its functionality. While the missteps distract little from the terminal's architectural accomplishment, they invariably occurred for petty reasons or due to shoddy execution, and they produce results that often contradict their rationale. Following are some noteworthy examples:

✦ **In-house standards.** Why would DOA staff engineers insist upon unilaterally controlling major design elements, such as interior finishes and signage? Who knows, but that's what they attempted. KPF

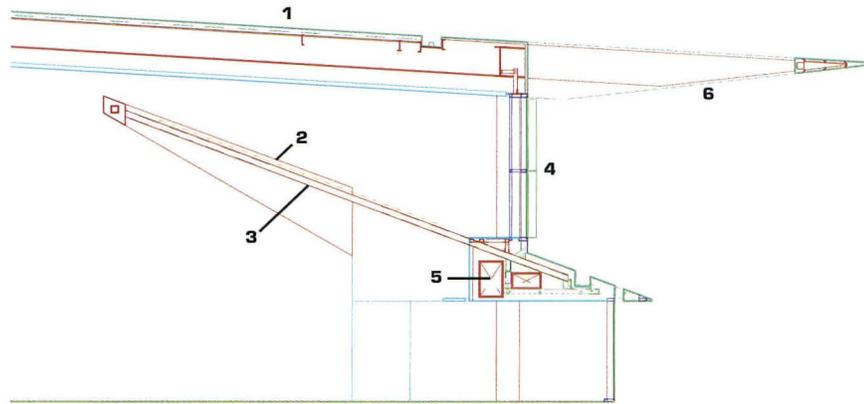
and US Airways vigorously and rightfully opposed the DOA's desire to see more of the dingy-grey ceramic wall tiles and dated maroon signage that mark older terminals. But their resistance was undermined elsewhere. Very late in the project, DOA unveiled a final scheme for concession signage—a design that had never been reviewed or endorsed by the architects. Even more degrading to the architecture are the kitschy artworks commissioned by Philadelphia's Office of Arts and Culture (undoubtedly using the same contracting methods that have drawn FBI attention to Mayor John F. Street and his cronies). At one end of the ticketing hall, for example, a bas-relief astronaut floats on a cartoonish outer-space backdrop; and billboard-sized calligraphy from the *Declaration of Independence*, a sort of ham-handed historical graffiti, mar the otherwise elegant arrivals hall. They're especially out of place in such cosmopolitan, sleek surroundings.

✦ **Passenger amenities.** The most egregious architectural lapse might be the mishandling by US Airways and the DOA of a critical intersection at the main terminal's western end, where it joins the concourse pier—an architecturally powerful convergence offering long views from both axes and a location where KPF originally proposed to place a highly visible, stylish lounge. Instead of such a celebratory landmark, however, a duty-free shop now obscures the drama and orientation of this corner, covering up its colliding structural geometries and acutely angled projections. (Fortunately, a retrofitted shadow



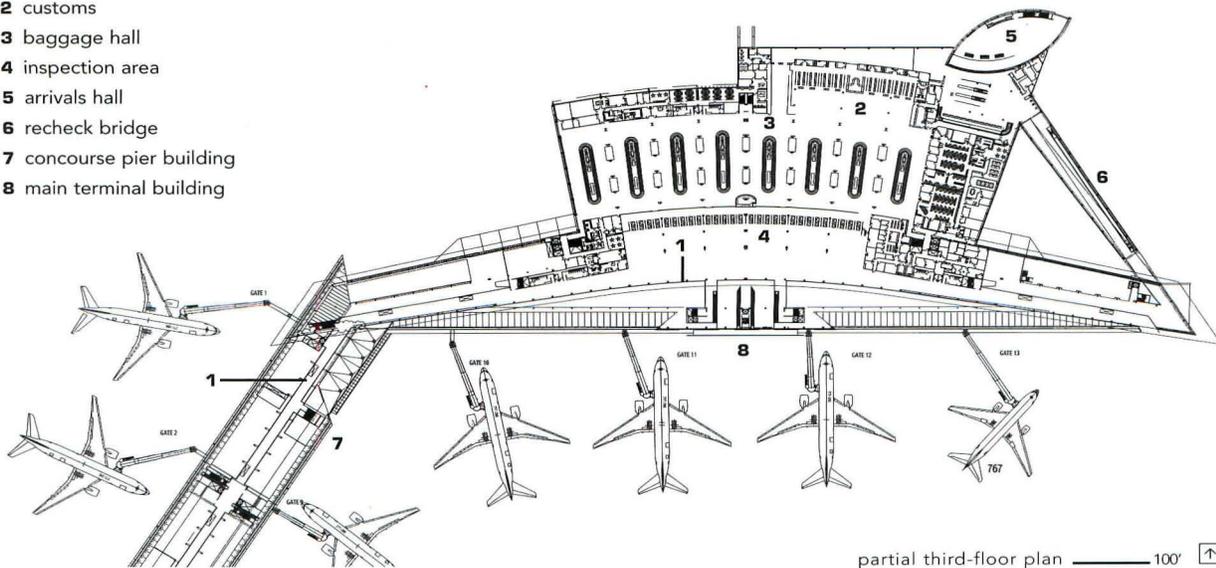
Aerodynamic eaves project from glass-finned curtain walls at the converging masses of the main terminal and the long concourse pier (top). The powerful corner was to contain an elegant lounge; airport authorities later decided to partition it off as a duty-free shop.

- 1 fully adhered single-ply membrane
- 2 light fixtures
- 3 painted steel tube
- 4 low-emissivity insulated glass curtain wall with glass fins
- 5 slot windows
- 6 open-joint insulated metal panels and framing system

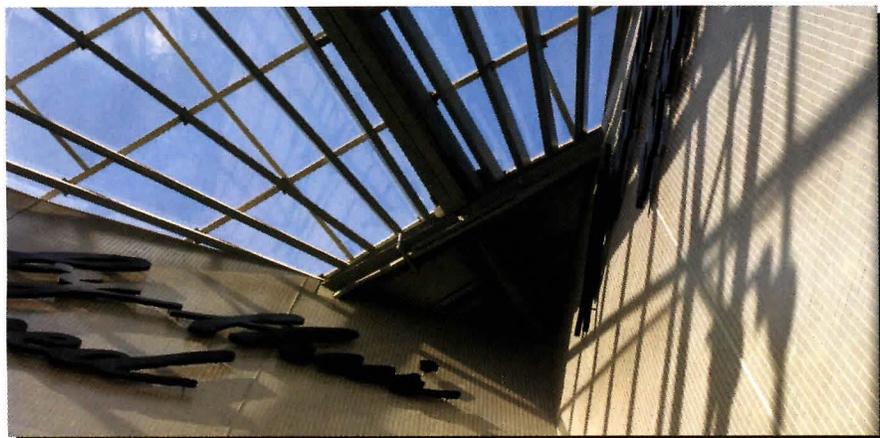
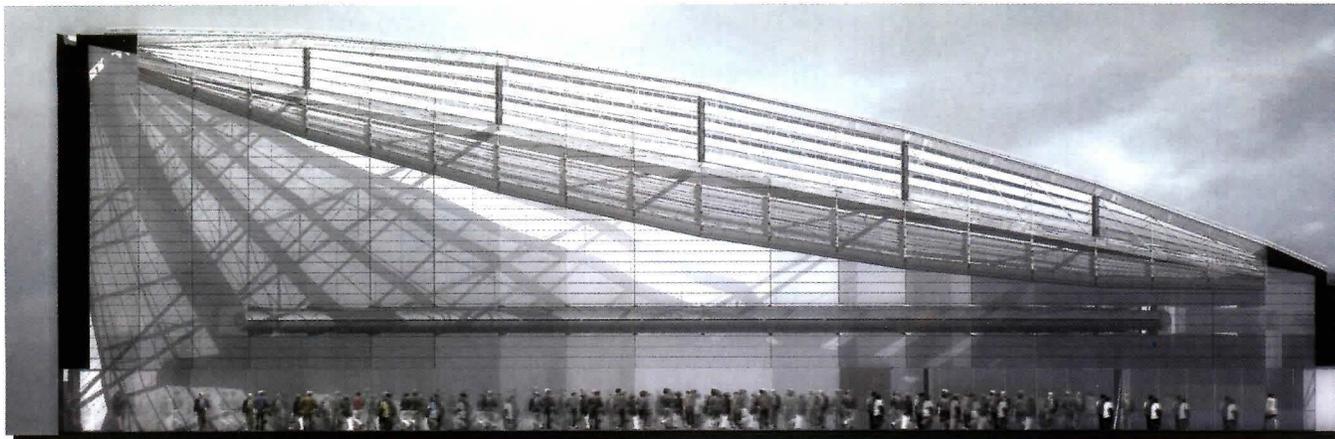


partial section at northwest wall ——— 7'

- 1 sterile corridor
- 2 customs
- 3 baggage hall
- 4 inspection area
- 5 arrivals hall
- 6 recheck bridge
- 7 concourse pier building
- 8 main terminal building



partial third-floor plan ——— 100' ↑



Kitschy art installations dilute two major spaces: the ticketing hall (not shown) and the arrivals hall (top), a skylit, iris-shaped room. The sweeping beauty of the space is disrupted by outsized calligraphy reproduced from the *Declaration of Independence* (above).

box maintains the integrity of the curtain-wall exterior, with its glinting 12-inch glass fins.) In other places, well-meaning airport officials applied similarly retrograde logic to please concessionaires. For example, every eighth column or so is painted in a vulgar pastel with presumably commerce-inducing icons (e.g., martini glasses) to alert unwary travelers as to the location of food stalls and newsstands. Why they thought this might boost business is unclear; the column-signs and color-coordinated banners are unreadable and enigmatic from any distance and meaningful only to the concessionaires' landlord, MarketPlace Redwood, which separately commissioned the work.

On the land side—and also after most of KPF's design work was done—the airport inexplicably chose to move a taxi waiting area into plain view of arriving passen-

gers, who now can observe a daily encampment of cab drivers sunning themselves, playing cards, or eating lunch. Even worse, the airport blissfully obscured much of its own architectural achievement from public view by making its massive parking garage of clumsy precast blocks higher and wider than originally planned. From the highway, this unwieldy structure obscures the alluring roofscape and shimmering expanse of the new terminal.

✦ **Security enhancements.** Because much of the project's execution occurred after the attacks of September 11, 2001, perceived security threats drove many downstream design changes. Some were clearly needed: more closed-circuit cameras in ticketing and departure zones, room for automated explosives-detection equipment behind ticket counters, and boxy steel armatures for screening areas.

Others seem gratuitous: Banks of flight-information monitors in the ticketing hall, for example, considered potential cover in a gunfight, were backed up against elevator banks; now they not only can hide nefarious activity but they also obscure a major means of egress. In another case, thinking that athletic terrorists might toss weapons over the ticketing queues and into departures lounges, security officials raised by 2 feet a glass partition separating these two zones. The changes, including many unseen but critical enhancements, added nearly \$100 million in materials and labor to the final cost.

✦ **Project management.** While one can't absolve the architectural firm from its due share of responsibility for a poorly administered design-build project—by some accounts, the budget ballooned to 85 percent over initial estimates—the fast-track process was laden with big-name consultants and public-sector managers unprepared to work outside of the city's standard competitive-bidding rules. The lure of overlapping design and construction schedules attracted the DOA's then-aviation director Dennis P. Bouey, who in 1998 hoped to accommodate US Airways' need to quickly move a fleet of new aircraft to the facility and, later, to capture a seasonal travel surge. But US Airways and the DOA continually revised the original scope of work, and in the end, the poor organization of the two groups—as well as weather and permitting delays—tacked on a full year to the airline's wait. And at \$42 million per gate, the terminal is far more expensive than comparable facilities set to open soon in Houston, San



From many vantage points, the airport's dynamic structure and programmatic elements are revealed to visitors. The strong composition stands up to such intrusions as a wayward green column (demanded by the airport's master concessionaire) and tepid artworks.

#### New International Terminal, Philadelphia

**owner** | City of Philadelphia **client** | US Airways **architect** | Kohn Pedersen Fox Associates, New York City—William Pedersen (design principal); A. Eugene Kohn (senior principal); Anthony Mosellie (principal-in-charge); Trent Tesch (senior designer); Bernardo Gogna (project manager); Liatt Avigdor, Li Min Ching, Jennifer Francis, Hidehisa Furuta, Zohed Jilal, Scott Loikits, Ayhan Ozan, Basak Yuksel (project team) **associate architects** | Kelly Maiello, Philadelphia; Pierce Goodwin Alexander & Linville (interiors) **engineers** | Severud Associates (structural); Burns Group (M/E/P); Urban Engineers (civil) **consultants** | Burns & McDonnell (project management); DMJM Aviation (program management); BNP (baggage handling); Synterra (landscape architecture); Daroff Design (signage, millwork); SPG3 (foodservice, retail); Thinkframe (graphics) **construction managers** | Turner Construction; Gilbane **photographs** | Woodruff/Brown **area** | 780,000 square feet **cost** | \$550 million

Francisco, and—also by design-build delivery—Dallas.

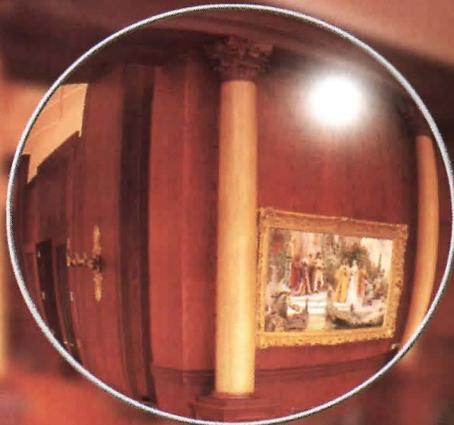
As much cause as effect, leadership changed constantly for what was Philadelphia's largest public project ever. While the architect remained throughout, US Airways swapped their construction manager (Turner Construction replaced Gilbane) when the work was well underway, and the city of Philadelphia employed no fewer than three aviation directors during the course of the project. Numerous US Airways officials left their jobs during the work, including former vice president of facilities Robert Hazel (now an airport consultant). Local politics and the souring economy added new meaning to force majeure: In January 2000, Mayor Street succeeded Edward G. Rendell, who, with then-city solicitor, Stephanie L. Franklin-Suber, vigorously advocated an unusual bond-financing deal and the skirting of standard municipal reviews to make the design-build approach happen. The new mayor soon renegotiated the city's oversight role to more closely manage the process. And in August 2002, US Airways declared bankruptcy.

#### INVERTING EXPECTATIONS

In spite of the tumult and the client's uncanny ability to undermine itself, the work succeeds. This is due largely to the strength of the initial concept and the convincing leadership of KPF design principal William Pedersen, who marshaled his firm's talent in a few months of schematic design to upend traditional notions of airport circulation patterns. The result gives physical expression to the building's structure as well as the disparate circulation elements that, although segregated, are visually apparent to the building's users. Many of these flows were often in conflict during conceptual planning—vehicular traffic, pedestrians, baggage, aircraft—yet their convergence yielded architectural opportunity. The splendid baggage hall, for example, resulted from the airport's unusual single-level vehicle access and the need for headroom

over rail lines that parallel the surface road. Unable to fit trusses for the 190-foot clear span comfortably underneath the volume, the design team flipped the structure to the roof, a move that led to its sawtooth profile and skylights—and one of the world's friendliest homes for baggage carousels.

Unexpected pleasures are what Philadelphia's new international terminal is all about. KPF's brief, unfettered design prerogative at the project's inception ensured that even the value engineering of a long and chaotic construction phase would not affect the enduring integrity of the building's intent. ■



**It's a Lot Harder to Make  
Column Choices These Days.**

**SDC**  
SOMERSET DOOR &  
COLUMN COMPANY

## Let Us Bring it Into Focus.

If choosing the right design, material, or manufacturer for the columns on your project has become difficult to bring into focus, just contact Somerset Door & Column Company. We have been manufacturing traditional architectural columns and other designs since 1906 and can provide many different species of wood, or the latest non-wood materials to meet your needs. Our design specialists will help you make the choice. And, with Somerset you can be assured that you'll make...

## The Right Choice Every Time.

174 Sagamore Street • Somerset, PA 15501 • 800-242-7916  
814-444-9427 • Fax 814-443-1658 • [www.somersetdoor.com](http://www.somersetdoor.com)

Circle 18 or [www.architecturmag.com/productinfo](http://www.architecturmag.com/productinfo)

## SOCIAL FABRIC

A tensile carport for a Chicago row house is complex to design, but easy to erect.

by Julia Mandell

Tensile structures are complex exercises in engineering sophistication. Pioneered by German engineer Frei Otto in the 1960s, these fabric constructions demand detailed calculations and thus, usually remain in the domain of engineers. Recently, however, architect Jeanne Gang, principal of Chicago-based Studio Gang, wanted to try her hand at building with **woven material**. "I've always been interested in fabric," she says. "I wanted to try to make it structural."

A carport in a Chicago neighborhood of row houses gave her the opportunity. The clients, whose home backs onto an alley that also functions as a communal gathering space, sought to shelter their car without affecting the social aspect of their parking area. "I hoped to encourage interaction and maintain a sense of lightness," says Gang.

Hence her adventure into tensility, and the challenges that came with it. Because the site was tight, it was a struggle to hold the structure in tension with minimal support. "Usually tensile structures are pulled into tension by numerous cords that extend either out beyond the area actually sheltered by the material or to the floor like a tent," Gang explains. "Here we wanted to leave space for people to pass underneath on all sides."

Through experimentation with small-scale models, Gang settled upon a winglike figure braced on a surprisingly minimal steel frame. **Y-shaped supports** stabilized with concrete pull the canopy down at center points on each side and up at all four corners, providing a double-curved surface that is strong enough to withstand both snow loads and uplift caused by wind.

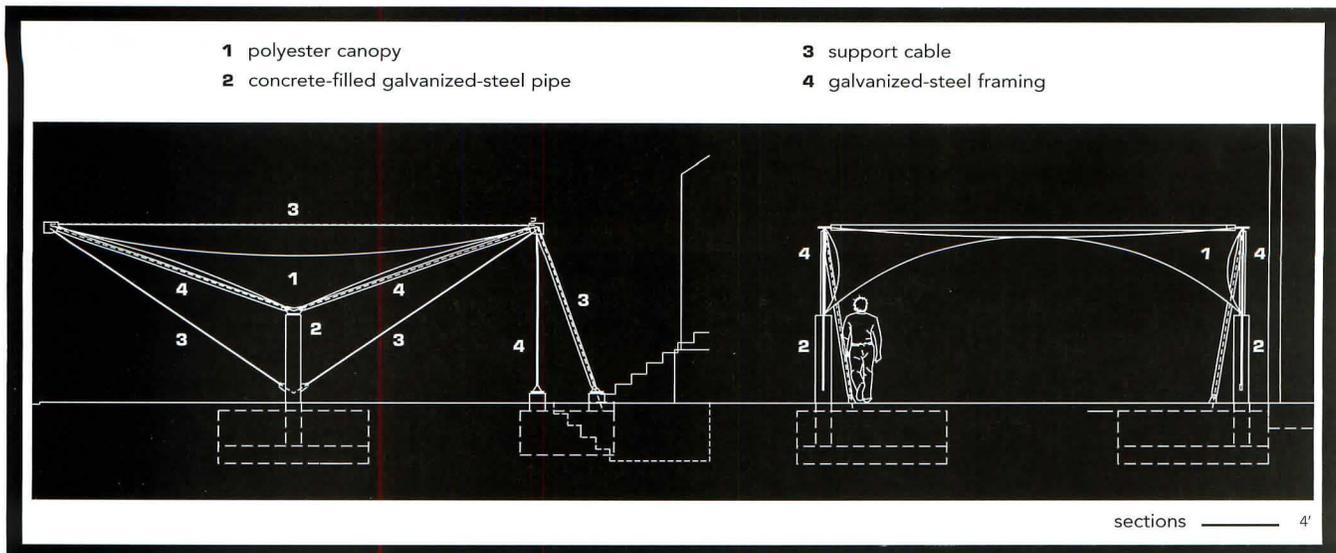
The correct **loads and tensioning** were determined through the use of a proprietary computer program called "Tensyl" created by Angus Palmer, a structural engineer then in the New York City office

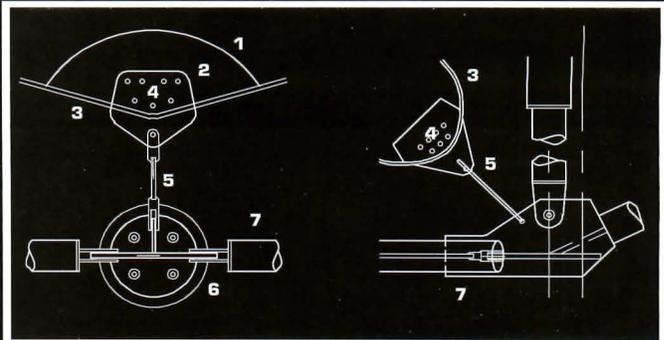


The white carport, whose brightness Studio Gang emphasized by whitewashing the adjacent wall, contrasts with the brick of the townhouses around it (above). The tight double curvature of the canopy can be seen clearly in section (below).

of Buro Happold Engineers. The data helped verify the proposed fabric form, ensure stability under all load cases, and determine member forces, allowing Palmer and Gang to quickly ascertain the size and thickness of the supports and cables and to calculate the required base sizes. They also chose a fabric, a polyvinyl chloride (PVC)-coated polyester from French fabric maker Serge Ferrari. Ferrari's "preconstraint" coating method entails applying the protective PVC coating while the polyester is in tension, improving its stretch characteristics.

All that remained was construction, which turned out to be a community event, satisfying Gang's aspirations: The **sewn fabric panels** arrived in a sort of laundry bag from the local fabricator, and rather than hire anyone, the clients rallied the neighbors—and their architect—and put up their very own tensile structure in an afternoon. ■

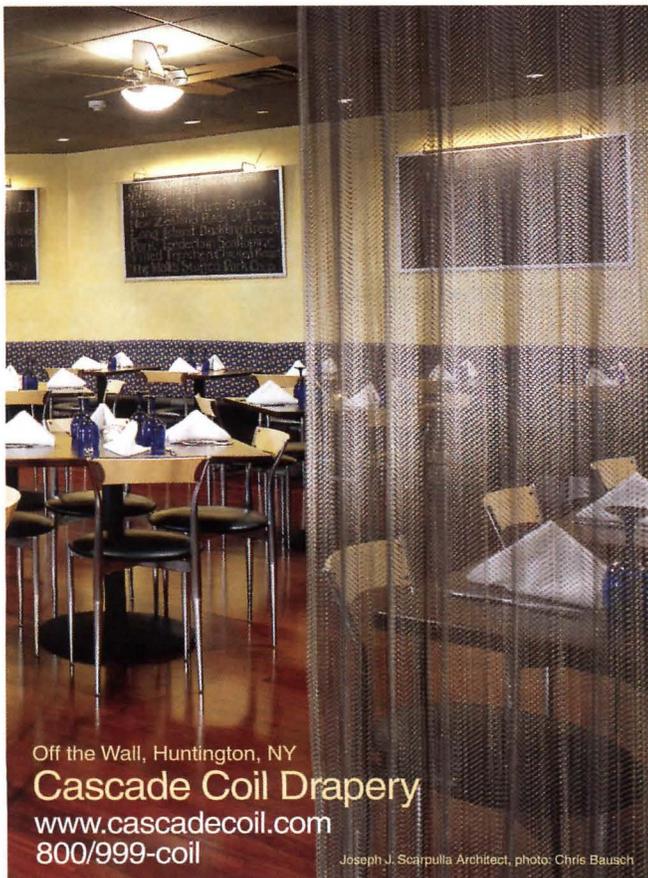




connection details — 8"

- |                          |   |
|--------------------------|---|
| 1 polyester canopy       | 5 stainless-steel tie bar fitting       |
| 2 reinforcing            | 6 concrete-filled galvanized-steel pipe |
| 3 support cable          | 7 galvanized-steel framing              |
| 4 plastic panel membrane |   |

To connect the canopy and its supports, the flat fabric is pulled taut by grommited plastic panels looped with U-bolts (above). The stainless-steel support cable keeps the canopy stable yet flexible (left).



Off the Wall, Huntington, NY  
**Cascade Coil Drapery**  
[www.cascadecoil.com](http://www.cascadecoil.com)  
 800/999-coil

Joseph J. Scarpulla Architect, photo: Chris Bausch

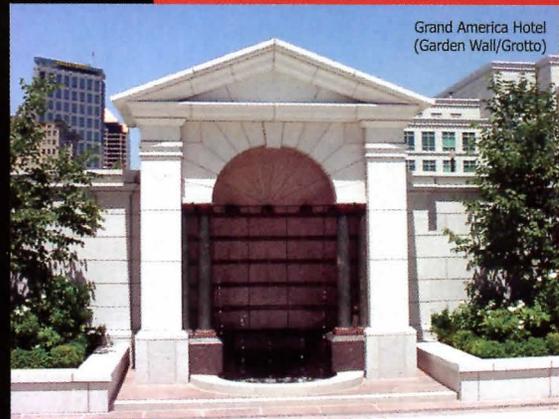
Circle 235 or [www.architecturmag.com/productinfo](http://www.architecturmag.com/productinfo)

**KEPCO+**

Architectural  
 Cladding Systems

**WE'VE COVERED IT ALL:**

- GOVERNMENT
- HOSPITALITY
- RELIGIOUS
- OFFICES/HEADQUARTERS
- SITWORK/PAVING**



Grand America Hotel  
 (Garden Wall/Grotto)

[WWW.KEPCOPLUS.COM](http://WWW.KEPCOPLUS.COM)

Circle 66 or [www.architecturmag.com/productinfo](http://www.architecturmag.com/productinfo)



Anshen + Allen used a “wolf in sheep’s clothing” approach to the Contained Research Facility; it’s modeled on a simple barn (above left). Inside is the “hot rod,” the equipment that allows the building to operate as a biosafety-level-3 research greenhouse (above right).

## M/E/P WITH MUSCLE

Anshen + Allen | University of California, Davis Contained Research Facility | Davis, California; Hellmuth, Obata + Kassabaum | Darwin Centre at the Natural History Museum, Phase One | London

by Jamie Reynolds

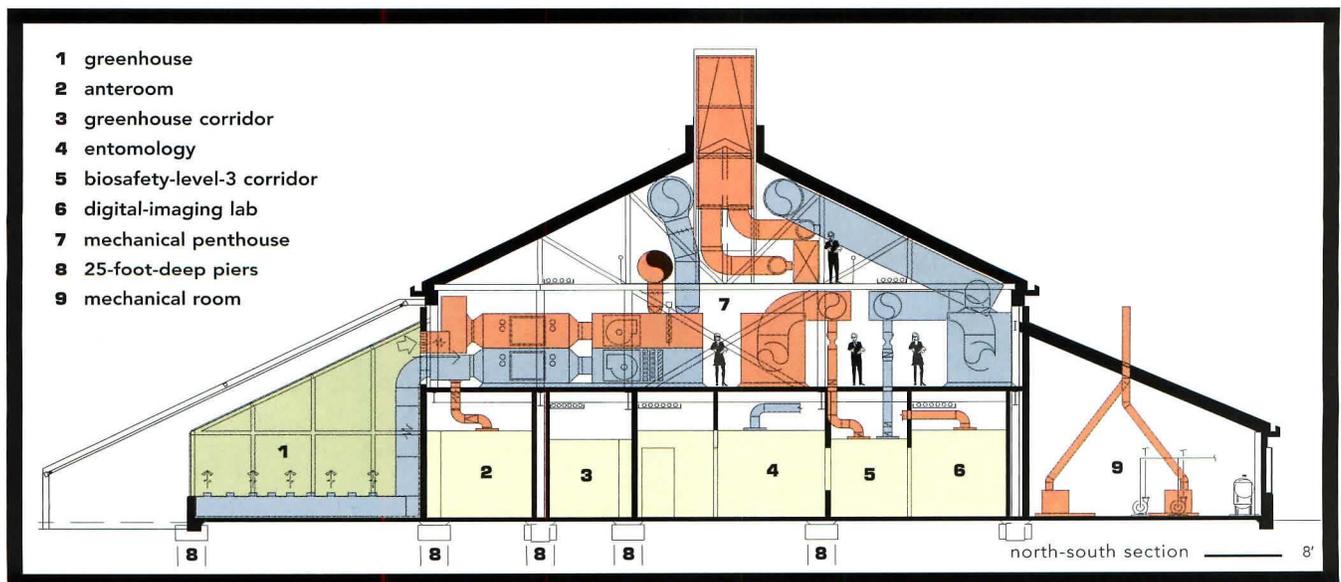
Mechanical, electrical, and plumbing systems are integral to any structure, but two recent projects—on separate continents, but both holding volatile biological materials—use M/E/P systems for **containment and**

**safety** in ways that dominate their programs.

Designated a biosafety-level-3 facility (the rating system’s second-strictest level of quarantine), the University of California, Davis’s Contained Research Facility (CRF) holds experiments on dangerous agricultural pests in the very heart of farm country. A 24,000-square-foot “shower-in, shower-out” facility, the CRF features greenhouses that are totally sealed from the outside world. The building is mostly taken up by what designers at San Francisco-based Anshen + Allen dubbed the “hot rod,” a 100,000-pound gleaming M/E/P system they worked on with Arup’s San Francisco office. Air is changed eight times per hour, cooled by dual 175-ton **rotary chillers**, 95-percent **HEPA filtered** coming in, and totally filtered going out. All outgoing liquid is subjected to a grinder pit and then cycled in boilers for 20

minutes before being cooled for safe expulsion. Each greenhouse features its own **air-purification unit**, which can be maintained without breaching the sealed facility and allow for a “hoteling” feature: Different experiments can be going on at different times in each unit. In turn, says project architect Brett Kelly, “the building can be completely serviced while experiments are ongoing.” An 800-kilowatt **emergency generator** ensures the facility doesn’t lose power for more than 10 seconds. These measures are necessary to prevent spores and other crop-threatening microbial agents from escaping. “The science being done here dictates the robustness of the M/E/P,” says design director Jeff Logan.

In London, meanwhile, sits the Darwin Centre, a 120,000-square-foot edifice featuring an equally volatile cargo: more than



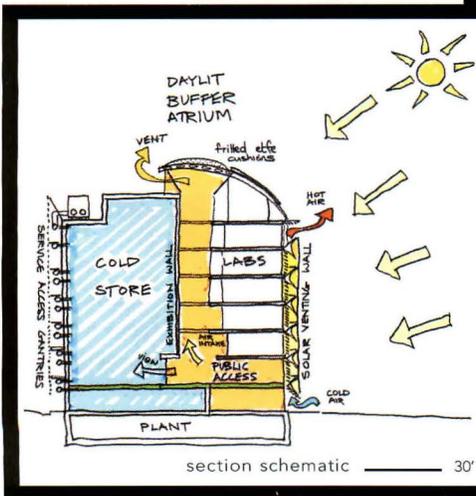
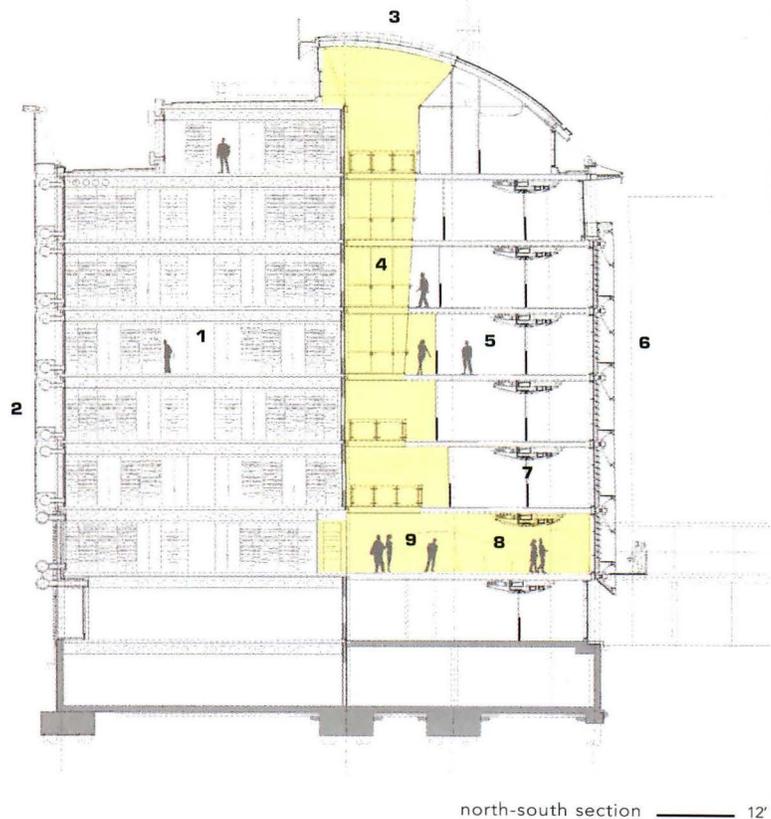
TOP LEFT AND TOP RIGHT: ROBERT CAMPBELL



The Darwin Centre's south façade allows maximum daylight penetration, aiding the microscope work inside while venting against heat gain (above left). Half the building is cold storage for some 20 million biological specimens suspended in ethanol-filled jars (above right).

20 million biological specimens stored in jars of 80-percent ethanol solution. "It's a great hazard sitting in central London," says project architect Guy Comely, a threat that led HOK International to work with a "bespoke fire engineer" that would allow them to go beyond the normal **prescriptive fire codes**. (Buro Happold provided engineering support on the project.) The north side of the building contains specimen storage, which must be kept at 57 degrees Fahrenheit to prevent evaporation and build-up of ethanol in the air. The rooms are rated for 2 hours of fire protection. **Ventilation** and cooling systems hang on the north façade, allowing for easy maintenance. A **smoke- and fire-funneling atrium** separates the specimen storage from the laboratories, which are provided with ventilation and power via a central "service spine." The southern façade admits ample daylight for microscopy scientists through a heat-vented curtain wall.

- 1 cold storage for specimens
- 2 service access
- 3 inflated transparent cushion roof
- 4 atrium
- 5 microscopy labs
- 6 heat-vented solar wall
- 7 service spine
- 8 public access
- 9 cold-storage viewing window



TOP LEFT AND TOP RIGHT: PETER DURANT/ANGELUS

## Talking Shop with SHoP

Sharples Holden Pasquarelli masters the CAD/CAM process. by Julia Mandell

For many reasons, an increasing number of architects are investigating computer-aided manufacturing (CAM), the fabrication of building components using a variety of computer-driven machines from laser and waterjet cutters to computer-numeric-controlled millers and routers. The technology enables the rapid production of customized building components. But working with CAM, or more accurately, CAD/CAM, entails a high level of involvement. Because the approach is still out of the ordinary, it takes careful planning and knowledge of the available processes and materials to successfully and cost-effectively work with CAM.

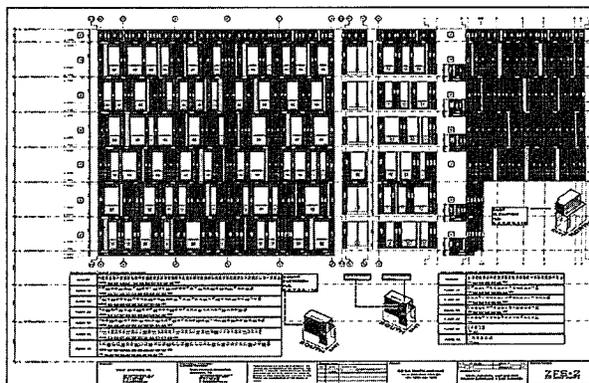
The principals of New York City-based Sharples Holden Pasquarelli, also known as SHoP, have devoted their practice to exploring and refining this process. Since 2000 they have been developing a design/build philosophy that looks to the means and methods of "customized construction" and CAM to formulate unique designs. According to William Sharples, one of the studio's five partners, architects must consider some fundamental guidelines for working with such novel approaches.

1. Consider methods and materials from the beginning of conceptual design. "Think about materials early!" declares Sharples. "For us, everything about a design is determined by the parameters we will be dealing with when building. The scale of the components depends completely on what material we want to use: How big a sheet of metal can you get? How big is the truck that you have to transport it in? Rather than just draw a sketch and hand it over to the contractor, we reach a solution that lets us get unusual things built, on time and under budget."

2. Learn from fabricators, contractors, and tech-savvy staffers. Busy firm principals like those at SHoP don't need to become experts in technology. Instead they should rely on their clued-in younger associates and the knowledge of the fabricators and builders they work with. "Our staff is always talking with fabricators," says Sharples. "At the very beginning of a design process, we gather as much information as we can about the processes we may use for fabrication and construction."

3. Work out details of fabrication and assembly ahead of time to keep costs down. By thinking through the complex details of fabrication and assembly before the process begins, SHoP manages to quiet any objections from potentially skeptical contractors—and to keep bids low. "When contractors don't understand how something will work, they throw money at it," says Sharples. "They have typical problems they anticipate. When we choreograph a solution for them in advance, they look at our plan and see that it won't make things difficult."

4. Communicate assembly through drawings. For SHoP, the key to their managerial role in the CAD/CAM process is their drawings. "Drawing is the medium through which architects communicate, but the traditional conventions don't help much for this type of high-tech building," believes Sharples. "Now that build-



SHoP's CAD/CAM methods were put into action recently when the firm designed Porter House, a renovation and addition to an apartment building in New York City that resulted in 22 residential units, each with a different façade configuration. Working with the Long Island-based roofing contractor Nick Martone of Martone & Sons and metal CAM fabricator Maloya Laser of Commack, New York, SHoP devised a façade system of precut steel panels that arrived on the building site labeled for assembly, minimizing construction staging. The drawings that accompanied the parts—including a full component schedule (above)—left nothing to chance.

ing production is changing, the drawings need to change, too."

Rather than a standard set of construction drawings, the studio produces detailed shop drawings that have more in common with directions for assembling model airplanes than with typical architectural plans. Every single building component is inventoried and appears on a schedule accompanied by axonometric construction drawings.

Producing these drawings is time intensive, but the understanding they promote between architect and builder is indispensable to SHoP's brand of innovation. "We are trying to produce groundbreaking architecture," says Sharples. "But where we want to change things is in the practice. The legacy we want to leave is a new process for building." ■

## Technology Profile: SHoP's Software

SHoP runs a PC-based office. The studio began using AutoCAD ([www.autodesk.com](http://www.autodesk.com)) in 1999, because the partners found it was the best platform for working with fabricators and making the transition from conceptual modeling to CAM. For 3-D modeling work, the designers use Rhino ([www.rhino3d.com](http://www.rhino3d.com)), which is affordable and interfaces well with AutoCAD, allowing the transfer of Rhino images into the AutoCAD page format to make drawing sets. Rhino files can go directly to fabricators, who use PCs almost exclusively. The fabricators SHoP works with also often use Solidworks ([www.solidworks.com](http://www.solidworks.com)), a 3-D mechanical design software. ■

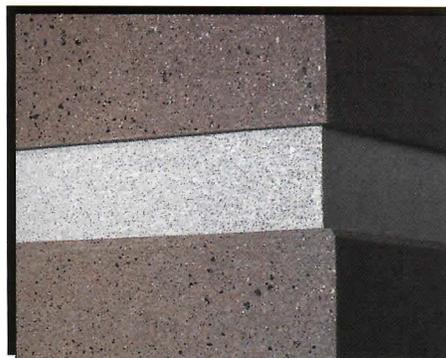
## EIFS and stucco: mimicry and moisture resistance

When a look-alike will do, the stylistic versatility of exterior insulation-and-finish systems (EIFS), or synthetic stucco, can't be beat. The layered façade system can mimic any cladding material from slate to brick. Expanding on this capability, **Dryvit Systems** ([www.dryvit.com](http://www.dryvit.com)) has introduced a new surface line called TerraNeo (top), which incorporates into its mixture mica chips and multicolored quartz aggregates that sparkle, creating a unique stonelike effect. Encased in a clear, 100-percent-acrylic binder for durability, the surface covering is available in 10 colors. Another new EIFS surface is Fiber-47, a factory-blended three-coat stucco finish system from **Parex** ([www.parex.com](http://www.parex.com)); it eliminates quality-control concerns that come with mixing in the field. Made of glass and polypropylene fibers to prevent cracking and to increase durability, all that is added at the job site are sand and water.

While mimicry is one EIFS attribute, dura-

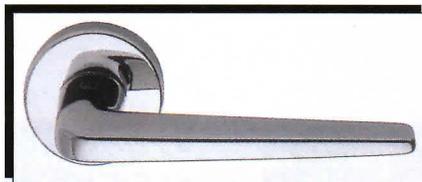
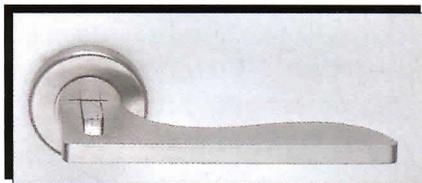
bility remains a concern: Do the waterproof finish systems actually stand up to harsh weather? To address this need, **Sto** ([www.stocorp.com](http://www.stocorp.com)) has introduced Sto Guard, part of their revised system called EIFS Next, which stands for "new exterior technology." Sto Guard is a liquid building wrap applied over sheathing; it eliminates leakage from staple holes or tears. Sto Guard not only protects the finished structure, but during the recent construction of the Waccamaw Community Hospital (bottom), in Murrells Inlet, South Carolina, Dallas-based architecture firm The Curtis Group relied on Sto Guard to protect the half-built project from heavy rains and coastal storms during construction. ■

FOR INFORMATION ON EIFS SYSTEMS,  
CIRCLE 121 ON PAGE 145.



## getting a handle on doors

Italian door-and-cabinet hardware manufacturer **Valli & Valli** ([www.vallievalli.com](http://www.vallievalli.com)) has a long tradition of commissioning designs from renowned architects, including Norman Foster, Richard Meier, Ron Arad, and Michael Graves. This year the line introduces three new works. A door pull by English architect John Pawson, known for his minimalist structures, combines simple circular and rectilinear forms and is constructed in solid brass with a satin-chrome or satin-brass finish. Another Brit, architect David Chipperfield, produces an elegant door lever, also in solid brass, with a choice of chrome, satin-chrome, or brass finishes. Chipperfield, whose work includes furniture, interiors, buildings, and large-scale urban projects, employs simple but effective details, such as a tapered shape for comfortable handling. Another lever in the line is the work of Droog, the iconoclastic Dutch design collective. A study in materials and process, this object takes advantage of laser-cutting technology, which allows the



handle to have a minimum of parts and results in a sleek and economical construction. The flat surface of the lever, made of stainless steel, can be imprinted with a corporate logo. Specifiers may choose from polished or satin finishes.

The AJ Lever Handle is a classic design that Danish modernist master Arne Jacobsen developed in 1955 for use in his interiors for the SAS Royal Hotel in Copenhagen. ■

Originally produced by manufacturer Carl F. Petersen, the handle is now available in the United States from **The Ironmonger** ([www.ironmonger.net](http://www.ironmonger.net)), one year after what would have been the late architect's 100th birthday. The lever is available in two sizes in polished brass or satin nickel.

For the look of wood without the material's typical problems such as warping, rotting, cracking, or splitting, **Therma-Tru Doors** ([www.thermatru.com](http://www.thermatru.com)) has developed the Classic-Craft fiber-glass door system, in two contemporary styles. The Mahogany Collection recreates the look of Honduran mahogany while delivering thermal protection and durability. The Rustic Collection offers the look of stained wood, combining smooth-grain panels and arches with modern fiber-glass materials and technology. ■

FOR INFORMATION ON DOORS AND  
HARDWARE, CIRCLE 122 ON PAGE 145.



## ARCHITECTURE CONFERENCES

### TOP 10 ISSUES IN K-12 SCHOOL DESIGN

- 1 Mold / IAQ
- 2 Cost
- 3 Sustainability
- 4 Enrollment / Utilization Data
- 5 Phased Renovations / Adaptive Reuse
- 6 Acoustics
- 7 Educational Technology
- 8 Multiple Uses
- 9 Lighting / Daylighting
- 10 ADA / Universal Design

Source: Architecture Conferences

### TOP 10 ISSUES IN HIGHER EDUCATION DESIGN

- 1 Sustainability
- 2 Educational Technology
- 3 Enrollment / Utilization Data
- 4 Phased Renovations / Adaptive Reuse
- 5 Cost
- 6 Lighting / Daylighting
- 7 Flexible Furnishings / Layouts
- 8 ADA / Universal Design
- 9 Formal / Stylistic Issues
- 10 Acoustics

Source: Architecture Conferences

### BUILDING BETTER SCHOOLS CONFERENCE SERIES SPONSORS

#### PRESENTING SPONSORS

Osram-Sylvania Page 133

Virco Page 139

#### CORPORATE SPONSORS

Bobrick Page 124

Centria Page 125

Epic Metals Corp. Page 126

Graham Architectural Products Page 127

Leviton Page 129

Lightolier Page 132

Marvin Windows & Doors Page 130-131

PCI Page 134

PPG Page 135-136

L.M. Scofield Page 128

Turner Construction Co. Page 137

Vecta Page 138

# BUILDING BETTER SCHOOLS

Architects, educators, and experts team up at a series of regional conferences created by ARCHITECTURE magazine

What does it take for an architect to excel in today's educational market? Aiming to assess the state of the U.S. educational market from an architect's point of view, *Architecture* magazine—in concert with 15 sponsors and scores of educational facility leaders and expert consultants—launched a series of four conferences this year under the banner BUILDING BETTER SCHOOLS. The events in Boston, Los Angeles, Chicago, and metropolitan New York City brought a multidisciplinary discussion to the perennial and varied issues that affect today's K-12 and higher-education administrators and facilities.

#### The Markets: Still Booming?

Most pertinent to the regional meetings were overviews of design and construction activity planned or currently underway. Against a backdrop of declining state budgets and, in many places, surging student enrollment, the presenters noted robust activity in school bond issues nationwide. According to Dun & Bradstreet, about half of the nation's colleges and universities have projects in planning or underway in 2003, totaling some \$11 billion. America's K-12 schools, on the other hand, anticipate spending just under \$20 billion through year-end, down from an all-time record \$21.5 billion in 2002. Yet available funds for education projects appear somewhat diminished, even at many private institutions with record-level endowments.

Numerous public schools, however, are undertaking novel planning initiatives to guide the next several years of work. A 10-year plan is in high gear for the Los Angeles Unified School District (LAUSD), which is building 80 new schools, expanding 79 other campuses, and planning the equivalent of another 40 new schools in playground space and classroom additions. (This is the same agency that, from 1980 to 2000, built a mere 24 schools total—and no high schools.) In Boston, the Massachusetts Division of Capital Asset Management and the state's Board of Higher

Education have just released a 10-year program for the state's system of universities and community colleges, entailing some \$1 billion in new construction and renovation projects. Likewise, many other school systems and institutions around the country report ambitious long-range capital plans.

Of course, the key for architects is to become active in the markets, and a large part of the BUILDING BETTER SCHOOLS program was devoted to creating winning proposals, presentations, and marketing strategies for educational owners, as well as how to be a more effective service provider. Panel discussions organized by marketing experts such as Boston's Michael Reilly and New Jersey's Sharyn Yorio—and by practitioners like Kimberly Knight of Frederick Fisher Partners, Santa Monica; and Deborah J. Hodges of Plunkett Raysich Architects, Northbrook, Illinois—provided tips and strategies for firms looking to expand their educational practices.

#### K-12: Smaller and More Innovative

Around the country, much of the upcoming educational spending is tied to regulatory compliance—notably President Bush's *No Child Left Behind Act*, which became law last year—as well as school reform initiatives. In cities from Seattle to Baltimore and from Los Angeles to Chicago, educators and facilities planners are developing new schooling concepts that center on more personalized student-teacher interaction and smaller, more decentralized school buildings. The goal? Better student performance.

"Factory-modeled schools—I like to call them 'cells and bells'—probably aren't the best model for educating our kids," says Victoria Bergsagel, principal of Seattle-based Architects of Achievement, a consulting firm. She points to innovative new school designs based on "learning clusters," "academies," or "project-based learning" approaches that are springing up around the country. Secondary-

Northeastern University Student Housing  
Boston, MA



## A Promise Delivered

Turner is the nation's leading builder. We have achieved this position through delivering on our promises. A recent promise delivered – the Northeastern University Student Housing – allows Turner to showcase its technical expertise. However, we take greater pride in making these dormitories a reality for Northeastern and their students. To learn more about Turner and see how we are building the future please visit [www.turnerconstruction.com](http://www.turnerconstruction.com).

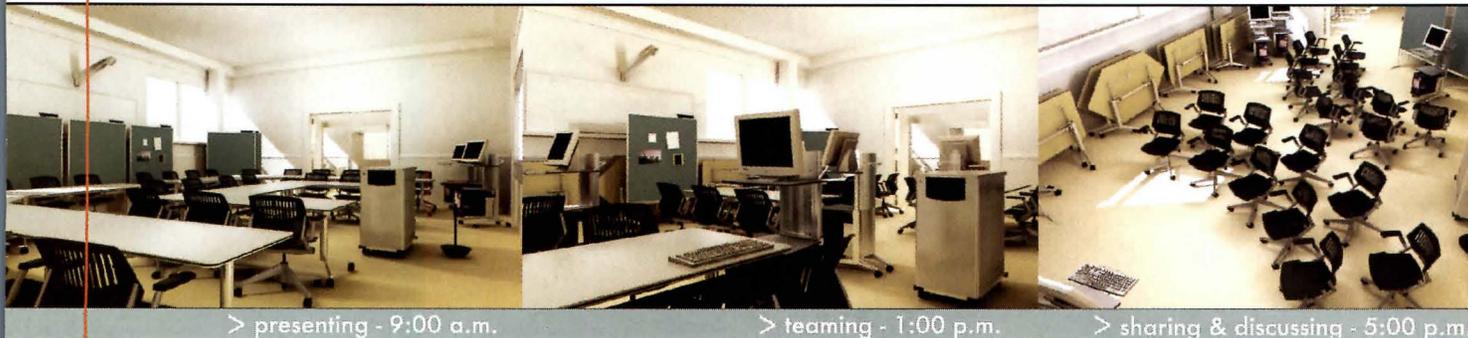
Building the Future

**Turner**

Circle 170 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

## multi·pur·pose

-- adj. -- easily reconfigured meeting spaces that support numerous teams, functions and activities throughout the day.

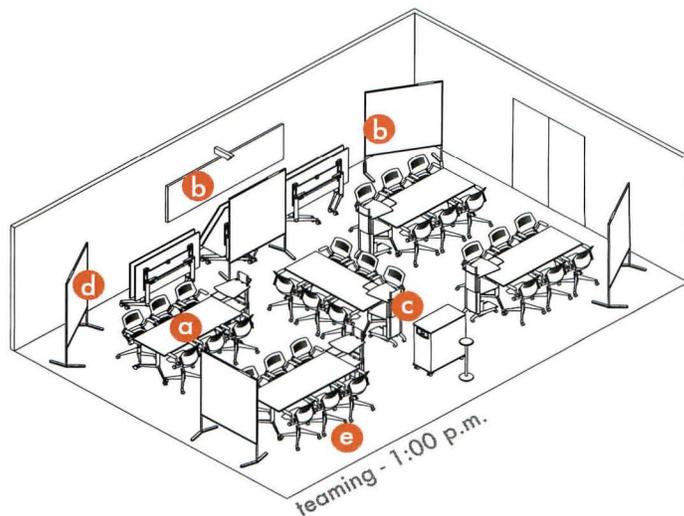
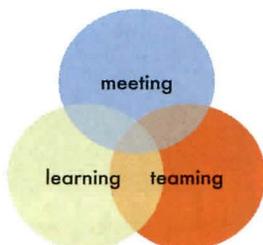


To maximize the money you've invested in meeting room real estate, the room must do the following:

- support presentations and the technology tools that enhance them
- provide access to power and data anywhere you need it
- promote communication and the display of information
- accommodate a variety of activities and user preferences by quickly and easily reconfiguring

That's why we've designed our multi-purpose room product solutions to do all of these. They'll help you leverage your real estate investment and pay off in faster teamwork, better collaboration and more idea creation.

To find out more about our complete line of multi-purpose room solutions contact us at 972.603.4270 or visit us at [www.vecta.com](http://www.vecta.com).



- a Computer carts provide teams with support and data access
- b Display boards record team's work and provide visual screening
- c Space for facilitator to "work the room"
- d Tables flip and roll away on casters; nest to reduce footprint
- e Chairs on casters for speedy reconfiguration

# I.Q.



CLASSROOM SOLUTIONS



*furniture that fits®*

For information or a free brochure call us at **800 813-4150** or visit **virco.com**

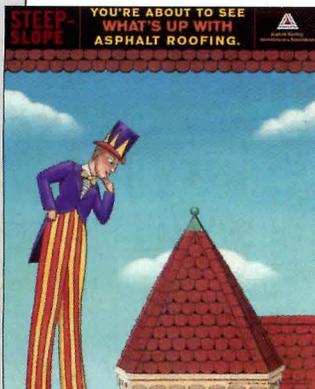
Circle 224 or [www.architecturemag.com/productinfo](http://www.architecturemag.com/productinfo)

©2003 Virco • Ref#03087

# ARCHITECTURE PRODUCT REVIEW

To advertise contact Michael Parrish at 646 654 5763 (phone) or 646 654 5816 (fax) mparrish@architecturemag.com

## ARMA



Request a free new brochure from ARMA on the aesthetic sophistication and high performance of steep-slope asphalt roofing products. The brochure, designed specifically for the needs of architects, covers topics such as: asphalt roofing's benefits vs. the competition; the 4 types of asphalt shingles; colors, styles, textures and dimensionality; manufacturers of asphalt-based roofing; and more! For your free copy (or to request the companion low-slope brochure), visit [www.asphaltroofing.org](http://www.asphaltroofing.org). **Circle 101**

## FAAC INTERNATIONAL, INC.



**Perfect for Gated Communities** FAAC is the world's largest specialized manufacturer of hydraulic operators for swing, slide and barrier gate systems. The Model 400 heavy-duty swing gate operator is UL 325 compliant and designed for heavy traffic applications, such as subdivisions and apartments. It's power also makes it

ideal for large, ornate gates. Visit [www.faacusa.com](http://www.faacusa.com) for more information. **Circle 104**

## CROSSINGGARD™ EMERGENCY RESPONSE GRILLE



Every day, the CrossingGard ERG from Cornell will protect the corridors of schools, hospitals and other public building with an exclusive anti-lift, AutoLock device. But when crisis strikes and the alarm is sounded or if power fails, the fail-safe motorized CrossingGard springs into action to automatically clear the path and allow escape without delay. Download the specification at [www.cornelliron.com](http://www.cornelliron.com) or call 800-233-8366.

**Circle 102**

## GAGECAST™



Gagecast™ is a cast metal wall surfacing material suitable for a variety of interior architectural applications. Twenty-four designs are standard; however, custom collaboration is encouraged. Gagecast™ is one component of Gage Vertical Surfacing. Contact the factory for product literature and selected samples. The Gage Corporation, Intl. PH: 800-786-4243 or 608-269-7447, FX: 608-269-7622, E-mail: [Gage@centurytel.net](mailto:Gage@centurytel.net)

**Circle 105**

## EUROTEX WALL CARPET



Wall Carpet muffles sound. It also reduces operating costs by protecting walls. Lanai wall carpet, the newest addition to the Eurotex collection, has a compact, articulated surface. Class A rated for resistance to flame and smoke. No tearing or scuffing. Occasional light maintenance preserves a crisp, new look. Studies prove savings vs. painted surfaces. Rolls and cuts may ship within 24 hours. Tel 800.523.0731, fax 215.423.0940, or go to [www.eurotexinc.com](http://www.eurotexinc.com). **Circle 103**

## OWENS CORNING



Respond® Access Ceiling—Now it's easier than ever to put style and function together. Respond ceiling system has superb acoustic performance and installs quickly and easily. It is the ideal choice for schools, hospitals, office buildings or retail spaces. For information visit [www.conweddesignscape.com](http://www.conweddesignscape.com).

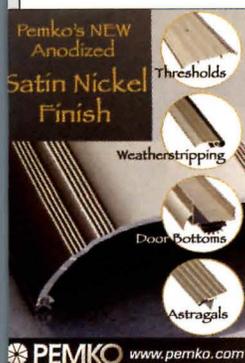
Conwed Designscape, an Owens Corning Company. **Circle 106**

# classified advertising

## WATERCOLOR RENDERINGS

Fortune 500 clientele, Watercolor: 11" x 17", 3 days. Evocative, Poetic, Cost Effective. QUICK SKETCHES TOO! Visa, MC, AmEx. Mayron Renderings, 1-800-537-9256, 1-212-633-1503. Visit [www.mayronrend.com](http://www.mayronrend.com)

## PEMKO



New anodized Satin Nickel finish completes the architectural package! Pemko offers a selection of thresholds, weatherstripping, door bottoms and astragals for residential/commercial applications in this new hi-tech finish which complements other satin nickel/pewter hardware. Architects choose Pemko for matching specified hardware/BHMA finishes. Contact Pemko at 800-283-9988 (Ventura or Whittier, CA) or 800-824-3018 (Memphis, TN). **Circle 107**

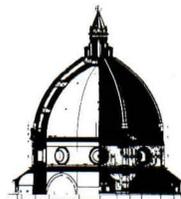
## CAREER OPPORTUNITIES

JR Walters Resources, Inc. specializing in the placement of technical professionals in the A&E field. Openings nationwide. Address: P.O. Box 617, St. Joseph, MI 49085-0617

phone: 269-925-3940 fax: 269-925-0448  
e-mail: [jrwawa@jrwalters.com](mailto:jrwawa@jrwalters.com) [www.jrwalters.com](http://www.jrwalters.com)

Master of Architecture, Post Professional Degree

## FLORENCE



### A TWO-SEMESTER PROGRAM

in design, including courses in history and theory, is open to qualified students with a first professional degree in architecture. Obtain this degree while studying in historic Florence and the rich artistic and cultural heritage of Europe. Financial assistance available.

For information Contact:  
SYRACUSE UNIVERSITY

Division of International  
Programs Abroad (DIPA)  
119 Euclid Avenue  
Syracuse, NY 13244-4170

1-800-235-3472  
[suabroad@syr.edu](mailto:suabroad@syr.edu)

or

School of Architecture  
Graduate Programs  
103 Slocum Hall  
Syracuse, NY 13244-1250

## OPUS BY PRIMA LIGHTING

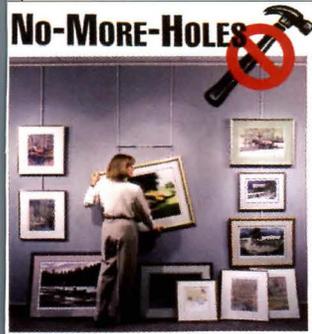


### Sunrays

Exceptional in both form and functions, Sunrays brighten any area. The light glows from the fixture's 12 glass wings and softly illuminates the area below. Sunrays can be used in low voltage monorail, cable, and mono-point / multi-point canopy system. Options of polished chrome and silver finish. Max 50W JC Xelogen bulb. For more information, call toll free 866-885-4915 or visit [www.primalighting.com](http://www.primalighting.com).

**Circle 108**

## WALKER DISPLAY



Walker Display helps you design an efficient system for exhibiting artwork anywhere. The functional no-nails design works on all wall surfaces, allowing creativity and easy rearrangement of artwork. Perfect for the office, gallery, conference room or the home. Download us at [www.walkerdisplay.com](http://www.walkerdisplay.com) or call for a FREE catalog. Walker Display, 800.234.7614 [www.walkerdisplay.com](http://www.walkerdisplay.com) **Circle 109**

## Q-CAD PAPER TO CAD DRAFTING SERVICES



**PAPER DOCUMENTS HAND-DRAFTED INTO CAD**

- 1, 3, 5, 10, 30-Day Turnarounds
- AIA or Custom Layering
- AutoCAD or Microstation
- Guaranteed Fixed Price Per Sheet, Quality, Turnaround, and Accuracy



### SERVICES

- Construction Documents
- Red-Line Markups
- Redraw: Architectural, Engineering, Maps, Machine Drawings, and Historical Archives

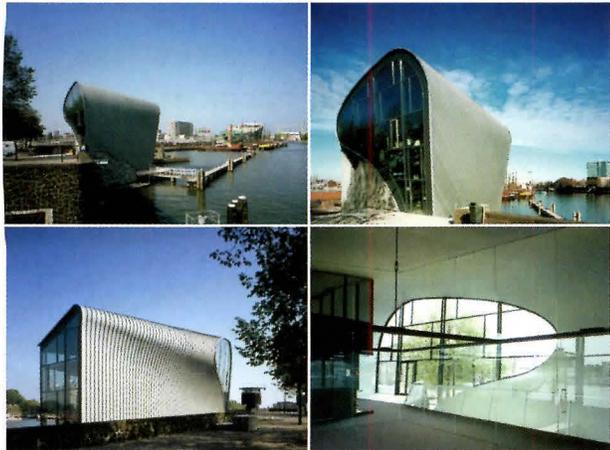
\$100

800-700-3305 | [www.Q-CAD.com](http://www.Q-CAD.com) | [qcad@qcad.com](mailto:qcad@qcad.com)

## VENUE

**Amsterdam Centre for Architecture | Amsterdam**  
| [www.arcam.nl](http://www.arcam.nl)

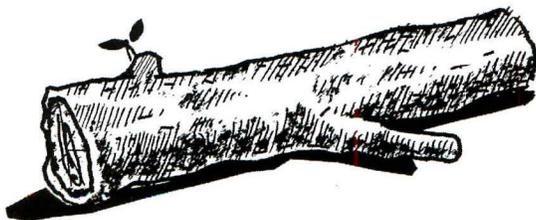
Few cities have architecture critics; even fewer have architectural information centers. Amsterdam is one of them and has been since 1986, when the Amsterdam Centre for Architecture, known as ARCAM, opened its doors. An impressive resource for all things architectural and urban design-related (books, maps, lectures, public debates), the organization moved into its first freestanding home this autumn, fulfilling its own mission in the process. The design by René van Zuuk, a young architect working in the Dutch town of Almere, establishes a boldly sculptural presence on the IJ River a short walk from the city's central train station; shaped like an inverted raindrop, the little building shares a pier with Renzo Piano's 1997 ship-shaped science museum, NEMO, reusing the columns and floors of a pavilion originally constructed as an annex to that structure. Van Zuuk added a floor and wrapped the three-story structure in corrugated zinc-clad aluminum and glass, enclosing offices, exhibition space, and meeting rooms. The result is a rare, high-profile venue for architecture. **Abby Bussel**



## JOURNAL

**Log | [www.anycorp.com](http://www.anycorp.com)**

Three years ago, two journals of architectural theory, *Any* and *Assemblage*, ceased publication. This fall, former *Any* editor Cynthia Davidson fills the void with the launch of *Log*, a platform for "observations, speculations, and ideas on architecture and the city at this point in our time and space." The first edition includes essays on topics ranging from mainstream issues (Davidson on Ground Zero, Anthony Vidler on Koolhaas) to fanciful musings (Mark Rakatansky compares architecture to an ice-cream sundae.) The journal is a hopeful answer to the current scarcity of critical writings on architecture, and best of all, it is a surprisingly readable addition to the notoriously word-locked world of theory. **Anna Holtzman**



## BOOK

**Critical Regionalism | Liane Lefaivre and Alexander Tzonis | Prestel**

The basic tenet of this modest volume is that in an increasingly globalized world, architects can continue to build in a way that authentically incorporates local landscape and culture, while infusing their projects with a strong strain of sustainability as well. Before launching into a wide-reaching survey of regionalist works that they feel fit this bill—by practitioners ranging from Alvar Aalto to MVRDV, Oscar Niemeyer to Renzo Piano—Netherlands-based authors and academics Liane Lefaivre (an *Architecture* editor-at-large) and Alexander Tzonis offer twin introductions that serve as both history lessons and cautionary tales. The nationalistic *Heimatarchitektur* of the Nazis, the fierce anti-International Style stance championed by *New Yorker* columnist Lewis Mumford, and the experiment in cultural kitsch that was the Hilton Hotel in Istanbul—all provide the up-and-down lead-in to the regionalist successes of the second half of the last century. The bulk of the book is wisely left to showcase works, such as Santiago Calatrava's Ysios Winery and Foreign Office Architects' Yokohama International Port Terminal, that the authors believe are prime examples of regionalism. **Jamie Reynolds**



## EXHIBITION

**Max Protetch Sculpture Beacon | Beacon, New York | [www.maxprotetch.com](http://www.maxprotetch.com)**

The Max Protetch Gallery in Manhattan, which began showing architectural drawings in 1978, recently opened a second branch with an outdoor sculpture garden in Beacon, New York, also home to the Dia:Beacon art museum. The gallery's upstate satellite provides a platform for large-scale works; its inaugural exhibition comprises a series of gray brick-and-block structures by Sol LeWitt that resemble mysterious memorials. The five-acre facility, sited next door to an art fabrication foundry, includes a 5,000-square-foot gallery building that used to serve as the foundry's paint shed, as well as the house of the foundry's former owner, which will be turned into live-work units for artists associated with the gallery. **Anna Holtzman**



## EXHIBITIONS

## BERLIN

**OMA/AMO**

An exhibition on Dutch architect Rem Koolhaas, his firm OMA, and its think-tank branch, AMO.  
**NEUE NATIONALGALERIE**  
 www.smpk.de  
 Through January 20

## BOSTON

**Michael Maltzan**

Work by the Los Angeles-based architect who designed MOMA's temporary Queens home.  
**HARVARD DESIGN SCHOOL**  
 www.gsd.harvard.edu  
 December 1–January 19

## LONDON

**Emerging Architecture**

Winners of the ar+d awards, sponsored by *Architectural Review* and design company d line.  
**ROYAL INSTITUTE OF BRITISH ARCHITECTS**  
 www.architecture.com  
 December 5–March 2



## NEW YORK CITY

**Jean Prouvé**

Furniture, architectural elements, and photographs relating to three of the French architect's buildings.  
**COLUMBIA UNIVERSITY ARCHITECTURE GALLERIES**  
 www.arch.columbia.edu  
 Through April 23



## SCOTTSDALE, ARIZONA

**Samuel Mockbee**

An exhibition organized by the Birmingham Museum of Art on the work of the Rural Studio.  
**SCOTTSDALE MUSEUM OF CONTEMPORARY ART**  
 www.scottsdalearts.org  
 Through January 2

## WASHINGTON, D.C.

**Rowhouse Redux**

Washington, D.C.-based architects' visions of the future of homes, cosponsored by the local AIA chapter.  
**NATIONAL BUILDING MUSEUM**  
 www.nbm.org  
 Through January 18

## EVENTS

## CHICAGO

**CSI**

Annual convention and trade show sponsored by the Construction Specifications Institute.  
**MCCORMICK PLACE**  
 www.thecsisshow.com  
 April 20–24

## LAS VEGAS

**Lightfair International**

Annual lighting show, now including the "Daylighting Institute," a series of educational seminars.  
**LAS VEGAS CONVENTION CENTER**  
 www.lightfair.com  
 March 29–April 2

## COMPETITIONS

**Young Architects**

National competition for young designers, sponsored by the Architectural League of New York.  
 www.archleague.org  
 Deadline February 6

**Labs21**

Student competition for a chemistry and biology laboratory building for Georgetown University.  
 www.acsa-arch.org  
 Deadline February 9

ALL IMAGES COURTESY EXHIBITING INSTITUTIONS

## ad index

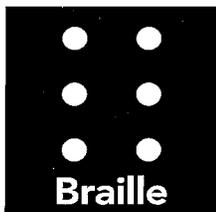
## FREE PRODUCT INFORMATION

RS #	ADVERTISER	PAGE	RS #	ADVERTISER	PAGE
230	Academy of Arts College	6	*11, 189	<b>L.M. Scofield Company</b>	50–51, 128
53	ARCAT (Regional)	75	*161	<b>Marshfield Door Systems</b>	44–45
99	Architectural Lighting Master Classes	33, 70	*191, 33	<b>Marvin Windows and Doors</b>	46–47, 130–131
101	ARMA	140	19	Osram Sylvania	133
*—	<b>Autodesk</b>	16–17	106	Owens Corning	140
213	Bartco Lighting	C4	107	Pemko	141
9	Bobrock Washroom Equipment	124	220	Petersen Aluminum	62
*158	<b>Bradley Corp.</b>	18–19	4	PGT Industries (Florida region)	128AA–128BB
235	Cascade Coil Drapery	117	37	PGT Industries (S.C. region)	128A–128B
*160	<b>Ceco Door Products</b>	20–21	193, 72	PPG Industries	135, 136
238	Centria	125	173	Precast/Prestressed Concrete Institute	134
*46	<b>CertainTeed</b>	22–23	108	Prima Lighting	141
*242	<b>Cooper Lighting</b>	24–25	41	Prisma Architectural Lighting	71
14	The Cookson Company	76	163	Reilly WoodWorks	69
219	Corbin Russwin	11	248	Rixson Specialty Door Controls	78
102	Cornell Iron Works	140	*225	<b>Schott North America, Inc.</b>	48–49
93	Dcota	C3	18	Somerset Door	115
*57	<b>Dornbracht</b>	26–27	162	Sony Electronics	84
51	Surfaces	83	*214	<b>SPI Lighting</b>	60–61
22	EFCO	110	*48	<b>Tarkett USA Inc.</b>	52–53
206	Epic Metals	126	*34	<b>Toto USA</b>	54–55
47	ERCO (Regional)	75	170	Turner Construction	137
*73, 103	<b>Eurotex</b>	28–29, 140	233	Urban Redevelopment Authority	65
104	FAAC International	140	74	USG	2–3
*28	<b>Follansbee Steel</b>	30–31	164	Vecta	13
*13	<b>Formglas</b>	32	224	Virco	139
105	The Gage Corp.	140	*204	<b>The Vistawall Group</b>	56–57
*174	<b>Glen-Gery Corp.</b>	34–35	*2	<b>VT Industries</b>	58–59
201	Graham Architectural Products	127	109	Walker Display	141
*88	<b>Graphisoft</b>	36–37	164	Wausau Tile	12
71	Hanover Architectural Products/	7	186	Wausau Window & Wall Systems	79
*152	<b>Johns Manville</b>	38–39	69	Wilsonart International	C2–1
228	Johnson Controls	8	209	W.S. Tyler	65
223	Kalwall	80			
171, 66	Kepeco	72, 117			
96	Kolbe & Kolbe Millwork	64A–64D			
35	LantorBV	66			
*194	<b>Lehigh Cement Company</b>	40–41			
178	Leviton	129			
*56, 190	<b>Lightolier</b>	42–43, 132			

## \* 2003 ACE AWARD WINNERS

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.

## THE CARROT AND THE STICK OF UNIVERSAL DESIGN



Ecologically minded design has become second nature—and good business. Why hasn't accessibility?

by Peter Slatin

Though it has taken time, green design has become a happy part of the lexicons of architecture, construction, and even real estate. But a design dimension that should have become its equal in the journey from advocacy to inevitability has been left behind. Universal design still presents a hurdle that most would rather walk around than take a run at. Sustainability is a goal that has seeped into design consciousness as a mainly positive force; accessibility, on the other hand, is still perceived as a design slum. In this unappealing district, the turbulent streets harbor beneficent ideas, but getting to and nurturing them seems more trouble than it's worth.

Is this a bad thing? Or is it less a reflection of skewed priorities than of the difficult and dangerous ways that public and private forces can collide in bringing decision-makers' attention to matters they would rather ignore?

Consider two acronyms: LEED and ADA. One beckons: Leadership in Energy and Environmental Design, administered by the increasingly powerful U.S. Green Building Council (USGBC). The Americans with Disabilities Act, under the aegis of the U.S. Department of Justice, threatens. The intentions that drove the creation of these initiatives, and the characteristics they embody, neatly express the perceptual chasm that grows between them. Put simply, LEED certification, a voluntary rating system, is something for building professionals to strive for; along with the environmental benefits that certification establishes, come impressive commercial ones. This green imprimatur also carries with it a host of marketing possibilities, from the self-con-

gratulatory to the full-blown publicity campaign. In addition, although no tax incentives come directly through LEED, the designation does offer a strong platform for various financial incentives at municipal and state levels; similar federal programs are likely to be established soon. The USGBC is a nongovernmental organization, but its makeup includes public officials who are able to assist or even lead the way in tying LEED into various tax programs and development bonuses.

Then there's ADA. Compliance and cost are its watchwords. Although bringing businesses and their facilities into compliance does allow owners to qualify for tax benefits, these are capped at \$20,000 per year in a combination of credits and deductions.

ADA compliance is rarely thought of as a building's most exciting design element. What good does it do to say one has met the minimum standard? Even those who reach well beyond the minimum to find creative and exciting solutions to accessibility challenges will, at present, find little value-added in the effort. Although universal design does sometimes drive large-scale renovations, it almost never forms the design underpinnings for new construction. Even in the accommodation of an aging population either in healthcare facilities or at home, where many Americans are choosing to "age in place," accessibility is not often a defining or marketing strategy.

### CAUSE AND RESPONSE

The present state of affairs can be traced to the roots of ADA and LEED. ADA was the climactic result of protests by disenfranchised citizens seeking redress. It was intended to mandate the arrival of the disabled community into the mainstream. It was born with the force of law, even though what that law requires is less than crystal clear. LEED, however, emerged from consensus-building

efforts across a spectrum of grassroots advocacy and professional groups.

It seems as if these tracks to plus and minus thinking on green and universal design are now firmly grooved into the terrain. And initially, it appears that cutting new tracks is impossible, or at best impractical. That isn't the case. Because while the initiating organizations, acts, and actions stem from divergent impulses, they share a common root: fear. We fear a sick planet and what it can do to us. Yet we know we can do something about it, something that, even in minuscule increments, will make a difference. We face this challenge with vigor, with at least a partial knowledge of the target and the desired outcome. Most important, we fear environmental calamity collectively, which makes it easier to address publicly.

But facing universal design is a less appealing task, involving more personal and complex questions that are difficult to place in global terms. Although everyone is vulnerable to changes that could put him or her in the camp of those most affected by constructed barriers, it is a truth that humans rarely confront. Those changes, after all, will come about most likely from violent accidents or extreme disease. The ability to alter that course of events seems out of reach.

The truth is, however, that universal design addresses what all of us, and those we love, will need at some point in our lives. As much as sustainability represents a goal with measurable societal benefits, so does accessibility. It's time to face the fears that assign the challenges of disabilities to others. Once we accept that we are already there—in a world that has too many unnecessary hurdles—good design will have to become as natural to us as a walk in the park.

Peter Slatin is founder and editor of *The Slatin Report*, a Web-based real-estate news service.