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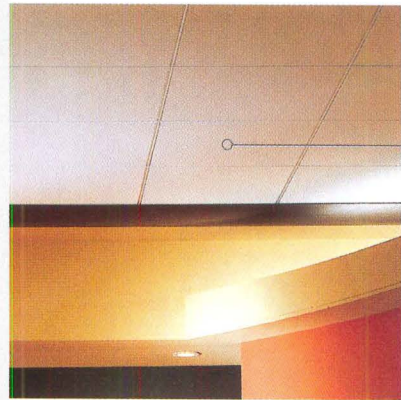
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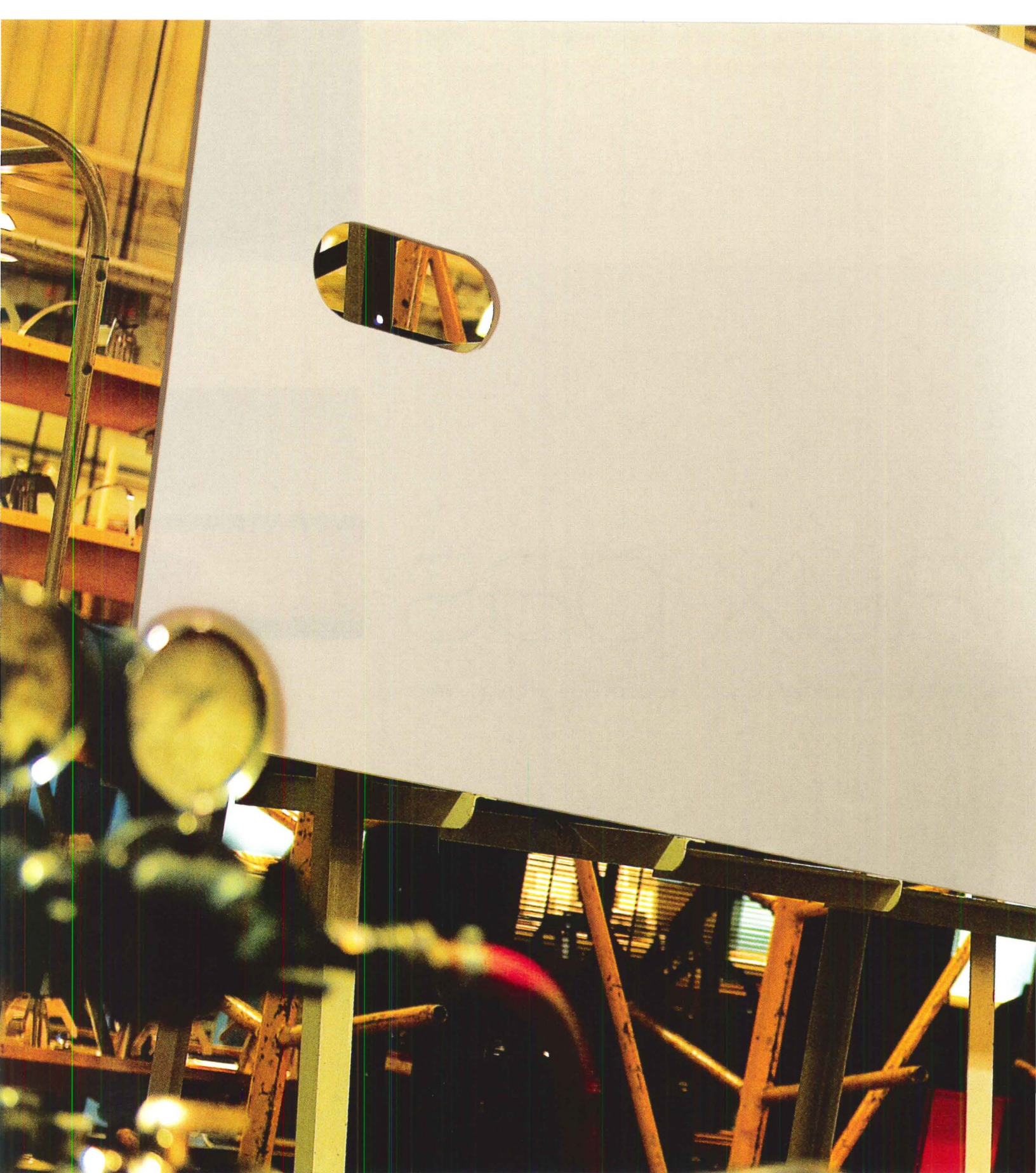


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FEBRUARY 2003

15 NEWS

World Trade Center memorial competition goes public; new Case Study Program launches; project management makes inroads; and more. **EDITED BY JULIA MANDELL**

22 AGENDA

Cities regenerate; a performance artist builds in Brooklyn; Caracas gets advice; a new Botta museum opens in Italy; plus exhibitions, conferences, and competitions.

EDITED BY ANNA HOLTZMAN

28 ON THE BOARDS

Johnston Marklee meets Morphosis; Miami courtyard houses by Keenen/Riley and Proun Space Studio; Richard Rosa residences reviewed. **EDITED BY BAY BROWN**

33 PROTEST

Boston's Leonard P. Zakim Bunker Hill Bridge is an imperfect icon. **BY JANE HOLTZ KAY**

99 SPECIFICATIONS

Brock Green Architects and Planners designs lofts for Atlanta; seamless curtain wall graces Trump World Tower; plus ceilings and carpeting. **EDITED BY C.C. SULLIVAN**

9 EDITORIAL / 13 LETTERS / 109 AD INDEX / 112 VIEW

PRACTICE

35 MAKING A CASE

Historic modern houses have regained their popularity, but a lack of protection keeps the bulldozers circling. **BY KIMBERLY STEVENS**

37 SECOND WIND

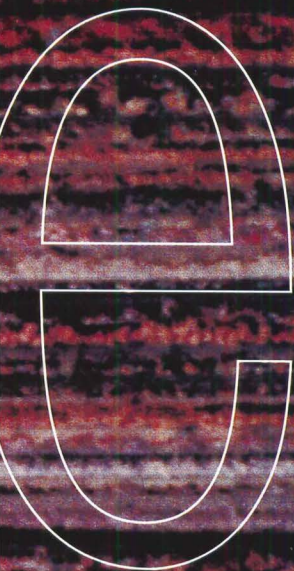
After a long period of drought, a new wave of commissions has the California modernist Pierre Koenig turning away clients. **BY BAY BROWN**

43 CRY, THE BELOVED COUNTRY

Expatriate Afghan architects do their best for a war-ravaged land. **BY JAMES MCCOWN**

VOLUME 92 NUMBER 2

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DESIGN

67 OPEN ARCHITECTURE

68 ORIGAMI EXPERIENCE

Yokohama's folded-steel international passenger terminal by Foreign Office Architects is lighter than air. BY PETER SLATIN

74 ON THE LINE

A German manufacturer of precision drilling tools expects its factory to function as well as its products. BY ABBY BUSSEL

80 GREAT SALT LAKE STORY

A mixed-use nonprofit development project revitalizes Salt Lake City's west side. BY JULIA MANDELL

84 MASTER CLASSES

Disciples of the Swiss Italian modern master Aurelio Galfetti fill in the pieces of his master plan for the University of Italian Switzerland. BY RICHARD INGERSOLL

92 IN THE STACKS

The last Rural Studio house supervised by Samuel Mockbee demonstrates that design driven by client, community, and context can transcend any obstacle. BY CATHY LANG HO

COVER AND TABLE OF CONTENTS

Students at the Rural Studio, Auburn University's famed design-build program founded by the late Samuel Mockbee and D.K. Ruth, render a concept for the Lucy Harris House (page 92), which was built with recycled carpet tiles (these pages). Cover illustration: Rural Studio Outreach Program; photograph by Timothy Hursley.

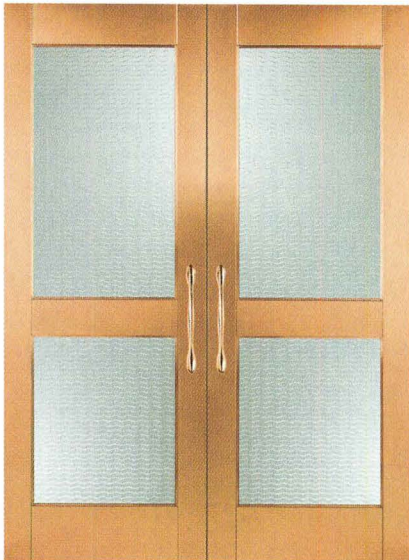
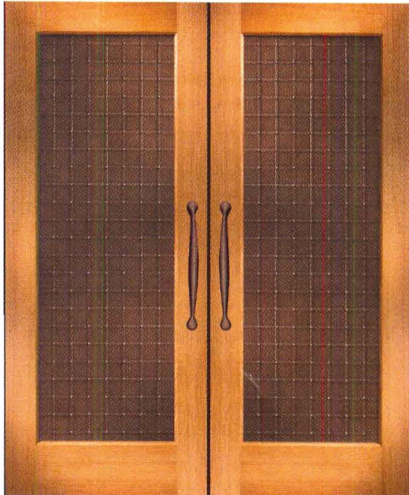
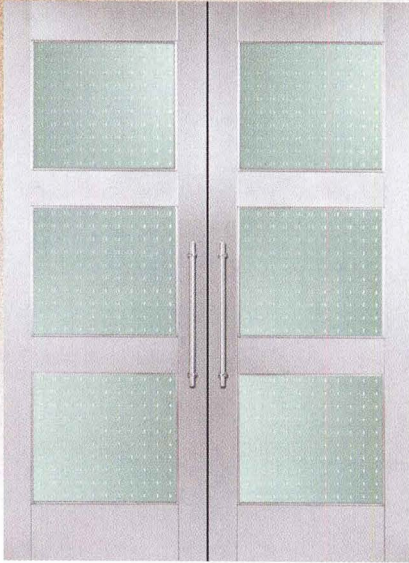
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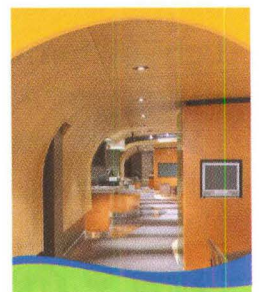
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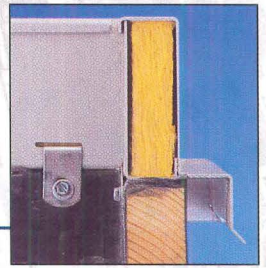


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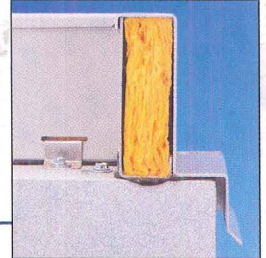
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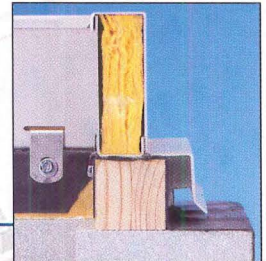
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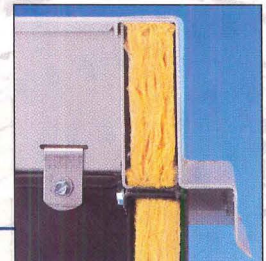
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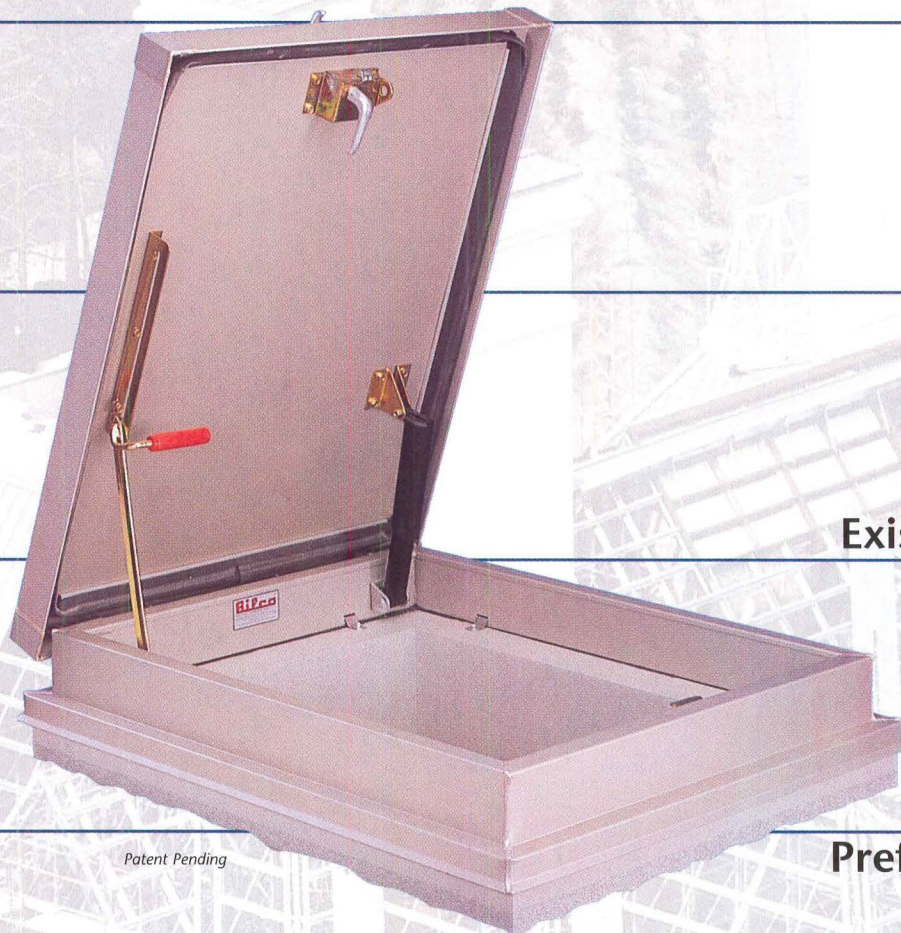
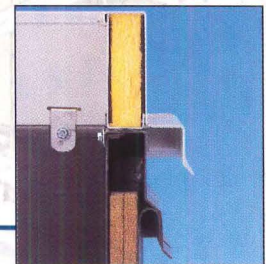
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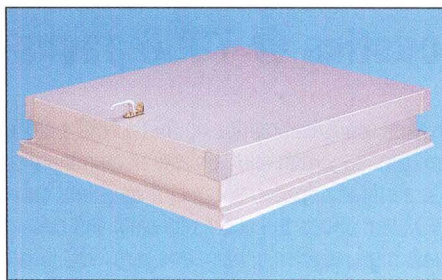
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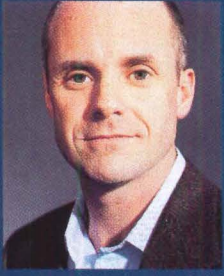


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BY C.C. SULLIVAN

A HEALTHIER DESIGN STUDIO

An increasingly urgent debate has resurfaced at the 115 or so architectural schools across the United States about how best to nurture budding talent. The discussion focuses on the role of the design studio, thanks largely to the publication in December of *The Redesign of Studio Culture* by the “studio culture task force” of the American Institute of Architecture Students (AIAS). The report raises new questions about how deeply ingrained attitudes and assumptions can compromise the effectiveness of the studio as a means of teaching and training. The big question implied by the study is how can schools promote excellence while treating their students decently, and the report’s authors call for fundamental, common-sense changes to the nature and direction of the design studio.

Ever since the late nineteenth century when it was imported from Paris by Beaux Arts-trained educators, the design studio has been the pedagogical and moral center of U.S. architectural education—and its fundamental qualities have changed very little. The open, interactive environment fosters dedication, lasting friendships, and a sense of community, acknowledges the AIAS report, yet it is also known for “long hours, punishing critiques, and personal sacrifice.” The authors detail how self-perpetuating myths have deeply affected studio culture over the years, contributing to unhealthy behavior, dubious work habits, and the isolation of architecture students from the broader academic community.

The report fails to point out, however, that too many educators staunchly defend the idea of the studio as a painful rite of passage. Is the “ritual scarring” of the studio culture—as one educator matter-of-factly describes this process—actually a beneficial part of architectural education? This question is central to the AIAS report, and it has come up recently at schools where students have aired grievances about their treatment by faculty members.

“The idea that somehow education has to leave scars is a weird and antiquated view, and I completely disagree with that,” says Thomas Fisher, author of *In the Scheme of Things: Alternative Thinking on the Practice of Architecture* (University of Minnesota Press, 2001) and dean of the University of Minnesota’s architecture school. “It’s part of a highly romanticized image of architecture, but you don’t educate by instilling fear and pressures.”

Why do some architecture schools struggle to foment an equitable and benevolent atmosphere while they turn out skilled architects? In part, the answer lies in the intense and necessarily personal nature of critiques and the openness of the studio, which heighten student awareness of each other’s work—and failings. This challenge has always been magnified at

schools that are growing quickly, trying to boost their reputation, or focusing on formal design and architectural theory. “These are high-pressure environments for students, and it can be very hard,” notes Frances Bronet, a professor at Rensselaer Polytechnic Institute’s architecture school in Troy, New York, and past president of the Association of Collegiate Schools of Architecture (ACSA). “It’s partly because there’s still this fetish about design. Yet, architecture firms are growing in areas of upstream and downstream services, and our studios need to reflect that.”

As Bronet suggests, many architecture programs are changing and expanding their curricula to include a broader array of experiences. This trend, the AIAS report concludes, is a key to enriching and enlivening studio culture and making it a more positive force. Among its recommendations is that design studios foster “a culture of engagement” by involving students in multidisciplinary study, community activities, and end-user dialogue. “I’ve been encouraging my department to be more involved in the community, because it’s very useful in advancing architecture and how we see it in the future,” says Bradford C. Grant, president of ACSA and chair of the architecture department at Hampton University in Hampton, Virginia. “It helps encourage diversity in architecture education, as well as diversity of views and ideas.”

The AIAS also recommends “a culture of sharing,” an idea that seems antithetical to our conception of architecture as an individual creative pursuit. “If you can deidentify ideas and thoughts solely with individual students and encourage a more collaborative attitude on all parties, that can increase student self-esteem,” Grant explains. “It also extends to professors; team-teaching is healthy.” Bronet points to the success of team-based projects and critiques at the University of Oregon and elsewhere as precedent.

Other suggestions from the AIAS report include fostering a studio culture that deeply values optimism, respect, and innovation. With these conceptual guidelines and a program of 18 recommended elements of studio education, the AIAS provides a clear blueprint for change. Of course, these ideas will meet as much institutional resistance as philosophical challenge. In his book, Fisher reminds us that, by their very nature, cultures change quite slowly.

Still, there is no better time to begin improving how we teach. For the dignity and confidence of graduates—and practicing architects—and for the advancement of our profession, educators should not only take these sensible recommendations to heart, they should immediately make plans to incorporate them into their pedagogy. ■



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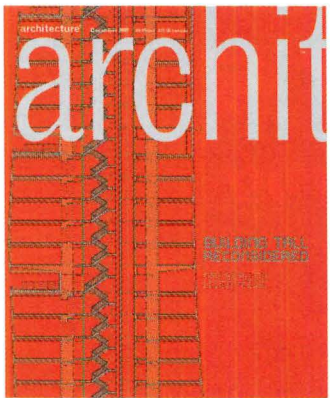
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TALL ORDER

It seems appropriate to reconsider the place of the tall building in our cities (December 2002, page 41) as we make plans for replacing the World Trade Center towers. Considering Aaron Betsky's premise that today's tall buildings arise from "a particular context and program," it was discouraging to see the examples that followed, presented like swimsuit models in their isolated glory. Only Foster and Partners' Swiss Re building shows any sense of urban context; the drawing calls into question just how compatible even an elegant design can be with a low-rise neighborhood. I look forward to a follow-up article in which the design of the space between buildings is as carefully considered as the new towers themselves.

Joseph Readdy
Portland, Oregon

TOUGH LOVE FOR INTERNS

I applaud the architectural interns in their pursuit of a more cohesive internship program and for their desire that the profession afford them the opportunities required in the NCARB process (December 2002, page 13). With that said, let me express an obvious but critical fact: The world owes you nothing! For the interns who believe their employer should manage their young careers, I recommend that they rethink whose future it is.

Neal L. Jones
Fishbeck, Thompson, Carr & Huber
Grand Rapids, Michigan

IT'S DIVERSIFICATION, STUPID

Regarding the editorial "Economic Introspection" (December 2002, page 9), I take friendly issue with your success criteria, which include being "committed to a specific market." Firms that we see doing well are those that are diversified and have education, military, and health-care work to take up the slack—or firms that provide "commodity services," such as space planning or facility management.

Stephen Swicegood
idea | span, Atlanta

JUST VENTING

The article "Curative Design" (November 2002, page 85) shows a tissue-culture lab with pressurization directing lab air into an adjacent corridor. This is not a recommended design practice. If researchers insist on positive pressurization to prevent contamination from adjacent labs, a vestibule at negative pressure relative to the labs and corridors will contain lab air.

David McCullough
SST Planners, Arlington, Virginia

CREDIT DUE

Peter Slatin mentions the Grand Avenue Plan in "Will Downtown L.A. Finally Be a Downtown?" (December 2002, page 33) without crediting the urban design workshops our firm led on behalf of the Grand Avenue stakeholders and the Music Center, which included Frank Gehry, Raphael Moneo's office, Arata Isozaki, landscape architect Laurie Olin, and the developer Stuart Ketchum. Also, he incorrectly credits my partner James Porter for the downtown group of architects that I assembled in early 2002.

Ronald A. Altoon
Altoon + Porter Architects, Los Angeles

CORRECTION

The article on the Kowloon Station Tower (December 2002, page 58) omitted the name of the Hong Kong-based associate architect, Wong & Ouyang, and its director-in-charge, W.H. Lam.

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WTC Memorial Program Drafted and Critiqued

> **REMEMBRANCE** Following the public unveiling of nine new design studies last December, the Lower Manhattan Development Corporation (LMDC) and the Port Authority of New York and New Jersey are powering through the process of settling on a land-use plan and a memorial design for the World Trade Center site while still accommodating public concerns. The two agencies hope to reach a decision on the land by the end of this month and plan to launch a competition for a memorial later in the spring. In mid-January a draft mission statement and program brief for the memorial were released, just in time for two public meetings arranged by

the LMDC to garner response to both the new designs and the memorial statements.

The memorial documents, the result of a year-long process of investigation and research, were issued by two separate committees convened by the LMDC comprising family members, residents, survivors, design professionals, and community leaders. The mission statement employs careful language to ask for remembrance, respect, and recognition of survivors and supporters, as well as inspiration. The program specified that every victim of all three September 11 attacks and of the 1993 World Trade Center bombing be recognized and that the

memorial include a place for contemplation, among other elements. The two documents were the subject of the second of the public meetings in January, held at Pace University in Lower Manhattan and simulcast to sites in the other boroughs, as well as on the local television station NY1. Attendance at both meetings fell far below that of the 5,000 participants at the "Listening to the City" event of last summer, which led the *New York Times* to speculate that the public was losing interest in the rebuilding process.

At the meeting to discuss the memorial, citizens repeatedly emphasized concern that the memorial would be overshadowed

by the economics of land use—decisions that would stifle creativity by confining the memorial to a small site. Populist feeling also ran high, with many expressing frustration with the cumbersome, bureaucratic decision-making process of the LMDC and Port Authority. One man asked for a chance to submit designs, even if he was "not in a multimillion-dollar architecture firm."

It remains to be seen if public opinion will have as much influence as it did after the first round of proposals. As the meeting's moderator, correspondent John Schiomo of NY1 said, "Let's not waste this opportunity. Let's make some noise." **JULIA MANDELL**

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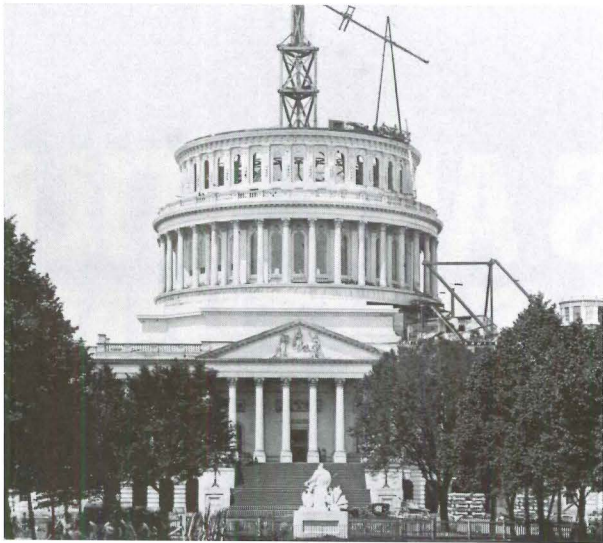
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Textures

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

circle 26 or www.thru.to/architecture



Federal Contracts to Trickle Down

> **POLICY** "Contract bundling"—a term used in the context of work that the federal government contracts out to private firms—refers to the practice of awarding all of the distinct segments of a particular project to a single firm, instead of parceling them out to several providers. The problem identified by the Office of Management and Budget (OMB) is that this practice often excludes smaller businesses, because they cannot handle large assignments. Spearheaded by the OMB's deputy administrator Angela Styles, the OMB and the Bush administration are pushing for more stringent enforcement of a largely ignored policy to "unbundle" federal contracts. Unbundling would ostensibly create more work for small- and medium-sized architecture firms.

In a press statement released early last year, Styles stated that "the number and size of bundled contracts ... have reached record levels," despite the fact that statutes for unbundling have been on the books for some time. "Not only are substantially fewer small businesses receiving federal contracts," she continued, "but the federal government is suffering from a reduced supplier base," in which competition—and competitive rates—are thwarted. To remedy this, Styles advocates increased accountability in federal agencies, requiring them to report to the OMB on procurement contract practices.

Could unbundling impact architecture firms? AIA senior director of federal affairs Dan Wilson believes so. "I think it's a great idea," he asserts, contending that the architectural profession would definitely benefit from the policy to some degree. According to the AIA's biannual Firm Survey, 6 percent of all architecture firms' billings in 1999 came from federal projects, accounting for \$1.5 billion. **ANNA HOLTZMAN**

BUZZ

The Office for Metropolitan Architecture, led by **Rem Koolhaas**, has signed on to design the \$600 million, 80-story headquarters for **China Central Television** in Beijing. The projected completion date is 2008.

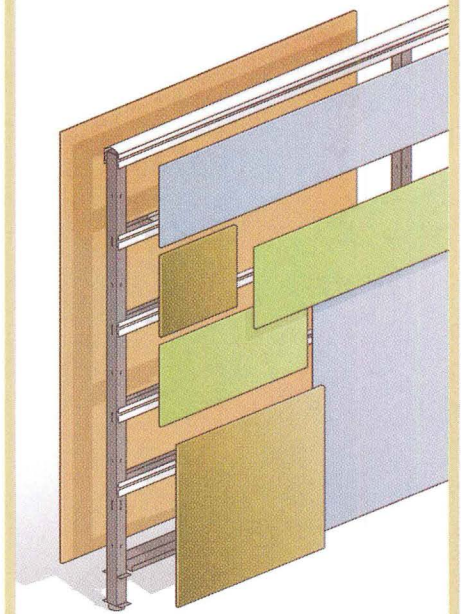
Piet Oudolf, the Dutch landscape designer, will design the Gardens of Remembrance, a 10,000-square-foot memorial garden honoring the victims of the attacks of September 11 as part of a new master plan for the Battery in Manhattan.

The New Museum of Contemporary Art has short-listed five firms to design a new facility in New York City: **Ábalos & Herreros** of Spain, **Adjaye Associates** of the U.K., **Gigon/Guyot** of Switzerland, **Kazuyo Sejima + Ryue Nishizawa/SANAA** of Japan, and **Reiser + Umemoto** of New York City.

Gaylord A. Nelson, U.S. senator from Wisconsin from 1963 to 1981, has been awarded the **American Society of Landscape Architects** Olmstead Medal for environmental advocacy.

Because of economic troubles, the **Solomon R. Guggenheim Foundation** has cancelled plans for **Frank Gehry's** \$950 million museum on the East River in New York City.

The New York Chapter of the AIA will relaunch its journal, **Oculus**, this spring with **Kristen Richards** as editor.



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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.

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How PMs Became PBs (Power Brokers)

> PRACTICE How did project managers (PMs)—also called owners' reps and program managers—suddenly become so powerful? In several markets and niches, architects say that third-party PMs control and refer large amounts of work, write major RFPs, and shortlist design firms for their clients. The trend is changing how architects behave: Many still view them as unwanted interlopers, but a growing contingent readily defend the PM's role, and a few architects even market their services cooperatively with PMs.

Favored for complex projects and in metropolitan areas where bureaucratic and coordination challenges are magnified, the market for PMs has grown quickly, notes Kenneth Levien, president of project-management firm Levien & Company, New York City. The deciding factor, however, is client profile, explains John R. Kirk, partner of New York City-based architecture firm Cooper, Robertson & Partners. "It can be anything from custom homes to institutions like museums or schools, but the shared

trait is that the clients don't design and build things for a living; it might be their first and only time." With the recent spate of new institutional buildings, and in other specialty areas, PMs have flourished, swelling their ranks by as much as 15 percent a year, says Gregory Balustrero, CEO of the Newtown Square, Pennsylvania-based Project Management Institute. Last year, a record 21,000 individuals took the group's "project management professional" certification exam.

While tensions between PMs and designers seem endemic to their roles, PMs emphasize the upside. "Our job is to make the owner a better owner," says William P. Becker, principal of Philadelphia project-management firm Becker & Frondorf, "not to second-guess the architects." On the other hand, says Kirk, "a potential liability is that the architect is removed from the client. If the clients or project managers are not disciplined, the project managers may take on more autonomy than they should." **C.C. SULLIVAN**

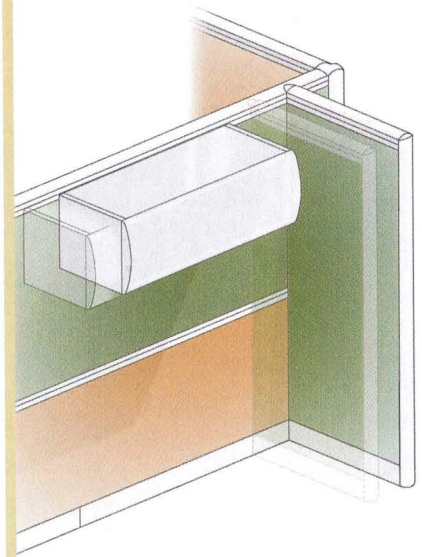
Fair Trade

> POLICY Multilateral trade liberalization will soon take another step, this time in the architectural arena. Last December, the AIA, NCARB, and Architects' Council of Europe (ACE) signed an accord that will promote the mobility of architects between the countries of the European Union (EU) and the United States and facilitate international trade in architectural services. The accord outlines the basic principles of the agreement; the three organizations expect to negotiate and define specifics over the next year.

Currently, there is no reciprocal registration between foreign countries and the United States, with the exception of Canada. While procedures differ in each European country and some do require an examination, Ellen Delage, the AIA's director of international relations, notes that in general Americans must only document a professional degree recognized

by the foreign country. European architects, on the other hand, have a more rigorous path: They have to acquire a license to practice in a U.S. jurisdiction, which means complying with the education, training, and examination requirements. "We have stronger title and practice laws than the EU has," says Michiel Bourdrez director of professional services for NCARB, "and European architects have not been happy about this. There is nothing to keep them from taking the exam, but it's a long process."

The success of the accord is not guaranteed. A key issue will be encouraging NCARB member boards to recognize and accept certification of EU architects under the new accord. In 1990, a reciprocity agreement with the U.K. was terminated because it lacked board support. Bourdrez notes, however, that this time should be different: "The idea of globalization is more commonly recognized today." **EMILIE W. SOMMERHOFF**



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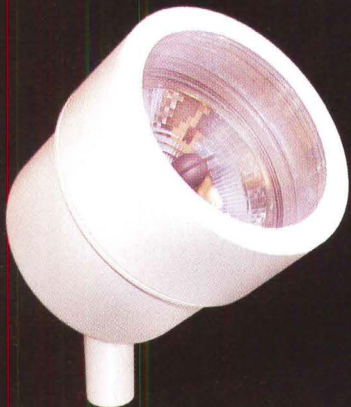
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Illuminating Design



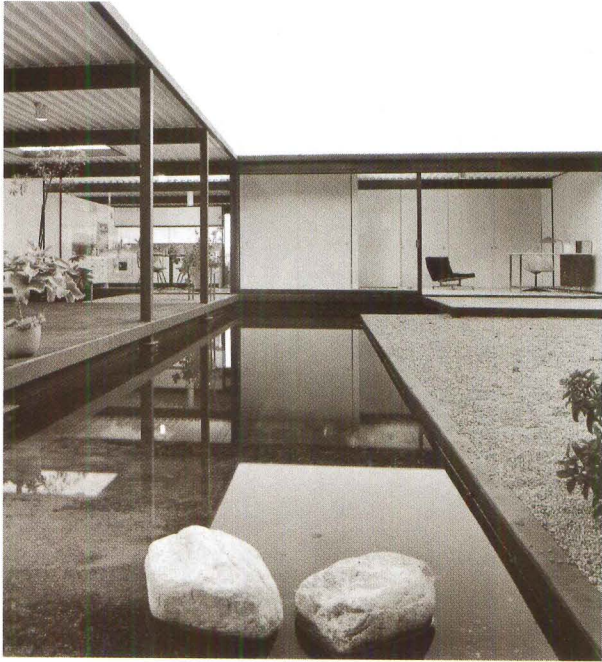
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Case Study Redux

> **POLICY** Architectural photographer Julius Shulman, the famed chronicler of midcentury modern architecture in Southern California, has long been an icon maker. But for Shulman, modernism has never reconciled the disconnect between good design and affordability, and the gap has only grown wider. He feels that all but two of the houses produced by *Arts & Architecture* magazine's Case Study program fell short of "affordable" status.

Today, at 92, Shulman together with Woodbury University School of Architecture and Design has initiated a program to resurrect the social ideals of the original Case Study program through the Julius Shulman Institute. To Shulman, Case Study Houses No. 8, designed by Charles and Ray Eames, and No. 21 (above), designed by Pierre Koenig, are two good models of well-designed, low-cost construction, but the other houses never reflected the mission as set down by the magazine's editor John Entenza.

The goal of Case Study II, the institute's first initiative, is to build prototypes designed by the school's students and faculty that have broad applicability. Projects will address the needs of an aging population and nontraditional families, issues of childcare and sustainability, and existing building code requirements. According to Shulman, like the original Case Studies, the new housing will have a modularity that will lend itself well to multifamily housing. Case Study II will begin when fundraising is complete. (See pages 35 and 37 for related stories.) **BAY BROWN**

BUZZ

The Monterey Trailer Park, the oldest trailer park in Los Angeles, has received landmark status from the **Los Angeles Cultural Heritage Commission**. It is the first time a trailer park has been declared a monument to American culture.

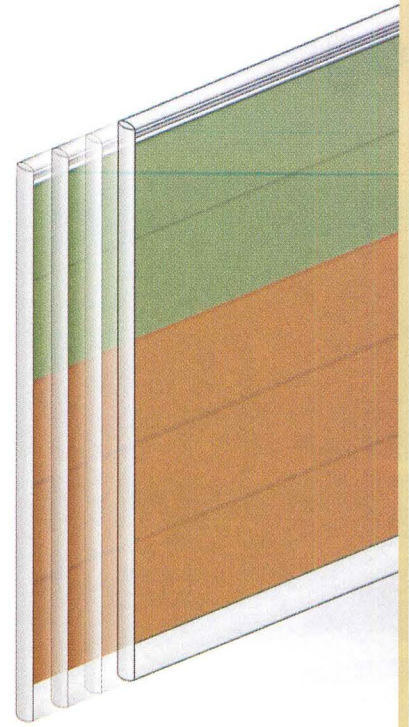
William J. Mitchell, dean of the school of architecture and planning at the **Massachusetts Institute of Technology** (MIT), is stepping down to head the Media Laboratory and the International Affiliated Media Laboratories, also at MIT.

Frank Gehry has rejoined the **Pritzker Architecture Prize** jury.

The Netherlands Architecture Institute (NAI) has given the NAI Award 2002 to **MVRDV** for the Hagen Island Housing Project in Ypenburg, the Netherlands.

The Hispanic American Construction Industry Association (HACIA) is the 2003 recipient of the **Whitney M. Young Jr. Award**, which recognizes exemplary professional responsibility toward social issues.

For architectural advocacy and achievement in the public sector, **Edmund W. Ong** of San Francisco, and **Susan Williams** of Indianapolis, have been selected as the recipients of AIA 2003 the **Thomas Jefferson Award for Public Architecture**.



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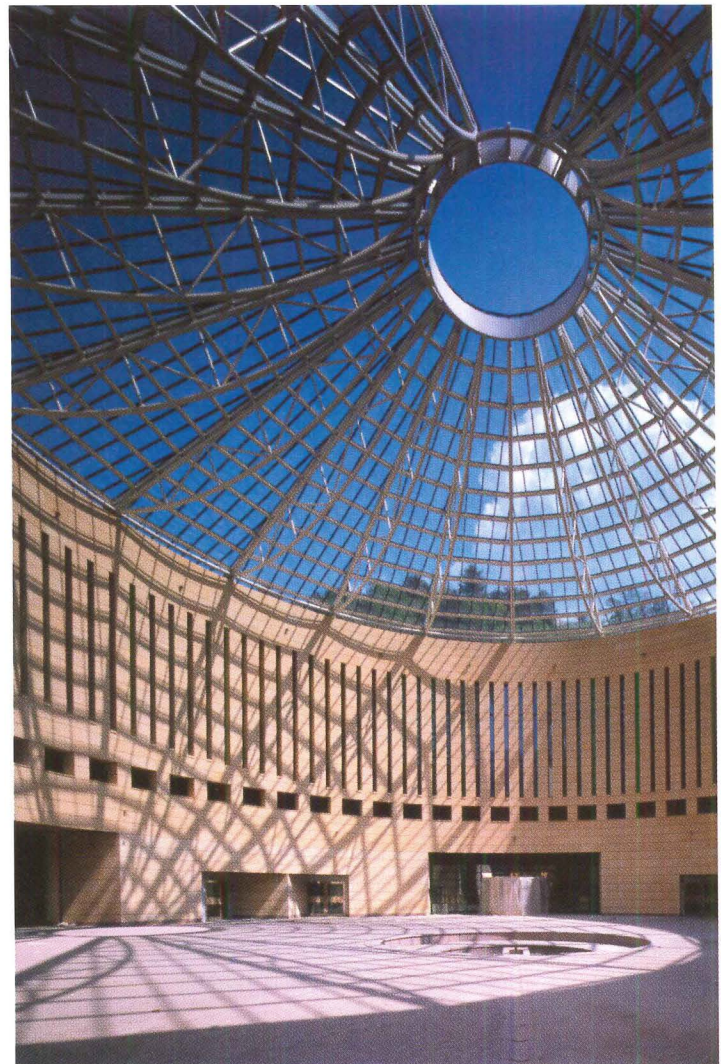


Caracas Report

> WEB

WORLDVIEW: GLOBAL PERSPECTIVES ON CONTEMPORARY URBANISM / THE ARCHITECTURAL LEAGUE / WWW.WORLDVIEWCITIES.ORG

Alfredo Brillembourg and Hubert Klumpner—both architects in Caracas, Venezuela, and members of the nonprofit research laboratory Caracas Urban Think Tank—examine the problematic urban conditions of their city in the first installment of Worldview, an ongoing online project produced by the Architectural League of New York City. The thought-provoking website maps the city of Caracas through many layers: profiles of a current cast of Caracas architects; a diverse collection of writings on and photos of the city; an information-rich map; government, geography, and population statistics; a timeline chronicling the city's history; and a forum for viewer feedback. The next installment in the Worldview series, on Dacca, Bangladesh, will appear later this year. **ANNA HOLTZMAN**



New (M)ART

> MUSEUM

MUSEO DI ARTE MODERNA E CONTEMPORANEA DI TRENTO E ROVERETO (MART) / ROVERETO, ITALY

Although Italy has more works of art per capita than any other country in the world, it offers few venues for modern art. MART is a new museum and cultural center in the northern Italian town of Rovereto dedicated to nineteenth- and twentieth-century Italian art. Designed by Swiss architect Mario Botta in 1988, the museum did not break ground until 1997 due to funding problems and bureaucracy. The permanent collection was initiated with a major donation by the futurist artist Fortunato Depero and is particularly rich in the work of his contemporaries. With its impressive 7,000-piece collection, the museum clearly has international ambitions; whether it can be supported by this provincial setting remains to be seen. **RICHARD INGERSOLL**



Reading up on Rebuilding

> BOOK

"INFORMATION EXCHANGE: HOW CITIES RENEW, REBUILD AND REMEMBER" / EDITED BY RAYMOND W. GASTIL AND ZOË RYAN / D.A.P.

After the events of September 11, 2001, the Van Alen Institute, an architecture and urban-planning think tank in Manhattan, had to decide how to offer expertise to its own city, suddenly the focus of a worldwide debate. The institute chose to put the debate in context, pulling together stories of other cities

around the world recently struck by disaster. The resulting exhibition and accompanying book provide a survey of eight cities, including Beirut (above), that have dealt with rebuilding in the last 15 years. The case studies presented offer a rich array of possibilities for the future and, most importantly, promise that there is a future. Cities do move on, sometimes in surprising ways.

The exhibition is currently on view at the Lighthouse, in Glasgow, through March 19.
JULIA MANDELL

Moveable Feast

> PERFORMANCE

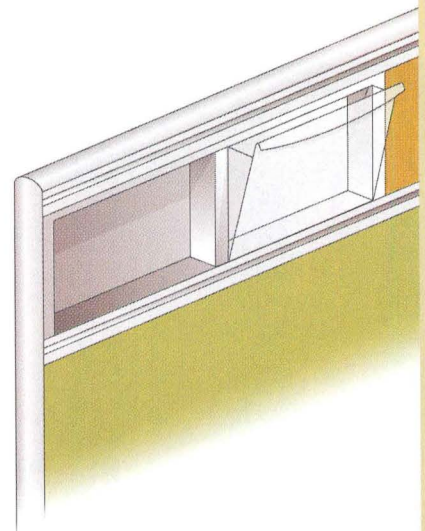
"FEAST" / J MANDLE PERFORMANCE / WWW.JMANDLEPERFORMANCE.ORG / NEW YORK CITY / MARCH 6-APRIL 6

Movement, sound, costume, lighting, and architectural design come together in the site-specific performance pieces produced by artist Julia Mandel and her collaborators, who form the New York City-based arts collective J Mandle Performance. Their latest creation, *Feast*, will premier this March in Brooklyn, New York.

Feast explores the theme of eros in Plato's *Symposium* and will incorporate Mandel's signature movement-defining costumes and architectural space design.



"I came up with the design of the space based on the building we're in, with its dynamic pitched roof. I felt that the [performance] room was somehow longing to have a response to that pitched roof," explains Mandel, who has held performances and exhibitions at venues in New York City including the Cooper-Hewitt National Design Museum and Storefront for Art and Architecture. **ANNA HOLTZMAN**



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>agenda

EXHIBITIONS

BELLEVUE, WASHINGTON

Oh Boym! A Sideshow of Design product and exhibition design team—and husband and wife—Constantin and Laurene Boym have designed their own exhibition, showing how they transform ordinary objects into new products, at the Bellevue Art Museum, through April 13. (425) 519-0770

BERLIN

Take a Seat! 200 Years of Design History from the Collection of the Vitra Design Museum a display of 260 chairs from 1800 to the present, at the Vitra Design Museum Berlin, through June 22. (49) 30-473-7770



BRUSSELS

Aluminum by Design: Jewelry to Jets organized by Pittsburgh's Carnegie Museum of Art, this exhibition traces the material's incarnations in furniture, architecture, and consumer and industrial products, at the Hotel Wielemans, February 18–May 11. (32) 02-544-0833

General Motors Technical Center:

Eero Saarinen's View of Industrial America Saarinen's grand scale project for GM in Detroit is documented through drawings and photographs, at the Graham Foundation, through March 13. (312) 787-4071

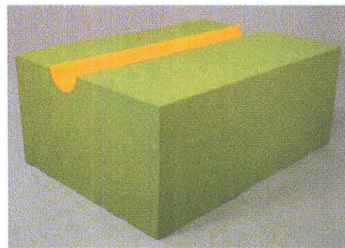


COLUMBUS, OHIO

Away from Home new projects by international artists reflecting issues of home, travel, exile, nomadism, and sense of place, organized by the Wexner Center, at the Columbus College of Art and Design's Canzani Center Gallery, February 1–April 20. (614) 292-3535

HOUSTON

Donald Judd: The Early Years, 1956-1968 the minimalist artist's lesser-known paintings and drawings are exhibited in the first comprehensive presentation of his early works, at the Menil Collection, through April 27. (713) 525-9400

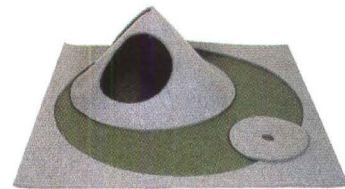


HUMLEBAEK, DENMARK

Wolfgang Tillmans: View from Above the German-born photographer and recipient of the 2000 Turner Prize exhibits his bird's-eye-view photos of subjects ranging from cities to plants, at the Louisiana Museum of Modern Art, through April 21. (45) 4919-0719

LONDON

Unpacking Design: Matali Crasset rising French furniture and industrial design star Crasset, a protégé of Phillipe Starck, displays her unusual designs, at the Victoria and Albert Museum, February 28–March 23. (44) 20-7942-2000



LOS ANGELES

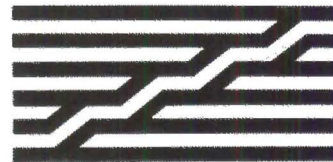
Trespassing: Houses x Artists this show of nine new architectural projects, developed jointly by artists and architects of OpenOffice, is co-organized by the Bellevue Art

Museum and the MAK Center, at the MAK Center, through April 13. (323) 651-1510

NEW YORK CITY

Living Inside the Grid works by 23 emerging artists address the challenges of living in a world increasingly controlled by institutions, technology, and media, at the New Museum, February 28–June 15. (212) 219-1222

Jean Widmer: A Devotion to Modernism—Itinerary of a Designer from Zurich to Paris a survey of the Swiss graphic designer's work, produced in conjunction with the Swiss Peaks Festival, at the Cooper Union's Lubalin Study Center for Design and Typography, February 24–April 5. (212) 353-4158



VIENNA

Emerging Architecture 3: Beyond Architainment the third installment of the "Emerging Architecture" series, presenting regional projects by 10 young Austrian firms whose work prizes quality over novelty, at the Architekturzentrum Wien, through March 10. (43) 1-522-3115

Tobacco: Architectural Photographs by Maxwell MacKenzie

architectural photographer MacKenzie chronicles the dying breed of the tobacco barn from Kentucky to Connecticut, at the Octagon, through May 2. (202) 638-3221



WEIL AM RHEIN, GERMANY

Ingo Maurer—Light—Reaching for the Moon a showcase of whimsical lighting designs by the self-taught German designer, at the Vitra Design Museum, through August 10. (49) 7621-702-3200

WILMINGTON, DELAWARE

Raymond Loewy: Designs for Consumer Culture a retrospective on the industrial designer who has created numerous American icons, from Greyhound buses to Shell Oil's corporate identity, at the Hagley Museum and Library, through August 3. (302) 658-2400

CONFERENCES

The University of Virginia School of Architecture, together with Design Corps, will cosponsor **Structures for Inclusion 3**, a conference on the potential for achieving affordable, high-quality architecture, at the University of Virginia, Charlottesville, Virginia, March 29–30. www.designcorps.com

The Kitchen/Bath Industry Show and Conference, owned by the National Kitchen and Bath Association, sponsored by *Kitchen & Bath Business* magazine, and produced by VNU Expositions, will be held this year at the Orange County Convention Center, Orlando, Florida, April 10–13. www.kbis.com

COMPETITIONS

Friends of the High Line, a coalition formed to preserve the early 1930s disused elevated rail line on Manhattan's West Side, is seeking visionary proposals to re-use the High Line as a pedestrian promenade, in the competition **Designing the High Line**. Deadline May 5. www.thehighline.org

The **International Achievement Awards**, sponsored by the Industrial Fabrics Association International, recognizes designers, manufacturers, and subcontractors that have creatively used fabric in a wide range of project categories. Deadline July 1. www.ifai.com

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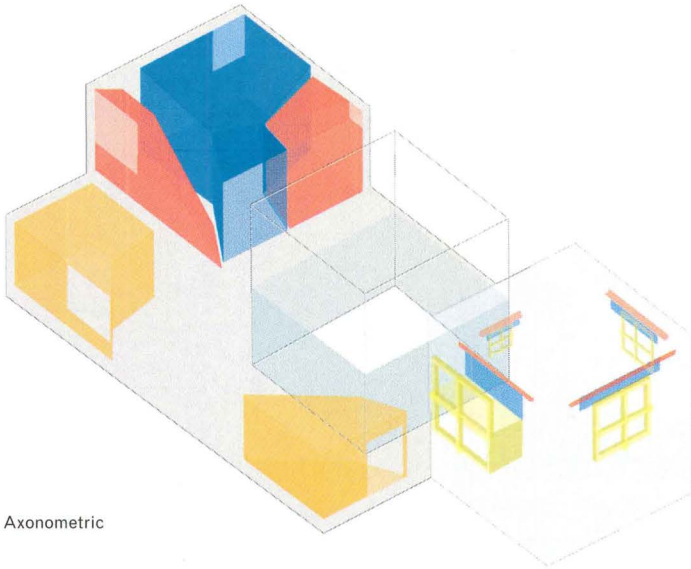
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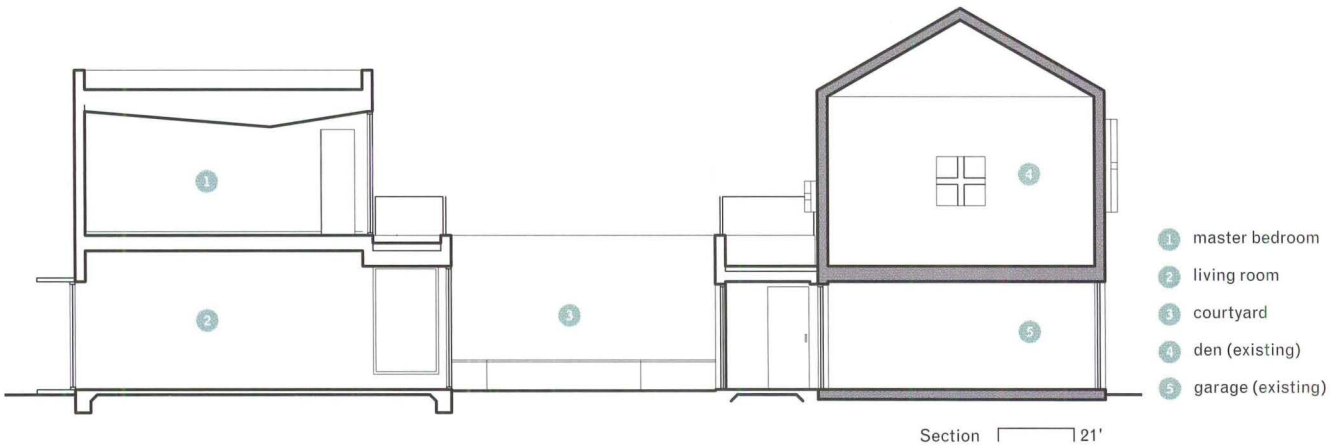
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- 2 living room
- 3 courtyard
- 4 den (existing)
- 5 garage (existing)

> JOHNSTON MARKLEE & ASSOCIATES / SALE HOUSE / VENICE, CALIFORNIA

In designing a new host structure for the 2-4-6-8 House, a back-of-lot studio and garage in Venice, California, designed by Morphosis in 1978, Johnston Marklee has the interesting task of commenting on a postmodern classic. The original host house lost to fire, the new Sale House will update and respond to the Morphosis design, itself a playful riff on the 1920s beach bungalow it was built to accompany.

The new house fills the narrow lot and attaches to the studio, creating a small complex of interior and exterior spaces that include a courtyard, a master bedroom and bath, and living, dining, and kitchen spaces. Inspired by a Morphosis drawing that shows the 2-4-6-8 House rotated and multiplied, Johnston Marklee uses the uniform mass of the ground

floor as a base for serialized variations on the existing studio. At the front of the new house, the second-floor master bedroom suite mimics the upper portion of the studio volume, while the interior courtyard is an excavated variation, representing the studio shape as a void.

The platonic dimensions of the studio windows (2 feet square, 4 feet square, and so on), which inspired the name 2-4-6-8, define the sizes of the exterior openings in the new building. The primary colors of the original studio's windows are expanded in the new interior, each room finished in red, yellow, or blue resin. The gray exterior of the new building amplifies the interior colors and creates an upscale counterpoint to the rough siding on the original studio.

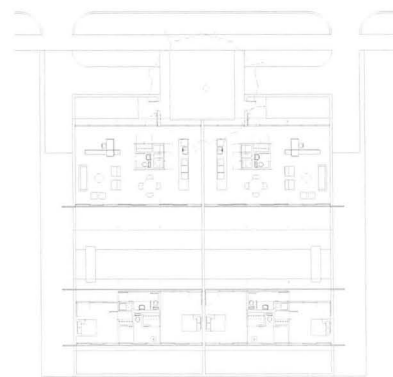
Echoing the proportions and ideas of the 2-4-6-8 House, Johnston Marklee also pares them down, updating the playful, childlike qualities of the older design with a sleek neomodernism. **JULIA MANDELL**

> KEENEN/RILEY ARCHITECTS AND PROUN SPACE STUDIO /
COURTYARD HOUSES / MIAMI

Developer Craig Robins is reactivating the tradition of individualistic architectural expression in his hometown of Miami. For example, he is the mastermind behind the Miami design district, an 18-block area of derelict 1920s and 1930s factories and commercial buildings remade into a thriving locale for furniture showrooms, shops, galleries, and restaurants. The developer is also expanding the city's residential stock. On the large-scale is Aqua, a new residential community of houses and midrise apartment buildings designed by an all-star cast of planners and architects that is now underway. On a more intimate scale are two private residences slated to break ground this spring on empty lots bordering the design district. Conceived by Keenen/Riley Architects and Proun Space Studio, both of New York City, the side-by-side private houses are meant to carry on the tradition of experimental domestic construction in the vein of the Case Study Houses that rose in Los Angeles at midcentury.

The courtyard type, with its inward-looking aspect, is well suited to the tight urban fabric of this working-class neighborhood north of downtown Miami, where privacy on the small lots is a rarity. Each new 1,200-square-foot house comprises a series of opaque and transparent parallel walls: Stucco-clad concrete-block walls meet both the street and the back edge of the properties; glass walls enclose living and sleeping spaces. Three open-air courtyards between the walls bring light and air inside. Deep roof overhangs provide shade from the harsh Florida sun.

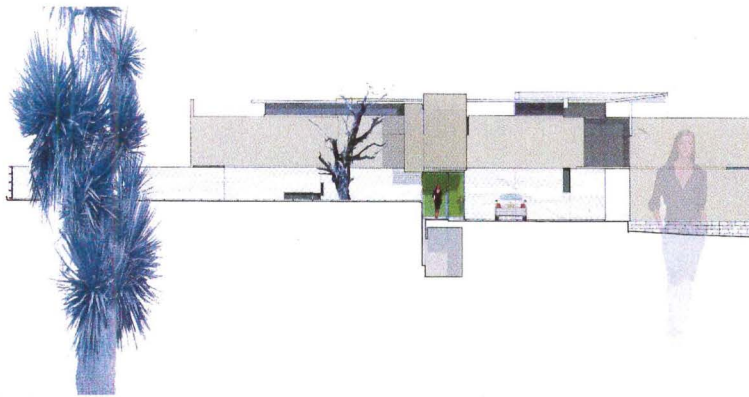
With the Miesian courtyard houses, like the 151-unit Aqua, Robins is bringing a right-angled aesthetic to the land of Morris Lapidus, Spanish Colonial revivalism, and Miami Vice. **ABBY BUSSEL**



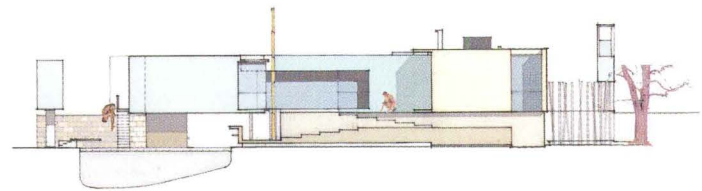
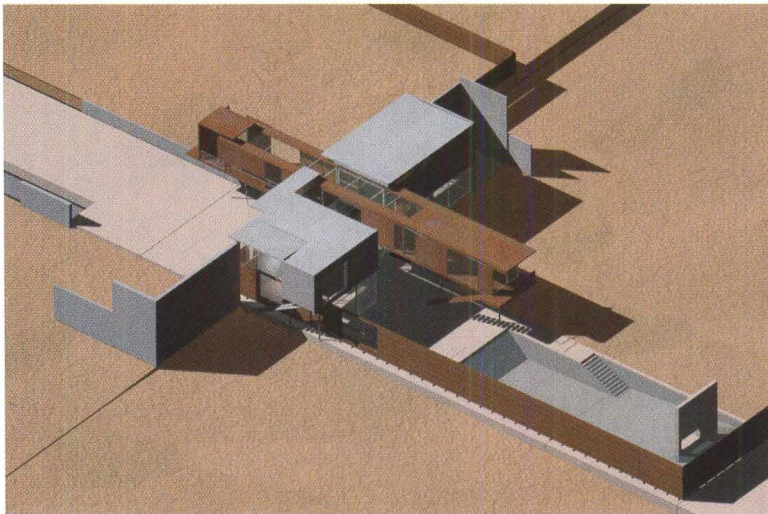
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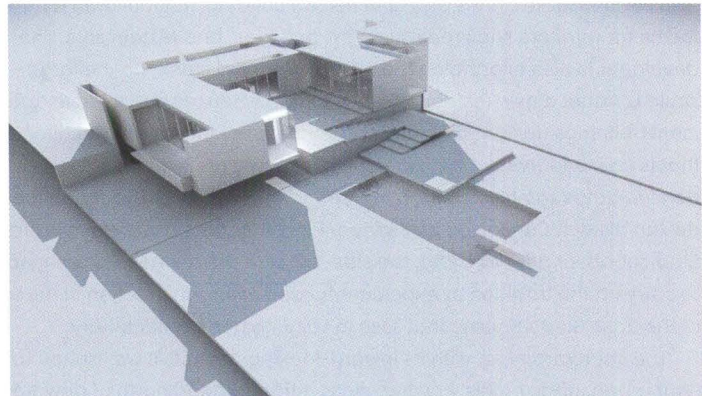
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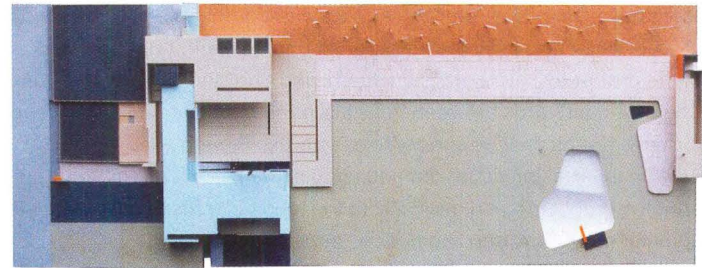
South façade (above) and model view (below)



Section through courtyard



Courtyard view of digital model (above) and aerial view of model (below)



> RICHARD ROSA STUDIO / EX PLATE CHESS HOUSE / PALM DESERT, CALIFORNIA (LEFT)

> INFRARED, RICHARD ROSA IN COLLABORATION WITH TIFFANY LIN / VILLA SILENZIO / TRUMANSBURG, NEW YORK (RIGHT)


Each of two new residences designed by Richard Rosa—one in southern California, the other in upstate New York—smoothes the boundaries of interior and exterior through layout, terracing, and orientation that gather the surrounding landscape to the protective body of the house. The effect is to create an exterior area possessed by the structure, claimed as part of the residential experience and shielded from (in the case of California) the elements and (in the case of New York) the neighborhood.

Turning its back on California's intense southern sun with a cast-in-place concrete wall along its east-west axis, the 3,200-square-foot Ex Plate Chess House (above, left) directs itself to a friendlier northern exposure. A second boundary, a wood fence, weaves its way through the property, further defining and confining the house's orientation to the more private pool and patio area on the north side, which is also shaded by the overall massing of the structure. At ground level, full-height steel-frame windows and polished concrete flooring that continues from inside to out dissolve the division between house and exterior garden court; the dining and living rooms extend beyond the structure to incorporate distinct patio areas. Reached by any of three sets of exposed stairs, the second story opens itself just as fluidly to the outside. An individual terrace accompanies each bedroom, both of which are

located in a north-south-oriented, wood-frame "sleeping tube" and elevated on stilts to optimize natural ventilation. The chess room at the center of the tube has access to an exterior glass court.

Subjected to a milder sun but closer neighbors, Villa Silenzio (above, right) occupies a narrow 100-foot-by-300-foot lot, which necessitated an inward courtyard focus to preserve privacy. The clients' desire for seclusion also inspired division of the 2,200-square-foot house into two distinct components: a private "figure" piece (shown light blue in model, bottom right), which confines family bedrooms, the kitchen, and dining area behind an opaque concrete-block and stucco structure, and a "frame" element of cast-in-place concrete, which contains public spaces, including the living room, guest quarters, library, and courtyard. Circulation is pulled through the frame area, from the street at the front of the house to the courtyard and pool in back, using a continuous, methodical promenade that seems to aim occupants toward the house's own gaze: its reclusive backyard.

In each case, the design controls both the interior and exterior spaces to define a series of rooms, of which the house is only a part. Through boundary fencing and landscaped planes, the front and backyard become equal pieces of the architectural whole. **EMILIE W. SOMMERHOFF**



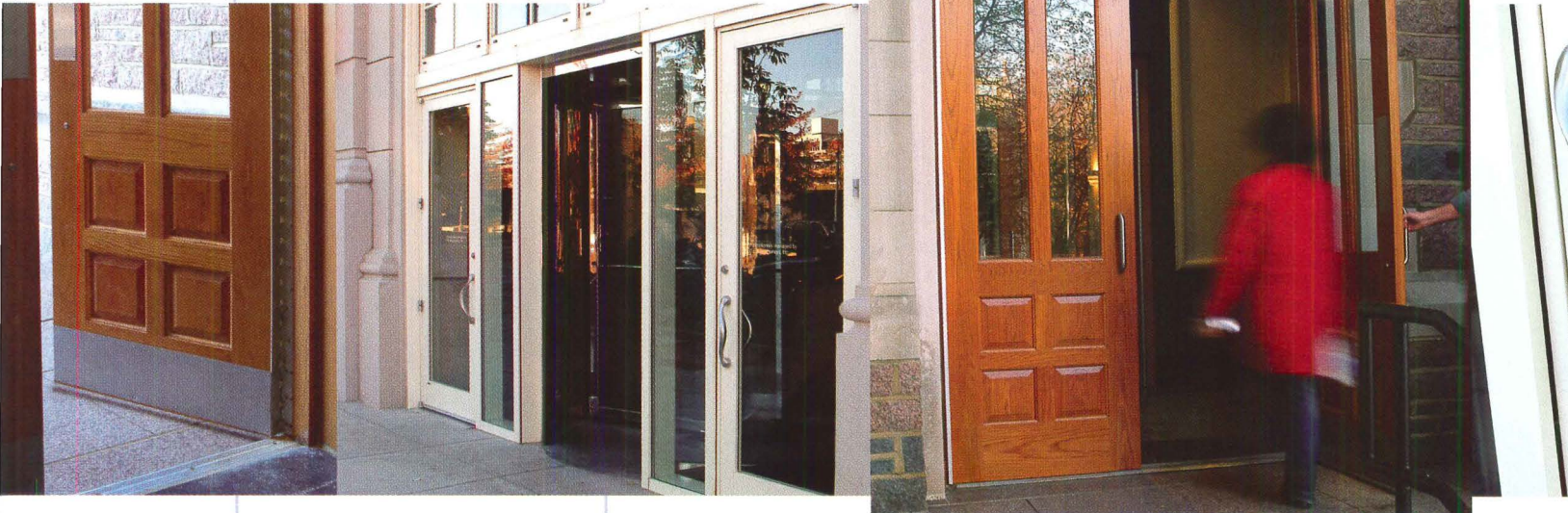
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Boston's Bridge Too Far

BY JANE HOLTZ KAY

What becomes an icon most?

The soaring Brooklyn Bridge and Golden Gate, the glorious, gilded Chrysler Building, the monumental Washington Memorial, the structural elegance of the Eiffel Tower—all are the stuff of urban imagery, working symbols of city life.

And yet, for all its history, urbanity, and architecture, Boston has had no such logo. The curved bow of the swan boats won't do. Nor will George Washington astride his horse in the Public Garden. The golden dome of Bulfinch's State House is, well, a dome. As for cloud-reaching height in the Hub, neither the monolithic glass façades of the

Surrounded by highways, parking lots, vents, and odd-lot structures, the Leonard P. Zakim Bunker Hill Bridge shrouds its site and undermines the landscape supposedly freed by the project.

former John Hancock Building (nameless since it went on the market last year) nor the ornate splendor of the 1913 Custom House Tower achieves truly commercial cliché.

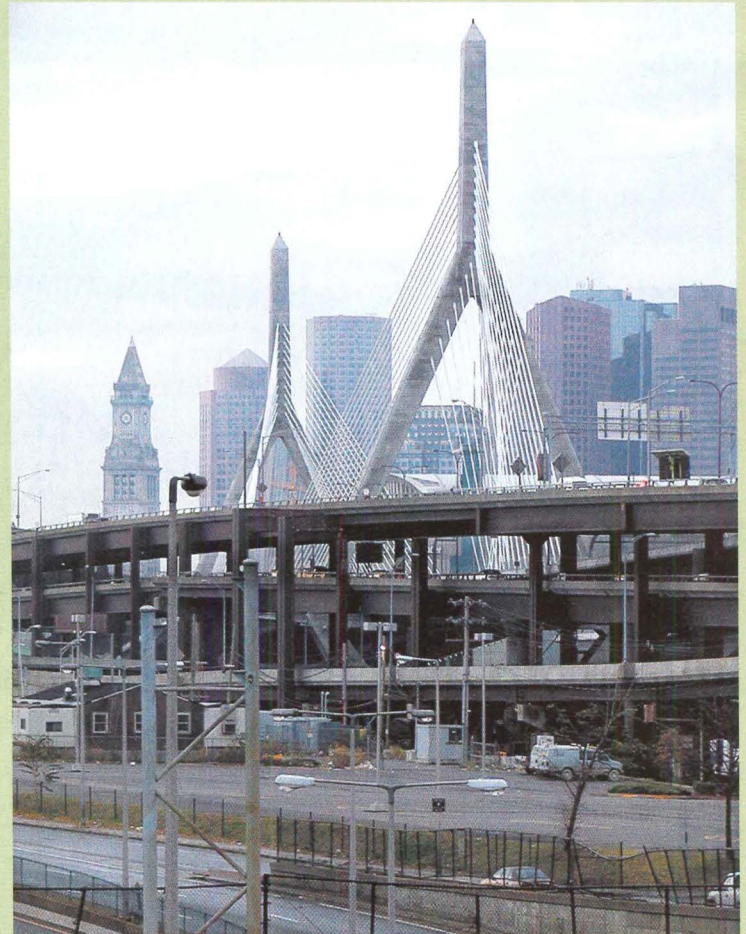
Now, however, Boston has an icon: a bridge conceived by engineer Christian Menn, the Swiss angel of bridgemaking (with HNTB of New York City serving as the engineer of record). It is, says historian David Billington, a "spectacular bridge" that turns an arduous span into a glorious spindle. A cable-stayed, prestressed-concrete structure dazzling the sky above the Charles River and its environs, it connects the city's "Big Dig,"

the \$15 billion tunnel that replaces the Central Artery, as it stretches 1,400 feet from the Charles River Basin at North Station to points north.

In a city that eschews au courant architecture, the widest cable-stayed bridge in the world, at 183 feet, has become a singularly modern symbol. More than an incidental artifact of the Big Dig, the Leonard P. Zakim Bunker Hill Bridge makes a postcard-worthy logo. Illuminated in neon brilliance at night, the asymmetrical bridge with its towering obelisks and triangular stays, draws eyes and sighs from passersby.

But closer inspection of what the bridge has wrought could change public opinion. Notwithstanding its soaring imagery, the 10-lane structure makes an awkward and ungainly presence on the ground of post-Big Dig Boston. Despite the bridge's sense of flight, its Piranesian collection of columns and cluttered underworld mar the Charles, blighting nearby neighborhoods and sharply limiting pedestrian access, passage, and comfort on the 40 acres of parkland now being constructed around its base. Surrounded by looping highways, parking lots, vents, and odd-lot structures now and to come, the bridge shrouds the site, scars the soil, and undermines the landscape supposedly freed by the project. "Another place where they'll burn tires," one skeptic predicts.

In *Inventing the Charles River* (MIT, 2002), Karl Haglund explains just how and why this came to be, spelling out the ugly debate that left the city with another scar. For the Zakim Bridge is, in fact, the result of a long struggle to stop the creation of an earlier overpass plan, "Scheme Z." First proposed in 1989, the



Crisp forms meet messy underbelly at the Leonard P. Zakim Bunker Hill Bridge.

scheme's notorious 16-lane bridge would have loomed over the Charles River, as well as Cambridge and Boston communities. Furious citizens and planning activists fought for a tunnel that would free the city from this Draconian mega-overpass and its countless cars, but politicians and transportation engineers stalled the tunnel, claiming high costs. The highway builders prevailed, undoing Boston's last chance to build a tunnel under the Charles.

Most slighting to citizens of America's "walking city," as Boston has long proclaimed itself, is the sad fact that their first true icon is not

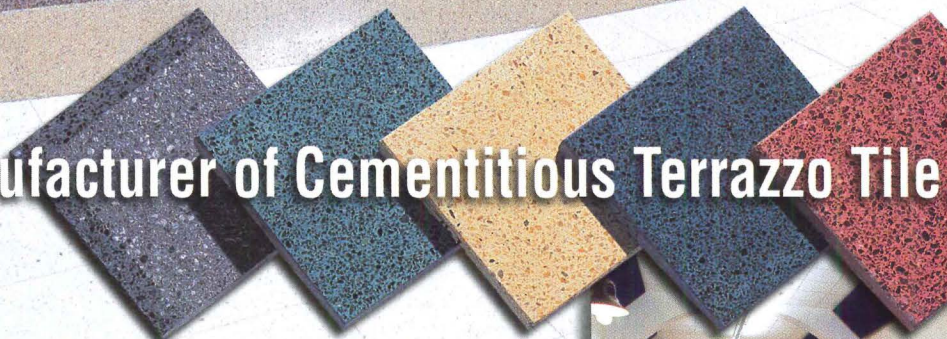
walkable. Unlike Rotterdam's new Erasmus Bridge—UN Studio's elegant artifact that boasts lanes for bikers, walkers, and streetcars, as well as automobiles—the Zakim Bridge is a car-only construction. After years of construction chaos that saw 13 million cubic yards of fill removed and billions spent, Boston's new emblem is more cosmetic than creditable. ■

JANE HOLTZ KAY IS ARCHITECTURE CRITIC OF THE NATION AND AUTHOR OF *LOST BOSTON AND ASPHALT NATION: HOW THE AUTOMOBILE TOOK OVER AMERICA AND HOW WE CAN TAKE IT BACK*.

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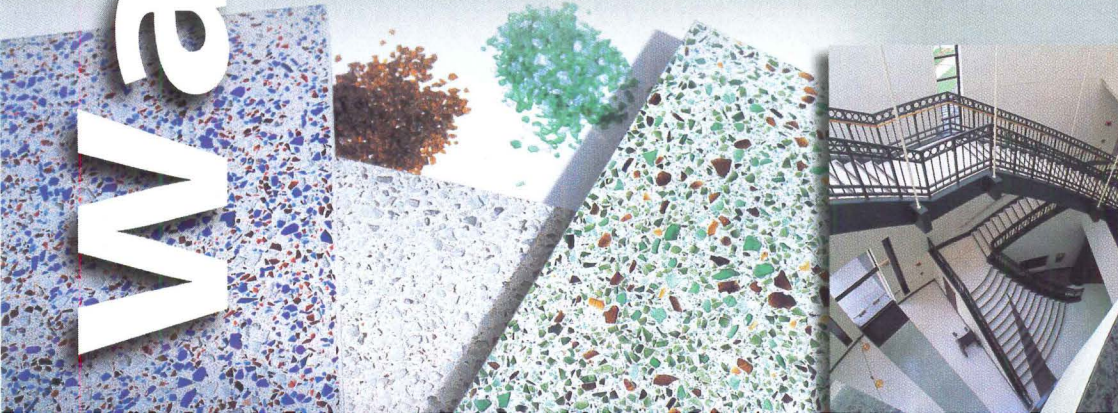
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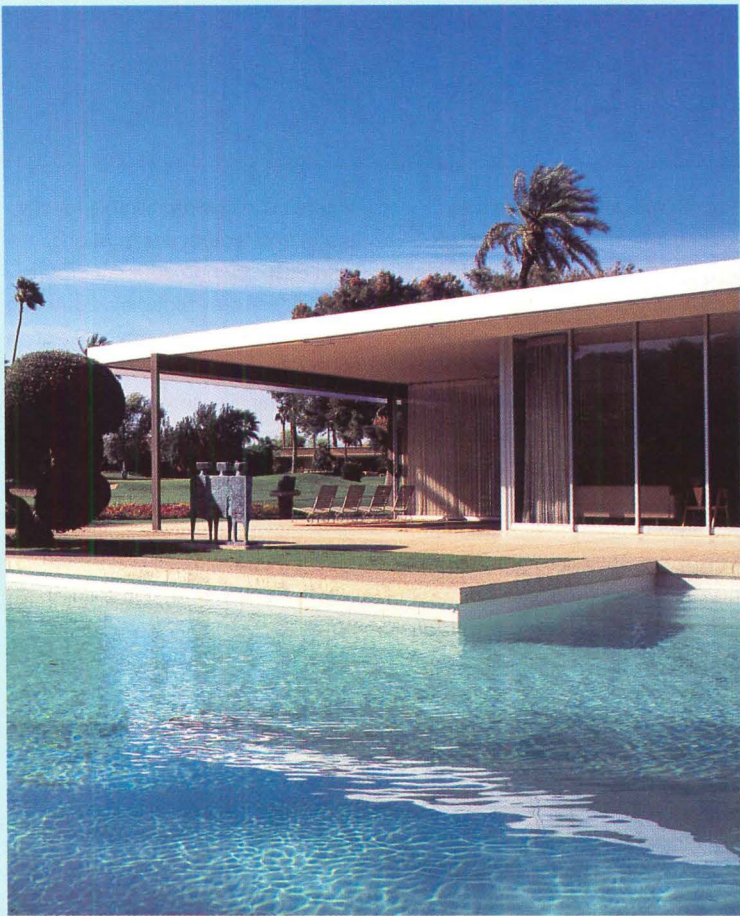


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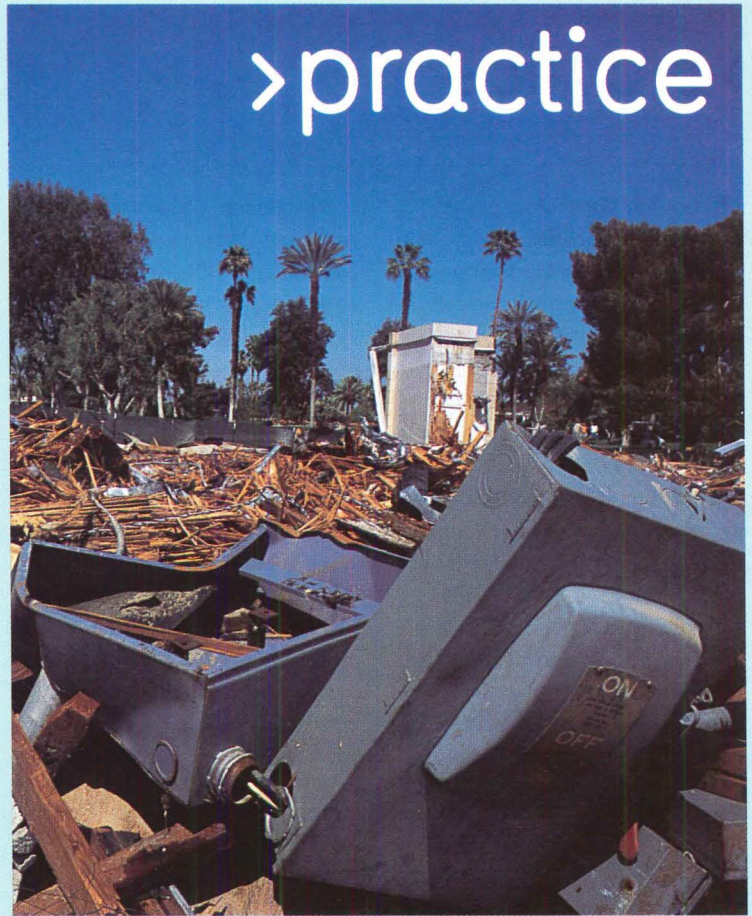
Making a Case

Modern houses have regained their popularity, but a lack of protection keeps the bulldozers circling. **BY KIMBERLY STEVENS**

> PRESERVATION In 1949 when Charles and Ray Eames designed Case Study House No. 8 in Pacific Palisades, California, the notion of a McMansion was inconceivable. But today, the house and its studio, among the most famous of the 24 houses built in and around Los Angeles under the Case Study program, is not invincible. While it is still in pristine condition, a proposed 24,000-square-foot neighbor recently threatened the original spirit of this house, which has been held up as a model of efficient and elegant modern architecture.

In December, the Eameses' grandson, Eames Demetrios, alerted the architecture community to building plans for the lot

just north of Case Study No. 8, which is part of an enclave that includes four other Case Studies. The massive home would be visible from the Eames property, which is still owned by the family. "If you have visited the house, you know how essential the natural environment is to the experience of the house. Charles and Ray built with utter respect and sensitivity to the meadow and to the natural world. It would be beyond ironic if their home were loomed over by this faux Tuscan villa," Demetrios wrote in the December newsletter put out by the gallery and store, Eames Office. "It is a classic machine in the garden; man in nature," he elaborated in



>practice

Recent demolition of houses designed by Richard Neutra and Rudolph Schindler has raised the level of awareness for the need to improve protection of midcentury modern buildings in southern California. Seen here are before and after pictures of Neutra's Maslon House in Rancho Mirage, California, which was demolished last year.

an interview. In a recent public hearing Demetrios's concern was somewhat allayed when the future homebuilders agreed to an additional setback.

"It is imperative that these cases stop being dealt with ad hoc," says Demetrios. "It is time for more education. If you truly want to protect these houses, the tools need to exist in advance." Currently the house is listed as a cultural and historic monument in the city of Los Angeles, which means that non-movable objects cannot be altered without a permit. But according to Demetrios, that means very little. "Yes, it's an honor, but what it really means is if someone wants to tear the house down, it will take them a year as opposed to a day." The designation merely stays demolition for a maximum of 360 days, during which preservationists typi-

cally try to rally support through a publicity firestorm. "It is actually easier to tear down something than to make a modification," he says. "Legislation needs to be proactive rather than reactive."

ERASE-ATECTURE

The Eames incident evokes a larger trend, not only for the Case Studies, but for modernist homes all over Los Angeles and the surrounding areas. Demolition is becoming commonplace, and many of these homes are purchased with a tear-down in mind. The recent demolition of important modern houses in the Los Angeles area, including homes by such noted architects as Richard Neutra and Rudolph Schindler, points to a need to protect these houses through both raised awareness and landmarking. In a recent article in the *Los Angeles Times*,

>practice

Christopher Reynolds reported that “erase-itecture” has become a significant issue in Los Angeles, because, in most cases, no one is keeping track of what is being lost.

Alan Leib, chairman of the Modern Committee of the Los Angeles Conservancy, a group committed to saving modern buildings at risk, is used to coming in at the eleventh hour. He would also like to see more protections in place. “Until people in this city start paying attention and truly understanding its great architectural significance, the blatant, ignorant destruction will continue,” says Leib.

The Modern Committee has been working to find ways to protect the Case Studies. The problem is that, while buildings can be landmarked individually in the city of Los Angeles, according to Leib, many of the Case Studies are located beyond city limits. Landmark designation depends on the existence of a local preservation ordinance, something that many municipalities in Los Angeles County do not have. Beverly Hills, for instance—while it has many landmark-caliber homes and public buildings—has no local preservation ordinance. This has led to recent destruction of homes by noted architects Wallace Neff and

Paul R. Williams. Because they lacked official landmark status, these buildings had no protection, and acquiring a demolition permit was a simple over-the-counter procedure. To prevent a similar travesty, the conservancy’s Modern Committee is undertaking a project to nominate the surviving Case Studies as a National Register of Historic Places Historic District on the grounds that as a group they form a noncontiguous historic district. (Noncontiguous or nonconforming districts apply to nonadjacent buildings that are historically linked by style or function.)

Even in the city of Los Angeles,

where buildings are eligible for city, state, and federal designations, with each offering different protections, there are loopholes. Catherine Barrier, preservation advocate at the conservancy, argues that a comprehensive survey of historic structures is also needed to make the preservation system work. According to Barrier, each city department has its own discrete building inventory, and it is therefore possible for the Department of Building and Safety to authorize demolition of a building without knowing that it is a National Historic Landmark. The Getty Conservation

continued on page 108

In Santa Monica, neither the city nor the preservation community knew that 95-year-old Brazilian architect Oscar Niemeyer had designed the Strick House (below, left) until it was recently purchased as a tear-down. The 1964 house, thought to be the architect of Brasilia’s only American commission, is now in the process of being resold to a design enthusiast. Built in the mid-1950s, Craig Ellwood’s Case Study No. 17 was transformed into a neo-Georgian-style villa in 1962 (below, right).



Second Wind

After a long period of drought, a new wave of commissions has the California modernist Pierre Koenig turning away clients. **BY BAY BROWN**

> **PROFILE** The 1989 exhibition *Blueprints for Modern Living: History and Legacy of the Case Study Houses* at the Museum of Contemporary Art in Los Angeles, where Case Study House No. 22 was rebuilt down to the ashtrays and plants, was a critical moment in the revival of midcentury modern

architecture and design. It was also a turning point for No. 22's architect, Pierre Koenig. So, too, was the publication of Koenig's first monograph by James Steele and David Jenkins (Phaidon, 1998), which caught the eye of an already primed audience busy collecting postwar ephemera. As a

result of all this attention, Koenig is getting queries from as far away as New Zealand.

After receiving wide acclaim from the 1950s to 1970s for his elegant steel-frame buildings, Koenig went through a 20-year dry spell. He has taught architecture at the University of Southern California since 1968, but his commissions were few and far between. Today, with the renewed interest in all things midcentury, at 77, Koenig is turning work away.

But Koenig's current clients are different than they were back in the day when *Arts & Architecture* magazine launched the Case

Study program. "In the 1950s and 1960s, my clients were rocket scientists working for Teledyne," he says. Koenig proudly recalls that his work was once described by a critic as "the true industrialized solution for the modern age."

"Modern architecture is about architecture as a way of living," says Koenig. But he feels that today's architectural connoisseurs have dispensed with the social agenda that was part and parcel of the modern movement. His current clients are drawn to him by the aesthetics of his trademark steel designs, but the ideals that the Case Study program

Interest in midcentury modern architecture continues to drive real estate prices up. After it was remodeled by Koenig five years ago for \$100,000, Case Study No. 21 sold for \$1.5 million.





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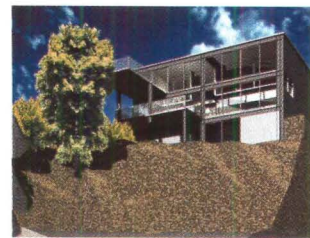
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The three-story Lafetra House in Malibu will sit atop a 40-foot cliff.

espoused—well-designed, affordable housing for the middle class—are nowhere to be found in his new commissions.

SAME BUT DIFFERENT

Koenig is currently working on two houses in Malibu, California, a house in Los Angeles, and another in Dallas, as well as a commercial building in Los Angeles. He describes his design for a house in Malibu for filmmaker Michael Lafetra as “a jewel.” Lafetra had lived in Case Study No. 21 and wanted a new house that was reminiscent of it. At 4,000 square feet, the new three-story steel and glass house with its cantilevered balconies sits atop a 40-foot cliff overlooking the ocean.

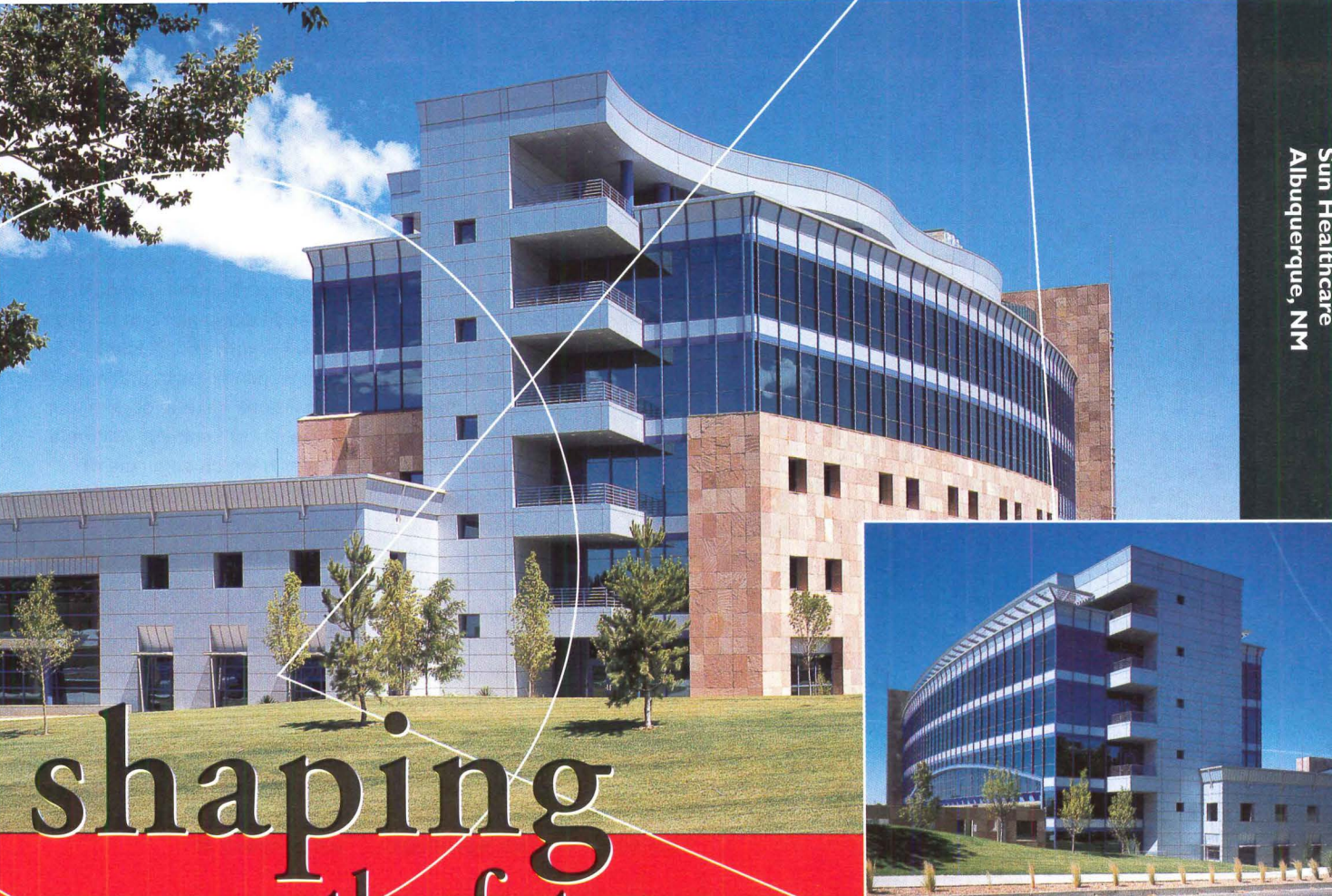
Also on a Malibu hillside, Koenig has designed a 4,500-square-foot house for engineer Vida Tarassoly and environmentalist Mohsen Mehran. Conforming to the contours of the site, the two floors of the house will be constructed as discrete units culminating another level below in a pool stretching the width of the house.

In the Los Feliz section of Los Angeles, Koenig is remodeling the Koppány House—originally designed by California modernist Gregory Ain in 1951—and adding a pool and a pool house with experimental canvas awnings for sun control. Also in Los Angeles, he is designing a store on Melrose Avenue for the clothier Resurrection, which is owned by the new owner of Case Study No. 21. In Dallas, he has a 2,000-square-foot house in the hopper, with four rooms that function as distinct modular units, connected by a covered walkway to form an L-shaped compound.

NEW PRICE TAG

When built in 1958, Case Study No. 21 cost \$20,000, but five years ago, after Koenig restored it for \$100,000, the owner banked \$1.5 million when it was resold. The architect accepts the current reality and enjoys its perks. “Now I don’t have to worry about cost as much,” he smiles.

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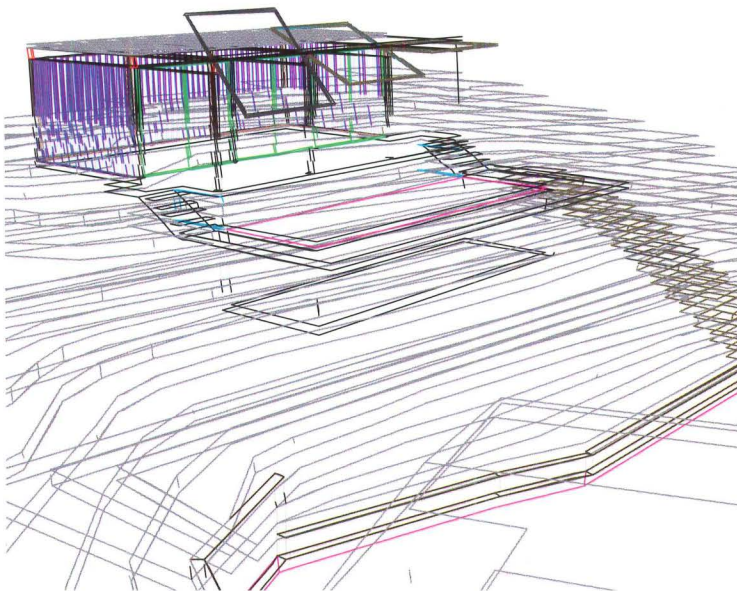
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Koenig's remodeling of a 1951 Gregory Ain house in Los Angeles includes adding this pool house and a swimming pool.

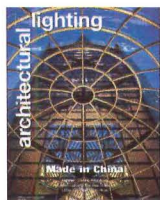
While pleased by his new commissions, Koenig does find it overwhelming at times. "I wish all this had happened earlier," he says. Nonetheless, he prefers to handle each project personally, and thus only completes a couple per year out of a studio connected to his 1985 Brentwood house. Alas, Koenig does not see a protégé: "My work is a product of a series of complex conditions others can't simulate. It is intellectual and emotional—you can't clone it, because it is innate and intuitive. I am working from information I've picked up since I was eight."

Koenig was drawn to working in steel from his experience as a youth on the docks in San Francisco. "The ships were so gor-

geous," he says, recalling his intrigue with all things industrial. "I began doing pen and ink drawings. By high school I knew how to do a working drawing." Since getting his architecture degree from University of Southern California, he has been an advocate of building in steel for its efficiency, as well as for its beauty.

Koenig has worked with many people over the years, and many students, but he bemoans the fact that those who try to emulate his work take a static, undynamic approach, reproducing the mechanical without emotion. "You can do a Koenig simulation, but you can't do a Koenig house," he declares in a tone of pride tinged with sadness. ■

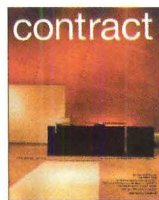
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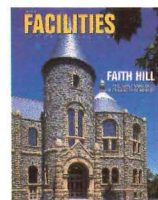
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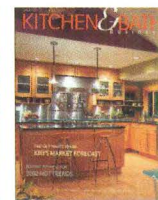
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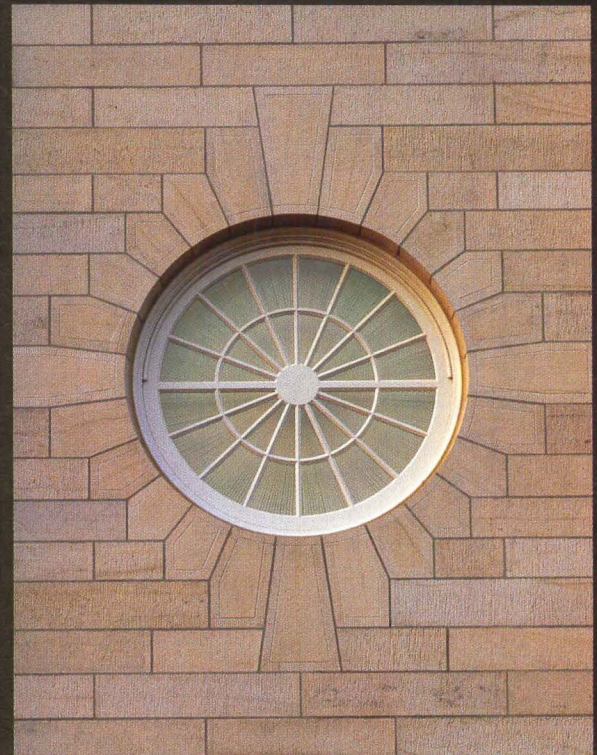
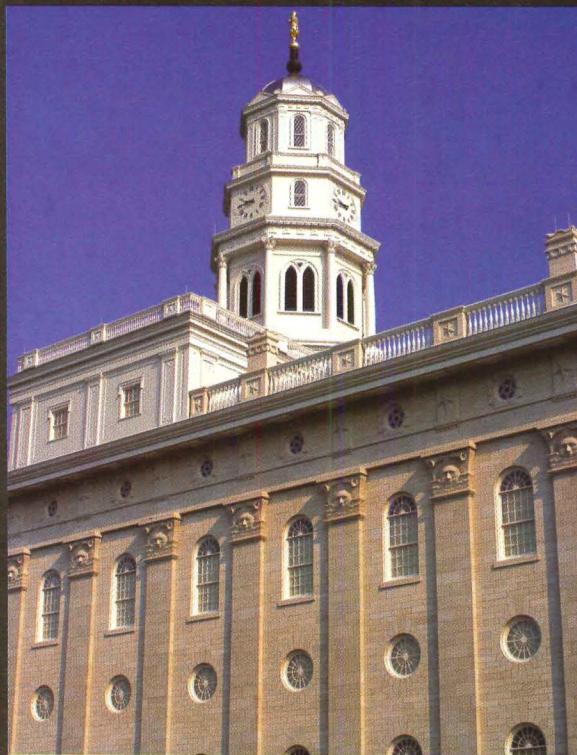
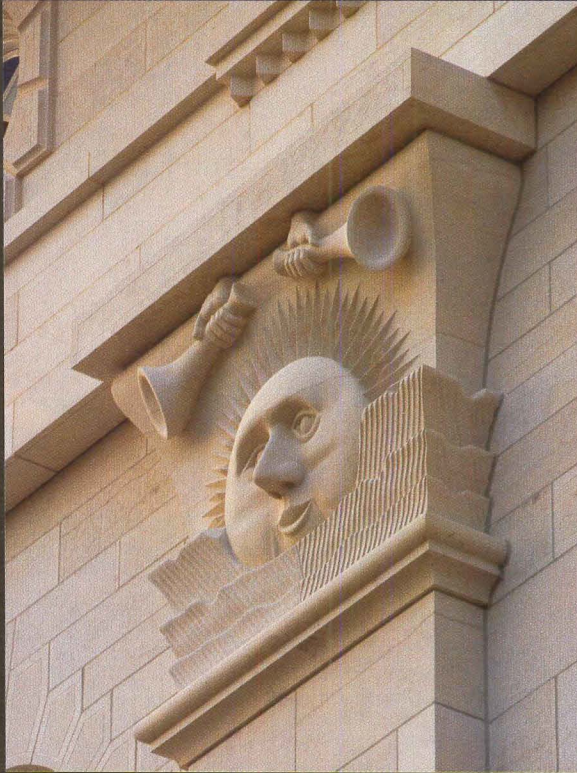


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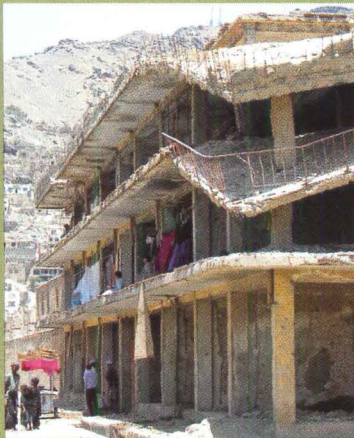
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After years of war, Afghans have learned to use the materials available to them: Old tanks support a bridge (right), while stacked, spent shells form the wall of a shelter (lower left).

Cry, the Beloved Country

Expat Afghan architects do their best for a war-ravaged land. BY JAMES MCCOWN

> REBUILDING The roots of the word nostalgia mean “to return home in pain.” For some expatriate natives of Kabul, Afghanistan, returning to their war-ravaged city offers a painful contrast to the place they remember in the 1960s and 1970s. Then, the ancient city was slowly but purposefully modernizing: Women wore mini-skirts instead of chadors, and sidewalk cafés hummed with European, Middle Eastern, and Asian languages.

“It was the most cosmopolitan of cities,” recalls Afghanistan-born

Najim Azadzoi, a Boston-based architect who has made several trips to the country at the invitation of the interim government. “It was a true meeting of East and West.” Today the country’s capital reels from a potent double legacy of Soviet totalitarianism and Islamic theocracy. Squatters occupy bombed-out buildings and use mud bricks to plug holes against winter’s chill. In the city and surrounding villages, the detritus of war becomes building materials. A row of spent shells doubles as a makeshift cornice; two junked

tanks form supports for a bridge.

Azadzoi is a member of the Society of Afghan Engineers, one group in a loose confederation of internationally dispersed Afghan architects and engineers who are trying to marshal resources toward rebuilding. For these design and construction professionals, accustomed to working in a measured and controlled manner and then seeing tangible results, Afghanistan presents a daunting challenge. Billions of dollars have been pledged by wealthy donor countries, nongovernmental organizations (NGOs), and other sources. But there remain sharp disagreements over how to spend it—on disaster relief versus desperately needed building and infrastructure programs.

ARRESTED (RE)DEVELOPMENT

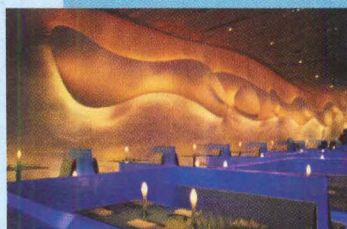
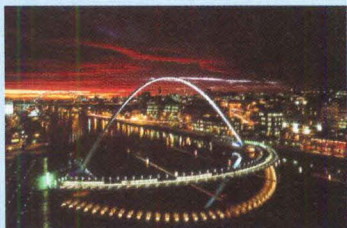
“The U.S. Agency for International Development, U.N. agencies, and the World Bank are focusing on emergency relief,” says Azadzoi. “When we start talking about architecture and urban planning, they lose interest. But the need is very great. Refugees are pouring in.”

Further complicating efforts to craft the building codes and construction guidelines that Azadzoi sees as critical is the Kabul city government’s stubborn insistence on sticking to a master plan drawn up by occupying Soviets in the late 1970s. “It dictates everything, from the location and massing of a building to its name,” Azadzoi says.

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pledged a total of almost \$5 billion toward rebuilding Afghanistan. Approximately \$1.88 billion has been delivered thus far, including \$280 million from the United States. Part of the U.S. commitment is \$80 million to rebuild the main highway linking Kabul with the secondary cities Kandahar and Herat. But others familiar with the country say a greater focus on all types of infrastructure is just not happening.

"Hundreds of NGOs are working on little projects here and there, diverting attention from the main ideas," says Rafi Samizay, who teaches architecture at Washington State University and, like Azadzoï, belongs to the Society of Afghan Engineers.

Thomas J. Barfield, head of anthropology at Boston University and co-author of *Afghanistan: An Atlas of Indigenous Domestic Architecture* (University of Texas, 1991), concurs: "With some parts of the city completely destroyed, now is the time to do things like install natural gas and electric lines. This will spur private building," says the anthropologist, who also shares the frustration many Afghans feel about the apportionment of relief funds. "The NGOs want something they can show back home, like smiling faces at a new girls school," he says. "But many Afghans are angry that not enough of the money is going for infrastructure."

REBUILDING VERNACULAR

Long an Asian crossroads, Kabul in the twentieth century had at least two foreign architectural styles foisted upon it. First was an ersatz Beaux-Arts classicism, and later a monotonous, prefabricated modernism still in evidence in the apartment blocks that ring the city. Neither is a suitable model for the future. Instead, it is the rich vernacular traditions, present in the narrow and mysterious spaces in Kabul's Old City, that experts say must be part of the city's rebuilding efforts when they finally happen.

"They have systems with rammed-earth bricks that are very sophisticated," says Stanley Hallet, professor of architecture at the Catholic University of America in Washington, D.C., and a Fulbright scholar

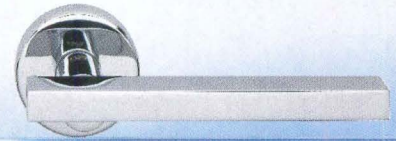
in Afghanistan in the early 1970s. "You already have the material there. Otherwise you have to import everything." Hallet, fearing inequitable emphasis on urban redevelopment, just completed a studio in which his graduate students designed clinics, schools, orphanages, bazaars, and mosques in rural areas. The large, detailed models the studio produced will allow rural contractors to construct the buildings without working drawings.

In the view of Rafi Samizay, who co-authored *Traditional Architecture of Afghanistan* (Garland, 1980), there is potential for a hybrid approach that combines readily available local materials and techniques with prefabricated components like windows and plumbing. "I'm always promoting native traditions," he says. "But we have to combine them with more practical and lightweight materials."

Before Afghanistan can rebuild, however, issues of funding, building codes, and property ownership must be settled; this promises to be a lengthy, complicated process. Two decades of Soviet occupation and then Islamic theocracy means nobody really knows who owns what land or buildings, thus getting a hold of issues of private property is crucial. And the concept of individual property must extend to refugees, according to Sultan Barakat, an expert on postwar rebuilding and a senior lecturer at the University of York, England. "Their informal settlements must be upgraded and reintegrated into the urban fabric," he says. "Without them feeling some kind of ownership, the future is dark." Meanwhile, the growing network of architects and engineers is at least one bright spot, and many dedicated to the endeavor are finding satisfaction in the effort. "As an architect, it puts me in the position of a helper," says Azadzoï. "It becomes so emotional—you want to help a man put one brick on top of another." ■

JAMES McCOWN IS A BOSTON-BASED ARCHITECTURAL JOURNALIST WHOSE WORK APPEARS REGULARLY IN *BOSTON MAGAZINE*, *ARCHITECTURE BOSTON*, AND THE *BOSTON BUSINESS JOURNAL*.

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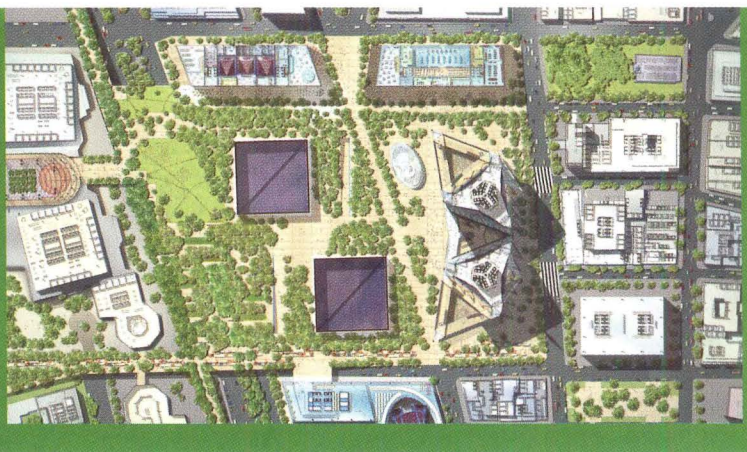
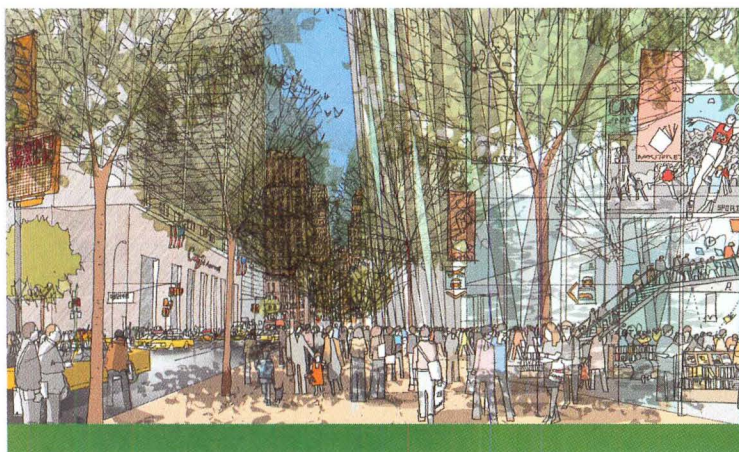
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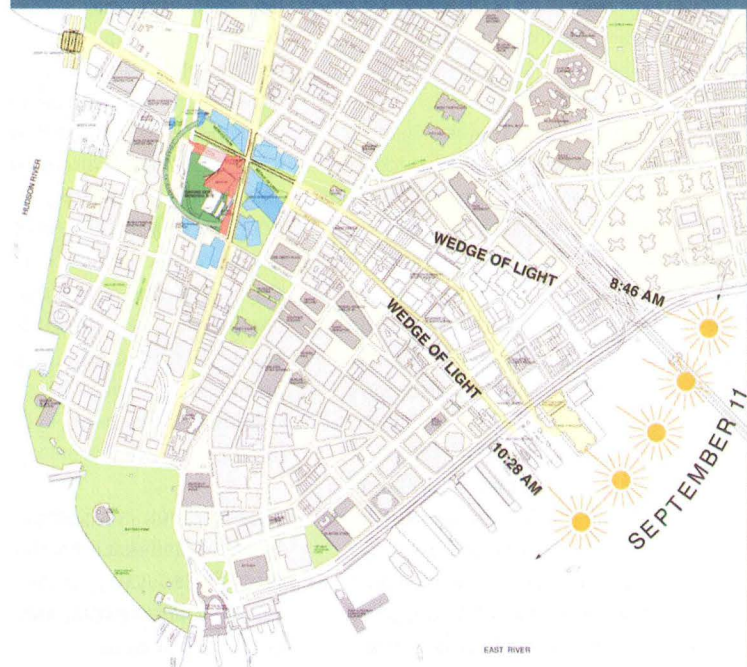
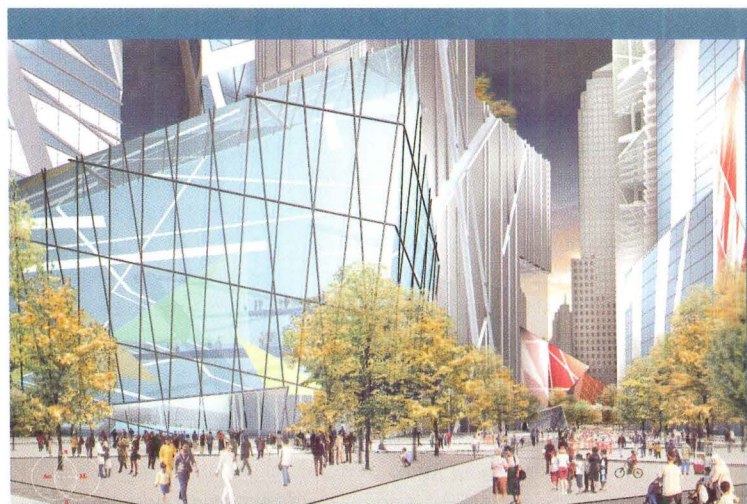
On the Ground at Ground Zero

In rebuilding the World Trade Center site, attention to context is everything. BY C.C. SULLIVAN

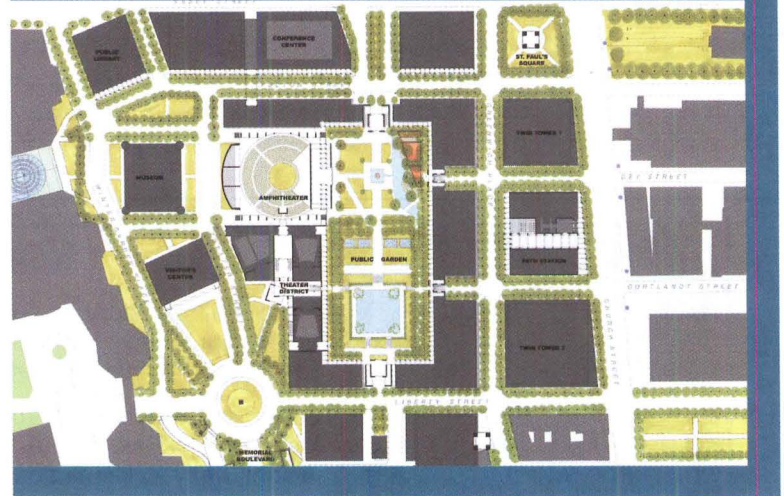
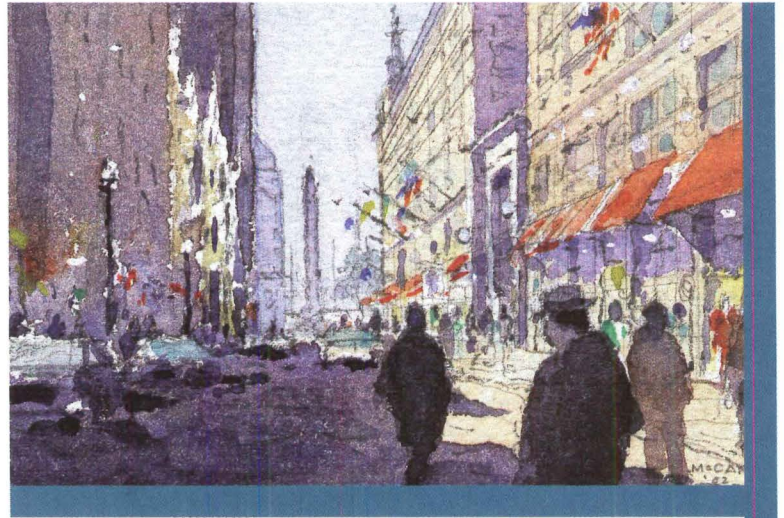
> **URBANISM** The nine design studies for the World Trade Center site unveiled late last year reflect two occasionally unified pursuits: first, to respond to a special physical context, and second, to frame the goals of this large urban intervention in a way that rationalizes one's own thinking. While the former presumably hinges on a constant, the latter proves highly variable: United Architects emphasizes the memorial as the big-picture issue; the Think team portrays the project in terms of cultural and civic content. Daniel Libeskind advocates participation by many, while Foster and Partners sees but two, if sustainable, towering image. For Peterson/Littenberg and the team led by

Skidmore, Owings & Merrill, the main impetus is to restore a lost signature of the site: the orthogonality of the city grid, or the line of the waterfront. The team of Richard Meier, Peter Eisenman, Charles Gwathmey, and Steven Holl ranks ground-level open space as a lead concern.

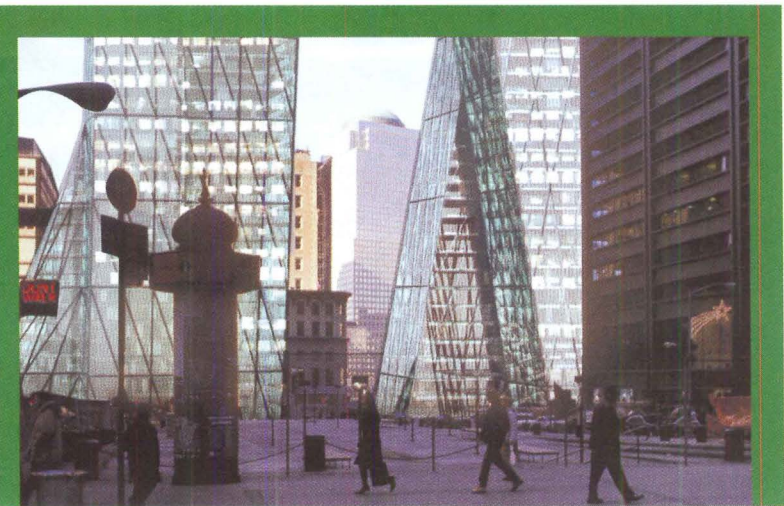
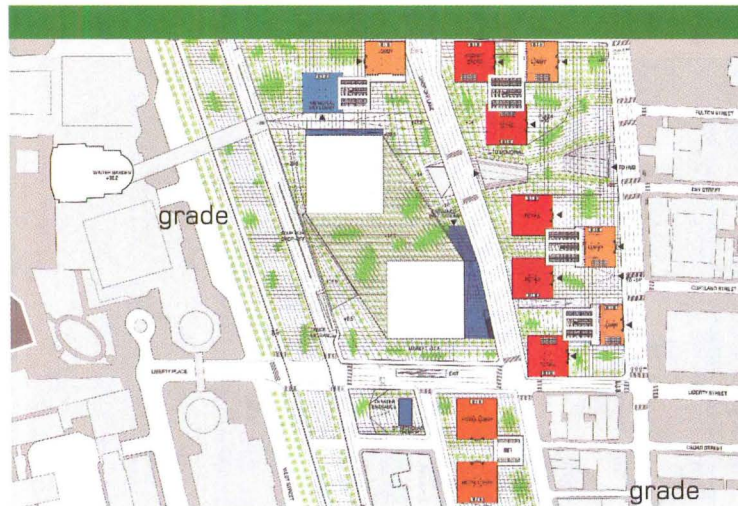
These big ideas, like the skyline images they accompany, are chest-puffing propaganda of little use at a busy time when a memorial competition, a feasibility study, and a land-use master plan are simultaneously underway. Yet, given closer scrutiny, a few of the proposals yield the kind of practical guidance that only architects can offer: deftly drawn responses to the



Site plans and pedestrian-level views of proposals for Ground Zero offer a window into the mindset of the architects. Foster and Partners' view south on Cortlandt Street, at the eastern edge of the site, shows how its massive towers are resolved with retail and plaza components at the ground plane (top left), also evident in the site plan (top right). Studio Daniel Libeskind offers a mix of low-rise and high-rise elements along their parklike "Wedge of Light," an extension of Fulton Street cutting through the northern third of the former World Trade Center superblock (right and center).



The World Cultural Center, one of three schemes offered by the Think team, adds a strong diagonal component to the site plan that breaks the street grid (above, left), expressed in part with pedestrian skybridges spanning an extended north-south Greenwich Street (top left). The plan by Peterson/Littenberg emphasizes the orthogonality of the grid (above, right) and a traditional conception of the streetscape, as seen in a view west along Liberty Street at the southern end of the site. The leaning masses of the United Architects scheme, seen in view west across a new plaza (below, right), rise from a relatively porous ground plane (below, left) into linked towers.



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immediate neighborhood, sensible conceptions of pedestrian life, and valid notions of scale.

TOWARD POROSITY

Anyone who knows Manhattan understands Ada Louise Huxtable's terse statements in the *Wall Street Journal* last month, that "New York's vitality is on the street. The World Trade Center notoriously destroyed it." Besides altering the scale of the area, Minoru Yamasaki's vision divided neighborhoods, set impediments to movement, and planted an alien landscape of windswept void and unthinkable height. To replace that space, we are offered similarly heroic gestures, as well as highly contextual schemes. Which can we trust?

Connections at the ground plane are critical for integrating into the context locally (and regionally), and most of the nine proposals take pains to relink these 16 acres with adjacent neighborhoods. The idea of porosity in the designs cannot merely be about easing street and sidewalk traffic, but enhancing qualities essential to everyday life, such as convenience, daylight, and views. The few schemes that try to harmonize a superblock with the urban fabric deserve the skeptical reaction they have received. (Think's vast "SkyPark," for example, is terraced, ramped, and interlaced with streets and open space, yet its permeability seems secondary to its processional intentions; escalators are offered for pedestri-

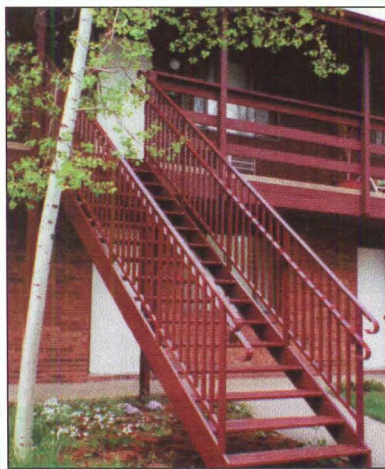
ans looking to shortcut this new hill.) Worse yet are the schemes that relegate important public realms to the upper floors of massive towers. While a fascinating concept, these street-snubbing parks and plazas do no service to a city; they merely soften the notion of building tall office blocks. They might work, but no precedent suggests so.

Reconnecting to the topography is a respectful way to make place, and many of the schemes respond to the street grid. While extending the grid seems logical and useful—it supports the flow of people, capital, and ideas—breaking with it also signifies the specialness of a place. A few proposals mediate these issues with great care. Others try to rectify the lack of connection with

the Hudson River. Cesar Pelli's towers in Battery Park City notoriously block cross-street views; by treating West Street as a tunnel, as a covered park, or as a tree-lined boulevard, several of the new proposals improve circulation and connection to the waterfront.

THE SUPERCONTEXT

Still, the context at Ground Zero is layered and hard to distill. It involves building a working symbol of freedom and democracy, remembrance and reflection, within a bustling commercial domain; creating hallowed ground while fusing a diverse area together; and making ambitious plans while 8.5 million square feet of office space sit vacant nearby.



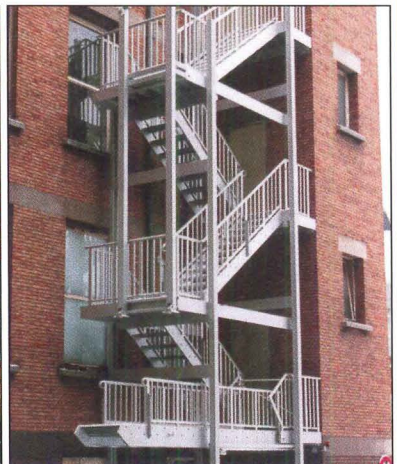
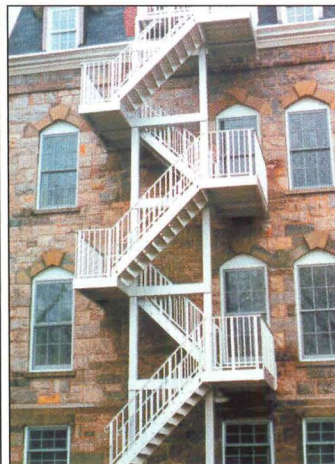
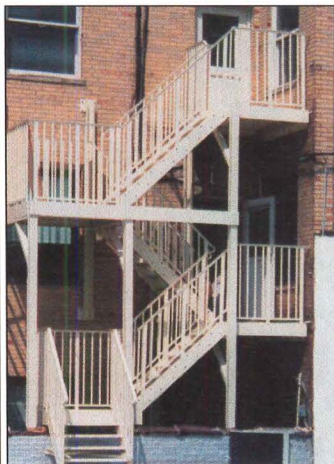
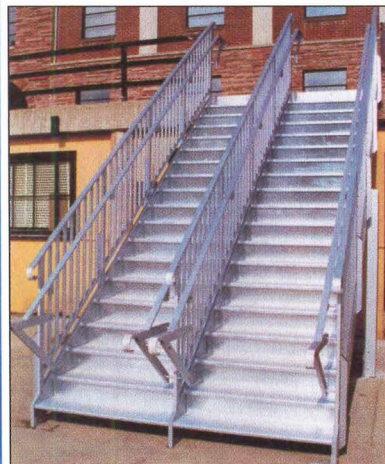
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The answer? On one extreme, we're offered retrocontextualism—Peterson/Littenberg's misty-eyed view of a timeless New York City—and on the other extreme, compositions of multiple, matching megaliths (Foster, United Architects). Neither of these strategies—overt nostalgia or megalomaniacal imprint—seems to advance the evolution of New York City, where architectural innovation contributes, over time, to the physical embodiment of an industrious pluralism. On both real and mythic levels, this city is about heterogeneity, a layered accumulation of ideas, images, and impulses. With this cue, several of the proposals take the massive program apart and offer a built-in eclecticism or

an open-ended design component. Libeskind, for example, promises that "many architects can participate" in his plan, and that it should encompass "different expressions over time." The Think team focuses on cultural program, and leaves much of the commercial building to market forces.

Laissez-faire development seems antithetical to at least one aspect of Ground Zero's context: its mission of restoring pride and innovation to a site of grave devastation. Doing so calls for a clarification statement of hopefulness. Clearly, the architectural embodiment of optimism has never been floor area, and it is no longer height. Today, it is the lateral span. From the Meier team, this is

expressed as a three-dimensional grid, while Foster advocates leaning, faceted twins. Most daring, however, are the unrelenting diagonals of the United Architects towers—a clear break from physical context—offering Manhattan a new expression of confidence and destiny.

WHAT NEXT?

Practical issues of phasing, funding, and feasibility have drawn loud debate and will be addressed over time. The site's owner, the Port Authority of New York and New Jersey, and the agency put in place to oversee rebuilding, the Lower Manhattan Development Corporation, have made a laudable attempt to gauge public opinion,

but the haphazard scheduling of the design studies (before the memorial competition, ahead of a land-use plan) and lack of a coherent program can be easily criticized. Even so, the time is ripe to discuss the character and context of this place.

The forces of accommodation in this city will work out the issues of how much space to devote to which needs. What they are quite unlikely to work out, however, is how this site should address its neighbors and serve the good of the common city dweller on the ground and above and below it. To that end, let's offer our implicit faith in the architects and their inquisitive studies of urban American context. ■

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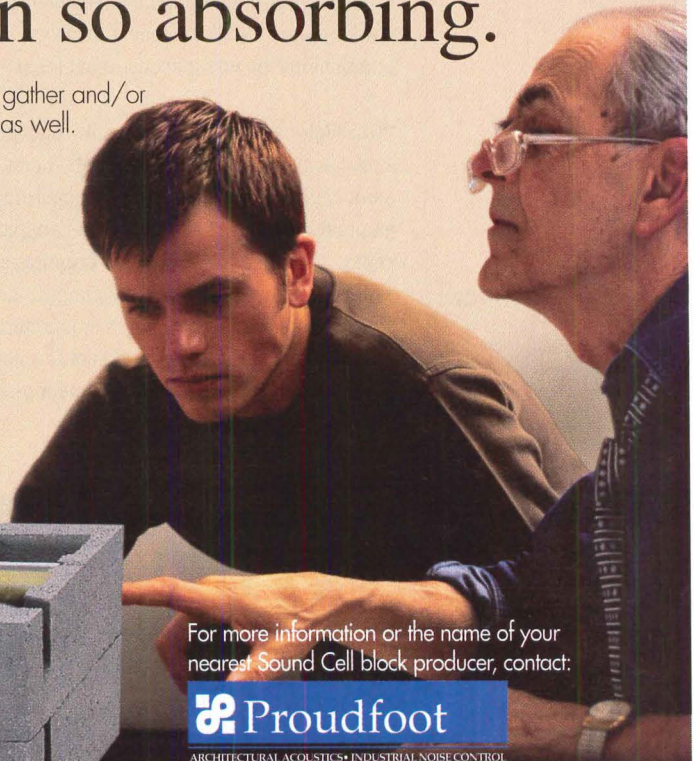
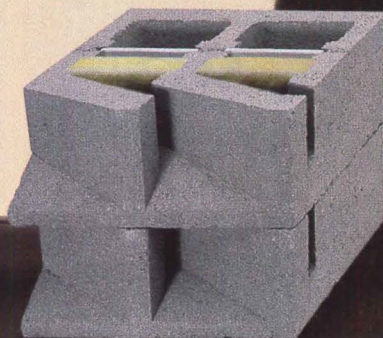
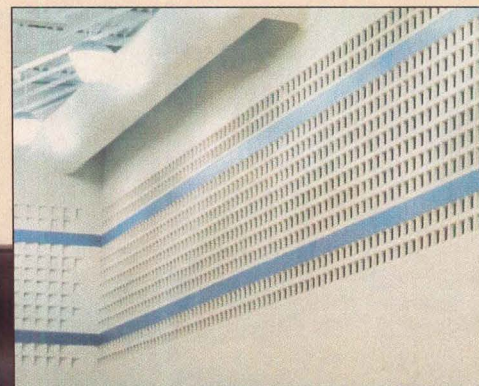
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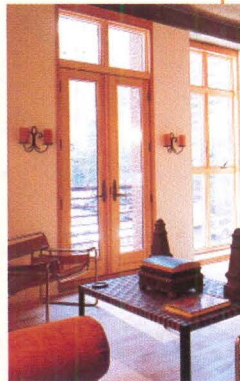
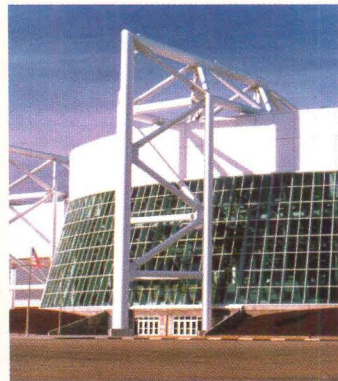
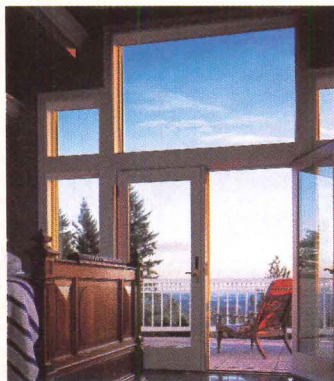
Despite the stock market woes of the past two years and looming economic uncertainty, the window and door industry is experiencing strong demand fueled by robust new home construction and improvement markets. On the commercial side, declines in retail and hospitality property segments have been offset by continued strength in education, health care, governmental, and institutional segments. Coupled with a high level of available industry capacity, these market conditions have resulted in a very competitive marketplace, and the public's desire to invest in their homes and businesses has increased business across the industry.

"The high-end custom home and renovation market remains strong with no end in sight, as baby boomers enter their peak earning years and find that their home is one of the best investments they can make," says Paul Landgraf, remodeling marketing manager for **Andersen Corporation**. "Many forms of high-end building products, including windows and doors, have benefited from this trend, and manufacturers have responded with more archtopy windows and doors, custom cladding colors, and windows with oak, maple, or mahogany interiors."

Michael Reilly, owner of **Reilly Woodworks**, agrees. "Consumers are more willing to make the investment to create a safe and substantial place for themselves and their family." And this sense of better-developed personal space and security extends beyond the home, into the public arena and business sector, where architects are also making such issues a priority.

In addition, growing evidence suggests that daylight is essential to health, well-being, and productivity. By carefully designing window and door specifications for commercial and residential buildings, architects can contribute to the increased productivity and psychological health of the inhabitants. There is also a renewed appreciation of windows and doors in design. Not just a portion of the outside envelope, windows and doors are an integral part of the lifestyle created within the building. And buyers are willing to pay the price for key amenities to create their vision. Skylights, bow and bay windows, roof windows, and upgraded entry and passageway doors all rank high on their list of preferences in new construction. In remodeling, windows and doors are among the most important pieces of the investment.

For more information on window and door manufacturers and associations, go to www.thru.to/architecture



This emphasis on more windows and doors has raised awareness of performance and design requirements and changing building codes. "Architects today have more criteria than ever to evaluate when specifying materials for both commercial and residential projects, primarily because of increased expectations owners and end-users have in terms of sound transmission, energy performance, security, and sustainability, in addition to design elements such as hardware, color, materials, and finishes," says Landgraf.

new again "Traditional home design continues to remain strong in both new construction and remodeling," says Landgraf. "While some residences have a contemporary architectural theme, many employ a Colonial, Shingle style, Arts & Crafts, Federal, Georgian, or Spanish Revival approach—all examples of traditional design. Thus the windows and doors being used in these projects must reflect the overall building design in terms of interior and exterior casings, types of windows and doors, and use of divided light grilles. The windows and doors need to say 'traditional' right along with the rest of the home." The introduction of

Andersen's new 400 series Woodwright double-hung window is in response to this major trend.

"Customers tend to go for traditional, with a pleasing design," agrees Molly Carr, an architectural sales representative for **Marvin Windows and Doors**. Using detailing such as true divided lights, transoms, solid wood double doors, and architectural arched, round, and bay windows, designers can create a new sense of tradition that meets improved performance standards. "An alternative I'm seeing more acceptance of is simulated divide lites," says Carr. Simulated divided lites offer either a traditional or contemporary style, plus energy efficiency since the SDL bars are permanently adhered to both sides of insulating glass. For an even more authentic look, spacer bars can be installed between the panes of glass, creating the illusion of authentic divided lites.

What's interesting is that while many homeowners desire a traditional architectural style, that's about as far as their love for the past will go. They prefer the open feel of modern

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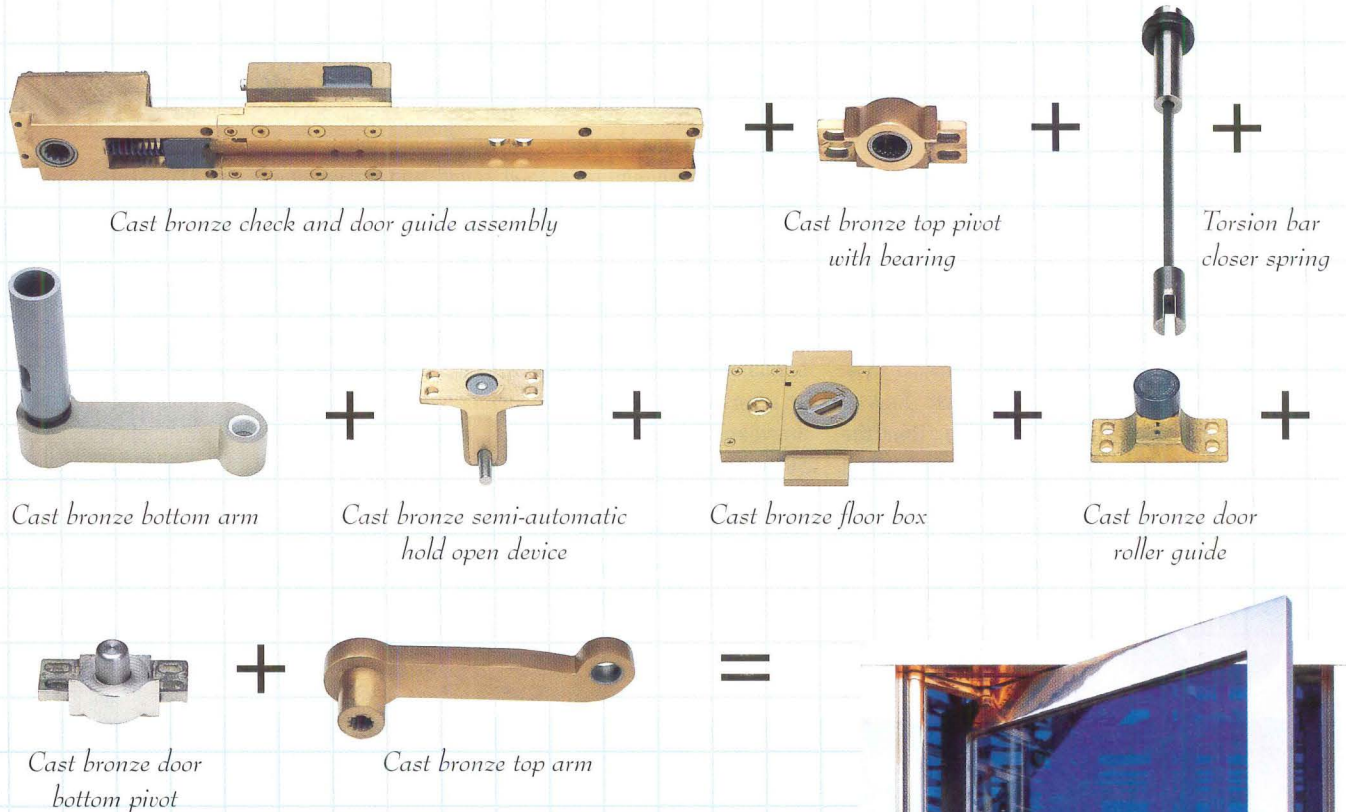
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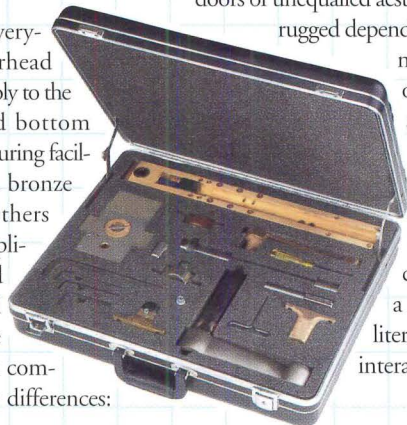
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floorplans and lots of natural light to the walled-in layouts of the past. Many have given up painting every six to eight years in favor of a maintenance-free exterior. Uncomfortable and energy-robbing single-pane windows have been replaced with energy-efficient windows with low-e glass in many cases. "The market is looking for a re-interpretation of the past," says Landgraf. "Customers want the look of old, but with the use of modern materials and features."

In the commercial world, the evolving curtainwall system is an example of the ideal blending of traditional materials and modern techniques. "This blending of materials and styles creates many unique design possibilities," says Reilly, who notes an immersing interest in a more modern design approach. "The use of wood in place of metal in curtainwalls creates a very stunning product. The softness of the wood and the crispness of the glass is an ideal combination of traditional and modern."

overall design "It's a constant balancing act to meet creative design intents within often tight budget constraints,

without compromising quality and performance. That's where having highly tailorable standard products and unique materials becomes essential in meeting the needs of today's architectural, design, and owner communities," says Laura Camp, marketing communications manager for **Forms+Surfaces**. "Increased integration, or cohesive design, is one of the strongest trends we've seen," she says, citing their recent product development that addresses an increasing demand for complementary product lines, including a new railing system (Silhouette) and two new lighting systems (Mitra and Contour) that incorporate the same surface materials that are available for doors and other architectural accents. "By offering a suite of interrelated products that share manufacturing techniques and proprietary materials, we offer specifiers the ability to coordinate all aspects of interior and exterior design."

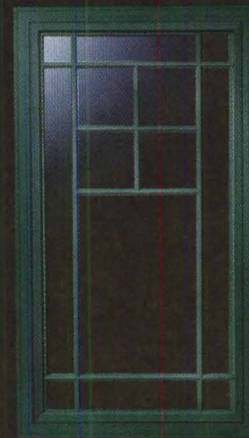
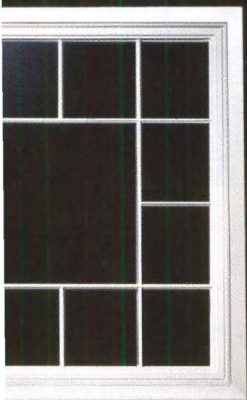
This trend towards overall design consistency has fostered an increased awareness of how volume considerations can bring high-design, high-quality products into more affordable price thresholds for wider applicability on a project. "We've

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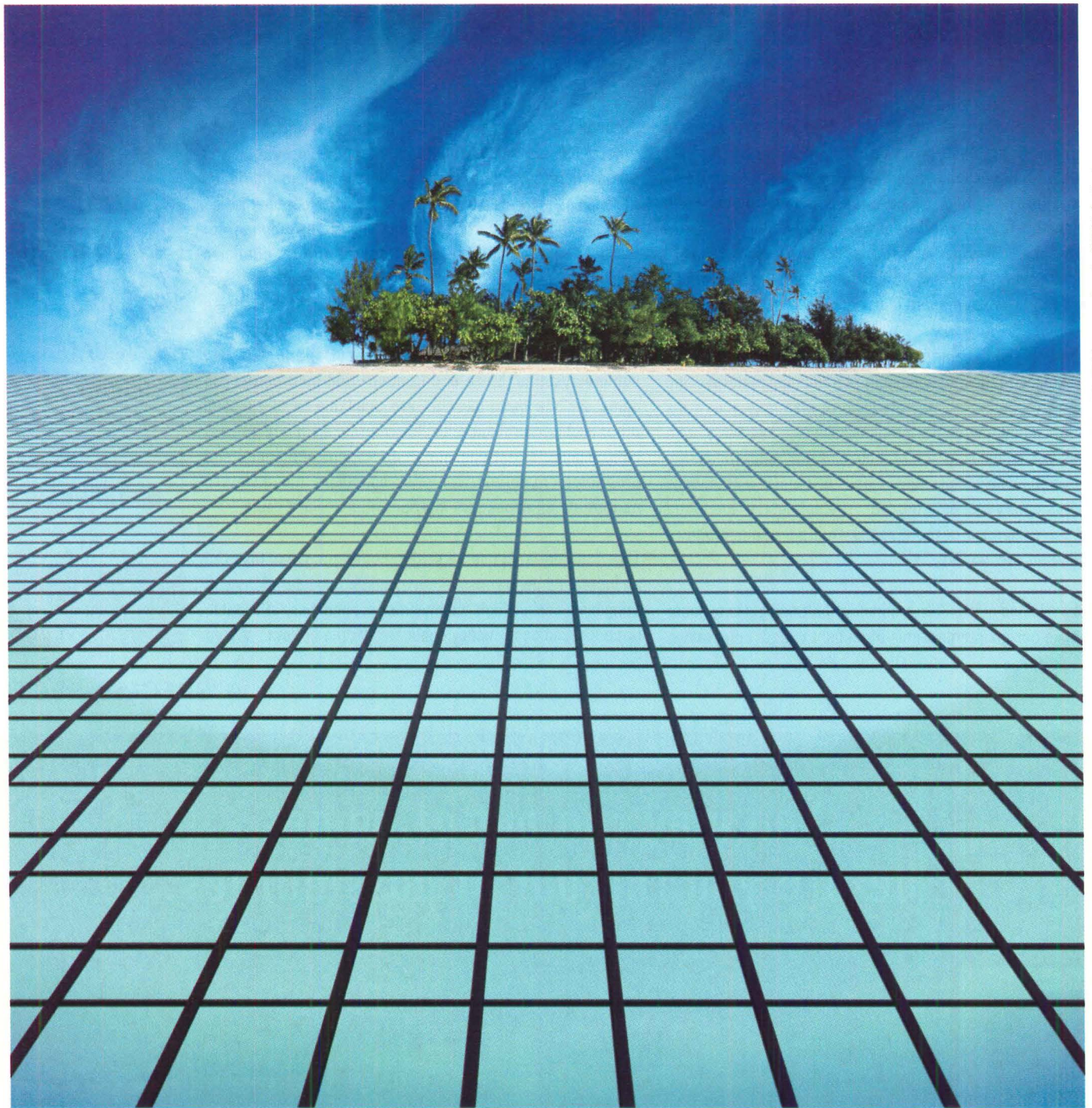
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been involved in a number of projects recently where the customer, who had originally only considered our doors for entrance or statement doors, was able to use the same or slightly modified versions of the entrance doors throughout the facility and stay within budget," says Camp.

"I expect to see more movement toward semi-custom windows and doors," says Alan Campbell, president of the **Windows & Doors Manufacturers Association (WDMA)**. "Designers are taking stock units and mulling them with transoms, lites, or unusual hardware to achieve a unique design without the cost of true customization."

Complementary product lines are reaching greater heights as more and more home and building owners now view door and window hardware as "decorative accessories" that need to be color- and finish-coordinated with other hardware around the home or office. This consumer-driven style is fueled by the multitude of styles and finish choices found in today's plumbing and cabinet hardware. "In terms of hardware, we are seeing, on the high end, a return to casted

products that are oil rubbed bronze and nickel, and on the mid range, lighter and more efficient designs," says Carr. "At Marvin, we're meeting these demands with Stone River Bronze compatible hardware and the change in our standard color from medium bronze to satin taupe and moving to the more sensible casement flip handle standard."

Sales of specific product lines also respond to regional design preferences in certain areas of the country where there is a predominant historically defined architectural style. "This can be seen in the large number of double-hung products sold in the Northeast and Mid-Atlantic states, as well as large volume of patio door sales in the Southeast and gliding windows in Western states," says Andersen's Landgraf. "These sales patterns also include color and grille options. For example, white units with traditional grille pattern in the Northeast and sandtone color with Prairie-style grilles in the Midwest or West."

"Architects share a deep understanding that the best buildings are designed as a complete system. The win-

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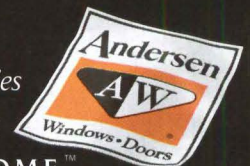
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dows and doors on a building should be treated with the same consideration—not just as components, but also as total, systematic solutions that have a place in the overall design, performance, and long-term lifecycle of the building,” says Steve Fronck, vice president of **Wausau Windows**.

Many industry experts agree installed sales is the wave of the service-orientated future for building material dealers. “Installed sales is becoming an important issue, when the manufacturer can sell it, install it, and stand by the installation because they have control over it,” says Dave Stork, manager of marketing services for **Eagle Window & Door**. “Offering installation is increasingly seen as a good opportunity to add value and reduce problems in the field, such as questions over whether it is a product defect or an installation problem and eliminating costly call backs and service charges.”

safe and sound But it’s not just about good looks. “Life safety and sustainability are equally as important, as well

as component finishes and materials that are long lasting and present natural and appealing finishes,” says Teri Kops, marketing administrator for **Pemko Manufacturing Company**. “Products in door handles, for example, continue to address the problems of high wind and rain, such as are being considered for the strict Dade County, Florida requirements; while security and aesthetic considerations are being addressed by concealed fastener applications.”

While architects have always required well-designed products to bring to life their signature concepts, performance issues—particularly in security and energy efficiency—are becoming top concerns for both the commercial and residential markets. “Security concerns around the world have prompted the use of specialty products, such as blast- and bullet-resistant doors, in applications that traditionally would not have required such performance considerations,” says Camp. “These ongoing security concerns, and a more design-conscious society in general, dictate the development of highly aesthetic options that meet specialty performance criteria.”

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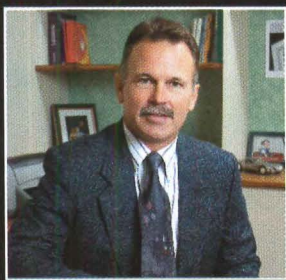
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According to Fronek, this concern for the safety of building inhabitants and the environment has fostered unique, creative solutions in window system design and applications, such as blast resistant curtainwalls, hurricane resistant windows, and photovoltaic systems. "Security and energy-efficiency are two design trends shaping the industry," says Fronek. For instance, to answer the special concerns of health care facilities, Wausau's hurricane-resistant, in-swing casement operating windows provide emergency ventilation for patient rooms in the unlikely case of fire. Since the protective qualities of hurricane-resistant windows can make them difficult, or even dangerous to break, windows that open become an important consideration. And because patients' mobility can be limited, these in-swing casement windows utilize a single locking handle located near the sill to actuate heavy-duty locks. "Architects want products that enhance the aesthetic design of their building, while meeting all the code and performance criteria," he says. "For windows, this means flexible configurations, uniform sightlines, and unique glass coatings, as well as custom colors and finishes."

This evolving category of high-performance products is becoming more mainstream as building codes along the eastern and southern seaboard continue to become more stringent in terms of bearing greater wind loads during high wind events, and in some cases, being able to withstand the impact of flying debris during a coastal storm. Most manufacturers expect these codes to be implemented up and down the coastline during the next several years and are working to provide code-compliant products for these markets. And although most coastal states are implementing impact-resistant codes, they can vary greatly from state to state and even within states. For example, a window that meets requirements in the state of Florida wouldn't necessarily meet the requirements in New York, where an energy code requiring insulating glass is also in effect. North Carolina, on the other hand, is trying to implement a code that would require certain criteria within 1,500 feet of the water, as opposed to the mile that has been the standard in other states. "It is essential that we develop products to meet the increasingly stringent specifications, as many states' building codes will soon mirror those of Dade County,

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which will become the benchmark for certification," says Mike Woodrum, director of marketing for **EFCO Corporation**. "Building codes and energy needs are driving the need to find alternative materials."

In an attempt to stay ahead of the changing codes and expanding requirements, new window and door products are manufactured to meet combined requirements of impact resistance and energy efficiency, as well as providing overall enhanced performance. "Laminated glass, which usually makes up impact-resistant glass, also has good energy efficiency qualities," says Stork. "These products can come into play in several instances and markets outside of the hurricane codes in the South, such as sound transmission or noise pollution in heavily populated areas, forced entry, and overall security."

At **SUNTUF Inc**, a leading manufacturer of polycarbonate panels and sheets, a new market is developing for the use of polycarbonate products to meet combined energy efficiency and impact-resistant requirements. "In applica-

tions of large-span windows, designers are often unable to meet impact and energy codes with glass, which, with the added weight of insulation and shading devices to control solar heat gain and loss, becomes too heavy and expensive," says Jim Larkin, product manager for all architectural **SUNTUF** products. The new polycarbonate products offer high insulation value and extreme impact strength and are very lightweight. "The response I've seen from architects is tremendous—a five percent increase every year in the use of polycarbonate in the commercial and industrial markets," says Larkin. "Much of this growth is along the lines of security applications, as designers become very conscious of what they have to do in regards to ballistic and impact resistance."

The growing concern over safety and security has resulted in a host of new product developments and reconfigurations of standard offerings. **Ellison Bronze**, for example, developed a mechanism that allows its balanced doors to incorporate wiring for security devices that require electronic switching within the door.

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Cascade Coil manufactures woven wire fabric used for window treatments as an alternative to fabric draperies, as well as ceilings, wall coverings, space dividers, and fireplace screens. "Our product has been considered for use as protection from flying glass and debris from explosions, as well as in industrial settings," says Cascade Coil's Kate Mytron. "The mesh fabric diffuses lighting without blocking views, suggesting privacy without reducing the sense of space or impairing ventilation. And since it is metal, it is not flammable."

Another growing performance trend is in the self-cleaning glass category. PPG saw significant interest in this category following the launch of its self-cleaning glass, and it is expected to continue to grow as several window and door fabricators are slated to add the glass to their own product offering early in the year.

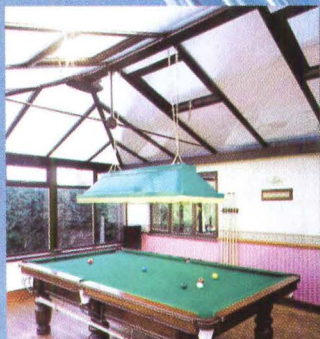
green scene In addition to safety, environmental soundness continues to influence the selection of windows and doors. "The need for sustainable, renewable products is growing stronger around the world," says Linda

Wolfe, director of marketing and business development for **Crittall Windows NA/The Fox Steel Company**. "Responsible product design and manufacturing are key to producing a highly sustainable, reclaimable end product that offers an unsurpassed lifecycle."

As a member of the USGBC (United States Green Building Council), environmental commitment is integral to Forms+Surfaces' operations and product offerings. "Most of our glass and metal doors have a high recycled material content and our Wood Stile & Rail Doors use "green-farmed" forest products, derived from sustainable sources rather than natural timber or rain forests," says Camp. "Specification writers and purchasing entities, municipalities in particular, are paying ever-closer attention to sustainable design."

This increased environmental sensitivity is also evident in the growing call for factory-finished products as opposed to products with finishes being applied on the job site. "If a product is painted on the job site, the majority of that

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THE GROWING
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paint is going into the environment, either as overspray into air or as leftover product being dumped," says Bill Munafò, director of marketing and sales for Timely. "When the product is painted in the factory, it is in a controlled environment that must meet tough EPA regulations, resulting in little or no pollution."

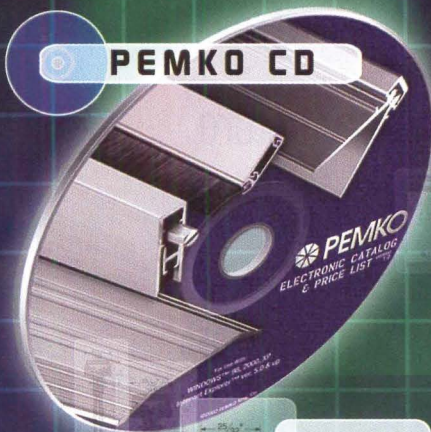
Meeting the specifications of the Green Building codes for thermal performance is increasingly significant as the country faces a precarious future energy situation. "There's a renewed emphasis placed on conserving energy as the economic crunch, budgets cuts, and possibility of oil shortages have accelerated the issue," says Woodrum. "Architects are still trying to feel their way through these programs and it is imperative that we meet the specifications to quality their building as a Green Building."

"Energy-efficiency continues to be a key driver in architectural design for both homes and commercial buildings," says Patrick J. Kenny, director of marketing for PPG's Flat Glass Products. "The current trend toward high visible light trans-

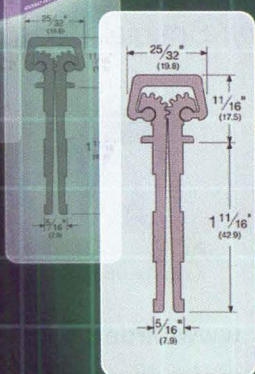
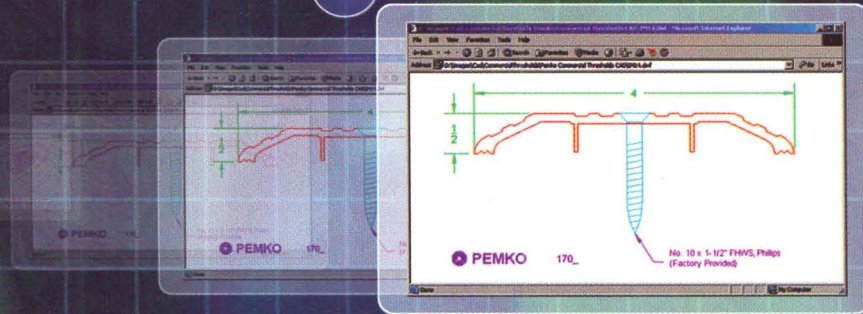
mittance and reduced solar heat gain will likely grow in strength. Light to Solar Gain Ratio (LSG), the derivative of Solar Heat Gain Coefficient (SHGC) and Visible Light Transmittance (VLT), will become an even more important barometer of glass performance." From tinted, spectrally selective tinted, and reflective to low-w and solar control low-e glass products, architects have the flexibility to meet nearly any performance standard with a range of aesthetic options. "These options might include color, such as the recently introduced spectrally selective tint, Caribia Glass, or another current trend toward the look of clear glass and high visible light transmittance while maintaining a substantial solar heat gain coefficient."

On the subject of building codes, 10 states have either put in place or will soon adopt mandatory codes requiring low-e windows. Neutral in color, glass with low-emissive, or low-e, coatings and interior layers allows for high visible light transmission but low outdoor and indoor reflectivity. Windows manufactured with low-e films typically cost about 10 to 15 percent more than regular windows, but they can reduce

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energy loss by as much as 30 to 50 percent, significantly reducing heating and cooling costs and conserving energy. Low-e coated glass can also reduce harmful ultraviolet rays by up to 75 percent, giving superior protection to interiors. "These new codes are a positive step toward reducing the energy consumption of the U.S. through reduced heat loss and improved solar control in buildings throughout America," says Kenny.

The growing influence of the Energy Star Program, in conjunction with the individual efforts of window manufacturers, has contributed to increased sales of energy-efficient products across the country. A collaboration between the U.S. Environmental Protection Agency, U.S. Department of Energy, and the private sector, Energy Star is designed to prevent pollution by helping consumers buy products that use less energy. Energy Star is also an easy way for specifiers to identify products that meet code requirements in states that have them, resulting in increased sales in the new construction market. In California, for example, where state legislation requires the use of energy-efficient products in

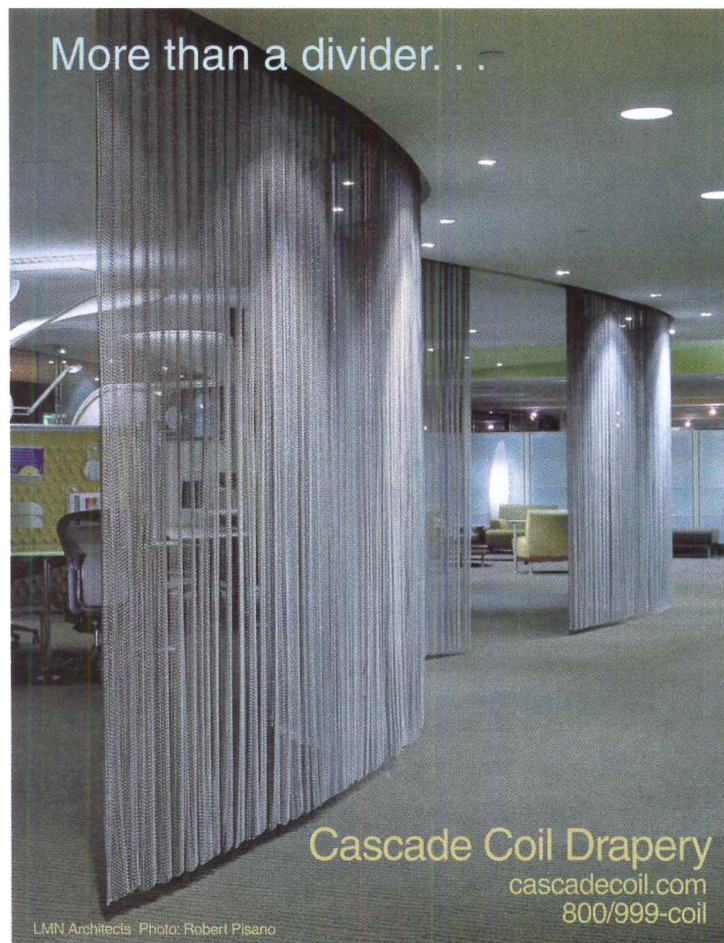
residential buildings, architects know they're safe when they specify Energy Star-rated windows. "There have been major advances in energy-efficient window technology over the past 10 years and the emphasis now must be on educating builders about why they should be using high-performance products in the first place, and educating consumers on the financial and comfort benefits of replacing their original windows, even if they are only 10 to 15 years old," says the WDMA's Campbell.

Energy issues have also captured the attention of Congress, resulting in the passage of energy legislation that represents a scaled down \$14 billion version of the House's \$33 billion legislation passed in the fall of 2001. Passed in April 2002, the Senate bill includes tax credits to cover the cost of products, including windows and doors, that improve energy efficiency in existing homes, new construction, and commercial property improvements. A House-Senate conference committee is attempting to reconcile the two bills.

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by **Liz M^CCarthy**

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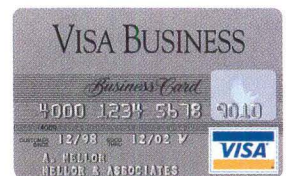
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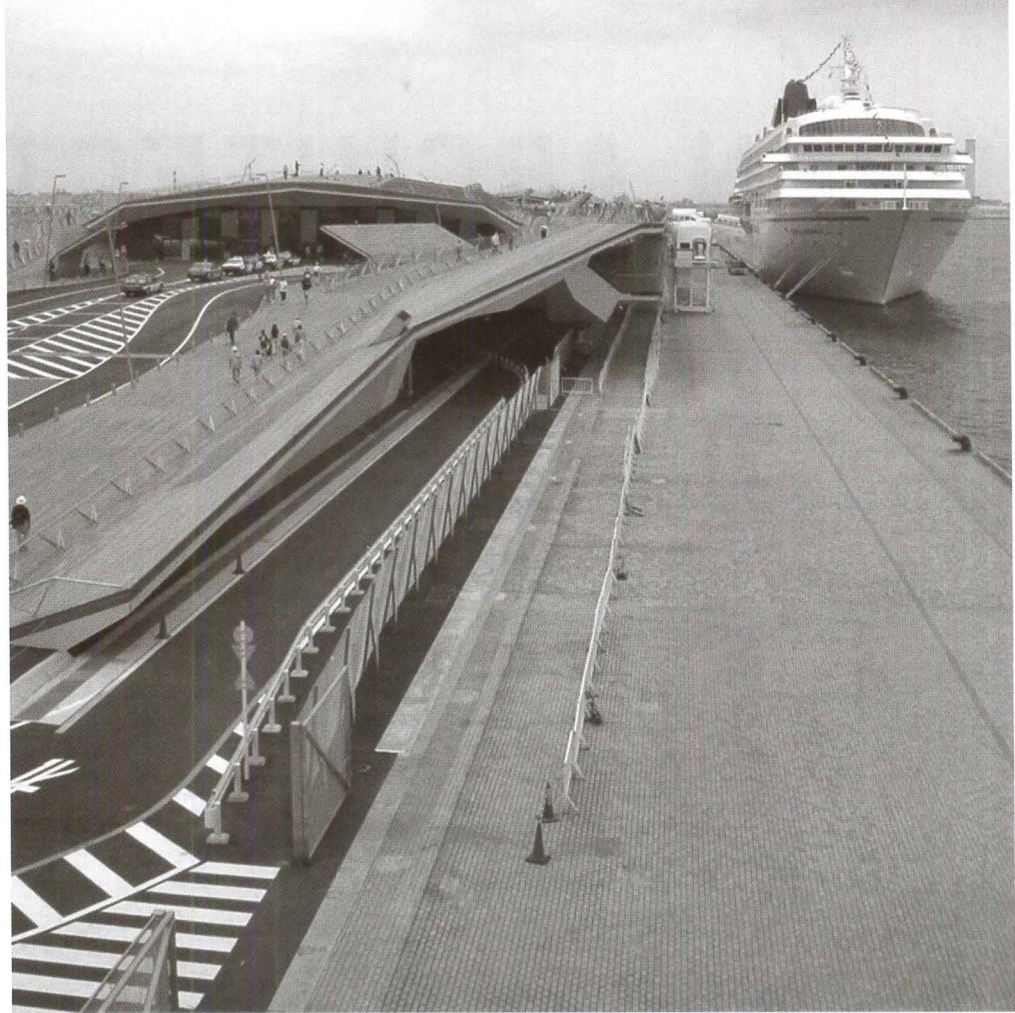
One of the great paradoxes of our era is the opposing trajectories of technological invention and geopolitical relations. The former moves at lightning speed to ever-greater heights, while the latter seems to degrade with disturbing consistency. In this climate, architecture, as cultural signifier, bears heavier burdens. One project, the Yokohama International Port Terminal, designed by Foreign Office Architects of London and featured in this issue (page 68), is a model of technical ingenuity put into the service of social interactivity.

While employing sophisticated computer software to both conceive and realize its groundbreaking visage, the terminal's designers leveraged the project's potential for common experience in the public realm. Travelers and locals sit side-by-side beneath the faceted steel ceiling of the main passenger hall and share sweeping waterfront views from the rooftop park, its irregular terrain extending the land into the sea, an artificial earthwork.

In 1859, Yokohama became one of the first Japanese ports to open to the Western world. Nearly 150 years later, the city's bold gamble on a young firm makes an extraordinary gift to the international community, transcending borders of all kinds and offering a new venue for cultural exchange.



ORIGAMI EXPERIENCE



YOKOHAMA'S FOLDED-STEEL INTERNATIONAL PASSENGER TERMINAL BY FOREIGN OFFICE ARCHITECTS IS LIGHTER THAN AIR. BY PETER SLATIN

Stepping through the innocuous entrance—a row of glass doors approached from a winding driveway—into the Yokohama International Port Terminal in Yokohama, Japan, is like passing through the wardrobe and into Narnia. Things are different on the other side.

It's not just a question of moving from outside to inside—although that is certainly an issue—because this multilevel interior enfolds the outdoors within itself, deploying 10 ramps among its three indoor and outdoor levels to do so. From inside the terminal's main-level great hall, Yokohama's expansive, increasingly vertical waterfront is suddenly telescoped and encapsulated in abrupt, bursting vistas where the building opens to the air. The clunky urbanism of Yokohama's surrounding inner harbor is becalmed by the slightly distorted order of the low-slung, 275,000-square-foot terminal's folded surfaces that progress along the length of the hall.

CONTRADICTIONARY SENSATIONS

Conventional cues to distance and direction are simultaneously dismantled and reassembled within the awesome open scale of the 700-foot-long, 230-foot-wide great hall, which reaches a height of 50 feet. Opened last June, this Möbius strip of a building draws visitors throughout its interior and exterior with a pull that feels positively gravitational. Yet, the uninterrupted expanses of floor space invite aimless wandering—not to browse retail stalls, because there are none, but rather to explore the unfolding of the building above and below the main hall.

There is another basic contradiction that tugs at the visitor once inside. The building, so gargantuan, heavy, and bound to earth and sea, seems to be zooming forward into the open sky of Yokohama Harbor, propelled by its own ornithology. The simple explanation provided by Kenichi Matsuzawa of Foreign Office Architects (FOA), which won the commission to design the terminal in an international competition held in 1995: It is “origami architecture.”

These apparently contradictory sensations are stimulated by the same elements: a dark steel ceiling in the great hall that soars in a series of folds overhead into a flattening arch; distant and sharp curvilinear bursts of daylight at the ends of the main hall and off to either side; the longitudinal flow of fresh-cut, solid planks of warm-colored ipe wood flooring from Brazil that awaits the scumbled patina that will accrue from many years of use by travelers descending from the 60-odd cruise vessels that pay call in Yokohama each year.

PORT OF CALL

Over the past two decades, vast sums have been spent to transform the industrial section of the port—a long-term renewal project known as Minato Mirai 21—into an entertainment-retail destination and business center, with a huge shopping mall adjacent to the Pacifico Convention Center and Hugh Stubbins's mid-1990s Landmark Tower (at 70 stories, the tallest building in Japan). Indeed, many visitors to the ferry terminal will likely be the residents and workers of Yokohama, eager to spend leisure time on the 120,000-square-foot roof deck covering the 1,400-foot-long terminal.

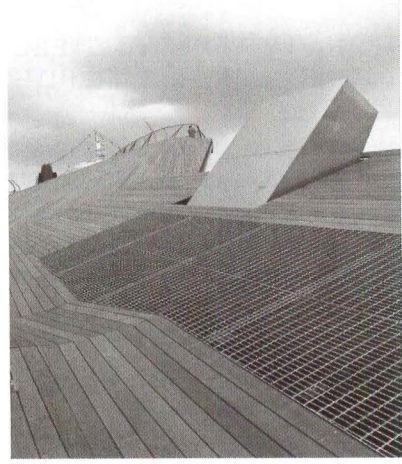
The roof deck is the most artful space at the terminal. It features grassy knolls and plantings and is punctuated along one side by slanting sunshades. The wood decking of the rooftop promenade culminates in terraced steps that form a 500-seat amphitheater, the staging area of which migrates through another opening into the upper level of the terminal, forming a large indoor/outdoor ceremonial and performance space.

The amphitheater has already been put to use. Last summer, Yokohama hosted the final game of the World Cup soccer tournament; the selection of the city for that honor was a key factor in the 1995 competition for the design of the new, \$200 million terminal, built atop Osanbashi Pier, itself completed in 1894 and the oldest in the port of Yokohama.

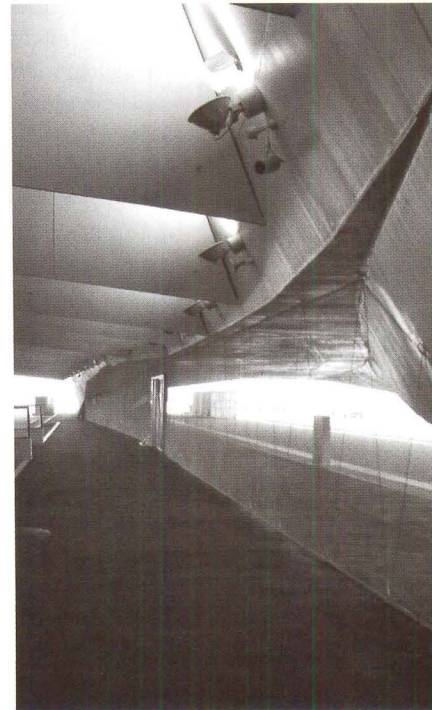
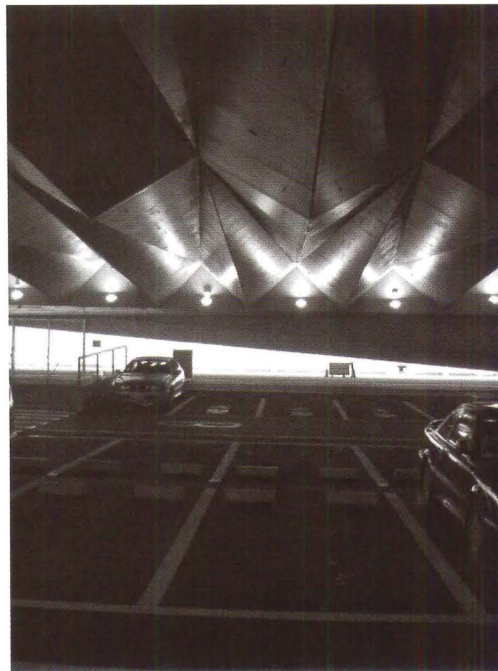
UNIVERSAL EXEMPLAR

Passengers that arrive by car, whether from automobile-carrying ferries or simply by driving to the terminal from elsewhere inland, will find parking only after driving onto the roof deck and snaking their way down to the lower level of the terminal. Like the rest of the structure, pedestrians reach this either by elevator—a glass lozenge that slides through the building near its center—or by one of the 10 gently sloping ramps that help make the terminal an exemplar of universal design, accessible to users with sensory or mobility limitations. Indeed, all of the Minato Mirai 21 projects are designed for universal access, reflecting a growing movement in Japan spurred by the aging of its population.

At the new terminal, this pragmatic consideration is skillfully translated and fused into a fluid, multidirectional space. Most striking is the extraordinary structural exposition in plain, sturdy materials. The ordinary experience of walking from point A to point B is anything but; FOA's wooden ramps link water and earth, traveler and vessel, in an intimate transitional space. ■

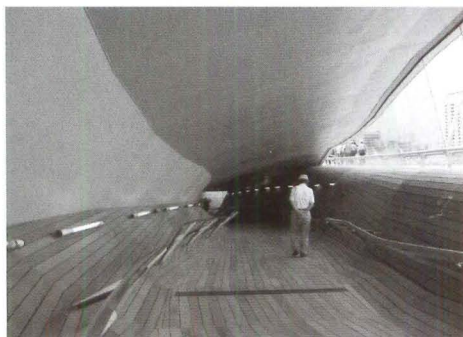
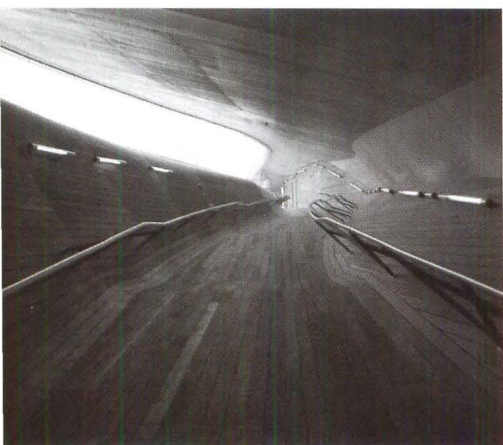


For locals, the port terminal's roof deck is an inviting park and public realm (above) with plantings, shaded areas, built-in seating, and a 500-seat amphitheater (above, far right).





For travelers, the port terminal organizes automobile and foot traffic through a series of sinuous, changing pathways that open into waterfront vistas and large, vaulted spaces (below).



FROM ORGANIC TOPOGRAPHY, A BASIS FOR STRUCTURE BY C.C. SULLIVAN

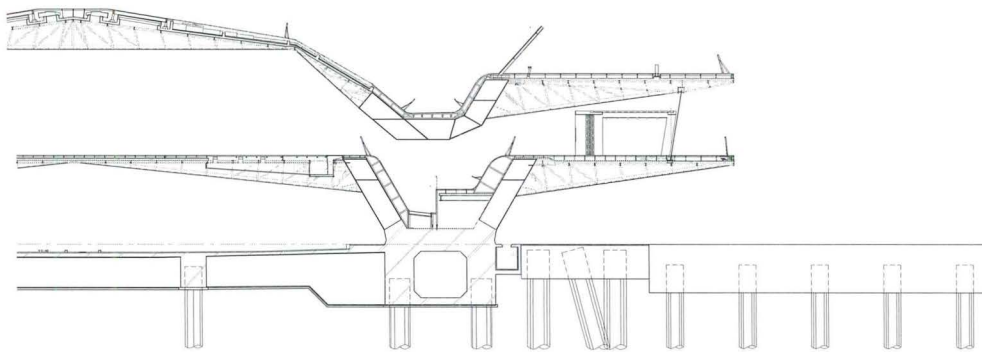
Extending the public realm of two nearby parks out into a harbor, the Yokohama International Port Terminal at first appears to neglect its job as an entrance point for thousands of arriving visitors. Yet, the warping planes of its parklike roof induce the flow of locals and travelers alike into an organic system of surfaces and voids below. As the deck of the plaza weaves under and around itself, interior and exterior merge—and the resulting folds and creases become structure.

The programmatic expression of the terminal dispenses with traditional notions of building envelope and load-bearing structure. Discrete structural members, such as columns, yield to a continuum of materiality; multiple physical stresses are reduced to elegant singularities.

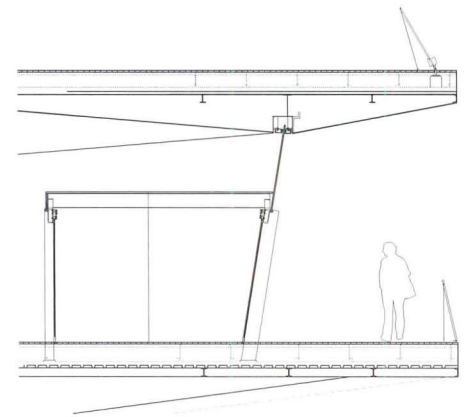
Layered steel framing provides the flexibility to articulate the irregular surfaces and the lightness needed for seismic activity. Each fold distributes loads diagonally to the piles of the existing pier, an ideal scheme for

the lateral forces generated in earthquakes. The main trusses rest on box girders, spanning cavities of varying size along the length of the building; cantilevers of up to 50 feet flank the pier, reaching out to the boarding decks of docked ships. The low-slope ramps and cantilevered wings necessitated large pieces of steel running below and above occupied areas.

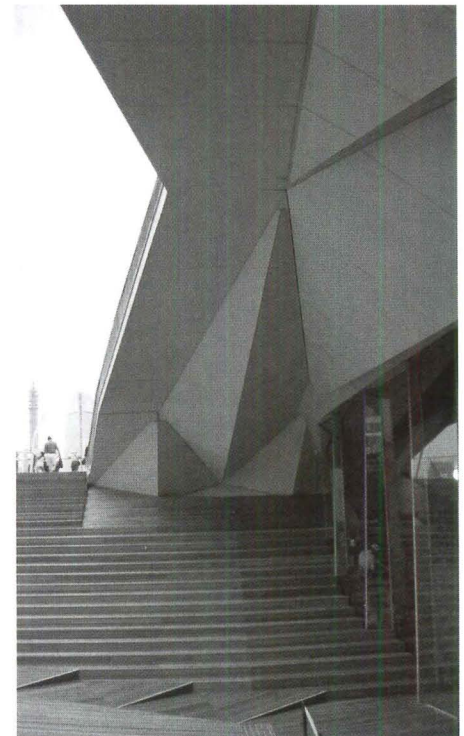
The massive steel framework contrasts with the featherweight finish materials and appurtenances attached to it: untreated wood-deck flooring, faceted glazing, cable-stayed scrim, and a system of projecting steel triangles across the largest transverse spans. Like the finishes, the handrails and guardrails derive from a single detail that adapts to the curving, folding, and inverting of the terminal's surfaces and spaces. The outcome evokes nautical forms and an aquatic biomorphism: symmetrical and hydrodynamic along its main axis, nonlinear and infinitely varied in section. ■

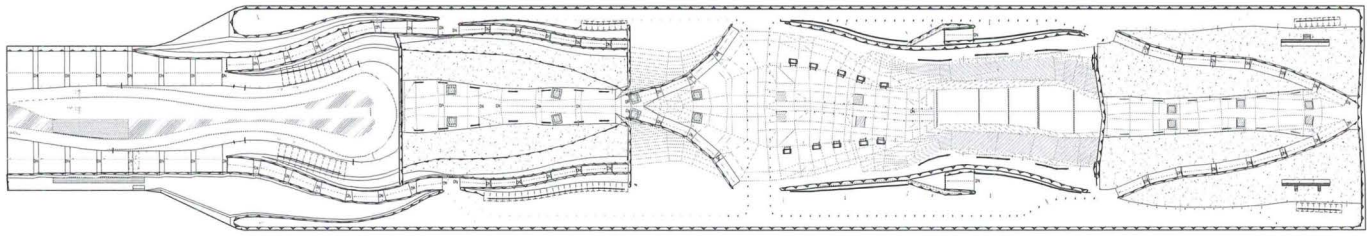


Partial transverse section | 15'

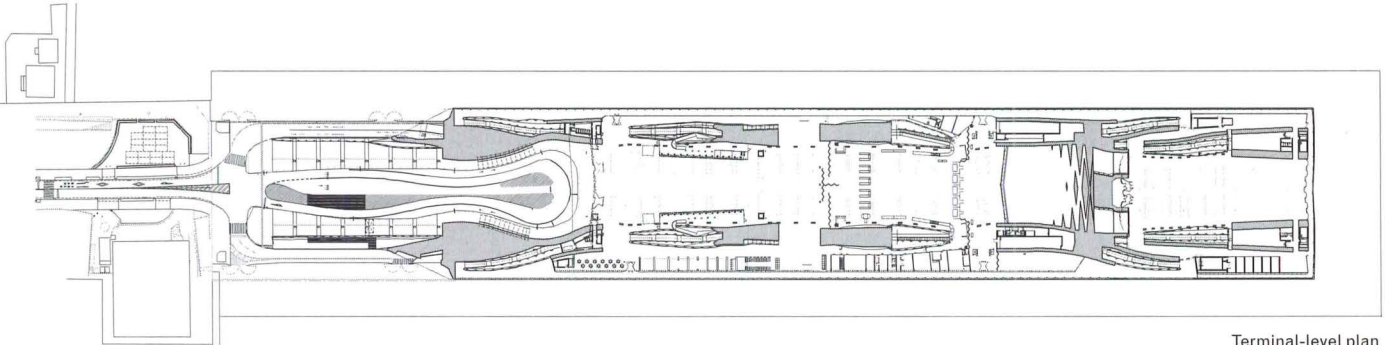


Section detail | 4'

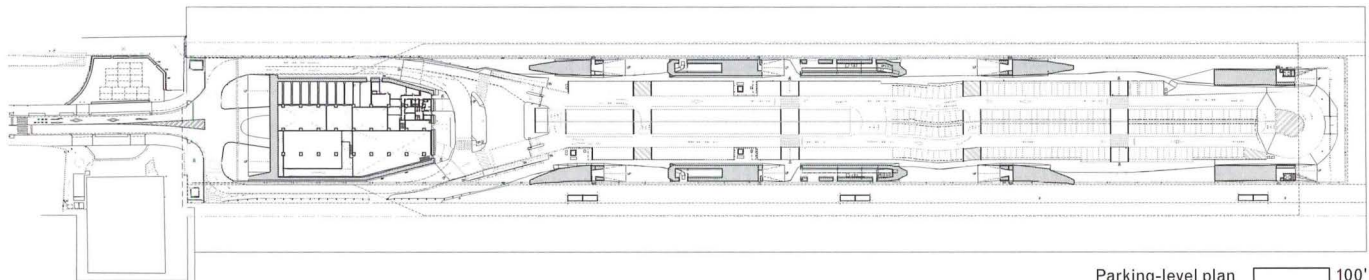




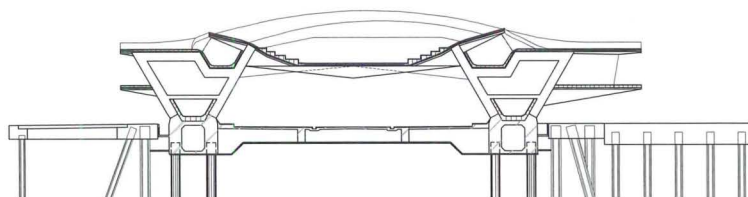
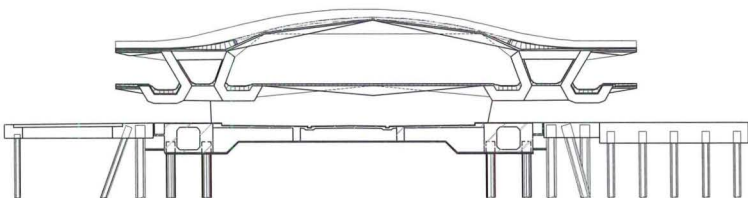
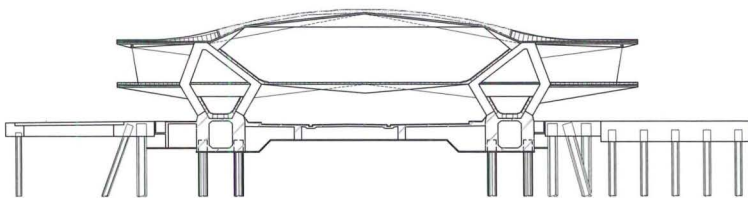
Roof/park-level plan



Terminal-level plan



Parking-level plan 100'



Transverse sections 33'

YOKOHAMA INTERNATIONAL PORT TERMINAL, YOKOHAMA, JAPAN

CLIENT: City of Yokohama Port & Harbor Bureau Construction Department, Osanbashi Passenger Vessel Terminal—Toshio Kumakura (director of planning and construction) **ARCHITECT:** Foreign Office Architects, London—Farshid Moussavi, Alejandro Zaera-Polo (principals); Shokan Endo, Kensuke Kishikawa, Yasuhisa Kikuchi, Izumi Kobayashi, Kenichi Matsuzawa, Tomofumi Nagayama, Xavier Ortis, Lluís Viú Rebes, Keisuke Tamura (project architects) **ENGINEERS:** Structure Design Group (structural); Arup (structural); P.T. Morimura & Associates (services) **CONSULTANTS:** Kado Lighting Design Laboratory (lighting); Nagata Acoustics (acoustics); Akeno Fire Research Institute (disaster prevention); Urban Traffic Engineering (transportation) **GENERAL CONTRACTORS:** Shimizu; Kajima; Toda **AREA:** 515,000 square feet **COST:** \$194 million

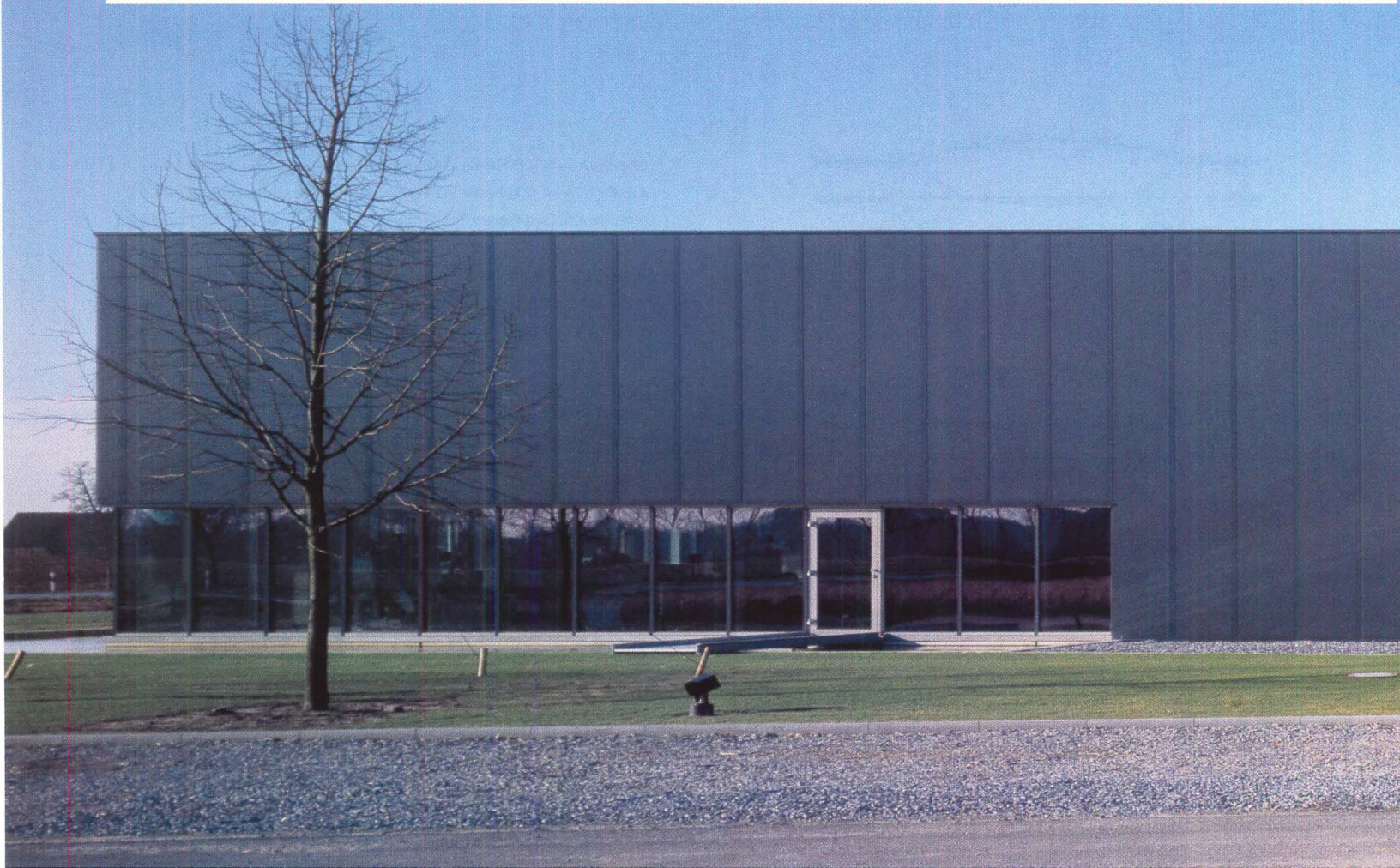
PHOTOGRAPHS BY KURT HANDLBAUER

SPECIFICATIONS

STEEL: Kawasaki Heavy Industries, NKK **STAINLESS-STEEL NAIL FASTENING:** Hilti **GLASS:** Asahi Glass Building Component Engineering **WATERPROOFING POLYURETHANE:** Mitsui Chemicals Industrial Products **ELEVATORS:** Yokohama Elevator **IPE WOOD:** Isolite Insulating Products; Maeda Environmental Art **HANDRAILS/METALWORK:** Kanematsu Devices **MESH:** Koiwa Kanaami **COATINGS:** Metal Spray Engineering **ARTIFICIAL SOIL:** Toho Leo **CONVEYORS:** Toyo Kanetsu

ON THE LINE

A GERMAN MANUFACTURER OF PRECISION DRILLING TOOLS EXPECTS ITS FACTORY TO FUNCTION AS WELL AS ITS PRODUCTS. BY ABBY BUSSEL



Wal-Mart and its big-box brethren could learn a thing or two from the design of the Lübbering Factory II in Herzebrock, Germany. At Wal-Mart, shoppers work the lines (endless aisles of merchandise) and assemble goods (onto conveyor belts) at the checkout counters in what is essentially a hermetically sealed container. No natural light, no exterior sights, no distractions from the job at hand.

Lübbering, too, is a big box rooted in the elemental efficiency of the column-free orthogonal volume, the formula so critical to the high-capacity needs of retail giants. But that's where the similarity ends. Designed by Drewes + Strenge Architects (D+SA), Lübbering (the second building for the company by the same architects) is an articulated box, in which natural light, exterior views, and a reflecting pool counterbalance the effects of the intense, often repetitive work required for the fabrication of high-precision aerospace and automotive drilling tools and other highly specialized products.

The largest element of the 23,000-square-foot factory is the production hall, which is housed within a black-painted, aluminum-clad rectangular volume. Its scale, says D+SA principal Frank Drewes, is broken down by a series of "parasites," or small boxes with discrete functions that create outdoor courts and provide shade from the sun and shelter from the wind. Clad in anodized aluminum, a second large box, smaller and taller than the main hall, is attached to its west end. Here, a moving crane mounted on a gantry delivers materials and products in and out of the loading dock, a massive cantilevered roof

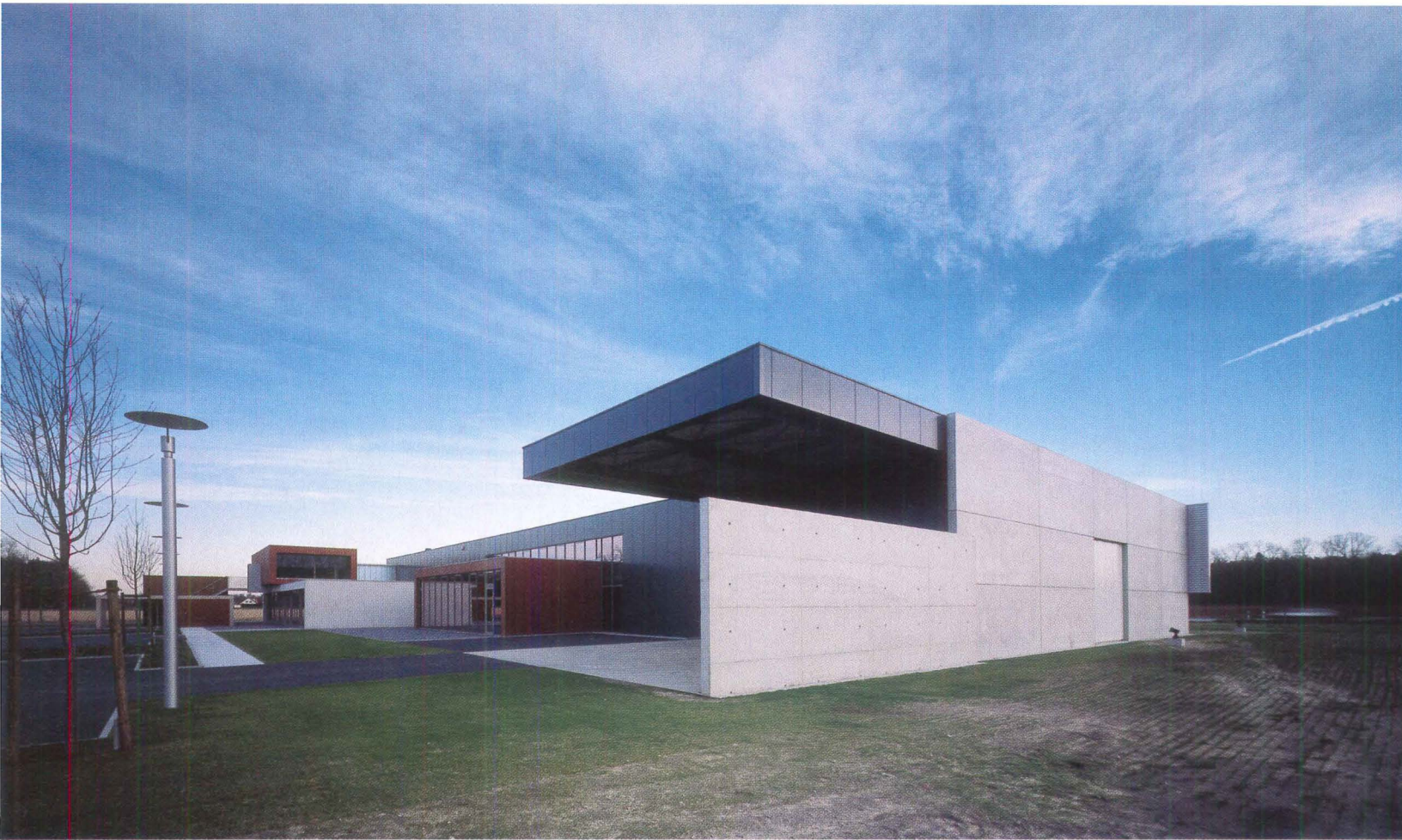
marking its singular purpose.

At the opposite end of the building are the common areas and offices, most of which are extruded vertically or horizontally from the production hall. The cafeteria and exercise areas are wrapped in a concrete shell, with a wall of glass opening the space to the landscape. Above the cafeteria are the client's quarters, encased within a glass and wood box that juts slightly beyond the concrete walls below. Two means of egress service the executive aerie: One is a glass enclosed walkway that leads to the mezzanine-level supervisor's station in the main hall; the other is a stair that descends to a single-story box housing a garage for the owner and an employee bicycle room, both behind a Corten steel wall.

Beyond its program-driven spatial variations, the Lübbering factory offers a contextual response to its environs that big-box stores rarely consider. Where the Wal-Marts of the world typically turn their backs on the vernacular, D+SA, a young local firm with a second office in Berlin and a satellite studio in San Francisco, brings a regionally inflected modernism to its small corner of Westphalia, in the northwestern region of Germany. Both the rough, red-colored fir wood that clads the executive suite and the unfinished cement stucco that encases the cafeteria wing, for example, recall the timber framing and stuccoed walls that dominate the historic core of Herzebrock, a city founded in 860.

Wake up Wal-Mart.





The varied massing and extensive glazing of Lübbing II imbue the factory with an uncommon dynamism. The loading dock (above) is sheltered by two monumentally scaled elements, a cantilevered roof and a concrete wall. The client, who occupies a wood-clad perch (facing page), required a high level of comfort and accommodation for his employees, including access to natural light and an on-site cafeteria and exercise room (below, left). Activity on the factory floor (below, right) is monitored by a supervisor, who works from the mezzanine level.



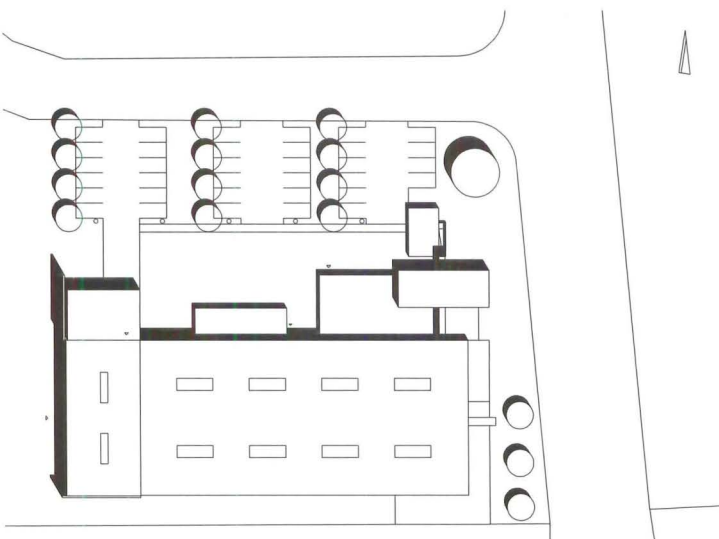


LÜBBERING FACTORY II, HERZEBROCK, WESTPHALIA, GERMANY

CLIENT: Achim Lübbing **ARCHITECT:** Drewes + Strenge Architects, Herzebrock, Germany—Frank F. Drewes, Martin Strenge, Stefan Bolzenius, Lilli Neumueller (project team) **STRUCTURAL ENGINEER:** Bröckling Vullhorst with Ulrich Drewes **LANDSCAPE ARCHITECT:** Drewes + Strenge Architects **CONSULTANT:** Nordemann (carpentry) **GENERAL CONTRACTOR:** Westkämper **CONSTRUCTION MANAGER:** Stefan Bolzenius **AREA:** 23,000 square feet **BUILDING COST:** \$1.59 million

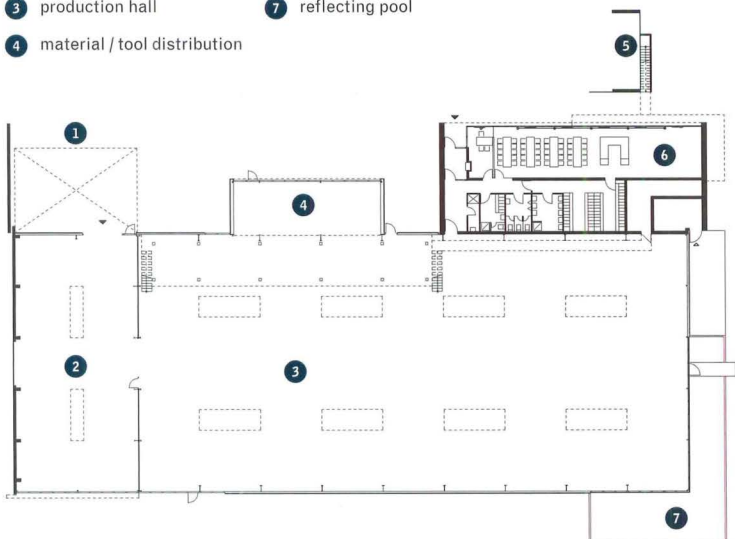
PHOTOGRAPHS BY CHRISTIAN RICHTERS

WOOD SIDING: Kerto CAFETERIA WOOD DOORS, PANELS: Meranti FLOORING: Anröchte PARKING LOT LIGHTING: Bega

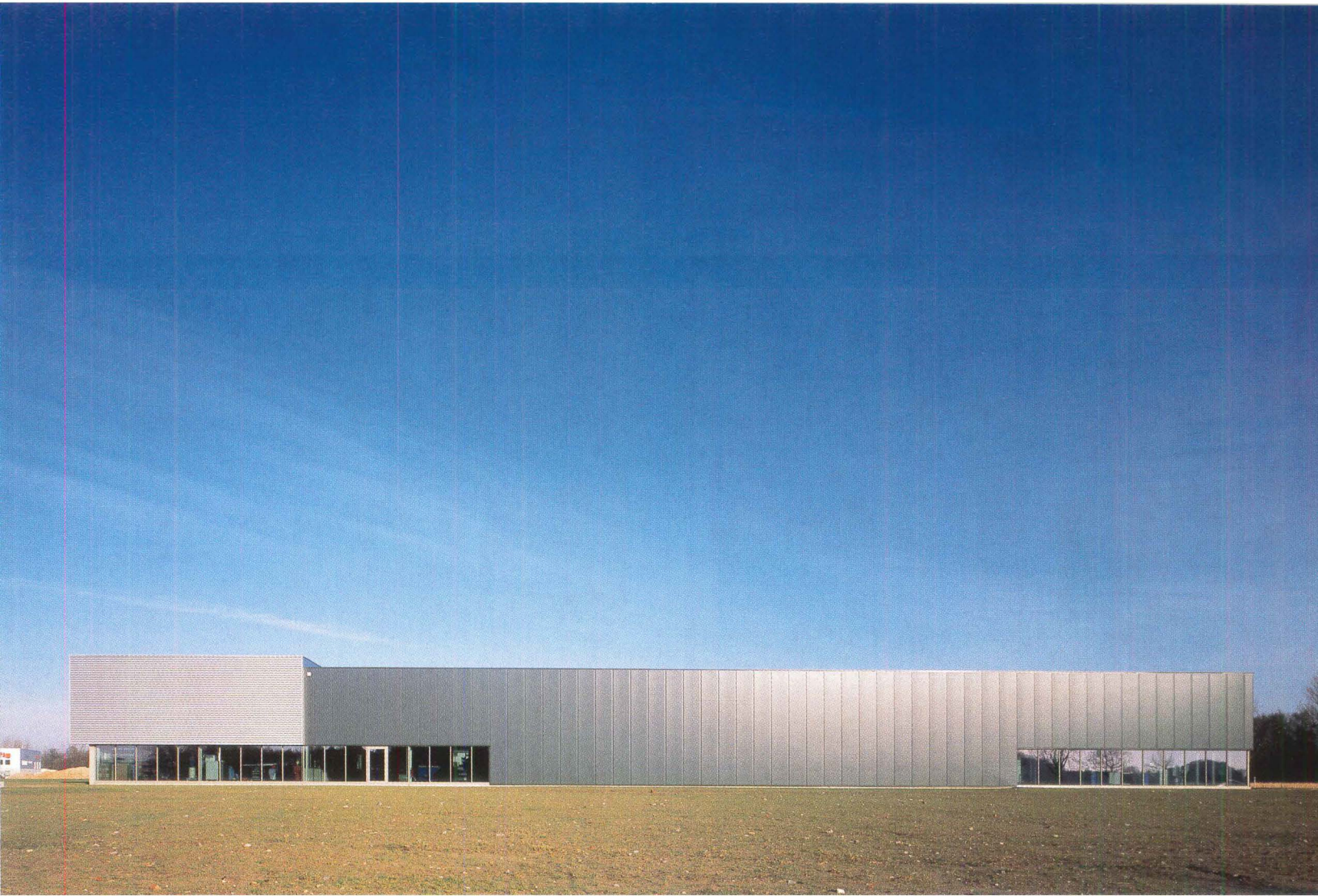


Site plan 1/42' ^

- 1 loading dock
- 2 distribution / delivery
- 3 production hall
- 4 material / tool distribution
- 5 carport / bicycle room
- 6 cafeteria / gym
- 7 reflecting pool



Ground-floor plan 1/22'

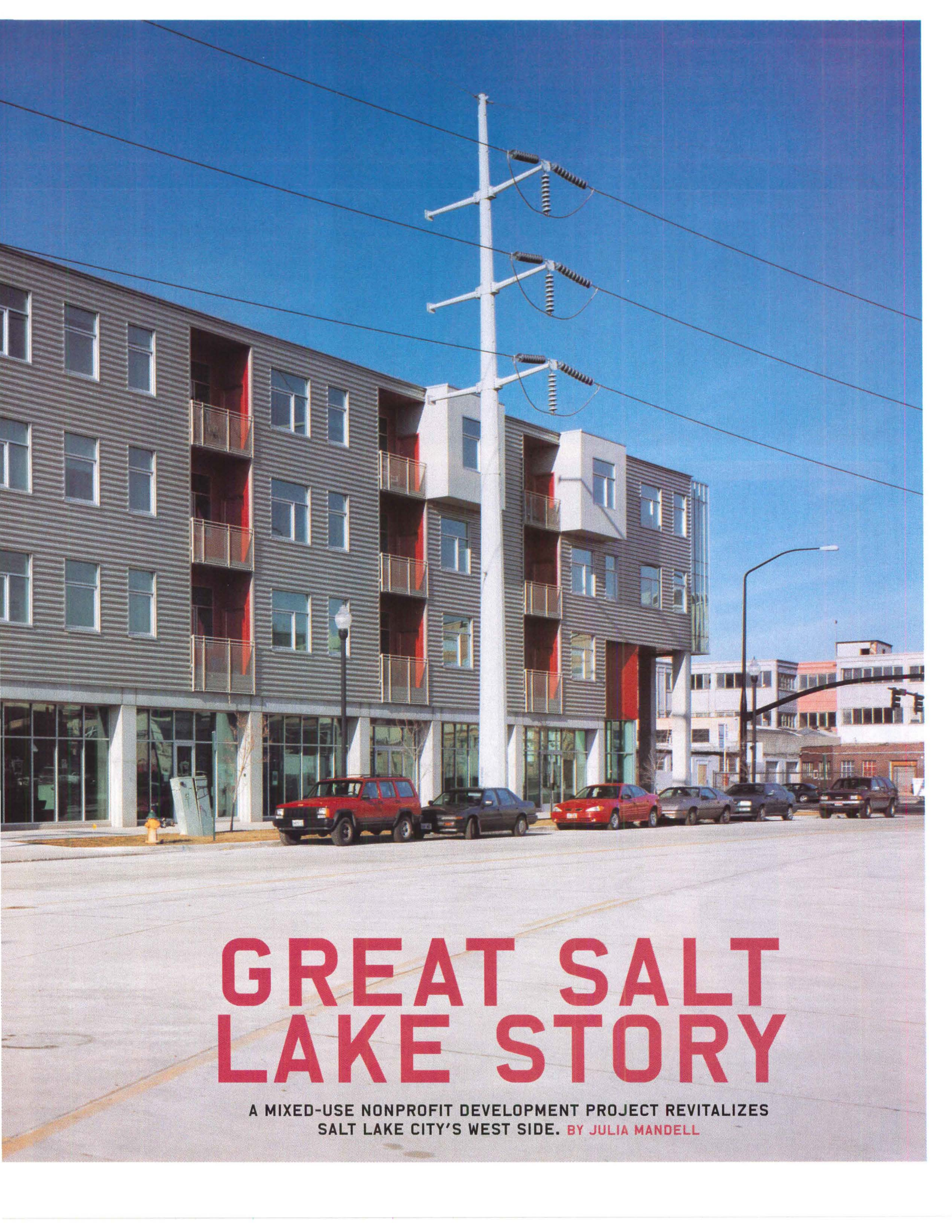


The south façade (above) is the only one uninterrupted by “parasitic” volumes, although a raised, anodized-aluminum portion of the building indicates the location of the gantry and loading dock. Amenities and support spaces—carport, bicycle room, cafeteria, and client’s office (below, right)—are on the opposite side of the factory, each housed in a discrete volume (below, left). Concrete, stucco, and aluminum and wood siding further demarcate the various functions of the plant (facing page).







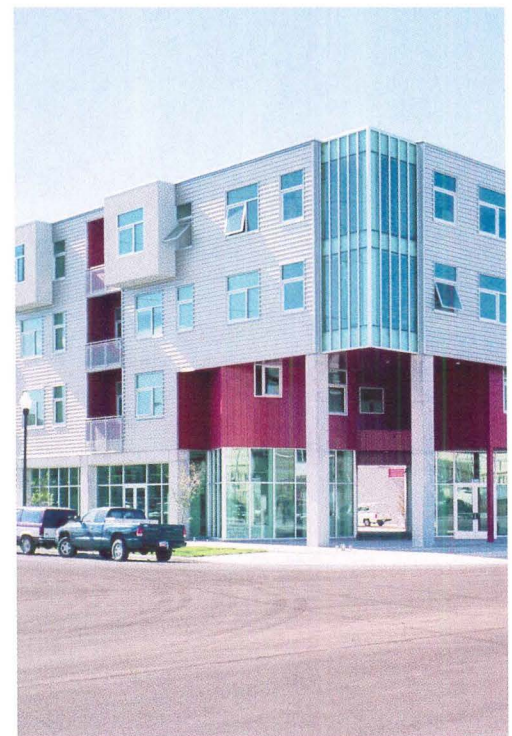


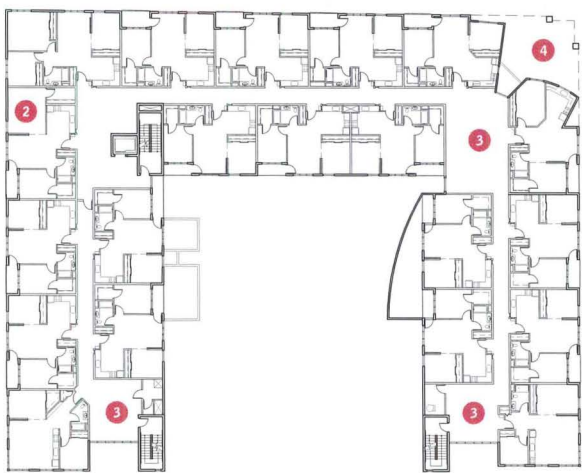
GREAT SALT LAKE STORY

A MIXED-USE NONPROFIT DEVELOPMENT PROJECT REVITALIZES
SALT LAKE CITY'S WEST SIDE. BY **JULIA MANDELL**

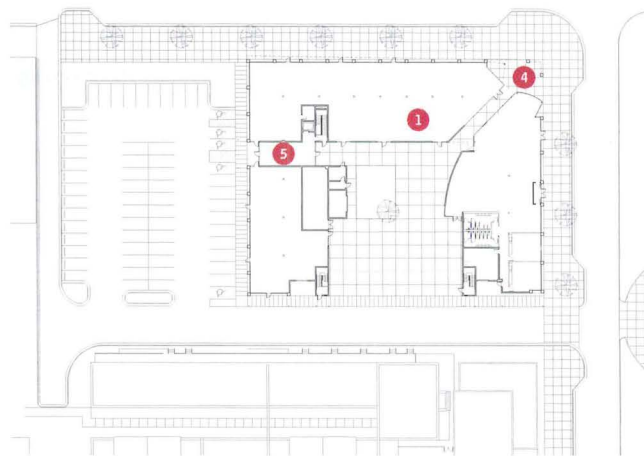


The materials and articulation of the exterior make the Bridge Project both elegant and inviting. Smooth gray finishes and clean lines belie the reality of a meager budget, as seen in the courtyard (left) and the sculptural stair towers (bottom left). The details and variation of the façade project a friendly face to both the street (bottom right) and the homeless shelter nearby (below).





Second-floor plan | 20'



Site plan | 50' ^

- 1 commercial space
- 2 apartments
- 3 common space
- 4 outdoor atrium
- 5 lobby

"It's fascinating to see how people own their space," says Prescott Muir about the Bridge Project, a nonprofit development he designed in Salt Lake City. "I have always been interested in deterministic architecture. It is a difficult thing for an architect to give up control."

While Muir did not relinquish command of the design in the Bridge Project, he created a building that fosters community and encourages a sense of ownership, a direct objective of the developer. Surrounded by a mix of abandoned warehouses, empty lots, and ramshackle storefronts, the building stands out as an optimistic monument to the ongoing revival of Salt Lake City's west side. Developed by Artspace, a nonprofit organization concentrated on this area of the city, the Bridge Project aims to link the affluent, predominantly Mormon downtown and east side and the growing Hispanic community to the west—hence the name. Originally intended as part of a larger complex that was to include low-income and market-rate housing and community spaces, the project's ground floor contains retail and nonprofit space, with tenants carefully chosen for their community value. Above are three floors of rental apartments, 62 units in all, which range from \$350 to \$700 a month. The lowest priced apartments are reserved for qualifying low-income tenants.

Invested with weighty hopes for the area in which it stands, the Bridge Project's coherent physical presence is a little incongruous seen against its disorganized surroundings. U-shaped, with its courtyard center turned away from the street, the building fills its block and rises three stories above its immediate neighbors. And the Bridge Project has some interesting neighbors: Directly across the street is the Road Home homeless shelter. The low, brick shelter buildings are serviceable, their function made obvious by the shivering figures outside the front door at all hours of the day and night. To the north of the shelter, beyond a vacant lot, sits the massive Gateway Mall, an exemplary display of Disneyesque postmodernism.

Faced with this strange juxtaposition of consumer goods and desperate poverty, the Bridge Project's clarity and articulated street façades become important to the project's successful integration with the neighborhood. In order to ensure a healthy relationship with the shelter, Artspace set up a transitional housing program, working with case managers at the Road Home to move homeless families into the Bridge Project as units become available. Even so, the new building is low on ethnic diversity, according to Artspace executive director Jessica Norie.

For his part, Muir made a number of decisions that open the building to its surroundings and encourage community. The ground-floor retail spaces are glazed from floor to ceiling, making them visually accessible to passersby. The height of the retail units and rhythm of the dividing concrete columns echo the earlier industrial buildings in the area. The materiality of the building also contextualizes it, presenting a clean update of

industrial architecture. Muir chose the corrugated siding because it "hints at the memory of the railroad," and, though jarring next to the brownish brick buildings nearby, the bright red paint adds a little spice.

By placing an entrance at every corner, Muir established an easy flow around and through the building, uniting commercial and residential, interior and exterior. The main public entrance to the building is at the corner of 200 South and 400 West, facing downtown Salt Lake City. This corner is carved out, creating a two-story outdoor atrium that leads to the courtyard. The cutout opens the corner to the street, interrupting the purity of the building's rectilinear mass. On the opposite side of the building is the tenants' main entrance, a glass-walled lobby that opens to both the courtyard and the parking lot. The lobby and the atrium draw foot traffic through the courtyard, traffic that is pulled to the other corners by the elegant stair towers at either end of the U.

This ease of circulation is a major factor in encouraging social interaction in and around the building. On the residential floors, balconies are attached to each unit and common spaces are provided. Each unit also has a window and exterior shelf by its front door, encouraging personal expression and display. These efforts toward interaction and ownership seem to be successful: More than one resident likens the building to a dorm, and every unit has some personal marker outside. "It's like *Melrose Place*, but to an extreme," says Matt Mateus, a musician, referring to the 1990s television show about a group of scandalously interactive neighbors. "I know all of my neighbors. If I'm cooking up something out here [on my balcony], everyone will know it and come over."

Muir marvels at the community his design and the efforts of Artspace have fostered. "I don't know my neighbors nearly that well," he says. ■

BRIDGE PROJECT, SALT LAKE CITY, UTAH

CLIENT: Bridge Project (Artspace) **ARCHITECT:** Prescott Muir Architects—Prescott Muir (principal-in-charge/design); Lisa Arnett (designer); Chris Bachorowski (project architect); Lynn Attwood, Bernardo Flores-Sahagun, June Williams, Douglas Pruitt, Mark Stonehocker, Troy Haynes, Jack Renner, Tami Cleveland (team) **ENGINEERS:** ARW Engineers (structural); Interwest Mechanical & Plumbing Engineers (mechanical); JSH Electrical Engineers (electrical); Great Basin Engineering (civil) **GENERAL CONTRACTOR:** Sahara **BUILDING COST:** \$7.96 million

PHOTOGRAPHS BY SCOT ZIMMERMAN, EXCEPT AS NOTED

SPECIFICATIONS

METAL/GLASS CURTAIN WALL: Kawneer **METALS:** MBCI Panels, Structural Steel Vercor Composite Deck **CONCRETE:** Brailsford Cast Stone **EIFS:** Senergy **SINGLE-PLY ROOFING:** Firestone UltraPly TPO **GLASS/WINDOWS:** EFCO **DOORS:** Boswell Olsen Enterprises



An eastward-looking view across the University of Italian Switzerland's campus (above) reveals one end of Bruno Fioretti Marquez's red-hued lecture hall building to the left, the glass-skinned building containing computer labs by Giraudi Wettstein straight ahead, and the theology school by Michele Christen to the right. Aurelio Galfetti's campus master plan (facing page) comprises an auditorium (1), a library (2), lecture halls (3), a lab (4), and a theology school (5).

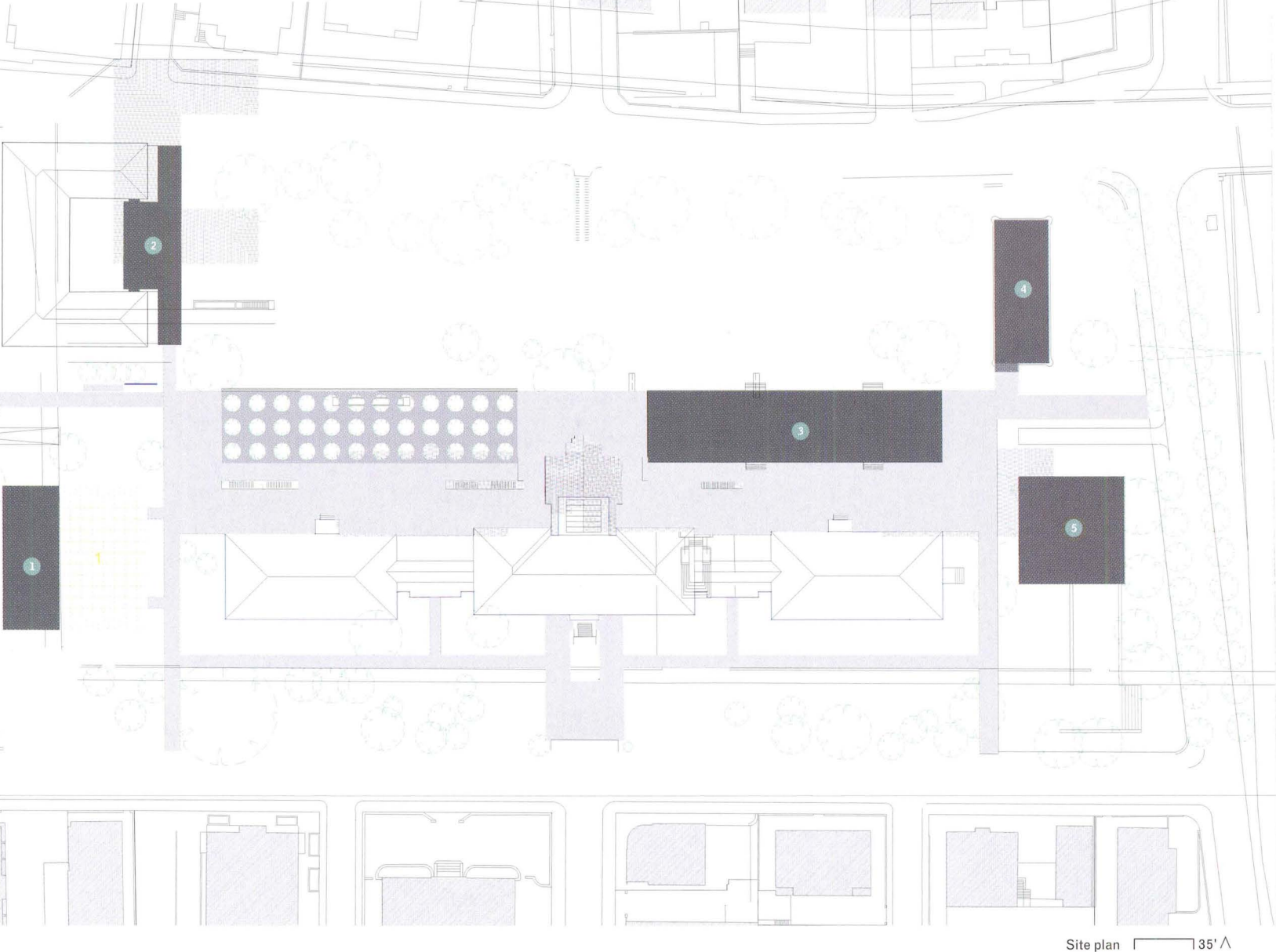
MASTER CLASSES

Planned and executed during the past four years, the new campus in Lugano, Switzerland, for the University of Italian Switzerland, or Università della Svizzera Italiana (USI), is an excellent example of how to obtain overall harmony while indulging multiple authors. The master plan and one of the five new buildings were designed by an acknowledged master of Ticino modernism, Aurelio Galfetti, and his young associate for this project, Jachen Könz. The other buildings were selected through competitions, open only to local architects under 40, with a jury dominated by Galfetti. Thus, while each building retains its own character and style, the assemblage consciously adheres to the taste of the maestro and master planner, who influenced each project as the general coordinator of works.

In 1995, when Ticino—the only Italian-speaking canton of Switzerland—was awarded a new state university, it was partly due to

the campaign of another local architect, Mario Botta. Under the new university's aegis, Botta founded the Accademia (a department of architecture) for a student body of over 500 in Mendrisio, close to the Italian border. The other university departments, for the moment limited to economics, communications, and theology, were housed in a nineteenth-century neoclassical hospital on the northern fringe of Lugano. The hospital, which had been retrofitted as a cultural center in the 1980s, was inadequate for the needs of 1,200 students and 200 instructors. In 1998, a major donation to the university's building fund provided most of the \$20 million budget for the five new buildings, with the only stipulation being that Galfetti should design all of them. Much to his credit, Galfetti succeeded in opening the commission to younger architects, while subtly exerting some formal controls.

Galfetti and Könz's master plan was liberally based on a 1997 study



Site plan 135' \

DISCIPLES OF THE SWISS ITALIAN MODERN MASTER AURELIO GALFETTI FILL IN THE PIECES OF HIS MASTER PLAN FOR THE UNIVERSITY OF ITALIAN SWITZERLAND. BY RICHARD INGERSOLL

by architect Peter Zumthor and his students at the Accademia that proposed five buildings differentiated by function, in contrast to the conventional practice of assigning buildings by academic department. As realized, the library, computer laboratories, lecture halls, and auditorium are autonomous and available to all departments. The only exception is the theological school, which occupies its own structure because it is an independent entity within the university.

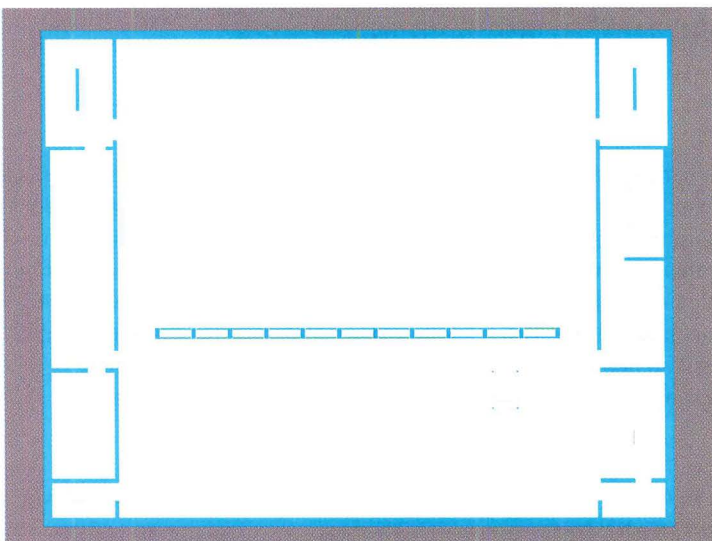
The guiding strategy of Galfetti and Könz's plan was to create unity through landscaping and a sense of accessibility through architectural transparency. Each of the new buildings sits as an abstract geometric figure in an open park that allows oblique views across the campus. While each building privileges a different material and pursues a particular technical innovation, they all share a commitment to geometric rigor and, to varying degrees, exposed concrete slabs. The site, a large

urban block measuring 820 feet by 360 feet, was previously enclosed by a tall fence that has been replaced by an 18-inch-high concrete bench, establishing a clear formal boundary without obstructing views into the campus. Some of the campus's openness is due to setting major program elements, such as a 300-car garage, underground. Each new building is an unrepentant essay in modernist architectural language in which a feeling of transparency has been achieved through the spatial dynamism of planes and pure volumes set in a landscaped void.

MASTER PLAN FOR THE UNIVERSITY OF ITALIAN SWITZERLAND (UNIVERSITÀ DELLA SVIZZERA ITALIANA), LUGANO, SWITZERLAND
ARCHITECTS: Aurelio Galfetti and Jachen Könz, Lugano, Switzerland **LANDSCAPE ARCHITECT:** Paolo Burgi **AREA:** 271,080 square feet **COST:** \$2.2 million



Glass-covered strips on either edge of the auditorium's plaza (above) provide natural light to the below-ground hall by day and are illuminated from below by night. The building's above-ground pavilion shelters a double-height lobby area (facing page).



Lower-level floor plan 13' <



North-south section 12'



THE AUDITORIUM

The crowning work of the new USI campus is a 500-seat auditorium designed by Galfetti and Könz. A grand subterranean chamber 4,300 square feet in area, it is entered through a glazed cryptoporticus, a transparent box suspended from two magnificent exoskeletal steel beams, reminiscent of those employed by Mies van der Rohe at the Illinois Institute of Technology campus in Chicago. By concealing the mass of the largest room on campus below grade, the architects have left the corner of the site closest to the historic center of Lugano exposed to view. The crystalline entry pavilion offers an alluring lens for viewing the rest of the campus.

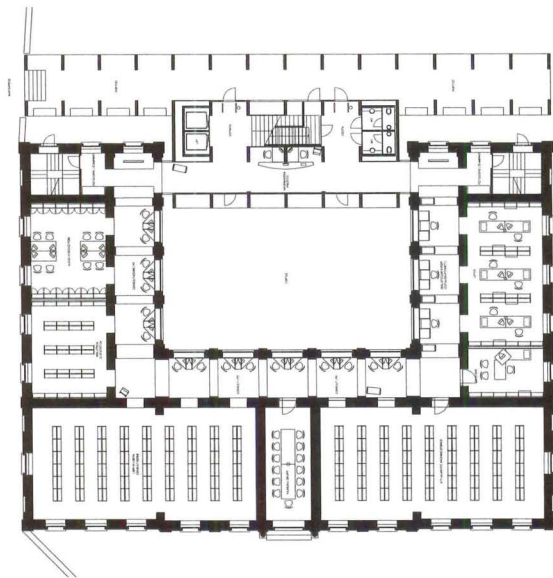
The only element off axis in the symmetrical composition is the door, a metallic shaft that opens to an interior gallery from which one descends either on the flaring concrete stairs or by the elevator. The underground auditorium is naturally lit from above by lateral strips of acid-etched glass pavers, which can be occluded by mechanical shutters. The roof of the auditorium doubles as a paved entry piazza, the only large gathering space on campus, framed on its flanks by five pairs of parallel, free-standing, 12-foot-by-12-foot concrete fins. At the base of each fin are V-shaped benches. The last two pairs of fins support 88-foot-long steel beams; the others are extruded from below-grade partitions between lateral service rooms. This proscenium of freestanding planes gives the space compelling ritual expectations, while enforcing a strong sense of enclosure without closing off the site.

AUDITORIUM

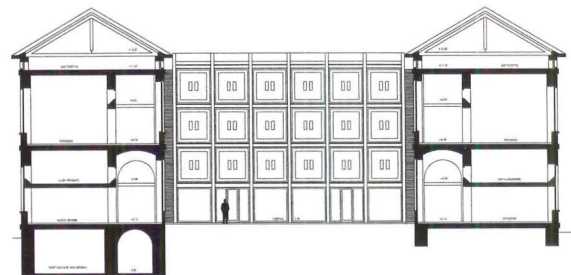
ARCHITECTS: Aurelio Galfetti and Jachen Könz, Lugano, Switzerland **ENGINEERS:** Grignoli Muttoni Partner Studio; Peter Fruh **AREA:** 14,000 square feet **COST:** \$3.5 million



For the university's new library, architects Michele and Giorgio Tognola added a thin, façadelike structure, covering the open end of an existing U-shaped building (above). Inside, a row of study carrels is pushed against the building's outer wall, making use of natural light for reading (facing page).



Ground-floor plan 16' <



North-south section 16'

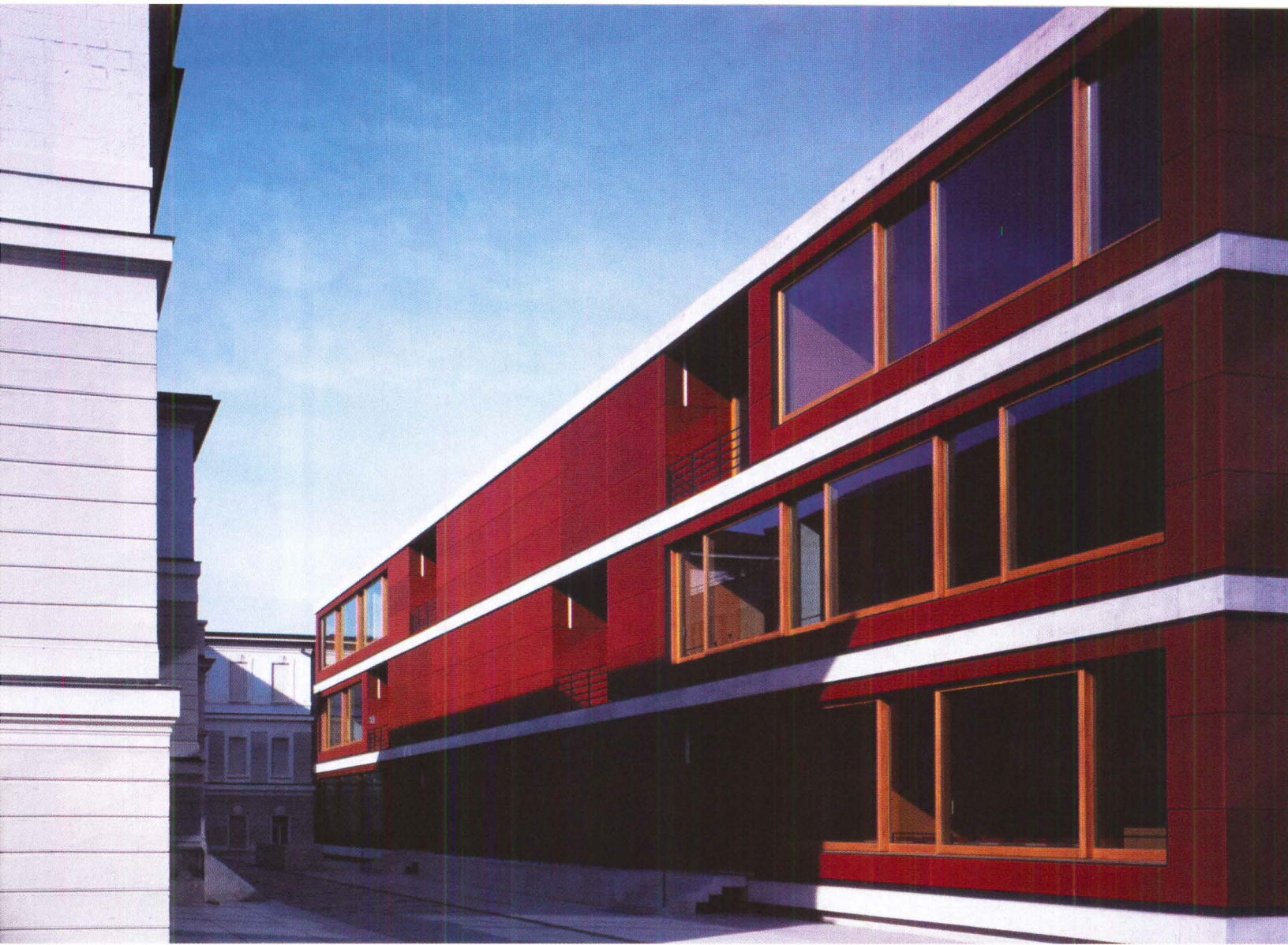


THE LIBRARY

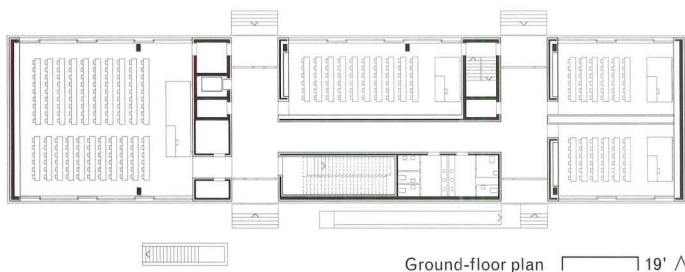
The only other existing building on the site—a U-shaped structure on the northeast corner that once served as a home for the elderly—has been left as an anchoring edge that is closed on the street walls and, with its new screenlike addition, opened toward the center of the campus. The architects, Michele and Giorgio Tognola of Losone, Switzerland, have deftly attached a new four-story structure for services onto the rear of the old two-story building, creating a serene, Zen-style, pebble-covered courtyard between the two. Following the method of Louis I. Kahn, the new structure, rendered in concrete slabs, is the “servant”—with its entry portico, librarian’s stations, stairs, elevators, bathrooms, and study carrels—to the “served” spaces of the original building used for open stacks and reading rooms. Conceived as stacked mezzanines, the new service spine interpenetrates the higher ceilings of the old structure on the second and fourth levels with glass-lined balconies. Taking another cue from Kahn and his Exeter Library in New Hampshire, the reading carrels have been pushed to the perimeter of the new structure. The wood-lined, 10-foot-by-3-foot pockets have floor-to-ceiling windows that have been masked with a black patch of steel, punctured with two slots at eye level that can be shuttered against glare when necessary.

LIBRARY

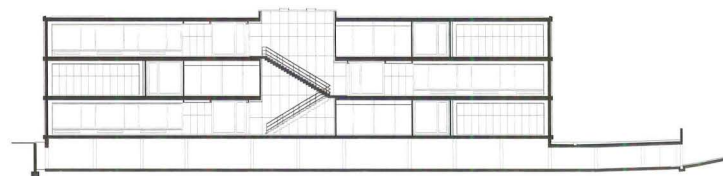
ARCHITECTS: Michele and Giorgio Tognola, Locarno, Switzerland; Andreas Filosi (associate) **ENGINEERS:** Giani & Prada/Renzo Prati **AREA:** 29,700 square feet **COST:** \$3.6 million



Red oxide, acid-etched glass panels encase the concrete walls of the lecture hall building, lending the solid structure a rust-hued illusion of translucency (above). Starkly Cartesian floor plans and ethereal lighting create an air of quiet calm inside (facing page).



Ground-floor plan 19' ^



East-west section 25'



THE LECTURE HALLS

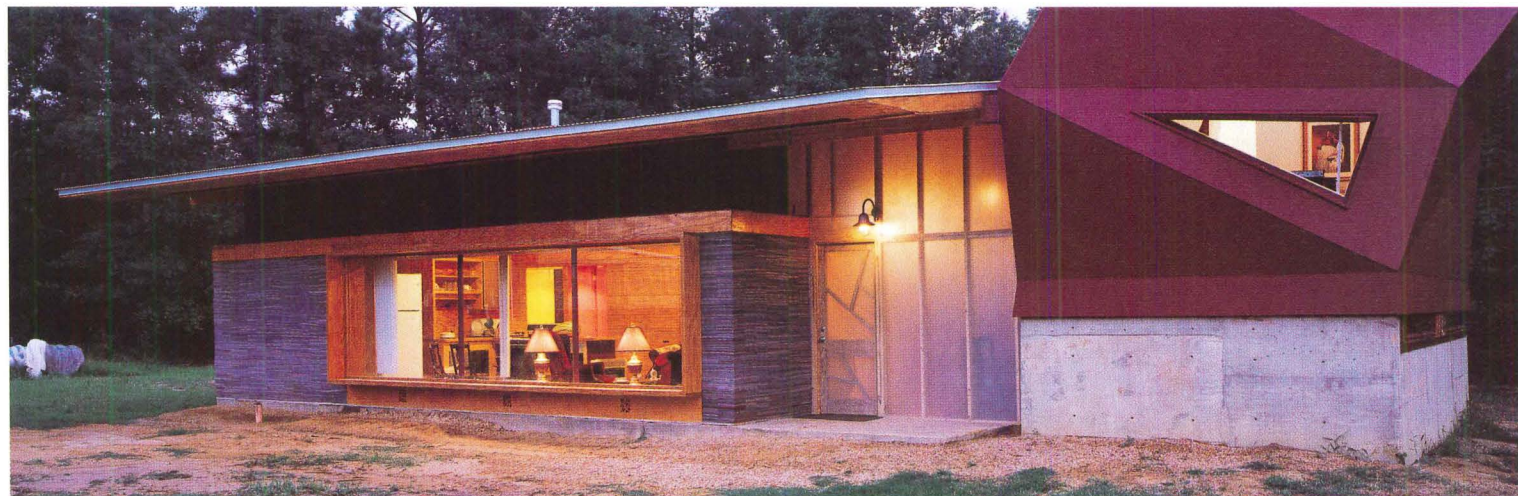
Directly behind the old hospital, following its outline, lies the building for the lecture halls, designed by Bruno Fioretti Marquez of Berlin and Lorenzo Martini of Lugano. Taking inspiration from the painter Mark Rothko, they have attempted to layer a transcendental quality onto a rigidly structured parallelepiped. The solid concrete walls are sheathed in red oxide, acid-etched glass panels held 1 inch from the structure on metal struts. The façades, with their glass-panel revetments, seem at once material and immaterial, tinged with an enigmatic rust color that is sensitive to the effects of changing light on the glass. These “ventilated walls” are cleaved by large hollows for the entries and balconies and wider openings for enormous sliding plate-glass windows set in thick cedar frames. The plan is identical for all three floors (one large hall, one medium, and two small per floor), except that the second level inverts the sequence. This causes the staggered position of the openings on the façades. The internal corridors are lined with the same extraordinary skin, allowing for coved lighting at the seams of the glass panels. The walls and ceilings of the lecture halls are upholstered in lively, ochre-hued acoustical particle board.

LECTURE HALLS

ARCHITECTS: Bruno Fioretti Marquez, Berlin; Lorenzo Martini, Lugano, Switzerland; Cristiana da Silva (associate)
ENGINEER: Balmelli-Fillippini **CONSULTANT:** Studio Conti (façades) **AREA:** 24,000 square feet **COST:** \$5 million

IN THE STACKS





THE LAST RURAL STUDIO HOUSE SUPERVISED BY SAMUEL MOCKBEE DEMONSTRATES THAT DESIGN DRIVEN BY CLIENT, COMMUNITY, AND CONTEXT CAN TRANSCEND ANY OBSTACLE. BY CATHY LANG HO

Before his death last winter at age 57, Samuel “Sambo” Mockbee realized yet another of his fantastic dreams: an outreach program that avails the teachings of his Rural Studio to graduates in all fields of study from any school in the world. Sponsored largely by the Jesse Ball duPont Fund, the first project completed by the outreach students is the Lucy House, named after the resident matriarch in the spirit of a South African tradition. Work began in Mason’s Bend, Alabama, in the fall of 2001, with design development complete and construction initiated by the time the seven students left for their end-of-term holiday break. When they returned, they learned that their beloved teacher had died. Work on the Lucy House, the last project to enjoy Mockbee’s supervision, went ahead, led by D.K. Ruth, director emeritus of the Rural Studio. In a way, the program had come full circle: In the 10 years since Mockbee and Ruth started the Rural Studio at Alabama’s Auburn University, civic works have outnumbered residential projects—yet, the design-build studio started with houses, which gave students a chance to become closely involved with those affected by their work.

The Lucy House fulfills a promise Mockbee made years before to Lucy Harris, a woman of extraordinary character who serves as the spiritual backbone of her community. Lucy and her husband, Anderson Harris, belong to the core group of Hale County families who were the earliest collaborators with the Rural Studio. Her parents live in the 1994 Hay Bale House, the first Rural Studio project, and her in-laws reside in the 1997 Harris Butterfly House.

THE FORM OF FAITH

Lucy Harris’s deep faith drove the design of her 1,300-square-foot house, which is sited on an abandoned field once used by her father to grow vegetables. Her two primary desires were a peaceful place to pray and a secure room where neighbors, family, and friends could gather during the region’s frequent hurricanes and tornadoes. Three of the Harris children would live in the house too, and the students wanted to respond to the siblings’ wish to have their own rooms—for the first time.

To keep construction simple and economical, they developed a low rectangular volume; children’s bedrooms are lined up along one long side, and the kitchen and bathroom on the other. Down the middle is a hallway, loaded on both sides with storage. At one end is a more com-

plex space: a living room/storm shelter at basement level, and above it, the master bedroom and prayer room. (The walls of the storm room are concrete, poured with the help of Anderson Harris, a highway construction worker, embodying Mockbee’s belief in architect-client collaboration.) The sturdy basement gives rise to a tower, inspired by the grain silos typical of the region and a form admired by Lucy Harris. The tower became increasingly deformed as the students attempted to add interest to the vertical space, drawing eyes heavenward. The result is an origamilike assemblage of wood panels; painted white inside, the angled planes collect and bounce light for a churchly effect.

THE MATERIAL IS THE MESSAGE

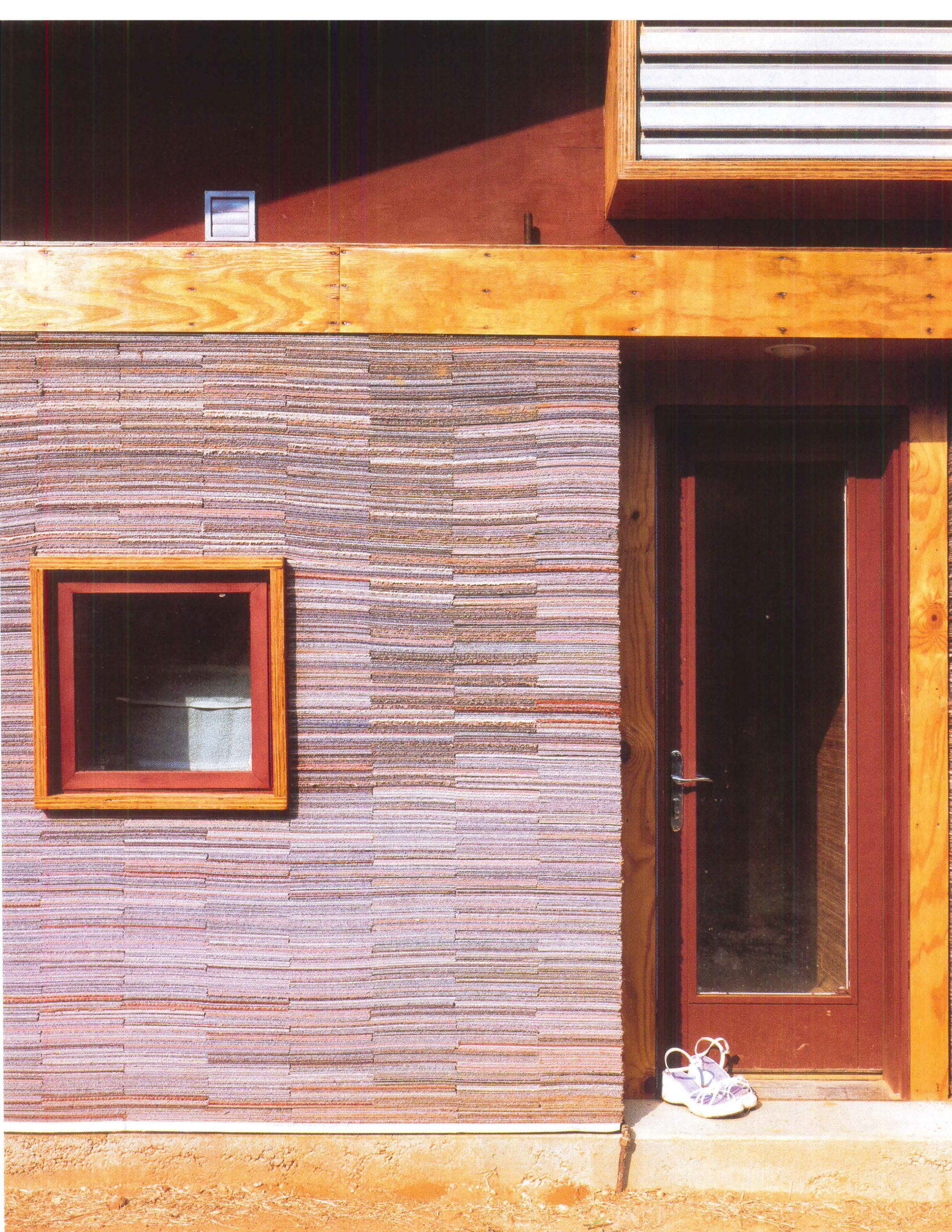
The rest of the house is earthier—exposed concrete, bare plywood, and carpet tiles. Following in the tradition of the Rural Studio’s experimentation with alternative materials (hay, earth, tires, cardboard), the Lucy House converts carpet tiles into insulating structure. When the students visited a warehouse of Interface, an environmentally aware carpet manufacturer and longtime donor to Rural Studio classes, they were drawn to pallets of used carpet tiles stacked high with colorful patterns coursing along their fuzzy edges. The construction of the house diverted 72,000 of the 18-inch-square tiles from the landfill.

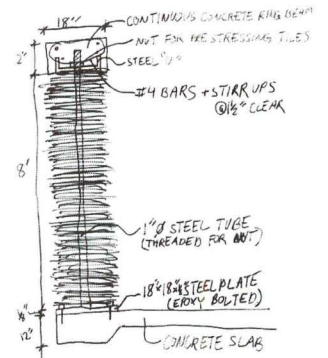
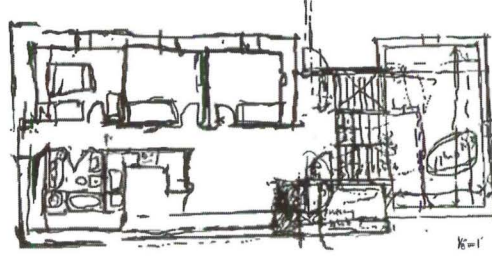
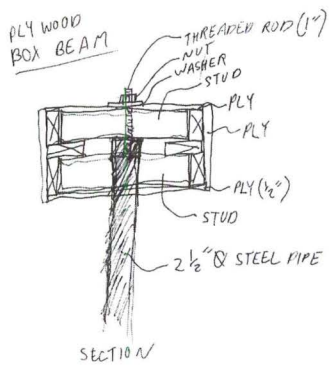
The students devised a structural wall system, threading tiles with a rod 1 inch in diameter and topping them with a wooden box beam to compress—and stabilize—the stacks. Carpet does not, however, take the roof load, which is transferred to the foundation through metal posts hidden in the carpet wall. Because the tiles are a manufactured product, they have been treated with fire retardants and an antimicrobial solution, and they naturally wick away water. The wall assembly has an R-value above 50.

HOMEGROWN DESIGN

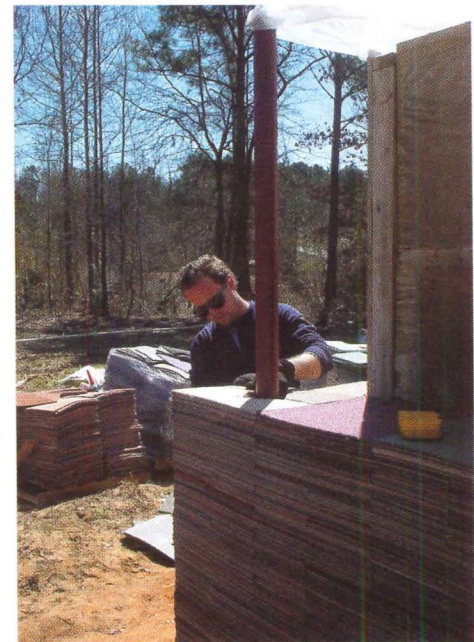
With five Rural Studio buildings, Mason’s Bend is an unexpected hotbed of architectural expression. But cultural critics must resist the urge to wholly credit the Rural Studio for importing a vernacular of material and formal inventiveness. The students insist, like their late teacher did, that they are merely extending what was already there: a legacy of self-built structures, ad hoc assemblages that leverage the resourcefulness and independent spirit of their inhabitants. ■

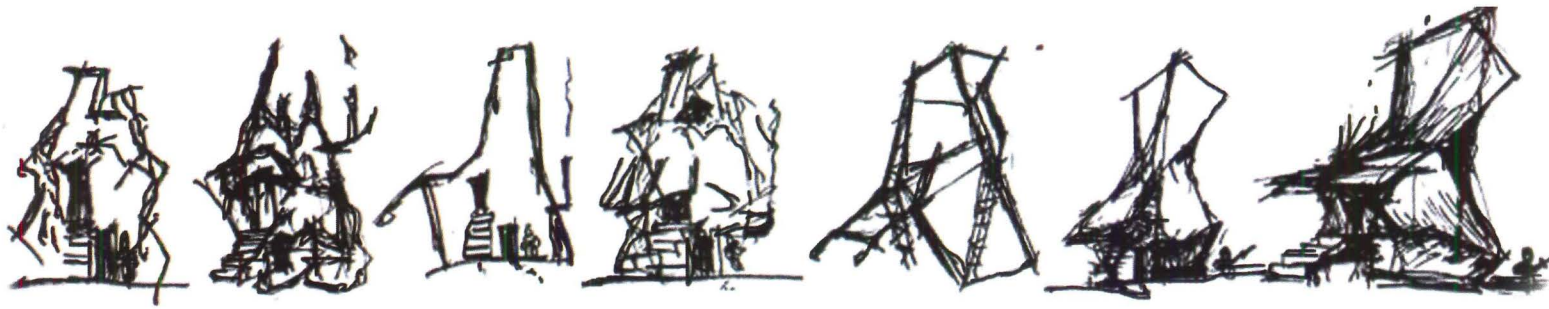
Resource efficiency is a constant concern of Rural Studio students, from the use of building materials—in this case, recycled carpet tiles—to site orientation. Students located the Lucy House (facing page) along tree lines on the site’s southern and western sides, providing shade from the hot Alabama sun and opening the house to the north and east, most prominently with a picture window, 6 feet high and 20 feet long (above).





Rural Studio outreach program participants, who designed and built the house with the benefit of donated materials and pro-bono advisory services, stack carpet tiles on the 2-foot-wide edge of the concrete slab (photos below, drawings above). “What we like about the Rural Studio,” says Chip de Grace of Interface, which donated the carpet tiles, “is that the end product is not just a building,” but an object lesson in “materials and how they are conceived, processed, and used.” The finished front façade (facing page) is a tapestry of color and texture.





The rectangular plan is split in half, with three children's bedrooms on the west side and the kitchen and living room on the east (facing page). Two stairways lead off of the living room, one descending into the basement, which is sunk 5 feet into the ground, and the other ascending to the faceted wood-clad tower (below, right), which contains the parents' bedroom (below, left) and prayer room.



LUCY HARRIS HOUSE, MASON'S BEND, ALABAMA

CLIENT: Lucy and Anderson Harris and family **ARCHITECT:** The Rural Studio, Auburn, Alabama—Samuel Mockbee, Andrew Freear, Johnny Parker, Jay Sanders (faculty project team); Floris Keverling Buisman, Ben Cannard, Philip Crosscup, Kerry Larkin, Marie Richard, James Michael Tate, Keith Zawistowski (student project team); Melissa Foster Denney, Ann Langford, D.K. Ruth, Brenda Wilkerson (Rural Studio office) **ASSOCIATED ARCHITECT/DONOR:** Jersey Devil Architects **ENGINEERS/DONORS:** Robert McGlohn (structural), Fred Fulton (septic) **CONTRACTORS/DONORS:** Mike Thomas, Al Burson, Charles Jay, James Stegall **AREA:** 1,300 square feet **COST:** \$32,000

SPECIFICATIONS

CONCRETE: Black Warrior Concrete **CONCRETE ADDITIVE:** Anti Hydro (donated) **CARPET TILES/RUGS:** Interface (donated) **STEEL:** Gamble Steel, Alabama Bolt and Supply **PLYWOOD:** Scotch Plywood (discounted) **WINDOWS:** Druid Glass of Tuscaloosa (donated), Pella Windows and Doors (donated) **ELASTOMERIC EXTERIOR COATING:** Hydro Stop (donated) **PAINTS/STAINS:** Minwax **LIGHTING:** Tuscaloosa Electric (discounted) **SOLAR WATER HEATER/CONTROLS:** Real Goods (donated) **GAS STOVE/PIPING:** Dowdle Gas (donated)

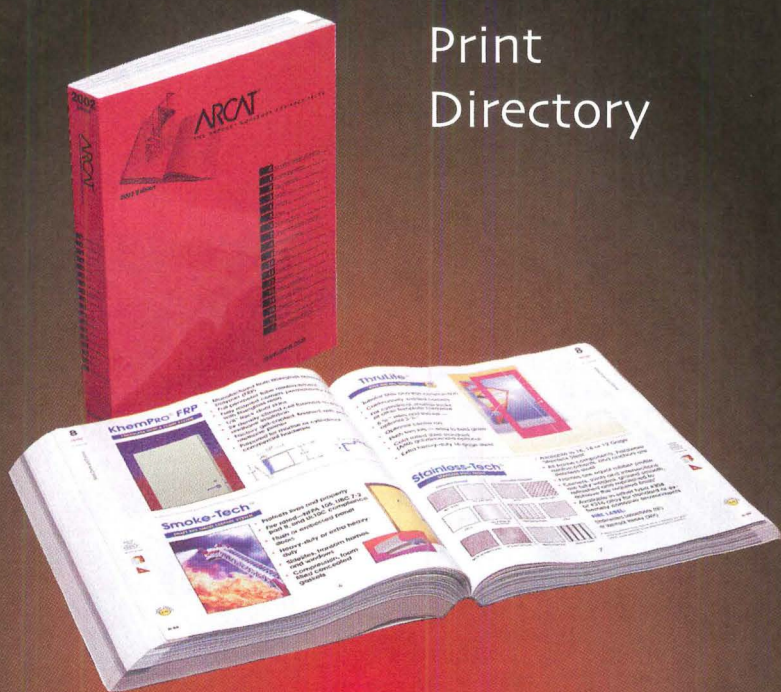
PHOTOGRAPHS BY TIMOTHY HURSLEY

CONSTRUCTION PHOTOGRAPHS: Floris Keverling Buisman, Marie Richard, James Michael Tate, and Keith Zawistowski



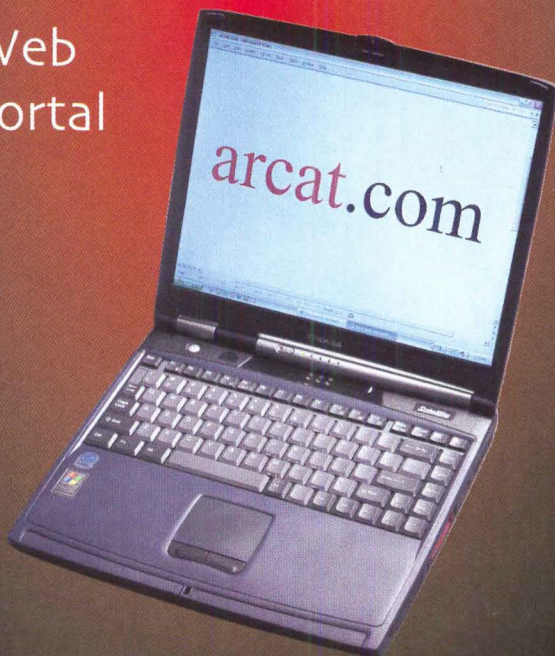
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SKYLIGHTS—Wasco Products



A Lofty Modern

> BROCK GREEN ARCHITECTS AND PLANNERS / MIDCITY LOFTS / ATLANTA

Rejecting the neoindustrial loft aesthetic seems sensible on numerous grounds, notably in dispensing with the brutal artifice that usually stands in for authentic Industrial Age ruins. Still, the palette and sensibility of the warehouse loft offers a compelling bridge to a modernist live-work ethic, and several U.S. architects are cleanly crossing the divide.

A new condo building in Atlanta offers an example. Located in the rapidly changing midtown section, where new residential and commercial projects have replaced vacant buildings and surface park-

ing lots over the last three years, the site still rubs shoulders with low-rent neighbors, the expressway, and a seedy nightspot called the Cheetah. Yet, the current aura of midtown—now filling in with high-tech companies, Georgia Tech projects, and creative types—is mixed enough to support loft living, while its location is close enough to downtown to merit a more cosmopolitan feel.

Responding to the half-block midtown location and a market of sophisticated homebuyers, architect Eric Brock of the local firm Brock Green Architects and

Planners wisely dispensed with faux industrial brutalism in favor of a context-driven, muscular elegance. On the exterior, a **concrete frame** emerges from brick wrapping, conveniently delineating midblock balconies; at the ends of the dumbbell-shaped form, fenestrated Palladian blocks of **natural brick veneer** stand over the major avenues. Inside the condominiums, occupants find clean interiors (devoid of such clichés as exposed conduit and duct) that are inherently loftlike in spatiality and materials—the ceilings are high, and the concrete frame is in

>specifications



MidCity Lofts engages urban Atlanta with a varied but contextual exterior image (above, top right) and bare-bones modernism in its interior public zones, such as the sky lobby (above, left) and pool on its roof deck. Using economical materials and a subtle exposition of structure, the architects develop an eloquent loft idiom.

evidence—but the effect is decidedly modern.

LAYERED FAÇADE

Faced with numerous constraints ranging from zoning rules that prescribed the building line to the client's dictations for unit mix and amenities—not to mention the solid rock just below grade—Brock proposed floating the residential units atop a three-story base of parking. Street-level live/work units activate the short building faces along the major avenues, but along the service streets of the longer axis, **monolithic granite-rubble retaining walls** punctuated with round vent openings

screen three floors of parking.

Above the parking area, Brock's layering and shifting of economical façade materials provides depth and scale and a varied composition in terms of color and tableau. Overall, the residential bar reads as a concrete frame with full-height **multicolored glass infill** wrapped at each end with a brick masonry curtain. While the masonry ends with punched out openings nod to the context (especially the historic Biltmore Hotel next door, which is now offices), the glazed middle section with its slender concrete exoskeleton lightens the overall mass of the building considerably.

The glass walls feature alternating, shifting geometric patterns that intersect with interior demising walls at vertical bands of **green stucco**.

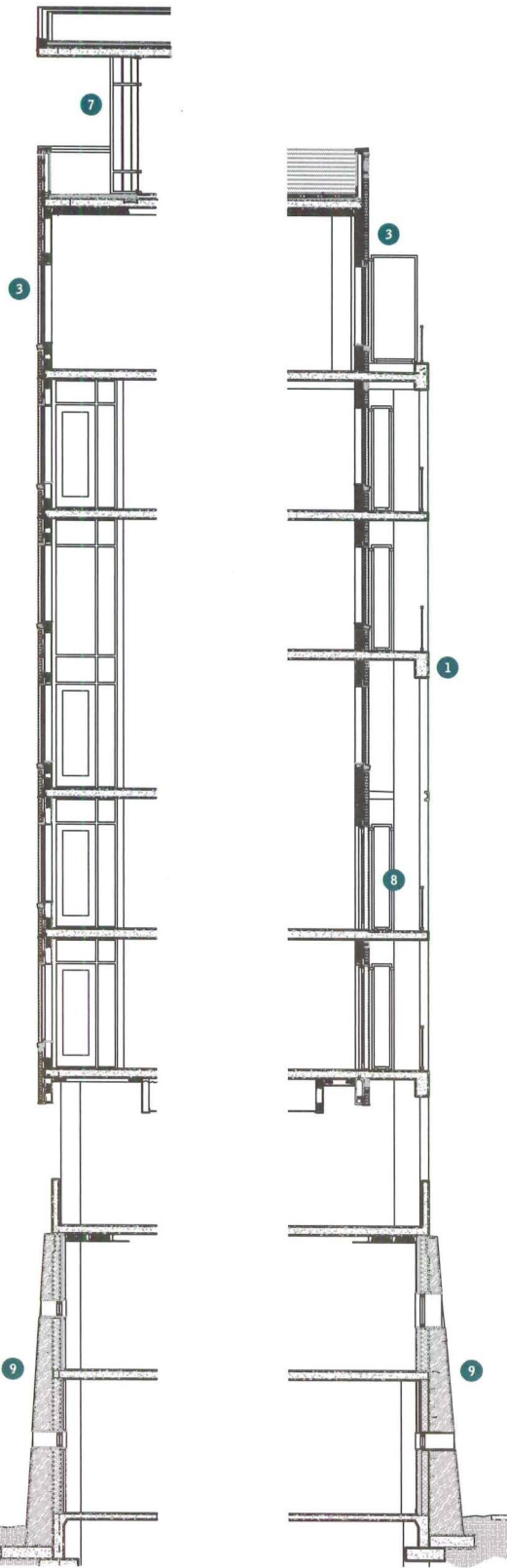
CONTEXTUAL MODERNISM

Other material selections and details heighten Brock's contextual modernism. **Metal accents**, for example, such as a brise soleil at the rooftop pool and the faceted glass box that contains the lounge and fitness center, are refined and simply presented. Inside, the architect breaks up the long residential corridors with a rhythmic varying of ceiling planes, wall planes, floor patterns, and light-

ing, which, along with the structural columns, present occupants with a constantly changing series of spaces.

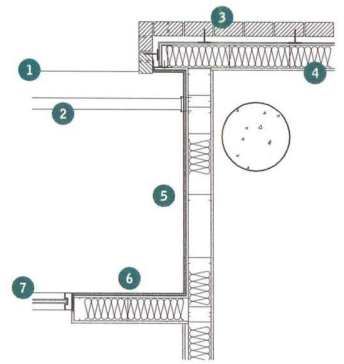
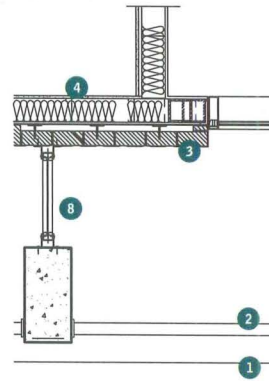
While one might find fault with some aspects of the design that don't seem to cohere—the two-story **angled storefronts** at both ends of the building, for example, or the artwork in the lobbies—it is only because Brock sets the bar high with his cool contextualism. Both he and the venturesome developer Kim King may be applauded for offering the lifestyle and convenience of modern urban living to a growing population of receptive city dwellers.

C.C. SULLIVAN



Typical section at brick veneer

Typical section at balconies 16"



Typical details (plan) 18"

- 1 edge of balcony below
- 2 metal rail
- 3 masonry veneer
- 4 metal studs and insulation
- 5 3/4-inch EIFS over exterior sheathing
- 6 1-1/2-inch EIFS
- 7 storefront glazing
- 8 balcony divider panel
- 9 granite rubble/CMU foundation

Typical details describe the relationship between the exterior systems—masonry veneer, EIFS, and glass infill—and the concrete building frame. In some places, the brick masonry wall sits “outboard” of the concrete frame (above, right) to read as a solid 12-inch masonry wall. Elsewhere, the masonry skin is pulled well into the concrete frame and into alignment with the glass infill wall (above, left). Two of three typical sections (far left) amplify the relationships.

MIDCITY LOFTS, ATLANTA

CLIENT: Kim King Associates, Atlanta **ARCHITECT:** Brock Green Architects and Planners, Atlanta—Eric Brock (principal-in-charge); Bruce Wise (project manager); Ellena Lin (project architect); Nancy Gribeluk, Jose Perez, Eric Kronberg, Adam Wall, Joseph Minatta, Berengere Kinsey, John Moores (project team) **LANDSCAPE ARCHITECT:** Eberly and Associates **ENGINEERS:** Browder + LeGuizamon and Associates (structural); Adams Davis and Partners (M/E/P); Eberly Associates (civil) **CONSULTANTS:** Kelly Lundstrom Group (lighting); Atlanta Network Technologies (data systems); Security & Safety Consultants of the South (hardware); ASAC (specifications); Stephen Ellison Visual Communication Design (graphics) **GENERAL CONTRACTOR:** Hardin Construction—Ed Smith (project manager); Dean Killen (senior superintendent) **SUBCONTRACTORS:** Sullivan Stone; J&J Masonry; Therrel-Kizer Roofing; Elite Flooring; Specialty Painting; H&M Mechanical; Casey Electric **AREA:** 325,000 square feet **COST:** \$23 million

SPECIFICATIONS

EPOXY FLOORING: Precision Concrete **METAL DOORS:** Ceco **WOOD DOORS:** Mohawk Flush Doors, Arrow Doors **LOCKSETS:** Schlage **HINGES:** Hager **CLOSERS:** LCN **EXIT DEVICES:** Von Duprin **CABINET HARDWARE:** Canac **SPECIALTY HARDWARE:** Rockwood **CABINETWORK AND CUSTOM WOODWORK:** Canac **PAINTS/STAINS:** Sherwin Williams **CARPET:** Shaw, Bentley **SPECIAL SURFACING:** DuPont Corian **TILE:** Dal-Tile **INTERIOR AMBIENT LIGHTING:** Artemide, Con-Tech Lighting, Cooper Lighting **DOWNLIGHTS:** Lithonia Lighting **SPECIALTY LIGHTING:** Belfer, Louis Poulsen, LBL, Linear **ELEVATORS/ESCALATORS:** Fujitech **CAB INTERIORS:** Forms + Surfaces **PLUMBING FIXTURES:** Kohler **HVAC/MECHANICAL SYSTEMS:** Carrier, Aaon **ELECTRICAL SYSTEMS:** Square D **FIRE PROTECTION:** Worsham Sprinkler **POOL:** Natare **INTERIOR FURNISHINGS:** Space

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Modern Monolith

> COSTAS KONDYLIS & ASSOCIATES / TRUMP WORLD TOWER / NEW YORK CITY

For a sophisticated, severely modern sliver of luxury dwellings bearing Donald Trump's good name, New York City architect Costas Kondylis opted for clean expanses of deep bronze glass and spandrel, adorned with nothing but a subtly incised grid of gasketed joints. A 70-story monolith, the building was conceived by the developer and architect to maximize floor area and views. Using **high-strength concrete**, Kondylis shrank the floor slabs and perimeter columns to allow as much glazed area as possible; four-sided **structural silicone glazing** produced very thin mullions to further improve visibility.

Design development concentrated heavily on optimizing the structural solution. Working with engineer Ahmad Rahimian, Kondylis specified 12,000-psi concrete in the lower floors (a typical high-rise mix is about 8,000 psi) for the thinnest possible columns, floor plates, and hammerheads. Two sets of relatively slender **shear walls** brace the structure, one along the tower's short dimension and the other perpendicular to it and adjoining the elevator shafts. Mechanical spaces on the 22nd floor are wrapped with a "belt" of concrete walls, engaging all perimeter columns and adding stiffness for wind loading and seismic requirements.

For the exterior image, Kondylis envisaged a seamless sheet of dark glass. To effect the illusion at a reasonable cost, he and façade consultant Gordon H. Smith developed a unitized, structurally glazed curtain wall with dark bronze, low-emissivity, dry-joint, 1-inch **insulating glass** and similarly painted aluminum mullions. The glazing system was designed in anticipation of wind-loading "hot spots"—areas where wind-tunnel tests showed extraordinarily high pressures, both positive and negative. Shop glazing was done with a typical two-part silicone (a base and a catalyst) to reduce curing time to as little as 24 hours. The only breaks in the virtually unrelieved façades are the **operable vents** on each floor. Of course, windows that open are required for residences, but with a literal catch: The units can open 90 degrees to meet fresh-air requirements, but a limiting device restricts their opening to about 4 inches to comply with child safety laws.

An open window is the only variation in an otherwise uninterrupted prism cut from polished black glass, and it is minor. From the street and from afar, the overall effect is seamless, the result of a design process of elimination that stripped away setbacks, ornament, and fenestration to let a true monolith stand. **C.C. SULLIVAN**

TRUMP WORLD TOWER, NEW YORK CITY

OWNER/DEVELOPER: The Daewoo Group **CLIENT/DEVELOPER:** The Trump Organization **ARCHITECT:** Costas Kondylis & Associates, New York City—Costas Kondylis (partner-in-charge); Marta Rudzki (principal); David West, Irene Skoda (associates) **ENGINEERS:** Ysrael A. Seinuk (structural); I.M. Robbins (M/E/P) **CONSULTANT:** Gordon H. Smith (façade) **INTERIOR ARCHITECT:** Brennan Beer Gorman/ Monk, New York City—Amy Jakubowski (designer) **LANDSCAPE ARCHITECT:** Abel Bainson & Butz **GENERAL CONTRACTOR:** Trump Sales and Leasing **CONSTRUCTION MANAGER:** Bovis Lend Lease LMB **AREA:** 895,000 square feet **COST:** \$400 million

HIGHLIGHTED PRODUCTS

GLASS—Viracon

SILICONE—Dow Corning

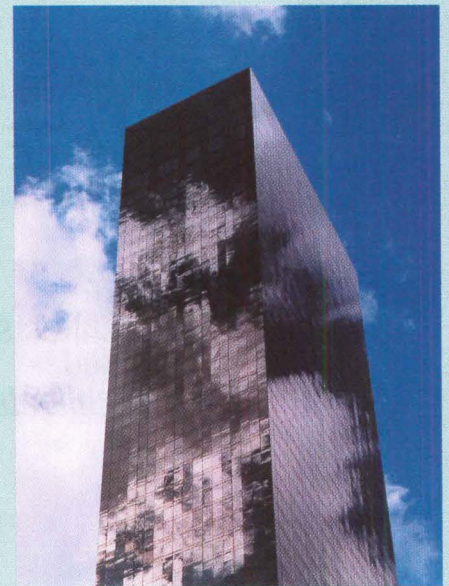
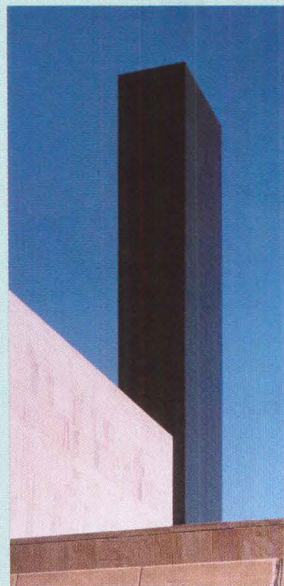
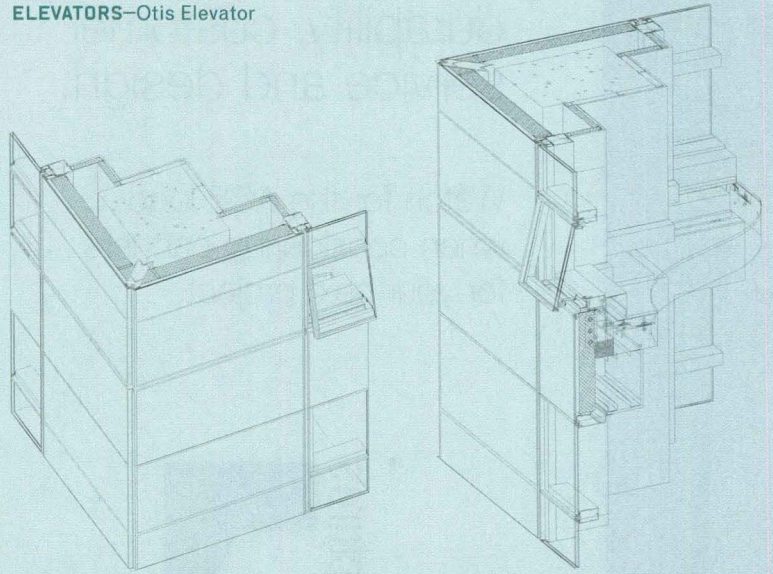
ALUMINUM AND GLASS CURTAIN WALL—Flour City Architectural Metals

CURTAIN-WALL ANCHORS—Halfen

HIGH-STRENGTH CONCRETE—Quadrozzi Concrete

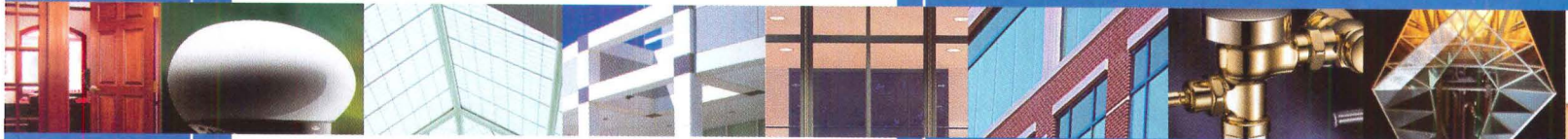
FORMWORK AND SCAFFOLDING—PERI Formwork Systems

ELEVATORS—Otis Elevator



The dry-joint gasketed structural glazing system, which is attached to the concrete structure with embedded, adjustable stainless-steel anchors, features an interior curb to weep rainwater and a hidden window-washing track in every third mullion. Beveled glass edges meet at the 1-inch-wide open corners. The designers specified a low-e, 1-inch insulating glass for the vision glass, and a 3/8-inch fritted glass for spandrel.

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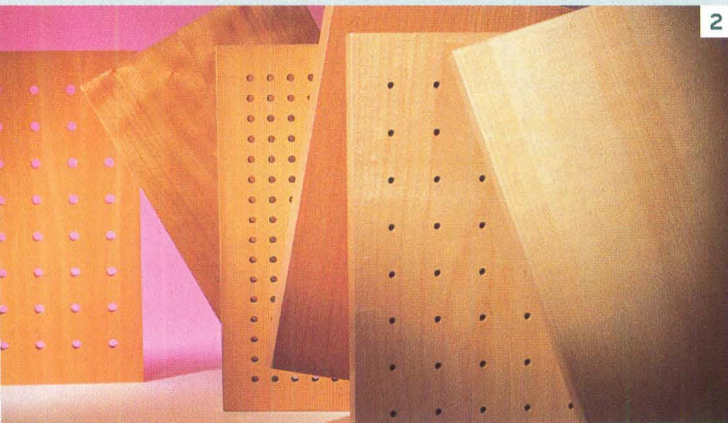
1B

1 LIGHT FROM ABOVE

Ceilings aren't what they used to be—and that is a good thing. New materials offered in unconventional shapes provide seemingly endless aesthetic options. In particular, a range of translucent, plastic-based products taps the enchanting effect of backlighting.

Varia (C), a product from **3form** (www.3-form.com) and available through Robin Reigi Art & Objects, is produced exclusively with Spectar Copolyester from Eastman Chemical. It combines a cutting-edge appearance with high durability (scratch and chemical resistant, colorfast, and with 40 times the impact resistance of glass at half the weight), making Varia appropriate for a number of applications, from partitions and flooring to signage and ceilings. Its collections include Kami, which uses handmade, natural-fiber papers from Asia, and Textura, a line that imitates the appearance of cast glass. Since Varia meets flammability requirements for light-transmitting plastics, these products, also available in a laundry list of colors and custom shapes, can be lighted for a unique effect.

Two ceiling solutions from **USG** (www.usg.com) provide a similarly organic appearance. Translucents (B) and the more recently introduced Topo (A) are both made from Lexan, a durable, molded plastic. While pictured with a curved shape, Translucents can also be specified as a flat ceiling, with panels available in 2-foot-by-2-foot dimensions or custom sizes. Topo is offered in a four-panel module that creates a gently rolling silhouette; its contours are available with a depth of either 12 or 8 inches.



2

2 WOOD ON HIGH

Simultaneously classic and contemporary, the WoodWorks Vector ceiling features three standard veneers—beech, cherry, and white maple—as well as 68 custom veneers. The product, which is a recent addition to the Vector collection from **Armstrong** (www.armstrong.com), is also available with or without perforation. The Vector line features a patented edge detail that minimizes the visible grid, creating a surface that is more monolithic in appearance than ordinary suspended ceilings.



1C



3

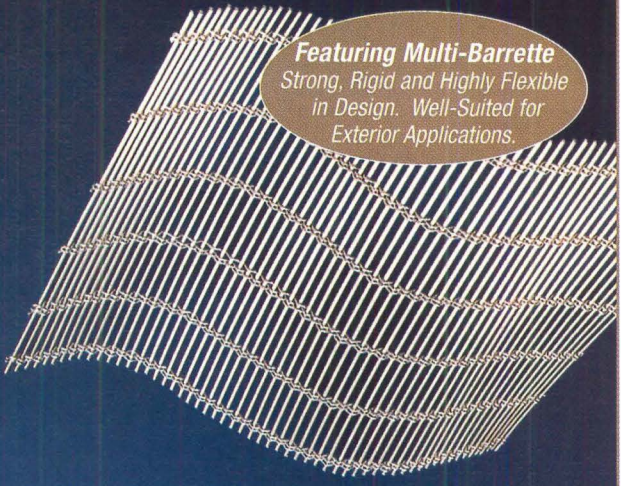
3 GEOMETRIC SHADOWS

With Geometrix, also from **USG**, three-dimensional angles dominate the ceiling plane. The lightweight aluminum panels are available in four shapes: flat, wedge-shaped, and wedge-shaped with either inside or outside corners. Together, these panels can be arranged as articulated surfaces, flat or angled, and combined with uplighting for dramatic shadows. Solid or perforated, in flat white, silver satin, and custom colors, Geometrix panels work with narrow-profile, standard suspension systems.

For information on these components and systems, circle 250 on the information card on page 113.

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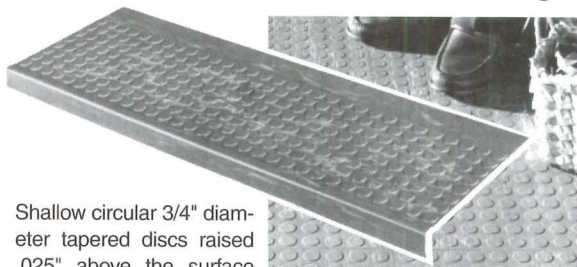
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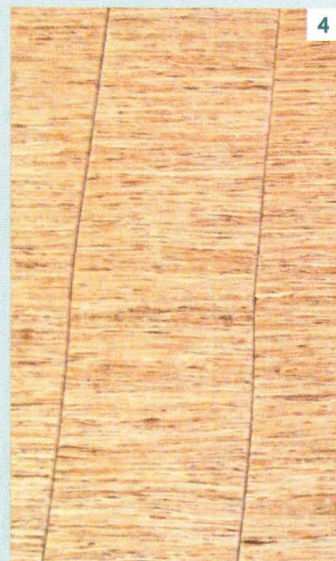
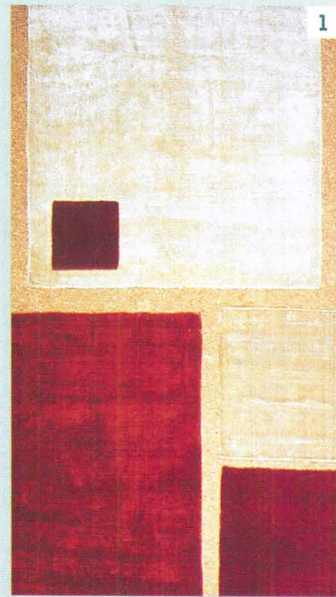
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>specifications



flooring / carpeting

1 HARD NUT, SOFT RUG

GT Design (www.gtdesign.it), based in Bologna, has used the coconut, famously hard and scratchy, to make beautiful, velvety coconut-fiber rugs. Combining coconut fiber and viscose, the handmade area rugs are shiny, soft, and richly colored. The manufacturer's new KAMA Collection combines these natural materials and traditional artisanship with modern designs. The collection is available in four colors and a variety of sizes.

2 WHO NEEDS TRUTH IN MATERIALS?

It may not be Meisian, but it is green. Armstrong's vinyl composition tile (www.armstrong.com) has won awards for sustainability. It also looks good and wears well, providing easy installation and a resilient, comfortable walking surface. The Natural Options line, for commercial interiors, offers a variety of finishes mimicking wood, stone, and metals.

3 SOMETHING OLD, SOMETHING NEW

What's old is new again, as demonstrated by this translucent terrazzo flooring and surfacing material made from recycled-glass aggregate in a translucent mix. Used as poured-in-place flooring, or as precast slabs in custom dimensions for vertical and horizontal surfaces, this modern-looking flooring solution lends an air of glamour to residential or commercial settings without breaking the bank. Available from Robin Reigi Art & Objects (www.robin-reigi.com).

4 FOLLOW THE GRAIN

COR, available from Robin Reigi Art & Objects, is an engineered wood product made of TimberStrand end grain that comes in a surprising variety of colors and patterns. As demonstrated on the main floor of the recently opened Vitra flagship store in New York City—designed by architect Lindy Roy—COR provides aesthetic elegance, as well as being economical and “green.”

5 CONCEPTUAL CARPETING

Architects always love a product that combines lofty ideas with sound practical design. A system of random carpet tiles from Interface Flooring Systems (www.interface.com) does just that: Based on the concept of biomimicry, the idea is to provide such a variation of carpet tiles that every installation will be unique. The new Philosophy Collection expands this capability, introducing three new patterns available in 20-inch squares, 6-1/2-foot squares, and 3-foot planks.

For information on these components and systems, circle 240 on the information card on page 113.



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Institute has started compiling such a survey—essentially a list of what each city department has inventoried—but it is unclear what methodology should be implemented: just a “windshield,” or drive-by, survey of communities or

something more comprehensive. Another question is who would foot the bill for such a survey.

VALUATING HISTORY

Demetrios believes that there are more philosophical problems with

the preservation system.

“Architecture is real estate in America,” he believes, pointing to preservation legislation in England that requires owners of historic properties to maintain their buildings. There, the responsibility

accompanies the privilege of living in a historic place. Personal interests have to be balanced with the common good.

Property rights versus historic preservation is a particularly hot issue in Santa Monica—located in the county of Los Angeles, but its own municipality. While Santa Monica recently completed an inventory of its buildings that are 50 years old or more, some residents aren’t eager to see their homes landmarked. As a result, there will be a special election next month on the “Homeowners Freedom of Choice” initiative, which if voted in would forbid the landmarking of individual houses or the creation of a historic district in a residential (single-family occupancy) area without the consent of all owners involved. In a way, awareness of what they have has jump-started an antipreservation movement. Defending the initiative, one real estate attorney told the *Los Angeles Times*, “The city should not be in a position of mandating that your house be historic. It is just a fundamental impairment of individual freedom. In the process of trying to preserve some old buildings so you can drive by once a year and say, ‘That’s nice,’ you’re really impinging on somebody.”

But according to Leib, that sentiment is the root of the problem for preservationists in the Los Angeles area. “When people in Los Angeles begin to understand the notion of collective property rights and the value that architecturally significant properties bring to a community, we will hopefully see changes in the legislation,” he said. “Until then, it is going to be a long, hard, uphill battle.” ■

KIMBERLY STEVENS IS A FREELANCE WRITER WHO CONTRIBUTES REGULARLY TO THE *NEW YORK TIMES*.

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RS#	ADVERTISER	PAGE
230	Academy of Arts College	38
222	AIA Convention	102
49	Alcan Composites USA	39
196, 197, 198	Andersen Windows	51, 53, 55
53	ARCAT	98
97	Architects & Designers Book Club	64A-64B
215	Architectural Lighting Master Class 2003	44
165	ARMA	41
1	Armstrong World Industries	C2-1
—	Autodesk	27, 31
39	B-K Lighting	20
26	Belden Brick (East and Midwest editions)	16
101	BioFit Engineered Products	111
216, 102	The Bilco Company	8, 110
235	Cascade Coil Drapery	64
17	Ceilings Plus	7
31	Crab Apple Travel	107
23	Crittall North America	24-25
177	Custom Window	Cover 3
19	Dornbracht USA	12
22	EFCO	57
172	Ellison Bronze	52
138	Eurotex	111
117	FAAC International	111
34	Forms + Surfaces	6
133	G Squared	111
104	The Gage Corp.	110
42	Hager Companies	32
107	Interedge Technologies	110
81	Jomy Safety Products	48
66	Kepco	42
20	Kimball Office	17, 19, 21, 23
229	Lonseal	108
33, 36	Marvin Windows	10-11, 13
231	Masonite	60-61
156	Musson Rubber	106
120	North Country Slate	110
77	Pemko	63
220, 126	Petersen Aluminum	14, 111
4	PGT Industries (Florida only)	32A-32B
114	Prima Lighting	110
249	The Proudfoot Company	49
193, 72	PPG Industries	18, 54
163	Reilly WoodWorks	56
144	RubbAir Door	111
16	Suntuf	62
168	Timely Industries	58-59
217	Valli & Valli	45
43	Visa	66
110	Walker Display	110
164	Wausau Tile	34
186	Wausau Window & Wall Systems	Back Cover
69	Wilsonart International	2-3
6	W.S. Tyler	106

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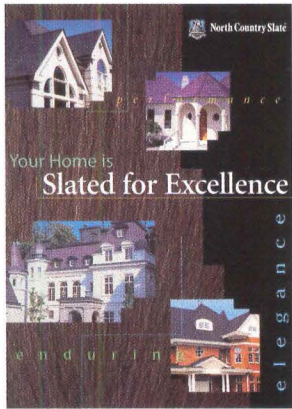
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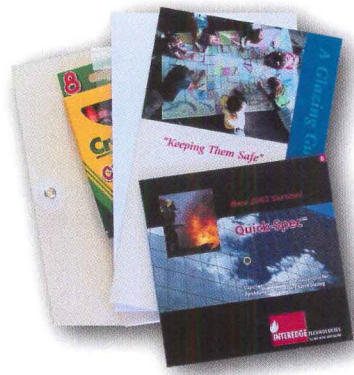
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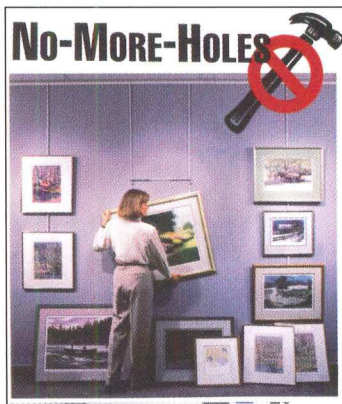
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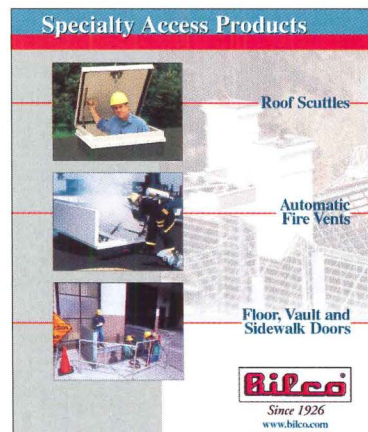
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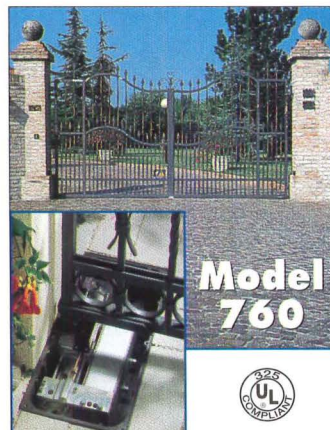
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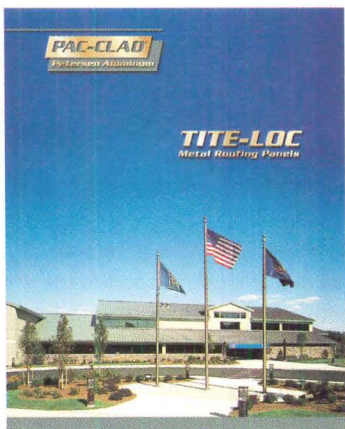
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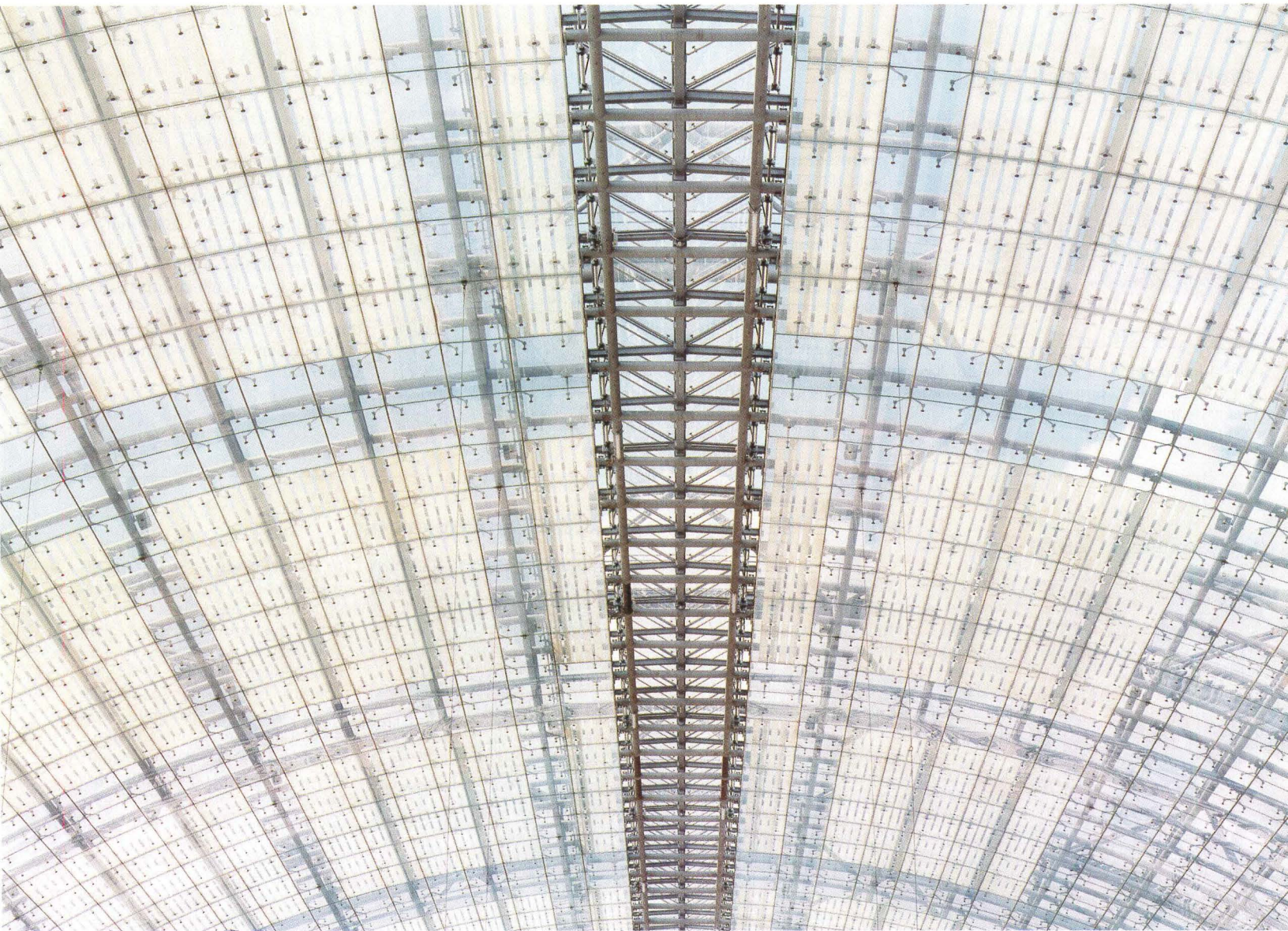
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STRAIGHT SHOT

CHRISTOPH MORLINGHAUS / GLASS HALL AT THE LEIPZIG TRADE FAIR (LEIPZIGER MESSE) / LEIPZIG, GERMANY

New York City-based German photographer Christoph Morlinghaus does not consider himself an architectural photographer, yet a considerable amount of his work deals with buildings. This, he says, is because “the graphics and structures I’m looking for in my photography, I find mostly in modern buildings. I’m looking for organized structure in real life that will translate into graphic images.”

This image of the roof of the Glass Hall at the Leipzig Trade Fair complex—designed by architects Gerken, Marg & Partners, Hamburg, Germany, with Ian Ritchie Architects, London, and completed in 1996—was caught en route from another shoot in eastern Germany. Morlinghaus spotted the site and quickly called his agent to obtain a short-notice permit to photograph the building. “We had two hours to shoot, and I took three pictures,” he recounts. When asked if it was his intention to create the illusion of an illustration or architectural drawing with this closely cropped view, he demurs: “I see myself as a straight photographer, who denies everything that has to do with effects.” **ANNA HOLTZMAN**

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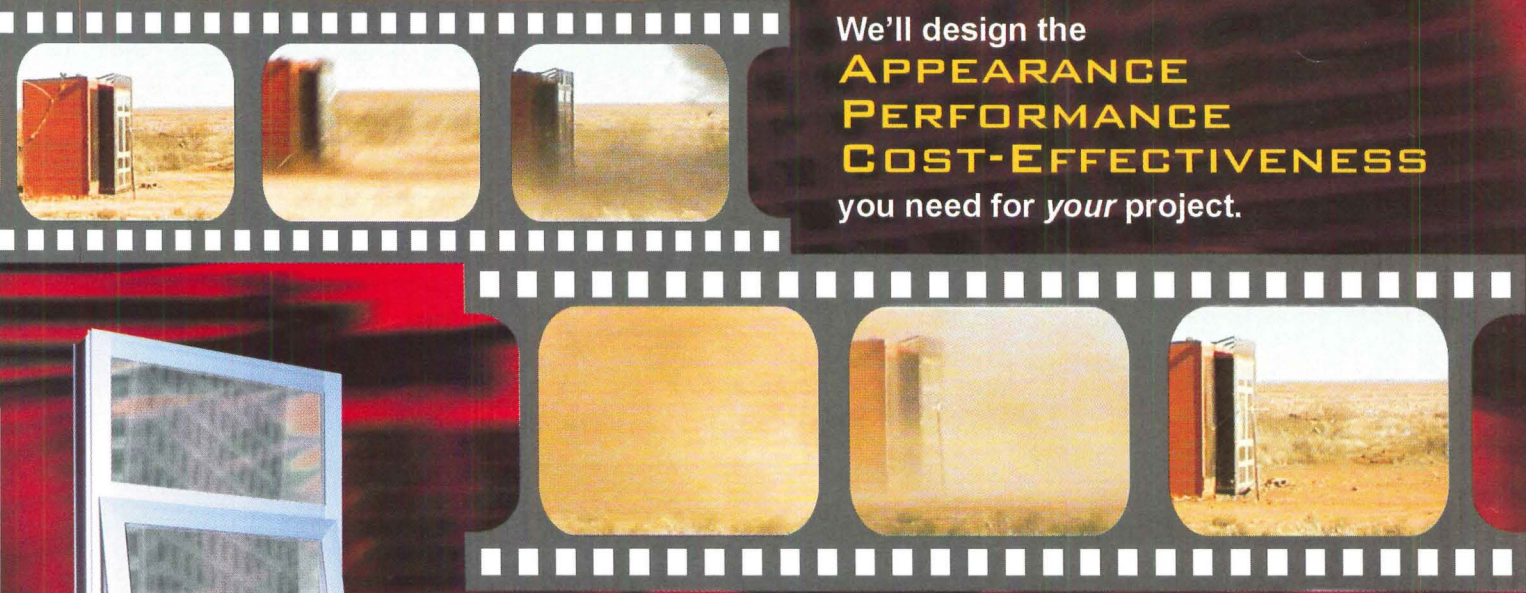
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