

ARCHITECTURAL RECORD

INTERIORS

Indoor Realms from Tranquil to Hot

plus: Refitting a Neutra Classic

Ingenious Interventions

Asking Tough Questions about
Architectural Education

Express



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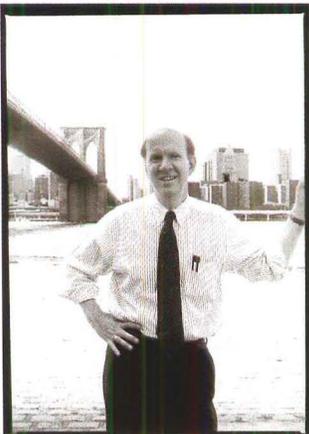
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EDITORIAL

You Had To Be There

BY ROBERT A. IVY, FAIA



The space fairly vibrated. On one of the hottest July days, the living room at Taliesin West melted into a crucible—of space, sense, and memory—all surrounded by the blast-furnace heat of the Sonoran desert. A chair of Wright's own design acted like a time-warp, catapulting the visitor into a place where present and past merged: After a day of overseeing drawings, Frank Lloyd Wright had sat in that odd, angular chair, perhaps drumming his long fingers on the armrest, and discussed his most intimate thoughts with Olgivanna. The present scent of wood smoke laced the air like incense, or personality; despite the Foundation's care, certain objects and surfaces looked slightly frayed at the corners. At that moment, Taliesin West, on the fringes of Scottsdale, seemed utterly real and, conversely, otherworldly. You had to be there.

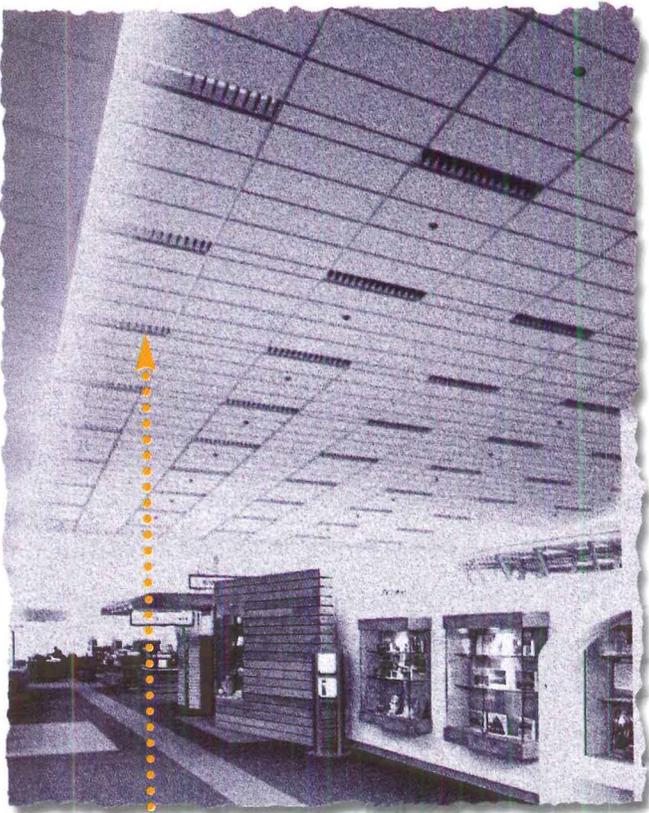
No amount of reading about Wright, or memorizing the photos of the winter residence, could prepare you for the reality. How else can any of us experience interior spaces but to occupy them? Despite our best efforts at this magazine to present interiors in all their fullness, and granting the skill of the great architectural photographers we publish, no two-dimensional photography or 3-D computer rendering captures the spatial nuance, the cast of light, the smudges in peripheral vision, the sounds or odors or feel as fully as a visit. In this issue, photography of Richard Neutra's Kaufmann House only hints at the powerful, interlocking spatial flow between indoors and out.

For architects, travel has become commonplace and necessary. Like our medieval ancestors, architects increasingly travel to the shrines of the masters, as the Wife of Bath made pilgrimage to Canterbury, "the holy blissful martyr for to seek." We are harvesting experiences, so much that you can't escape your peers: The other guests breaking bread with you at remote La Tourette, Le Corbusier's monastic masterpiece in the Jura mountains, probably babble in archi-speak just like you. Tuscany and Umbria will be overrun this September with men and women in Soho black. Where do they come from?

Historically, elite institutions like the American Academy in Rome offered fellowships to the best students, a practice that continues and flourishes. But access to the Great World has been democratized. Cheap airline fares and Eurail passes have contributed to the phenomenon, but the prime instigators of architectural tourism may be schools of architecture. Among the 122 schools that are ACSA members, fully 48 maintain studios abroad, of which 20 share cooperative programs with international partners—and promote international travel. The ubiquitous sketchbooks and Pentax-laden students share familiarity with great architecture and cities in a way most couldn't before the worldwide backpacking circuit began in the 1960s.

Practitioners don't lag far behind. For example, Mithun Partners in Seattle sponsors a biennial office field trip on a remarkable journey to architecturally rich locations. The group includes about 30 employees, typically associates and up, although even receptionists with 10 years' experience qualify. This year, the Mithun architects that travel to Berlin will have specific tasks to accomplish and information to gather, but all must turn in a journal, slides, and a sketchbook, from which the firm will compile and professionally publish a record of the trip. According to principal Bert Gregory, AIA, the excursions allow young and older architects to forge a common language and broaden everyone's point of view for upcoming designs.

While most firms may not be able to afford to underwrite such an ambitious trip as the Seattle architects enjoy, every architect should be aware that basic professional literacy now includes real-world engagement with the classics and personal familiarity with the best contemporary structures. The ante has been raised for all of us, but rather than a burden, what a joyous obligation. This magazine is only an appetizer; go get a ticket to ride.



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CIRCLE 11 ON INQUIRY CARD

LETTERS

Fantastical Guadalajara

In your June issue [JVC Center, page 132] you reported—uncritically—Daniel Libeskind's fantastical assertion that his collision of forms "will help reshape the university as a social organism with common interests and goals." In short: if it looks like interaction, it will cause interaction. It is hardly responsible of you to present, unchallenged, such sophomoric thinking.

—Tim Culvahouse

Adjunct Steward Professor

California College of Arts and Crafts

San Francisco

Critical urban design

John Kaliski [Critique, June, page 45] calls for a "critical urban design" in our cities, urging architects, urban designers, and planners to take a hard look into reality and not into what Michael Sorkin would call the "Disneyfication" of cities. I couldn't agree with him more. It takes someone with a lot of guts to come out and say what he said, especially in the face of what many perceive as the successes of New Urbanism. He echoes the same call and principles of such noted architects as I.M. Pei, Kenneth Frampton, and a small but growing number of unknown architects and students like me who believe that we should not be boxed in by "isms." Nor should one's ego supercede the needs of an entity, whether it be a piece of furniture, a building, or a city. Instead of celebrating our own ideals and forcing others to "believe," we must take to heart the humble beginnings of architecture—providing shelter. For once, throw away the enormous ego, step down from the pedestal, stop talking, and start listening.

—Mark Steven Ong

Brooklyn, N.Y.

Automatic transit for the people

I was glad to read the article concerning public transportation in cities [Speak Out, June, page 24] in light of the new federal funds. The article speaks well of the factors that must be integrated to have a working transit system. However, a very important point was missed. The types of environments that have been created by zoning codes (read: low density) are major setbacks. Transit only works when the densities it serves are high enough to provide the ridership to support the system. Changing zoning codes across the country is the first step in implementing fast, reliable, convenient public transit in any city.

—Carol Marra

Seattle

Having studied urban planning and the role of public transportation in building and rebuilding cities and its countering the effects of sprawl, I agree that architects hold a significant place in the future of cities in their public-transportation design and decisions. It is important for the world of the future to be able to survive and not be strangled by sprawl, lack of space, and the resulting pollution and loss of urban place. However, I must point out that there is a very fine line between being successful with public transportation and creating a mess.

I write this to reinforce Eli Naor's sentiments that architects should take great interest in becoming involved with the creation of public transportation. If we leave it to the politicians we might not have solutions that improve the quality of life and public transportation systems.

—Steven J. Kushner

Fairport, N.Y.

This letter is a combined response to two July items: Thomas Fisher's article "A Call for Clarity" [Critique, page 47] and Marcia W. McLoughlin's "Why overpower the neighborhood?" [Letters, page 21].

Regarding the Landa House, Ms. McLoughlin forgets the difficulties of this project as described by special correspondent Suzanne Stephens [April, page 128]. After all, the site was only a 30-by-100-foot lot. And the budget was less than a quarter of a million dollars. As well, Jutta and Hans "wanted an architect who could put something on a small lot and not have it look like a concrete box." And Thom Mayne wanted to "investigate something in a focused way that can become an element of a larger work." Mr. Ivy gets a "signature" filler for the April issue. Always a crowd-pleaser. Please be fair Ms. McLoughlin, the pressures of haute couture are immense.

At last report "the architect and the client are proud of the house," and it seems our special correspondent feels that you and the neighbors should be just as proud to play such a crucial role in this great experiment.

Thomas Fischer [Critique, page 47] is correct to call for a greater variety of national journals. More so, the ones we have should become more gutsy and less starstruck.

—Matt Harris

via the Internet

Two steps forward, one step back?

Products Editor Rita Catinella's "A Look Back at Old or Extinct Building Products from Architectural Record's Past Century" asks, "who in the world would specify products advertised like those

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All submissions should be sent to: Barbara Catlow, Manager of Marketing Services, Dryvit Systems, Inc., One Energy Way, P.O. Box 1014, West Warwick, RI 02893 USA. Submissions for the Dryvit International Design Competition 2000 must be postmarked no later than March 15, 2000.

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CIRCLE 14 ON INQUIRY CARD

above? You did, or rather, members of your profession once did."

When it comes to two of the products cited in the article, linoleum and cork floor tile, RECORD displays disregard for environmentally desirable products. For a number of years, both cork and linoleum (largely a cork derivative) have been making a comeback and are being used in place of vinyl by architects concerned with the ecological consequences of their specifications. In lumping these materials together in your article with freon, asbestos, and lead paint as "outdated architectural building products," you confuse matters further by associating materials that have been withdrawn from the market for health and safety reasons with products that are environmentally rather "friendly."

Shouldn't an architectural magazine such as RECORD try to represent the conscience of our

profession, not just its largest vendors, who dominate the advertising pages?

—G. Mackenzie Gordon, AIA
Lakeville, Conn.

Rita Catinella responds: Sorry for the confusion, but the article's heading states its intention: to look back at products that are "ancient history" or "ready for a comeback." It did not mean to imply that the entire grouping of products shown were environmentally undesirable. As you say, cork and linoleum fall into the "comeback" category, as does terra cotta. When I queried "who would specify products advertised like those above?" I was directly referring to the three products mentioned in italics: asbestos, lead paint, and ultraviolet glass.

For recent information on sustainable design and products, you can refer to the May 1999 New Products focus on sustainable wood; details on the sustainable

design of Lord Norman Foster's Reichstag in July 1999; last month's technology story, "What It Means to Be Green," and our Web site [www.archrecord.com], which features a special sustainable products section. Finally, the advertisements were chosen because their graphic style was a fun way to revisit our magazine's past. Current advertising schedules were not a consideration.

Corrections

In August, we gave credit to Christian Richters for the photo on page 85. The credit should have gone to Margherita Spiluttini. Two credits were missing from the August story on Second Stage Theater on page 93: architect Dan Wood (OMA) and consultants Ambrosino, DePinto and Schmeider (MEP). The photo on page 68 of our July issue was miscredited. It was taken by Steve Rosenthal. In our July Building Type

Study on Celebration Health, on page 134, we left out a credit for a member of NBBJ's interiors team: designer Richard Brennecke. And, finally, the drawings in our July story on Caruso St. John Architects were incorrectly annotated. The drawings and model shown are for the Rome Art Gallery competition. We regret the errors.

The correct copy for the Armstrong World Industries' ceiling product shown in July's New Products section on page 158 should read: The new Corridor Ceiling System Solutions from Armstrong provide a range of alternatives to traditional corridor ceilings, including longer-span smooth textured or metal planks, with acoustical options and abuse resistance. They are designed and engineered to interface with other Armstrong products, suspension systems, and perimeter solutions for a fully integrated, finished look. The planks are available flat or vaulted.

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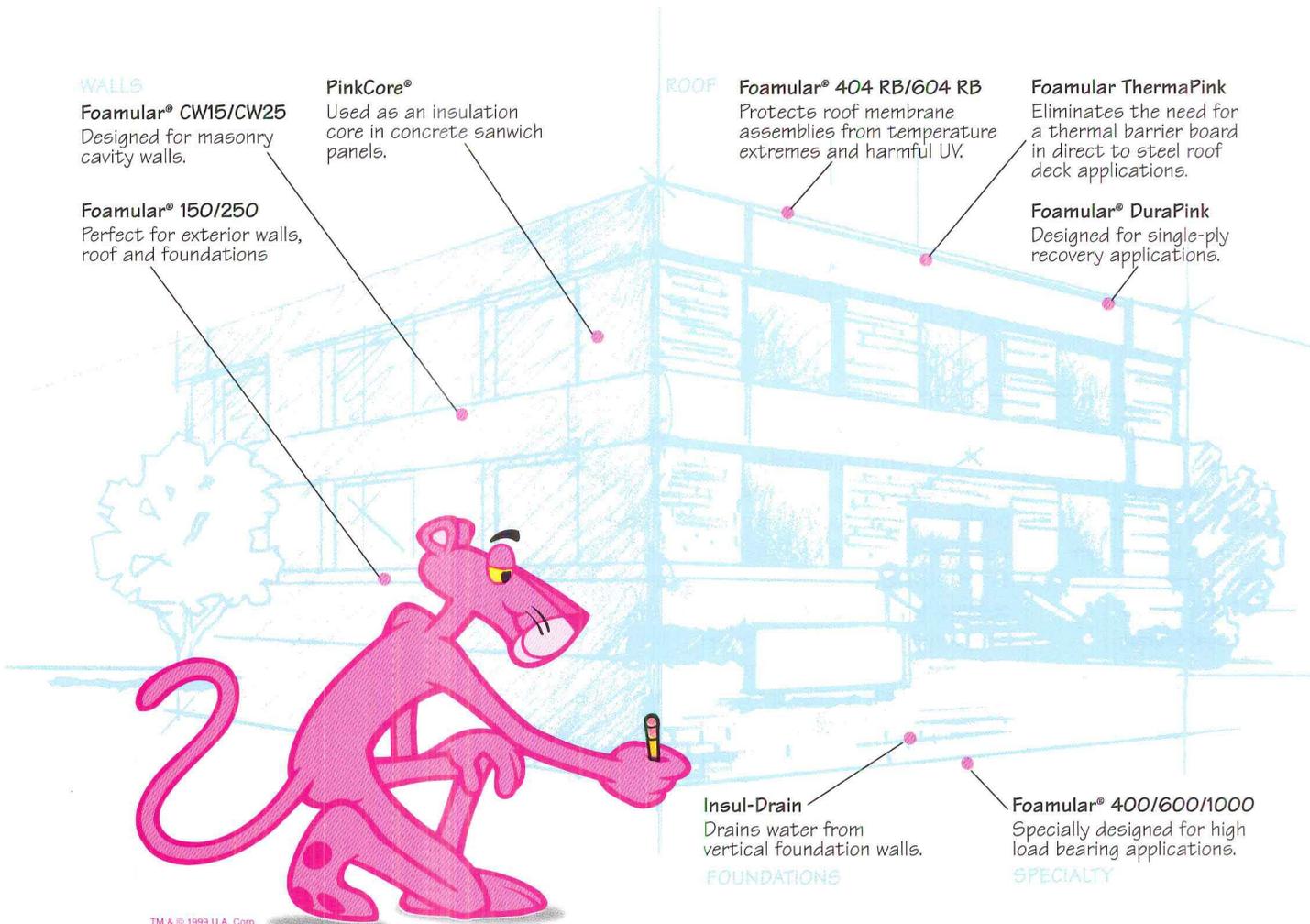
Material	Description	Qty	Units	Cost	Margin
INSULATION					
	R-20 Wall Insulation				
	Vapor Barrier (Wall)	1853	sqft	0.30	10.00
	Air Retarder	2360	sqft	0.85	10.00
	Subtotal	2098	sqft	0.15	10.00
EXTERIOR FINISH					
	Brick				
	Siding				
	Cable Siding	81	sqft	2.70	15.00
	White Vinyl	1537	sqft	1.95	15.00
	Brick Header	1026	sqft	1.95	15.00
	Brick Tiles	1	each	14.50	10.00
	Brick Mortar	1	cuft	1.00	10.00
	Brick Moulding	2	cm	12.70	10.00
	Siding Starter	19	cuft	2.80	15.00
	Siding J-Moulding	207	feet	0.75	15.00
	Siding Outcrop	222	feet	0.16	10.00
	Outside Siding Corner	61	feet	0.16	10.00
	Inside Siding Corner	42	feet	1.00	10.00
	Door Trim	36	feet	1.00	10.00
	Window Trim	89	feet	1.20	10.00
	Stucco	267	feet	1.20	15.00
	Subtotal	328	feet	0.41	10.00
TOTAL PROJECT COST					

Working Drawings

3D Renderings

Material-Take-Offs

CIRCLE 15 ON INQUIRY CARD



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BY DEBRA LEHMAN-SMITH AND JAMES MCLEISH

Debra Lehman-Smith, Assoc. AIA, and James McLeish, AIA, are partners at Lehman-Smith + McLeish, a Washington, D.C.-based architecture and interiors firm whose current projects include headquarters for Gannett/USA Today, Freddie Mac/Building 4, and General Dynamics.

Today's corporate clients demand new offices and facilities with designs focused not only on the building's appearance but also on critical workplace issues. These include workflow and processes, organizational structure and corporate culture, productivity, and worker attraction and retention. Yet many recent corporate facilities don't reflect this new reality—and thus fail to meet the clients' needs. Why does the American architectural profession fail to give priority to interior design and shirk its creative responsibilities with these projects?

Many architecture firms don't recognize that interiors increasingly drive the design process when it comes to corporate facilities. As a result, interior architects aren't taking a strong role on the design team. Architects often consider interiors to be an afterthought, and this has to change.

Not only are they not taking charge the way they should, interior architects often use formulas and standardized benchmarking rather than study carefully a client's needs and determine customized, cost-effective design solutions. Architects can get caught up in their own egos, instead of focusing on the corporate client's range of needs. Often, they approach the client's problems with formulaic or outdated resolutions, instead of rigorously examining the client's specific profile.

The problem is deep-rooted. Our schools reflect and reinforce our profession's misunderstanding of the role of interior architecture in the overall design process. At many universities, the architecture and

interior architecture programs are separate. Students aren't taught to think about integrated design. Making matters worse, some universities consider interior architecture a human resource issue—a matter of corporate policy, not design.

Our universities need to treat architecture and interior architecture as two branches of the same tree. The scope of architectural

building than each firm could have produced on its own. Thus, a corporate facility's interior, exterior, landscape, graphics, art, and other visual elements should be designed as integral components of one solution, rather than as independent entities.

When architects look at public spaces like airports, libraries, and museums, we can see that a strong relationship between the interior

TODAY'S CORPORATE CLIENTS DEMAND NEW OFFICES FOCUSED NOT ONLY ON APPEARANCE BUT ALSO ON CRITICAL WORKPLACE ISSUES.

studies must be broadened to include interior and landscape design, and interior architecture students must be taught basic design skills and architectural understanding. Students should be taught to see the outside and inside of a facility as a single, interconnected design. Schools should follow the example of the University of Cincinnati, which has a multidisciplinary program that incorporates architecture, interior design, and visual arts.

Problems in the educational system can provide easy excuses. The change in attitudes toward interior architecture have to come from within the profession. Interior architects need to understand that corporate design demands their leadership, with the goal being to design a unified structure that reflects the client's specific requirements. Often these corporate projects involve a design team of several firms, and a smoothly functioning unit will create a better

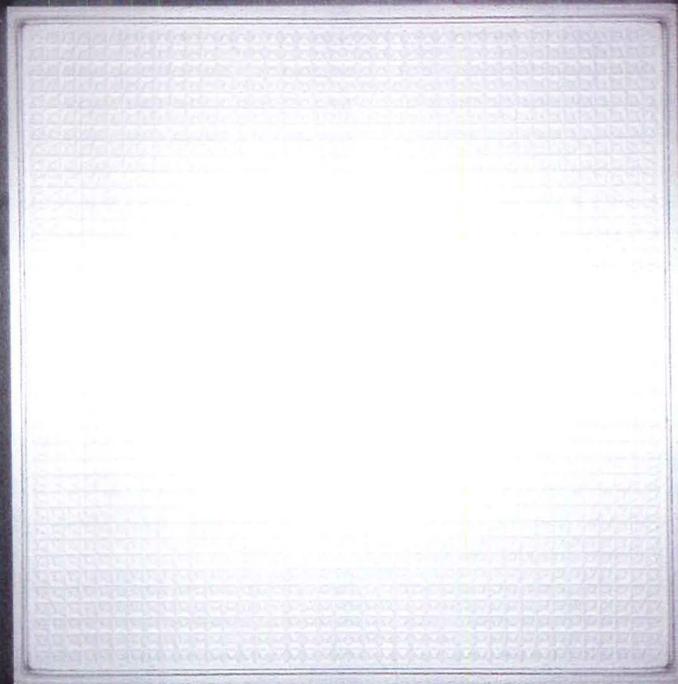
and exterior spaces has been paramount. We must now look at the facilities we design for corporate America in much the same way. If interior architects don't rise to the challenge, our corporate clients will go elsewhere. Those international architecture firms and business management consulting companies who see the synergy and totality of a building—and who understand that a client's business goals transcend all phases and disciplines of the design process—are waiting in the wings. ■

Contributions: *If you would like to express your opinion in this column, please send submissions by mail (with a disk) to Speak Out, Architectural Record, Two Penn Plaza, New York, N.Y. 10121; by fax to 212/904-4256; or by E-mail by visiting www.archrecord.com and clicking on News/Features/Dialogue. Essays must not exceed 700 words. The editors reserve the right to edit for space and clarity. Where substantial editing occurs, the author will receive text approval.*



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MENTORS It's not personal, it's business:

Peer review and self-criticism are crucial tools that elevate the quality of preliminary designs.

Andy Pressman, AIA, NCARB, is associate professor of architecture at the University of New Mexico and leads his own architecture firm in Albuquerque. His latest book, *The Architect's Portable DESIGN Handbook*, will be published by McGraw-Hill in 2001.



Most architects share the unpleasant memory of encountering a diatribe such as this:

"Your project is about meaningless, multivalent form devoid of theoretical underpinning. There is little evidence of rigorous intellectual investigation or even a hint of innovation. It's a gratuitous contrivance in search of an idea. The work is so reductive, it's about nothing, and that might be vaguely eloquent if it was intentional. Can we move on?"

What can you say about a 25-year-old architecture student who was just brutally attacked in a design review? That she's quite talented, perhaps. That she listens to *Massive Attack* and just saw *Eyes Wide Shut*. That she loves architecture. And that she will need years to recover from the trauma of her early studio education and start to embrace pragmatic and appropriate criticism, be it from clients, peers, or public stakeholders—the kind of criticism that is essential if her projects are to be as effective and beautiful as they can be. No wonder the Boyer report, the study of architectural education prepared by the Carnegie Foundation for the Advancement of Teaching, concluded that juries can "foster excessive egotism and an adversarial approach to clients."

Break away from bad habits

We're all aware that one of the developmental problems we must overcome is the systematic and often ruthless criticism presumably utilized to bring students to overarching truths or principles

about architecture. Weld Coxe, HON. AIA, founding principal of the Coxe Group, believes that the sort of destructive personal criticism alluded to in the fictitious mad professor's rant—a familiar rite of passage in schools of architecture, as we know all too well—seriously undermines the primary goal of the profession, which is simply to create excellent design.

What can we do about this problem? We must readily identify and admit to mediocrity and fraud, make every effort to avoid prema-

utilized in our field—should be a matter of course for architects in the midst of the design process.

The art of self-criticism

Self-criticism is an acquired skill, a subset of criticism, that can efficiently stimulate new ideas, infuse projects with special meaning, and help formulate cogent arguments in support of convictions and aspirations. I asked Christopher Mead, professor of art history and architecture at the University of New Mexico, to elaborate.

USED PROPERLY AS DESIGN TOOLS, SELF-CRITICISM AND PEER REVIEW ENSURE AN IDEA'S COHERENT DEVELOPMENT.

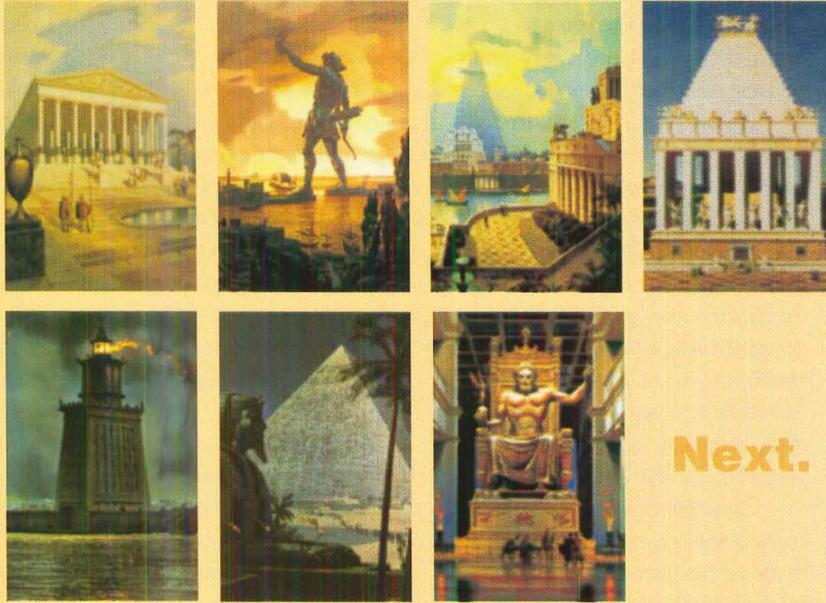
ture enthusiasm for trends and fads and even apparent breakthroughs, and recognize individuals for their contribution and for caring.

Contribution and caring? What do these words have to do with creating better architecture? Contribution and caring are values that should be fostered in our profession and expected of all practitioners. Why? Because criticism should *strengthen* our colleagues and their work, rather than tear them down. Is this concept self-evident? A bit idealistic? Sure, it is. But time and again history has demonstrated the value of simply reminding ourselves of who we should strive to be.

Attitude adjustments are one matter. But what specific methods can architects use to undertake positive and meaningful criticism of their work? Self-criticism and peer review—strategies that are under-

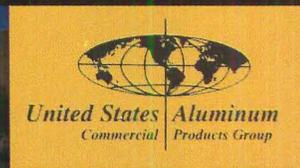
Mead suggests that self-criticism assists the architect in "formulating a project's aesthetic and social purpose at the start, so that the project, as it develops, can constantly be measured against this original conception." Used properly as a design tool, Mead says self-criticism "serves initially to test the strength of the original idea and then, once the value of that idea has been proven, to ensure its coherent development by editing out missteps or flaws." Every line on the paper or every pixel on the computer screen should relate to the bigger concept.

Given that we're all pretty good at design fundamentals—solving the functional equation—it follows that self-criticism must address more elusive factors. Mead suggests that this has to do with matters beyond the design's immediate utility; in other words,



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A World of Possibilities

CIRCLE 17 ON INQUIRY CARD

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the question of whether an architect is creating a culturally significant work of art.

Taking an unflinching look at one's own work has tangible benefits. But outside opinions are also essential. To that end, peer-review programs offer an appealing vehicle for the delivery of good criticism.

A jury of peers

Doug McCallum, AIA, is the manager of the "Works in Progress" program of the Boston Society of Architects. He says that discussing design is the sole intent. Each month, an architect presents a project in process and chapter members—and occasionally others from allied disciplines, such as artists, landscape architects, or planners—assemble to constructively critique the work of one of their colleagues. They do it out of the office context and away from the pressures of a business environment. McCallum says the sessions provide perceptive discourse to

enrich specific projects and advance general knowledge. This program is a model of professional behavior at a high level, one that could be implemented by even a small group of local design professionals.

There is a great advantage to external reviews. Fresh eyes, unimpeded by explicit or implicit agendas, can be focused on design quality and introduce new perspectives. The more exposure to diversity in points of view, the more possibilities become evident. Another benefit accrues to the reviewer. Experience in evaluating the work of others will likely contribute to more objective and effective ability at self-criticism.

Christopher Mead deftly links self-correction mechanisms with external criticism. He explains that self-criticism "provides the architect with a means to deal with the criticism offered by others, because it sets the architect's own idea of a project as the standard against which critical reactions can be judged—not defensively, but confi-

dently." Having a solid base makes insights from external sources easier to accept.

A communal effort

Because it is so easy to whine about the mediocrity surrounding us, we need to be especially conscientious about allocating energy toward creative and activist methods of raising the level of (or at least discussing meaning and content in) architectural design. Effective self-criticism and peer review are elements of real professionalism as well as good business.

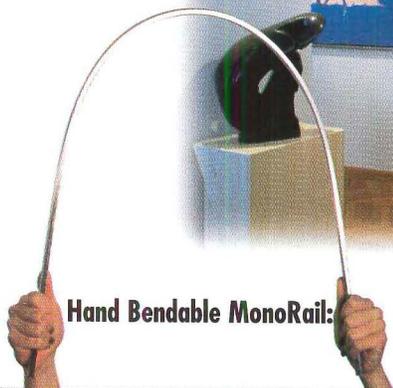
Traditionally, criticism—whether delivered by another or self-generated—represents a dialectic. This typically means that a gulf of some type exists between that which is regarded and that which is evaluated; and as C.P. Snow has observed, the differences between the two poles often cause trouble. Misunderstanding, hostility, object bias, and even a total absence of discriminating

judgment can easily be the end result of critical effort.

The question this column raises is how might we redefine and exercise a more effective and genuinely constructive brand of criticism. Potential answers to this question include a general rediscovery of (dare I say?) teamwork and altruistic critical thinking during the design process, as well as vigorous advancement of the art of self-criticism, which should also take place during design. Simple and accessible instruments for these "solutions" exist. All that is required is a commitment to utilize them. ■

Questions: *If you have a question about your career, professional ethics, the law, or any other facet of architecture, design and construction, send submissions: by mail to Mentors, Architectural Record, 1221 Avenue of the Americas, New York, N.Y. 10020; fax 212/512-4256; or by E-mail to rivy@mcgraw-hill.com. Submissions may be edited for space and clarity.*

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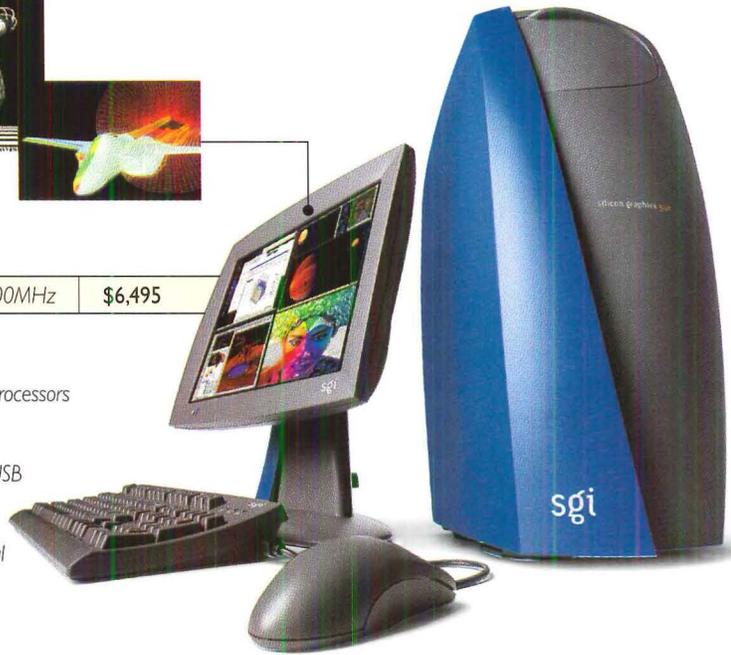
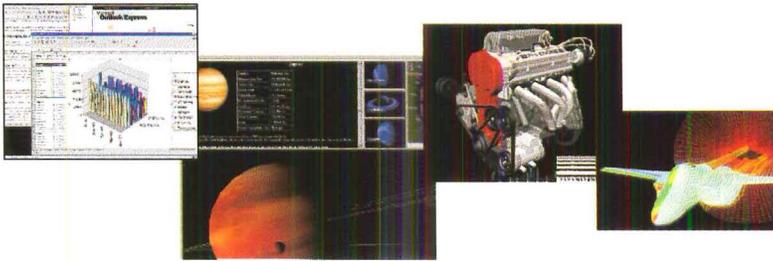
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CIRCLE 19 ON INQUIRY CARD

PULSE RECORD readers were asked: Should architects be more political?

No. Politically oriented architects more often than not promote monopolistic architecture.

Here in the Philippines, a lot of work is done by the same architects. The problem is, they keep on repeating their concepts, making the environment unsightly, and leaving other architects without work.

Politicking causes other problems as well. Take the case of our business district here in Ayala, Makati. The skyline is not visually attractive because architects with contacts to the city building code officer defy the rules of height limits. If what is required is a 10-story building maximum, they pay off the building inspectors and build a 20-story building. It's ridiculous and can be blamed on politically motivated architects.

—Emerson P. Hernandez
Antipolo, Philippines

Yes. Of course we should be, especially when inclined toward urban design projects. If we aim for a better tomorrow I think we must go political. An example here in India: an architect became a member of parliament during the 1960s, resulting in easier and faster implementation of hard-worked design projects and a more serious take on regional architectural associations.

—Sivaraman Venkatraman
Pondicherry, India

Yes. Architects should place their clients' interests above any political considerations. The design and construction of any single project is not the appropriate forum for such expressions. However, a designer

should petition code organizations, trade associations, and governmental entities to effect change. I find that many are unwilling to put time and effort into this process.

—Andrew E. Harris
Denver

Yes. Thank God architects are not a monolithic group. May the introverted architects (those energized by individualistic tasks) focus on designing. May the extroverted architects (those energized by contact with people and with civil affairs) give attention to politics. May we all not ignore or lose sight of the big picture.

—Miles Battle
Brookeville, Md.

Yes. Architects should endeavor to be active politically because they have great skills and varied perspectives that are needed when trying to solve problems. I have recently become involved with a politically active group in my community, and it is helpful for me to hear the concerns of others in my city as we discuss planning, development, and livability issues. Plus, I see the leadership qualities that many architects possess as useful in the public/political arena.

—Donna Johnson
Edinburg, Tex.

More answers to: Can American architects learn from their European counterparts?

Yes. The U.S. is still a young country with a yet-undefined architectural tradition. The references drawn from foreign counterparts, including the education at the Paris' Beaux Arts

School, shaped the architectural styles in this century. Politics, the economies of construction, and fast-track construction processes disregard the essence and care for proportions and style that shape the development of European architecture. And yet, there is not enough liberty of expression or innovation characterizing the work of foreign architects. Only American architects with a foreign education seem to be more open-minded in this respect.

—Alicia Dmaz de Lesn, Assoc. AIA
Chicago

Yes. Dedication to one's own culture: this is what is missing in discussions about how poor American architecture is in comparison to European architecture. American architects tend to want to criticize their own culture or impose

foreign ideals on it. Generally, European architects express confidence and understanding of their particular cultures in their structures. This is something American architects could learn from them.

—Aida Latorre
Dallas

Yes. I think there is often a strongly moral component to architecture in Europe—a component and dialogue not entirely lacking in America, but in Europe the vision of the collective is more often expressed. Architecture freed from historicism has a transcendent function in Europe that is not as compellingly felt in the U.S. It has to do with class and of trying to reinvent a place where strife and resentments are things of the past.

—Frederick Shands, AIA
Stockholm, Sweden

This Month's Question

Interior architecture: Is it architecture's neglected stepchild?

There was a time when putting the inside of a structure together was as natural a part of the process of building as creating the exterior. Is that no longer the case? Our Speak Out [page 26] contributors think architects are designing interiors as an afterthought, thus missing an opportunity to create a total building. Do you agree or disagree?

Fax your response to ARCHITECTURAL RECORD, 212/904-4256, or visit www.archrecord.com and click on News/Features/Dialogue to voice your opinion by E-mail.

Note: Pulse reflects individual responses to each month's question and is not meant to be construed as formal research.

CRITIQUE Most contemporary architects have callously abandoned the social agenda set by the founders of Modernism.

BY ROBERT BENSON

In June, European American Realty Ltd., a Chicago-based developer, announced its intention to build the world's tallest skyscraper in Chicago. The main purpose of the 112-story shaft—being designed by Adrian Smith, FAIA, of Skidmore, Owings & Merrill (SOM)—is to provide high-definition television transmission from communications antennae on its pinnacle.

In a way, the design is a late-century Modernist interpretation of the Vesnin brothers' 1924 competition entry for the Moscow office of the *Leningradskaya Pravda* newspaper, a modestly scaled project that, by presenting the news on its facade, would have interacted with passersby and rewarded their attention. In contrast, little engages human beings where the proposed 1,537-foot-high tower in Chicago meets the street: glazed parking decks occupy its first 11 stories and the retail spaces are underground. The street, rather than being a social and political arena that a building must address, is ignored as mere necessary infrastructure.

The design underscores the degree to which today's Modernism has abandoned the movement's early belief in a transforming social agenda. And it begs the question: Ought architecture to have a social agenda or is that now an anachro-

Robert Benson, PhD, is a professor of architectural history and criticism and chair of the Department of Architecture and Interior Design at Miami University in Oxford, Ohio. He is the former architecture critic for the Detroit News and the Cincinnati Enquirer.

nism? Whether it is conceived as such, architecture is always a political statement for those who design it, buy it, use it, or interact with it. Any effort that requires such large expenditures of money, materials, resources, utilities, labor, planning, and conceptualization is a political and social act by its very nature. When we fail to understand this or refuse to acknowledge it, we relinquish authority and allow architecture to become the instrument of someone else's political and social position.

Detached and dismembered

Today's Modernist architecture is beholden to the vagaries of international finance, unstable market trends, and rapidly diminishing sources of cheap labor. It is detached from any semblance of social agenda or cultural vision. It is a style, a signature, an image created by teams skilled in business operations and trained to partition off their thinking from social and political meaning. It is subservient to clients who often measure themselves against their competition by the height of their towers. Modernist production looks much the same in Southeast Asia as it does in Chicago—evidence of its detachment from specific cultural conditions.

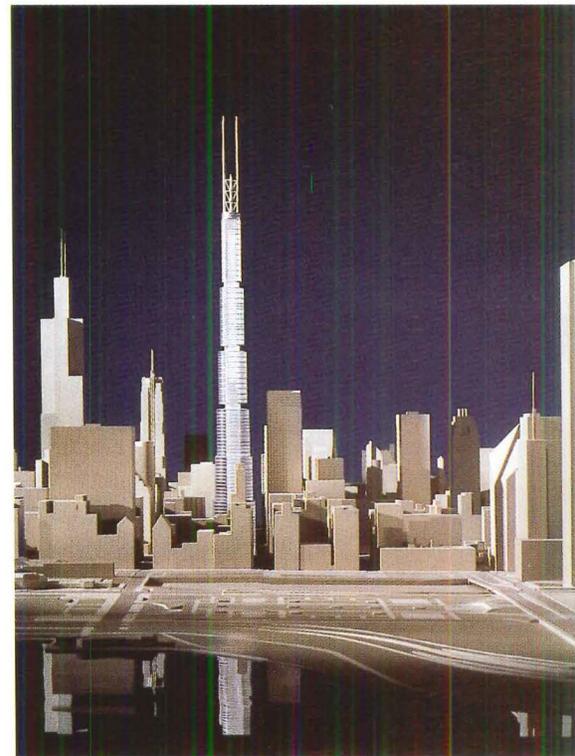
By contrast, Modernism in Europe arose as a response to the needs of post-World War I reconstruction and the call for a new social order. It insisted that architects do more than build, that they facilitate sociopolitical and cultural changes through architectural form.

It inspired manifestos, demanded social justice, established minimal standards of housing, created efficient building forms for education and government, and identified itself as an agent of resistance to the status quo. It appropriated the working class as its client and social democratic government as its patron. Its design objectives included function, flexibility, and lightness; the use of industrial materials, processes, and images; and the development of urban context. One might criticize the audacity, irreverence, or naivete of the early Modernists, but not their hopes for a better world and their willingness to stake a personal and professional claim in achieving it.

Stateside politics

Unlike in Europe, the earliest Modernism in the U.S. responded to the economics of 19th-century liberal capitalism and its burgeoning business culture. As part of this culture, the commercial work of Burnham & Root, Frank Lloyd Wright, and Albert Kahn focused on making business and investment work well and on supporting a vibrant and volatile industrial economy. Social justice was the province of government or

religion, not business, and certainly not architecture. By the 1920s, business architecture clearly expressed laissez-faire capitalism in its luxury, eclecticism, and exuber-



If it is built, SOM's tower on Chicago's Dearborn Street will be the world's tallest building.

ance; it culminated in a final Art Deco flourish just as the stock market crashed.

During the Depression, Henry-Russell Hitchcock and Philip Johnson, FAIA, introduced European Modernism to the American architectural profession and public in a famous 1932 exhibit, "Modern Architecture: International Exposition," at New York's Museum of Modern Art (MoMA). Although the

two architects were well aware that European Modernism was intrinsically connected to a social agenda, they chose to ignore it in their exhibit and presented the new architecture as the flower and fulfillment of precursors like Wright, Louis Sullivan, Hendrik Berlage, and Peter Behrens. They intentionally focused on the formal characteristics of European Modernism, arguing that its stylistic traits had gelled by 1922, were already international in scope, and could therefore be labeled “the style of the 20th century.”

Only Lewis Mumford addressed the social housing concerns of Modernism in the MoMA exhibit and its catalog. Mumford believed, along with architects Clarence Stein and Henry Wright, that Modernism was principally an embodiment of a social vision. This position was supported by such critics as Catherine Bauer and Douglas Haskell, who warned readers of *The Nation* that the MoMA exhibit skewed the picture of Modernism. This polarization into two contradictory positions—a particular style without content versus content without a particular style—set the stage for American architectural debate in this century.

Welcome to the Bauhaus

After the Bauhaus was shut down by the Nazis in the early 1930s, practitioner-educators such as Walter Gropius, Marcel Breuer, and Ludwig Mies van der Rohe emi-

grated to the U.S., seemingly ready to transplant the social vision of Modernism at Harvard, the Illinois Institute of Technology, and elsewhere. Indeed, the social agenda became embedded in architectural education as a result of their efforts and convictions. However, the Modernism that was taught and practiced took firmest root in the capitalist economic climate following World War II; architects applied the design principles of the Bauhaus to

corporate commissions, effectively subverting the social agenda of Modernism.

By the 1950s, graduates of American architectural schools, including Johnson himself, were working within a corporate culture that was more concerned with functional flexibility, cost efficiency, and image than with social agenda, except when a social agenda served business interests. Corporate capitalism exploited the Modernist glass box as a symbol of its own power and created what Ada Louise Huxtable would later dub an “urban vernacular” in city business districts. The resulting competition for unique corporate personae and the reaction against the Modernist boxes of the 1960s and '70s played itself out against a growing critique leveled by Postmodernism.

Revolt in style

During the '70s, the OPEC oil embargo offered environmentalists some opportunity to resuscitate social responsibility. Civil rights and the growing feminist movement seemed to offer the possibility of a renewed concern for social justice. Tax credits for revitalizing historic buildings seemed to offer a new way to regenerate urban centers in the wake of the failure of slum clearance. The globalization of capitalism, the dramatic rise in electronic communications, and the emergence of Australasia as a

and more sculpturally dramatic and formally complex work (Coop Himmelblau; Frank Gehry, FAIA; Morphosis; Peter Eisenman, FAIA; Zaha Hadid). Underlying this plurality was a common disregard for the social responsibilities of architecture. Architects practicing under the aegis of a Modernist social agenda—Aldo van Eyck, Lucien Kroll, Max Bond, or Michael Pyatok, FAIA—or within the



The Fagus Factory, designed by Walter Gropius in 1910, is an icon of early Modernist design.

context of environmentally conscious design (William McDonough, FAIA) were few and far between.

Educating by design

Excepting the environmental movement, assuming social responsibility remains principally the domain of architecture schools. Business-practice issues are of far greater concern for professional organizations than debate about social or political meaning. In fact, the notion of a social agenda today seems to be equated with political correctness. It is much safer to treat architecture as a financial investment and image, or as a functional and mechanical object, than as a conscious and political statement. As a result, architecture becomes a statement of consumerism. Architects proudly identify themselves as offering a full range of services, a notion that has eroded their status as a professional with a specialized education, experience, and knowledge who can provide a

vision and appropriate form for a project and relate it to a larger physical and cultural environment.

We can reinvigorate Modernism's social agenda by changing the way we teach design. When we acknowledge that design, like information, is never neutral but always serves a point of view, we can help students develop points of view, much as we expect them to develop visual results. We can further teach our students that as design professionals, they should conduct themselves as collaborators, not as servants who simply reflect their clients' value systems. We can introduce students to design-build experiences in low-income and ethnically diverse communities where the social realities of architecture become more clearly defined by their differences from conventional design culture.

We should also demand architectural criticism that goes beyond expounding a theoretical position, that transcends formal analysis, and that does not pretend to be the arbiter of taste. We should demand that critics ask penetrating questions about the social and political effects of buildings, whom they empower, and how they demonstrate sensitivity to the environment.

We should seat incisive boards of review and building commissions whose members are willing to risk being unpopular to guide public officials, investors, developers, and designers toward the best possible architectural solutions. We need architects and designers to serve on city councils and commissions to establish responsible standards of design and construction and to speak out against irresponsible planning and development.

Unless we make educational and professional commitments to promote socially and politically responsible architecture, we will inadvertently promote the opposite. Reexamining the Modernist social agenda and adapting it to our current conditions may not change our world immediately, but I have yet to hear a better alternative. ■

THE NOTION OF A SOCIAL AGENDA TODAY SEEMS TO BE ASSOCIATED WITH POLITICAL CORRECTNESS.

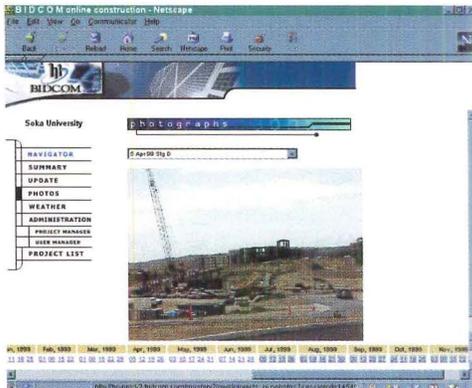
grated to the U.S., seemingly ready to transplant the social vision of Modernism at Harvard, the Illinois Institute of Technology, and elsewhere. Indeed, the social agenda became embedded in architectural education as a result of their efforts and convictions. However, the Modernism that was taught and practiced took firmest root in the capitalist economic climate following World War II; architects applied the design principles of the Bauhaus to

financial power spurred a reassessment of worldwide Modernism through critical regionalism, as elaborated by Kenneth Frampton.

During the 1980s, the renewed emphasis on individualism and the private sector was mirrored in design directions that included corporate practices based on the model of SOM, high-tech design (Renzo Piano, Richard Rogers, Nicholas Grimshaw), reinterpretations of earlier Modernism (Arquitectonica; Richard Meier, FAIA),

DIGITAL ARCHITECT "Internet-based project collaboration allows farflung team members to design buildings without flying around to meetings."

BY JERRY LAISERIN, AIA



PCN software acts like an online job trailer, providing an Internet location to check project progress.

Shifting business communication from paper media, such as fax, mail, and next-day and same-day couriers, to electronic media, such as the Internet and World Wide Web, enables these communications to flow faster, cheaper, easier, and more accurately. Still, designing a building is more complex than searching for music CDs, airline tickets, or home mortgages. Web-based architecture must facilitate and document long-term collaborations among multiple players in the design industry.

On an average project, participants, including the lead designer, general contractor, consultants, and subs, are thrown together by competitive bidding, chance, and choice. They differ wildly in their technological abilities and willingness to share information. During the life of a project, in an atmos-

Contributing editor Jerry Laiserin, AIA, consults, writes, and lectures about the impact of information technology on the practice of architecture.

phere of cost and time pressure that is always competitive and occasionally adversarial, they exchange hundreds or thousands of documents, many of them created by incompatible computer programs.

By leveraging the Web's universally interchangeable file formats, affordability, and instant availability, project teams sidestep

incompatibility issues, costly paper-handling, and slow turnaround. And if things go smoothly, they may even walk away liking each other. Like commercial Web pages, private Web sites for individual projects are information repositories, message clearinghouses, and business transaction hubs. Web browsers provide the software gateway for exploring such project networks.

Projects on the Web

Collections of browser-accessible information inside an individual firm are called intranets [March 1999, page 39]. When two or more separate entities—some combination of client, architect, consultants, and contractors, for example—share browser access, the underlying collection of information is called an extranet. Because these sites can be hosted on Web servers inside or outside a firm, design-and-construction extranets are more aptly called project-specific Web sites, project Webs, or project collaboration networks (PCNs).

The simplest PCN functions as a repository for documents, such as drawings, memos, and meeting minutes. These are accessible, once the password is entered, to project participants. Everyone can view, copy (download), or save (upload) documents using nothing more than a Web browser.

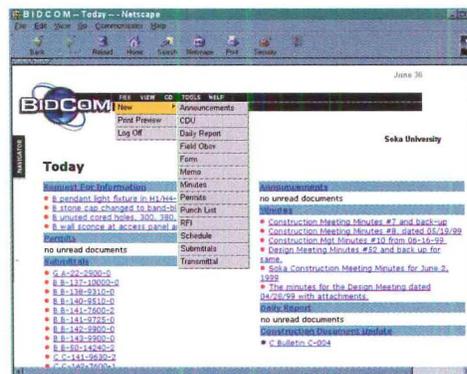
Clients, for example, can view CAD drawings online, even without having CAD software on their computer. Some PCNs add the ability to pan and zoom across CAD files or to annotate and redline these drawings. These extras necessitate helper programs, usually available for free, that are downloaded by the

sages first, like an E-mail system.

The message center usually appears on each participant's personalized home page or start page, displayed by the software every time that person logs on. This page also includes directories of contacts, pointers to documents, and other information that would need to be quickly accessed. The message center replaces the confusing and easily misfiled array of faxes, E-mails, phone messages, and paper memos that characterize non-Web projects.

Finally, PCNs can provide a hub for project workflow, such as tracking requests for information, submittals, and shop drawings.

Most project contracts impose legal obligations to handle such transactions in a formally prescribed sequence and a timely manner. As a result, logging and routing documents up and down the chain of command consumes an inordinate amount of the project manager's time and attention. A PCN makes this workflow



A personalized message center acts like an E-mail system, displaying and tracking messages.

user and plugged in or automatically served to the browser.

PCNs may also include a message center, a place for posting and archiving memos and notices about items for action or review. Messages can be broadcast to the entire team, a subgroup within the project, or a specific individual. Most PCNs track who has read which messages and present the latest unread mes-

instantaneous, self-documenting, and transparent—anyone with browser access can verify whose response is required next. This also frees up the project manager.

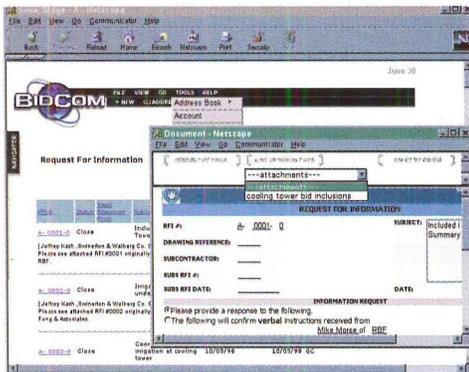
Buy, build, or rent

PCNs can be hosted on a Web server operated by one player on a project team or by an outsourced service provider. As the team mem-

ber involved in the project from beginning to end and the one generating a significant portion of the drawings and other documents throughout the project, the architect often is the participant best suited to host the project Web site.

Many firms want such control over their own data and client/consultant access, but not the headaches and costs of developing and maintaining homegrown software. Among the few packaged programs available for this need is ActiveProject from Framework Technologies (www.frametech.com), [May 1999, page 275].

Hammel, Green & Abrahamson, a 460-person A/E firm in Minneapolis, relies on ActiveProject to coordinate design guidelines and CAD standards with a half-dozen other major-role A/E firms and multiple consultants on 15 to 20 separate projects at the Minneapolis-St. Paul airport.



Browser-based forms in PCN software ease tedious chores, like logging submittals and RFIs.

According to HGA principal Bill O'Malley, AIA, installing ActiveProject was faster and less expensive than developing software in-house. The packaged program also overcame the client's concerns regarding privacy and security when entrusting project data to a third-party service.

Large firms, with sufficient in-house software development expertise and information technology (IT) support, often choose to program such software themselves. According to Brian Ware, applications manager at Callison Architecture, a 450-per-

son firm based in Seattle, "Developing our own PCN allows a strong architectural focus, rapid response to changes and customization, and an individual brand identity for our firm and our projects."

In contrast, some commercial PCN software "reflects the contractor's and owner's goals and work patterns more than the architect's," Ware notes. "Plus, packaged software limits you to the vendor's choice of features and updates. Many outsourced services make their own name and logo more prominent than the architect's."

Hosting their own project Web servers, whether prepackaged or custom-built, can strain the resources of firms with a limited technology infrastructure and information technology staff. Clients and contractors on Web-based projects expect reliable access 24 hours a day, seven days a week, which requires that the host have the following: a high-speed

direct Internet connection; high-capacity servers; and a technology support staff on call around the clock.

For firms unable or unwilling to make that kind of investment, nearly three dozen businesses have sprouted in the last 18 to 24 months to provide PCN services on a rental basis. Typical service fees start at a few hundred dollars per project

per month. But this delivers plain-vanilla services offering little more than the Web equivalent of a filing cabinet and a memo pad. Fees may run as high as \$1,500 per project per month for unlimited users on a full-featured service, which includes elaborate annotation and messaging options, built-in structured workflow, and other features.

Making it work

James Brogan, AIA, director of technology at 130-person Hardy Holzman Pfeiffer Associates (HHPA) in New York City, has built and hosted

his firm's own project Web sites and also experimented with several PCN rental services. He's found that the success of any type of project network depends on "getting the whole team up to the same level of connectivity."

Participants with slow dial-up connections will not be happy with the experience." A five-minute download via HHPA's digital T-1 link to the Web takes two to four hours by conventional modem.

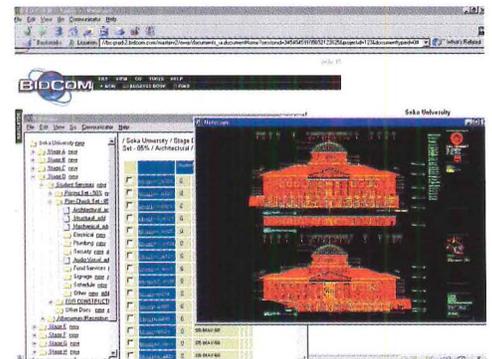
At Cambridge, Mass.-based ADD, Inc., IT Director Jill Rothenberg also has tried multiple services for her 150-person firm. "The projects that have the strongest commitment by the entire team to use the technology consistently benefit the most. We do a lot of education of our clients and contractors, but there's only so much support IT can provide and only so much the architect can control."

One way to solve the commitment issue, according to Kavita Gupta, a project manager with 25-person Summit Architects in Santa Monica, Calif., is to "require in the contracts that everything on the project be digital." She cites her own firm's success using the InSite service from BidCom (www.bidcom.com) to manage a multibuilding, fast-track project with eight phases of construction.

In Manchester, N.H., the 32-person architecture/interiors firm Lavalley Bensingler uses the ReviewIt AEC service from Cubus Corporation (www.cubus.net). Stephen Clayman, AIA, vice president at Lavalley Bensingler, calls ReviewIt affordable and simple, but adds that "there is still labor overhead" in the steps required to get offline drawings into the online system.

Now what?

While first-generation PCN services require conscious effort to publish or upload design information to the



Like office flat files, PCN software offers an easily referenced repository of project drawings.

Web, the emerging trend is toward more direct and automatic linkage between tools for making designs and tools for sharing them.

Bentley Systems, maker of MicroStation CAD software, already offers a system called ProjectWise (www.projectwise.com) that eliminates the publishing steps that fall between creating a design model and sharing it over a project network. The forthcoming ProjectPoint service (www.projectpoint.com) from Autodesk, maker of AutoCAD, will build on Autodesk's CAD expertise to better integrate the processes of producing design documents and distributing them on project networks.

Wimberly Allison Tong & Goo, a 220-person architecture/interiors firm with four international offices, relies heavily on the ProjectNet service from BlueLine/Online (www.bluelineonline.com). The company is currently beta-testing ProjectPoint. Chief Information Officer Lawrence Rocha predicts that PCNs "are paving the way for centralized building-data models. This technology provides a foundation, a single place, where intelligent building data can exist and evolve along with the project. Over the next couple of years every sizable project will require data-centric project sites that allow design teams to collaborate more effectively." ■

For more information on technology for architects, go to our Web site at www.archrecord.com.

BOOKS Reconsidering two often overlooked Modernists whose regional bases kept them out of the national spotlight.

Ralph Rapson: Sixty Years of Modern Design, by Jane King Hession, Rip Rapson, and Bruce N. Wright. Foreword by William Pedersen. Afton, Minn.: Afton Historical Society Press, 1999, 240 pages, \$35.

Ralph Rapson is a Minnesota institution, widely regarded as the state's most influential Modernist architect. But unlike such Minnesota icons as Garrison Keillor and mythical Lake Wobegon or that eccentric artist formerly known as Prince, Rapson hasn't entered America's mainstream. Perhaps that's because he spent 30 years of his professional career in the quiet groves of academia, where he led the University of Minnesota's architecture program from 1954 to 1984. Yet Rapson, who has taught and inspired some of

the state's most successful architects, is more than an academic, as is shown in *Ralph Rapson: Sixty Years of Modern Design*, which chronicles his career.

With each of three authors tackling different chapters, the book is—as with so many monographs—largely uncritical, told essentially through Rapson's interviews with the authors. Yet much of what Rapson says is fascinating reading, a juicy who's who of architecture.

Rapson came of age professionally when many of Modernism's European proponents, fleeing the rising current of Nazism, came ashore in America. Rapson knew many of the

era's big players—Ludwig Mies van der Rohe, Eliel Saarinen, Sibyl Moholy-Nagy—and through his anecdotal recollections, we reacquaint ourselves with these masters, as well as with such figures as Charles Eames, who were just emerging at that time.

Rapson himself was a rising star in the 1940s and early '50s, having designed lines of chairs for Knoll and foreign embassies in Stockholm and Copenhagen. In 1945, at age 31, he was the youngest architect to participate in *Arts and Architecture* magazine's Case Study House program with his design for the Greenbelt House.

Now 85, Rapson holds the dubious distinction of having outlived many of his most famous Minnesota buildings and projects. The 1963 Guthrie Theater in Minneapolis is largely unrecognizable since a recent renovation replaced the idiosyncratic facade with a plain-Jane glass curtain wall. The Philip and Eleanor Pillsbury house, his best-known residential work, was razed a couple of years ago. And only one portion of his ambitious Minneapolis urban-renewal master plan from the late 1960s and early 1970s was completed, namely the cluster of high-rises at Cedar Square West.

The publication of the book coincides with exhibitions of Rapson's career at the Frederick R. Weisman Art Museum and the Minneapolis Institute of Arts. The one real drawback to this handsomely produced volume is that it's printed in black and white. Rapson is particularly revered for his archi-

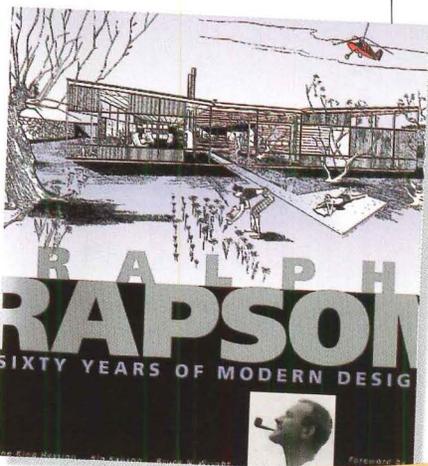
tectural drawings and renderings, especially his beautiful watercolors recording famous sites from around the world. The book misses the full impact of these works. So readers will learn how Rapson first met Moholy-Nagy in a Chicago cafe, but not how he used color on paper.

Eric Kudalis

Albert Frey Houses 1 + 2, by Jennifer Golub. New York: Princeton Architectural Press, 1999, 84 pages, \$35 (cloth), \$18 (paper).

Slide the coral-colored hardcover edition of this book out of its translucent, white plastic case and you enter the hot and cool world of Albert Frey. The Swiss-born Frey, who worked for Le Corbusier before coming to the U.S. in 1930 and settling in Palm Springs, Calif., brought Modernism to the desert and made it seem perfectly natural. The two houses shown here, both designed by the architect for himself on shoestring budgets, reach out to the rugged landscape with overhanging roofs and elegant pool terraces. At the same time, they bring in the outdoors by way of large panes of glass and—in the case of Frey House 2 built in 1964—the presence of a large boulder in the major interior space.

In addition to photographs by Julius Shulman and Charles Wittenmeier, the book has shots Frey took of America's natural and industrial landscape and images from eight-millimeter films he made of the houses. There's also an interview that the author conducted with Frey in 1995, three years before he died at the age of 95. *Clifford Pearson*



FREY

Eric Kudalis is the editor of Architecture Minnesota and the book 100 Places Plus 1: An Unofficial Architectural Survey of Favorite Minnesota Sites.

Hip Hotels: City, by Herbert Ypma. New York: Thames and Hudson, 1999, 256 pages, \$30 (paper).

From Amsterdam to Zurich, Antwerp to Vienna, *Hip Hotels* lets style-conscious jet-setters in on a slew of chic places throughout the world to hang their hats. Targeted at travelers with a sense of design more than at architects (no plans are shown, for instance), the book covers 44 of the hottest hotels in 21 of the world's most cosmopolitan cities.

Herbert Ypma, founder of *Interior Architecture* magazine, had the choice gig of traveling to each destination and bringing back more than 600 photographs, most of which he took himself. The photos show detailed views of each locale and try to reveal the individuality of the various hotels. "Whether it be high design or high art, cool kitsch or Zen minimalism, chic loft living or lavish historical revivalism," states Ypma, "they are all completely individual, all quite unlike any other hotel in any other city." The short texts provide fascinating historical contexts and trivia (who knew that Dresden under the GDR was known as the "land of the clueless" because its hilly topography wouldn't let it receive West German TV?). The author also offers detailed information on what you can expect from each hotel in terms of gastronomy, atmosphere, architecture, and even cost.

Despite the frequent regional stereotypes that flaw its text, *Hip Hotels* impresses the reader with the distinct flavor of what a wealthy and stylish traveler's life on the road might be like. *Ingrid Whitehead*

Design Hotels, by Arian Mostaedi. Barcelona: Links International, 1999, 240 pages, \$85.

Unlike *Hip Hotels*, this book is for architects. Part of the Spanish publishing house Links International's *Architectural Design* series, *Design*

Hotels has a large, beautiful format, complete with architectural plans, color photographs, and Spanish translations of all text. The 23 hotels are the work of celebrated architects and designers such as Tadao Ando, Toyo Ito, Paul Andreu, Eduardo Souto de Moura, Michael Graves, and Geoffrey Bawa.

According to Soledad Lorenzo's introduction, the distinction between "design hotels" and the big, glamorous hotels built at the end of the last century (the Ritz in Paris and London, the Plaza in New York) is more than just a new definition of luxury. Lorenzo claims that those grandiose buildings are a result of "the plethoric growth of the bourgeoisie," while the design hotels that emerged in the 1980s respond to "the sensitivity of an elitist and demanding traveler who hopes to find at his destination a special and stimulating accommodation which, despite the fleeting contact, will impregnate his memory as one of the happiest and most outstanding experiences of his journey." (Whew!) That's a tall order to fill, but the 23 choices in *Design Hotels* (of which only one is in the United States) are prime examples of unique and inspired hotel design. *Ingrid Whitehead*

The Favored Circle: The Social Foundations of Architectural Distinction, by Garry Stevens. Cambridge, Mass: The MIT Press, 1999, 253 pages, \$35 (paper).

In Garry Stevens' view, the architectural profession is divided into two groups: the majority, who build and provide services to clients, and a small minority, the so-called "creative geniuses" or big names who have designed the most "significant" works and seem to get all the attention. But these elite few, suggests Stevens, owe their success not necessarily to genius, but to a variety of factors that have little to do with talent, such as master-pupil relationships and other collegiate connections. Further, the

breach between this group and the rest of the field causes discord throughout all levels of the profession.

Propelled by his own experience as a student and architecture school teacher, he uses what he calls "sociological scalpels" to dissect the profession, its history, and its schools. In the process, he adopts the methodology of sociology—including an array of graphs and charts—to support his position. He is not as objective, however, as those methods would imply.

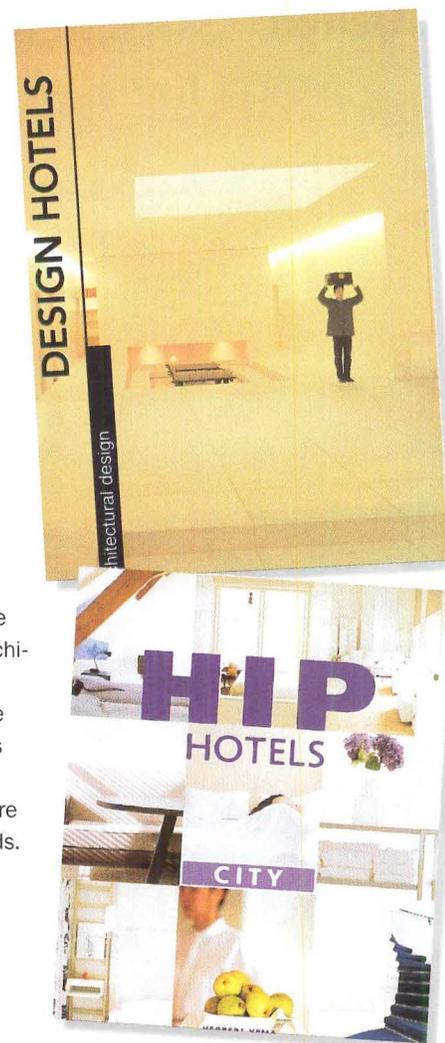
While Stevens stops short of calling for affirmative action for underprivileged architects, he does shed light on some very real problems, like why so few female graduates stay in practice and why the most successful architects are from upper-class backgrounds. The book successfully analyzes the profession and brings to light many of its problems, but apart from proposing that the favored circle just go away, it offers few practical solutions.

Christine Sheridan

American Classics View-Master Reels, by View*Productions, 1999, \$34 (View-Master with three reels).

The View-Master debuted at the 1939 World's Fair in New York. The ever-popular child's toy is now making a comeback—with a whole new application. In an eclectic series called "Architectural Classics," the new View-Master from View*Productions presents the work of famous architects in a refreshingly user-friendly format.

The company's first packet in the series, *Bruce Goff: 3 Houses*, showcases the distinctive designs of the Oklahoma architect who lived from 1904 to 1982; the second, *Fallingwater: Wright and the Third Dimension*, documents one of the



world's best-known houses.

Each packet contains three reels (seven views on each) featuring 3-D images of exteriors, interiors, and details. Wright himself was fascinated by stereoscopic photography, and in the notes accompanying the Fallingwater reels, he is quoted as saying, "the only photograph that can be made of architecture is three-dimensional."

Wright, it seems, had a point. The images on these reels offer realistic views that are, in some ways, superior to traditional architectural photography, which tends to flatten volumes and distort distances. The View-Master's new incarnation is less a plaything and more an instrument for exploring architectural spaces. Future sets of reels in the series will be available separately. *Christine Sheridan*

EXHIBITIONS In Montreal, a Scarpa show offers treasures from the great Venetian architect's drawing archives.

BY SUSAN DOUBILET

“Carlo Scarpa Architect: Intervening with History” is on view at the Canadian Centre for Architecture in Montreal until October 31. It may be remounted at the Museo di Castelvecchio at a later date.

“Carlo Scarpa in Murano: Art Glass by an Architect (1926-1947)” is at the Montreal Museum of Decorative Arts until October 3.

Carlo Scarpa Architect: Intervening with History is the exhibition's 256-page catalog, published by the CCA and The Monacelli Press. The paperback publication costs \$45 and includes 206 illustrations, 149 of them in color. It has an introduction by Nicholas Olsberg and essays by George Ranalli, Guido Guidi, Sergio Polano, Alba Di Lieto, and Mildred Friedman.

Rarely seen drawings by the Venetian architect Carlo Scarpa form the centerpiece of an intelligent exhibition on view at Montreal's Canadian Centre for Architecture (CCA) until October 31. “Carlo Scarpa Architect: Intervening with History” features 150 key drawings, illuminating the process by which the enigmatic modern master created his highly personal and moving works.

Selected by Nicholas Olsberg, a CCA curator, and Mildred Friedman, a guest curator, from among 16,000 drawings in the Scarpa family archives, the documents include sketches, orthogonal drawings, and layered combinations of both. The images shed light on the ways Scarpa orchestrated movement through his buildings, developed eloquent construction details, and communicated graphically with the artisans who were integral to his design process.

Photos and models, too

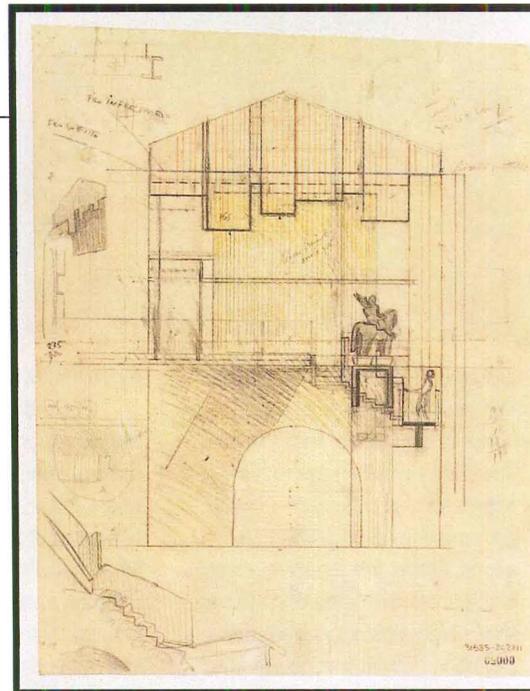
The exhibition also explores Scarpa's designs through specially commissioned photographs by Guido Guidi, as well as wood models built under the direction of architect George Ranalli, who conceived the

exhibition's elegant installation.

Scarpa, who designed his major works between the 1950s and his death in 1978 at age 72, has remained a somewhat obscure figure in the history of architecture, a condition the exhibition helps redress. The show examines his bold but enlightened approach to preservation and urban interventions and his commitment to craft. Scarpa's interest in materiality and his resistance to a machine-dominated, functionalist aesthetic has been likened to Frank Lloyd Wright's and Louis Kahn's.

The exhibition includes eight works designed between 1953 and 1978, investigating most extensively his two climactic masterworks, the Museo di Castelvecchio in Verona and the Brion Family Tomb near Treviso. The former, the reworking of a building comprising 14th-century and Napoleonic accretions and 1920s renovations, exemplifies the

architect's inspired use of demolition and creative addition, his theatricality, and his concept of restless, compelling spaces. The latter represents Scarpa at his most poetic, with inspirational



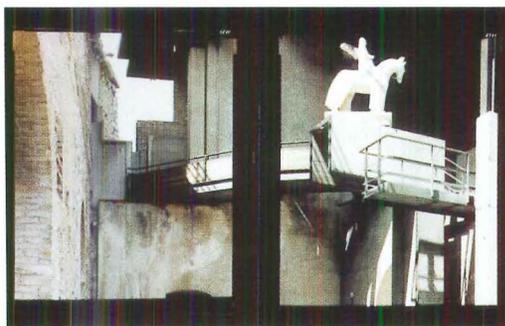
A section (above) and photograph (below) of the Museo di Castelvecchio in Verona reveal how Scarpa inserted modern elements in the fabric of this 14th-century Italian building.

pieces set in exquisite harmony with the landscape.

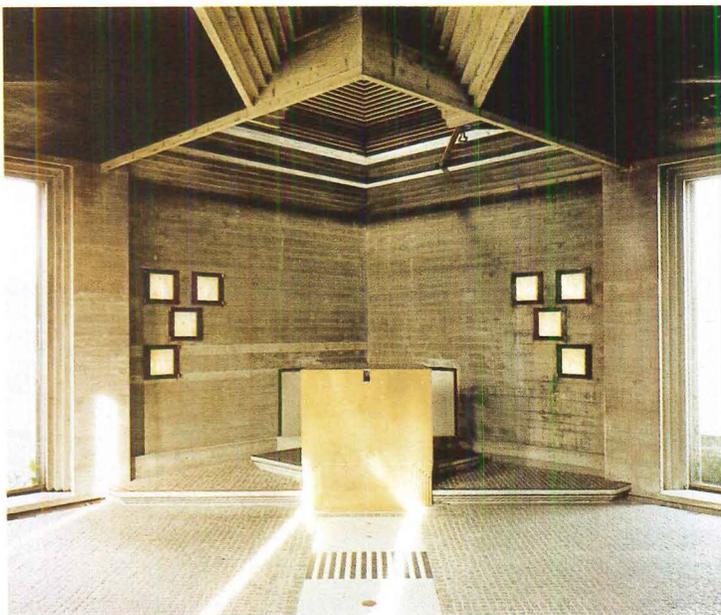
Enriching the show are controversial buildings, such as the Banco Popolare in Verona, completed posthumously, with strange, reflective-glass window elements on its modernist street facade. Buildings that are idiosyncratic, even within Scarpa's own unusual body of work, also add flavor. Take, for example, the all-white, almost classical Antonio Canova Museum in Possagno and the freestanding Veritti house, which betrays Wright's influence most clearly.

Appreciating craftsmanship

Scarpa, who was not a licensed architect, worked for years as a



Susan Doubilet is coauthor of American House Now (Universe/Rizzoli), Private Architecture (Monacelli), and the upcoming European House Now (Universe/Rizzoli).



The chapel of the Brion Family Tomb in San Vito d'Altivole (left) is one of Scarpa's most poetic works. The family tomb, which was built between 1969 and 1978—the year Scarpa died—combines concrete, glass, and

light to masterful effect. A model in the CCA exhibition by George Ranalli (below) shows Scarpa's reworking of the Palazzo Querini Stampalia in Venice and his elegant bridge leading to the project.



glassmaker and then as an exhibition designer before devoting himself to buildings. These earlier disciplines provide keys to his approach to architecture. From glassmaking he developed an appreciation for the power inherent in the subtle minutiae of craftsmanship. (Examples of his glass designs can be viewed at a concurrent exhibition at Montreal's Museum of Decorative Arts). Designing exhibitions, he refined his almost uncanny ability to create intriguing, unfurling interior sequences.

Scarpa's tendency to envision spaces as a series of episodes is revealed by drawings showing progressive views that look almost like storyboards for films. This cinematic approach to design, which will surely strike a chord with architects today who eschew the more intellectual, classical disposition of space, also influenced the exhibition's layout. As viewers enter each gallery, they are first drawn to an important photograph standing on an asymmetrically placed easel (a copy of those designed for the Castelvecchio), then to freestanding cabinets containing more photographs or a model on a stand, and finally to the framed drawings on the wall. Within the classical CCA galleries, then, the installation designers recreated, in reduced form, an experience of asymmetrical

movement a la Scarpa.

Beyond the layout, however, the exhibition design does not evoke the experience of Scarpa's architecture—unlike, for example, the CCA's exhibition of the works of Peter Eisenman, FAIA, in 1994, which featured an aggressive installation that echoed the personality of the architect by requiring visitors to crouch and peer from awkward angles to see parts of models concealed behind walls [June 1994, page 25].

Toning down contrasts

The installation's low-key elegance is characterized by a monotony in the lighting, color palette, and scale of elements—a setting totally lacking the contrasts and drama for which Scarpa's later architecture is known. "We considered more vigorous display alternatives," says Ranalli, "but rejected them in favor

of a more restrained approach."

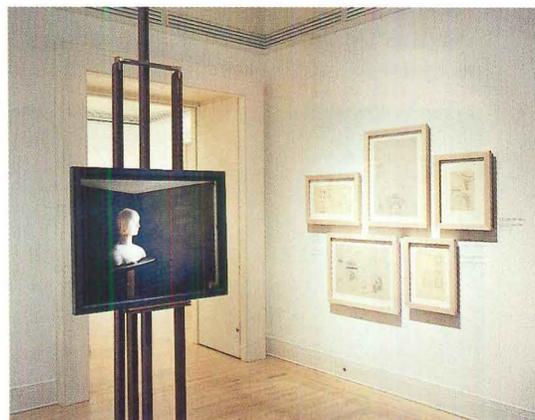
Guidi's photographs of Scarpa's work thoughtfully study the changing nature, over time, of parts of the structures. One wishes, however, that these were more comprehensive, so that the uninitiated could gain a sense not only of the aura but of the totality of the buildings. Furthermore, as exquisite as a number of the images are (such as the view of the bust in the Palazzo Abatellis' Sala Laurana), as a group they convey melancholy. Only occasionally, as with the diptych photos of the Cangrande Statue at the Castelvecchio, do they impart the animation of Scarpa buildings.

To acquire as complete a pic-

ture of Scarpa's work as possible, viewers are advised to benefit from all the CCA offerings: bibliographic material placing Scarpa within his time as a rare poet in a predominantly Rationalist architectural environment; a film by British filmmaker Murray Grigor; and a fine exhibition catalog further analyzing the work—though, here again, one wishes for some more documentary photos.

As in traditional scholarly exhibitions, viewers are offered primary and ancillary materials in a relatively sedate context and are then left to construct their own understanding of work by a master who was anything but sedate. ■

Each gallery in the CCA exhibition has a photograph placed on an easel, which is a copy of those in the Castelvecchio (right). Carlo Scarpa stands next to a sculpture of Santa Cecilia on the ground floor of the gallery wing of the Castelvecchio in 1965 (far right).



CORRESPONDENT'S FILE *A new generation of architects in South Africa struggles to install design ideals of equality and local identity.*

BY DAVID SIMON MORTON

David Simon Morton, a former editor at RECORD, is a traveling freelance writer.

Despite its visible array of tall buildings and exclusive shopping malls, South Africa remains a poor country. Most people live in the townships and rural areas—places lacking in almost every amenity—where they were forced to move because of apartheid. Though the old system has been abolished, unemployment is still high, and the resources to effect change are limited.

Unfortunately, most architecture in South Africa ignores these realities. Architects have often imitated the latest European or American fads, no matter the expense, the skill of available labor, or context.

A new paradigm

Some architects in postapartheid South Africa do think architecture should more faithfully abide by the country's new aspirations of equality and local identity. This means making the most of what already exists, by rehabilitating buildings and using locally produced materials. These architects ask contractors to provide on-the-job training for the local unemployed, so they'll have marketable work experience when the job is done.

Because of apartheid's practice of exclusion, many postapartheid architects think buildings should look and feel accessible, especially those with public uses. Above all, the local experience should be respected and, when appropriate, incorporated into design. This doesn't represent a new vernacular or a unique style, just a different way of thinking.

Right now, these ideas are driving many small-scale development



The design for the Constitutional Court uses traditional timber awnings to shade exterior spaces.

projects for poor communities, like schools and clinics. They have yet to touch the commercial mainstream of practice, however, and even the postapartheid government, which might be expected to endorse the new architectural perspective, hasn't proved itself that sincere in its support.

Potent symbols

Nevertheless, two recent design competitions for highly symbolic public buildings, the new Constitutional Court and the Apartheid Museum, virtually demanded a more sensitive approach.

The 1994 constitution instituted the Constitutional Court as the ultimate interpreter of the constitution and protector of the new bill of rights. The brief for the design of a building for the court requested, naturally, that it should be a central symbol of a free, democratic South Africa. To underscore the banishment of former

inequities, a historic site was chosen: the Old Fort prison complex in midtown Johannesburg, which for a century confined political prisoners of all persuasions, from white socialist mine workers to Mohandas Gandhi to Nelson Mandela.

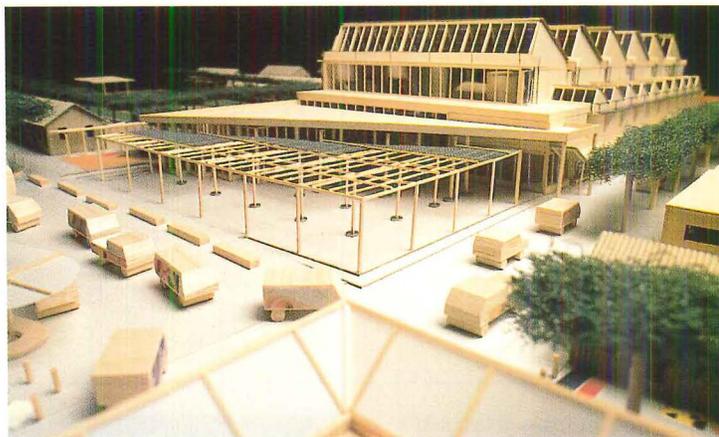
A novel concept

OMM Design Workshop, based in the east-coast city of Durban, and Johannesburg's Urban Solutions won the competition with a design that shed the monumental pretensions normally associated with important government buildings. Design Workshop principal Andrew Makin says he wants to create a government building "that is about people and democracy, and not just about power."

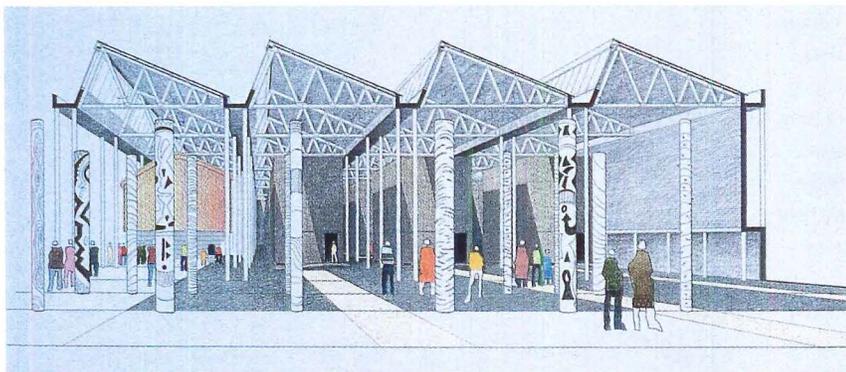
The architects broke the building down into small, functional components: courtroom, administrative offices, judges' chambers, and library. This kept the structure at a human scale and had the more

practical purpose of allowing emerging contractors to hone their skills by handling different portions of the project. While it is obvious from the outside that the circular part of the building is the courtroom, the building as a whole doesn't dominate the site with one well-defined form.

Nor does it wall itself off. The perimeter is penetrable, although not quite to the extent that a visitor could just walk in anywhere. Recalling an African building tradition of creating outside rooms, timber



The Apartheid Museum (above), with its memory boxes (left), will be built next to a collection of run-down, corrugated-iron shacks (bottom), a constant reminder of apartheid's legacy of poverty.



awnings shade the spaces near the building's edge. A similar shading system is used on the interior to further dissolve the boundary between inside and out. For the same reason, most of the facades filter daylight through steel slats, which, at night, emit electric light, making the building a beacon for the surrounding area. A new street grid will overlay Constitution Hill, as the site is called, connecting it to adjoining neighborhoods, and for the first time, the city will claim the area as a setting for normalized urban life. Public spaces and sidewalks will accommodate informal markets.

Only one of the prison buildings will be destroyed to make room for the court, while another will probably become the Nelson Mandela museum and bring tourists to the district. Others will be refitted to house associate agencies of the court, such as the Human Rights Commission. Some of the existing facilities will be preserved as objects of memory: across from the court, a prison wall will be stripped and covered with glass to permanently reveal the now empty cells.



Remembering injustice

Noero Wolff Architects' design for the Apartheid Museum, to be built in the Red Location neighborhood of Port Elizabeth, also rejects conventional building types. The Red Location is an industrial area, with factories on one side of the railroad tracks and corrugated-iron shacks housing workers on the other side, where the museum will be. Like most South Africans, the people who live here never patronized museums during apartheid because they weren't allowed to enter.

In contrast, a factory represents a more public place in most people's experience than a museum, says architect Heinrich Wolff. People met freely there, he

explains, and the unions, one of the greatest forces against apartheid, held sway. It made sense, then, for the architects to adopt an industrial language for the building.

It had been surmised that some people in the community would prefer a different type of aesthetic to interrupt the industrial monotony. To address these concerns, the museum displays—which the architects are designing themselves—will allow much greater freedom of interpretation. Beneath the sawtooth roof, in a great open space, will sit 12 "memory boxes," each about 18 feet long and 30 feet high. A collection of a variety of artifacts from the apartheid experience will fill each one. Visitors will choose their own paths through the boxes and develop their own narratives.

Much like the new courthouse, the museum is meant to be an economic engine. Visitors will walk past updated versions of traditional market stalls and a crafts center before entering the museum. A conference center is also planned. Construction materials—concrete, brick, and corrugated iron—will be inexpensive.

Meanwhile, grassroots work in the townships and former homelands proceeds much as it did before 1994. C.S. Studio Architects, perhaps South Africa's most vocal proponents of including the community in every stage of the design process, has completed a meat market in the Cape Town township of Guguletu that provides formal cleaning and cooking facilities for 100 traders.

Principal architect Carin Smuts says the traders wanted their tables placed in a central open space with supporting facilities surrounding them—a design with which they and their customers are familiar, but which ran contrary to Smuts' Western training. She convinced the traders that a wavy, unconventional roof—though slightly more expensive—would be preferable and make the market stand out more in the community.

Local designers will be able to think bigger as the nation's resources become increasingly devoted to development—and inevitably, their influence will grow. Architect Muhammad Mayet, who has designed community buildings for impoverished communities throughout southern Africa, has come up with a plan to reconnect the northern and southern halves of Johannesburg, currently divided by railroad tracks.

In the same vein, architect Peter Rich designed a multipurpose, one-stop facility that will attract tourists to a small northwestern rural village. He says that the complex, which includes a gas station and restrooms, craft shops, a community hall, and campgrounds, represents a new typology that can be repeated by other poor villages.

This kind of economic opportunity wasn't possible before 1994—there weren't many tourists then. But the country is changing, and many architects see a chance to make a positive impact. Says Cape Town architect Smuts, "You couldn't have a better opportunity to build a better South Africa than by being an architect." ■

LOOKING TO REDEFINE ITS DESIGNS, GSA HIRES MORPHOSIS FOR TWO PROJECTS

After a generation of building lackluster projects, the U.S. General Services Administration (GSA) is attempting to redefine ideas of public architecture through its Design Excellence Program. The program, launched in 1993, is dedicated to commissioning the top American architectural talent to design new federal projects. To this end, the GSA has hired Los Angeles bad boy Thom Mayne, AIA, and his firm,

Morphosis, to collaborate with local firms on two important new projects: a federal office building in San Francisco (in collaboration with SMP/SHG) and a federal courts building in Eugene, Ore. (in collaboration with the DLR Group).

The approximately 650,000-square-foot San Francisco project will be on a key site in a dilapidated area south of Market Street. The \$120 million to \$140 million project

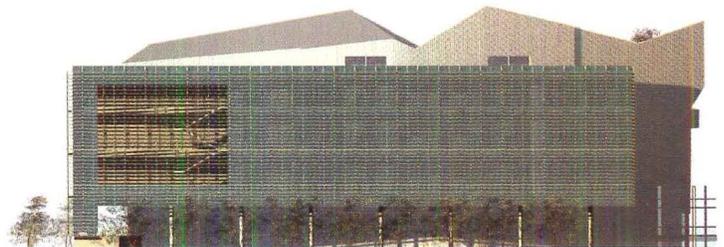
is due to open in 2001 or 2002. While no physical proposal exists yet, Mayne sees the project as an opportunity to question the office building as a type.

"There are any number of possibilities here for transforming the social and cultural aspect of the generic workplace," he says. "Really, most office buildings are dead places." In addition, Mayne is looking forward to addressing the potentially conflicting issues of street frontage, federal security, and public accessibility that the downtown site poses.

The courthouse in Eugene raises other, perhaps more complex

challenges. The 264,000-square-foot, \$73 million project offers myriad possibilities for using architecture symbolically. While the site has not yet been secured, Morphosis and DLR have presented a design vision (two perspectives, below) that strives to use architectural form and space to symbolically represent the significance of a courthouse in American culture.

The team's aspirations for these projects, which will be infused with Morphosis' provocative thinking, extend beyond what the public typically expects of federal buildings, precisely the point of the Design Excellence Program. *Lisa Findley*



GEORGE LUCAS WINS A WIDE-RANGING COMPETITION TO BUILD IN SAN FRANCISCO'S PRESIDIO NATIONAL PARK

After an uncertain rebirth as a national park, San Francisco's Presidio is the scene of a series of initiatives that may offer a peek into the park system's free-market future.

In May, the Presidio Trust, the park's governing agency, selected a team headed by George Lucas as the winner of a competition to develop one of its choice parcels, the 23-acre site previously occupied by the Letterman Medical Center. The new Letterman Digital Center (below), a 900,000-square-foot campus for Lucas' Industrial Light & Magic and LucasArts enterprises designed by Gensler San Francisco,

will feature a 7-acre "great lawn" and a 1,500-car underground garage. Lucas officials describe it as a "creative think tank." About 15 acres of the campus will be open to the public.

The Lucas proposal prevailed over other developer-architect teams including Skidmore, Owings & Merrill, Robert A.M. Stern, EDAW, and Calthorpe Associates, among others. While proposals ran the gamut from housing to a conference center to an Internet company headquarters, each called for demolishing the abandoned Vietnam War-era medical center.

After fierce political jockeying, the Lucas name and \$250 million offer held sway. Though details are not confirmed, groundbreaking is projected for next year.

The 1,480-acre Presidio, one of the first U.S. military outposts on the West Coast, was decommissioned in 1994. In a deal intended to stave off Republican efforts to auction the land, Congress decreed that the Presidio Trust must be able to cover its projected \$36 million operating budget by 2013 or face having its land sold.

After nearly a decade of planning, the Presidio Trust is now leasing the nearly 3 million square feet it needs to meet that goal. It hired Simon Martin-Vegue Winkelstein and Moris to undertake the implementation planning and is completing a plan by landscape architect George Hargreaves and Associates to restore Chrissy Field, a historic Army airfield.

Eric C.Y. Fang

PRESIDENTIAL POLSHEK

One of the year's plum commissions—the Clinton Presidential Library—has gone to the Polshek Partnership of New York City. The Clintons have been linked to names such as Frank Gehry, FAIA, and Charles Gwathmey, FAIA, but in the end Polshek was selected after meeting with the president at the White House earlier this year. The Clintons have not yet commented on their choice.

The \$125 million library will be built in Clinton Presidential Park, planned on the banks of the Arkansas River in Little Rock. While no designs have been developed, it is known that a 100-year-old railroad depot will be incorporated in some way.

Polshek will collaborate with Ralph Appelbaum Associates; the same team designed the dramatic new Rose Center planetarium in New York City. *Soren Larson*





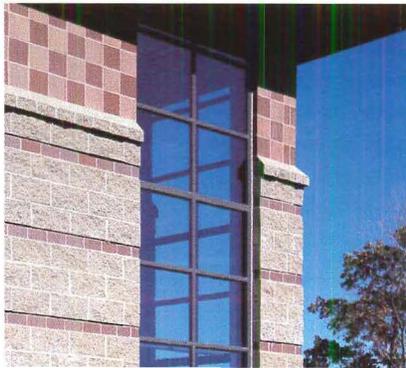
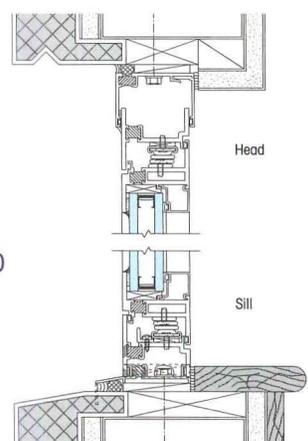
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SEATTLE CITY HALL AWARDED

Bohlin Cywinski Jackson Architects has won a competition to design the new \$66 million Seattle City Hall, part of a \$224 million civic campus the city is constructing. The 200,000-square-foot city hall will share its steep site with a new public plaza—the centerpiece of a master plan by Seattle firms Hewitt Architects and Weinstein Copeland Architects to revitalize and replace outmoded and unsafe municipal buildings.

Mayor Paul Schell, HON.

AIA, a selection committee member who describes his current offices as a “recycled Holiday Inn,” challenged the designers to “balance the competing needs of consensus and inspiration.”

Surprisingly, only eight firms responded to an initial nationwide search. Concerned that architects may have had to choose between pursuing Seattle’s new central library or the city hall, the deadline was extended until after the shortlist for the library was announced (the Office for Metropolitan Architecture of Rotterdam won the library commission in June, beating out Steven Holl Architects). The field expanded to 19, and the city decided to interview 3: Bohlin, with offices in Pennsylvania and Seattle; Antoine Predock Architect of Albuquerque; and Patkau Architects of Vancouver.

Peter Bohlin, FAIA, best known for his collaboration with Jim Cutler, FAIA, on Bill Gates’ mansion, will work in a joint venture with Basetti Architects of Seattle. To be completed in 2002, the project will house the mayor’s offices, city council chambers, and customer-service spaces, as well as a child-care center and facilities for bicycle commuters. *Sheri Olson, AIA*

STATEN ISLAND, NEW YORK CITY’S FIFTH BOROUGH, HOSTS A SERIES OF REVITALIZING PROJECTS

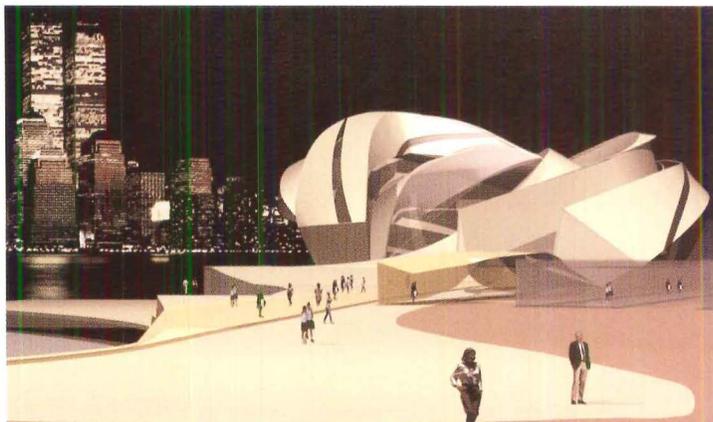
Staten Island, often derided as the forgotten borough of New York City, has been getting a lot of design attention of late.

The locus is the Staten Island Ferry, which attracts almost 1 million tourists per year (and 8 million commuters). The intermodal St. George Station is being redesigned, and several large-scale civic projects are in the works directly adjacent. Mayor Giuliani, Staten Island Borough President Guy Molinari, the NYC Economic Development Corporation, and the Department of Transportation envision the \$81 million renovation of St. George as the first step in revitalizing the waterfront. Hellmuth, Obata + Kassabaum (HOK), the project’s planners and architects, have completed a complex project-definition phase. Completion is projected for 2002.

Ken Drucker, design director at HOK’s New York office, says the building will be “light and airy, improving the experience of waiting and riding the ferry, while simultaneously creating a new gateway for Staten Island and its residents.” Sandwiching the new station between other new attractions will create what Drucker refers to as “a necklace of cultural institutions along the waterfront.”

A baseball stadium for a Yankees’ minor-league team is planned just northwest of the terminal. Designed by HOK Sports Facilities Group, the ballpark is due to be completed in 2001 and will give fans a clear view of Manhattan’s dramatic skyline. Norman Friedman, an associate at HOK Sports, says the goal “is to connect the city to the site, through a public sidewalk, arcade, and esplanade along the water.”

South of the ferry terminal, the



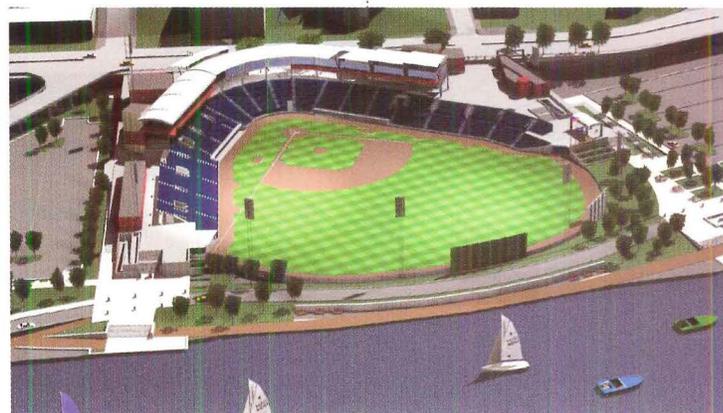
Peter Eisenman’s proposal for the National Lighthouse Center and Museum.

National Lighthouse Center and Museum will be installed on a site that housed the main U.S. Lighthouse Service operations for over 100 years. The museum will inhabit seven historic structures that are undergoing rehabilitation by Jan Hird Pkorny. Henry Stephenson, the museum’s project director, says the buildings “will become artifacts; they become the

exhibits themselves.”

What might prove the most talked-about attraction is Peter Eisenman, FAIA’s Staten Island Institute of Arts and Sciences. The architect originally conceived a master plan for the ferry terminal with a museum on top of it, but is now designing the museum on a new site. Sitting between St. George Station and the stadium, the strikingly contemporary 150,000-square-foot project would devote at least 60,000 square feet to science and technology exhibits, though details aren’t settled. If funding is in place, the museum could break ground this winter.

Susanna Sirefman



HOK’s designs for a revamped St. George ferry terminal (top) and a new minor-league baseball stadium on the waterfront.



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MODERN HUNGARY: THE COPS MOVE OUT AND A CHAIN HOTEL MOVES IN

Once redesign and reconstruction is completed, a venerable building in the heart of Budapest will be a much more hospitable place to visit than it was under its former occupants. It certainly will be easier to check out of.

The 81-year-old structure served as the headquarters of the Budapest Police Department for 49 years before being vacated in late 1997. It will reemerge next spring as the \$45 million, 220-room, luxury five-star Hotel Le Meridien Budapest. The French hospitality chain Meridien has some 120 hotels worldwide, but this will be its first in Central Europe.

The renovation has not been without problems, says architect Tibor Kolbe, managing director of Mérték Építészeti Studio, the Budapest firm that did the design work and is overseeing the reconstruction. Despite extensive bomb damage during World War II and two previous major renovations, "it seemed to be in good shape," he

says. "But the beams had become very thin and the building had to be reinforced." And, because it is a historic building, the Monument Protection Authority requires that its original premodern exterior remain unchanged.

Completed in 1918 as the headquarters for the Adria Insurance Co., the structure was one of the first steel-reinforced buildings erected in Budapest. In addition to the insurance company's offices, it housed several floors of large luxury flats. It was turned over to the police by the then Soviet-controlled regime in 1948.

When construction is finished, the hotel will provide deep-pocketed tourists and business travelers with posh rooms and suites, a swimming pool, and a health club on the fifth floor, as well as an elegant bar/restaurant and a variety of shops on the ground floor. The cells and bomb shelter on the basement level will be replaced by banquet and meeting rooms. *Carl Kovac*

ROTO TO ENLIVEN HOLLYWOOD WITH A MODERN RETAIL CENTER

Hollywood Boulevard is known for Mann's Chinese Theater, celebrity handprints in the concrete, and tourist outlets—not for contemporary architecture. But that will change soon when a parking lot at the Orange Street intersection is transformed into HollywoodOrange, a 30,000-square-foot retail center with a modern glass-oriented design by RoTo Architects, in association with John Ash Group.

The building—which will create a striking juxtaposition with next-door neighbor Mann's—will have nearly 8,000 square feet of public

space on the ground level as well as a 10,000-square-foot partially enclosed roof terrace for public use and special events. Groundbreaking is scheduled for early January with construction due to be completed about a year later.

HollywoodOrange is the latest effort to elevate the gone-to-seed Hollywood area. The subway has been extended; the American Cinematheque, a nonprofit film forum, has opened new headquarters at the historic Egyptian Theater; and a new Academy Awards theater will open in 2001. *Soren Larson*



GEHRY GETS GO-AHEAD AT BARD, MAKES A TRIP TO PANAMA

Bard College in Annandale-on-Hudson, N.Y., finally broke ground last month on its new Frank Gehry-designed performing arts center, after moving the site to appease concerned locals. The small, liberal arts school wanted to build a dramatic home for its music, drama, and dance programs and hired Gehry to recreate the magic he worked with the Bilbao Guggenheim. The architect produced a design for the \$24 million center that featured his trademark silvery, swooping forms—but area residents claimed it didn't fit into the surroundings and would block pastoral views. Eventually, the university found an acceptable spot on the north end of campus, and will likely open its new structure in late 2001.

Meanwhile, on a much larger scale, Gehry has been leading a team of architects, engineers, and environmentalists to develop a master plan for sites at either end of the Panama Canal. Under the direction of Panama's president, Ernesto Perez Balladares (this year, the canal zone is reverting from international control to Panamanian control), Gehry is charged with preserving and revitalizing both architecture and the surrounding landscape. The master plan will include Fort Sherman and over 20,000 acres of virgin rain forest at the Caribbean mouth of the canal.

While it may seem an exotic locale, for Gehry the culture is not unknown—his wife, Berta, is Panamanian. *S.L.*



THE HOME OF THE ORGASMATRON GETS SOME MUCH NEEDED CARE

High atop Genesee Mountain, 25 miles west of Denver, architect Charles Deaton constructed what he called a "sculptured house" in 1965 made of steel and hand-troweled concrete and resembling a white clamshell delicately perched on a pedestal. Featured in Woody Allen's 1973 sci-fi/comedy *Sleeper*, the 2,500-square-foot house is one of Colorado's most recognizable buildings. But it was never completed or occupied, and since last year, when vandals broke a number of windows, causing an estimated \$50,000 in damages, its future has been uncertain.

Recently, however, Denver businessman John Huggins bought the house for \$1.325 million, and he's restoring it to its full futuristic glory. Huggins hired Denver architect Nicholas Antonopoulos, of Praxis Design, to complete the interior and oversee construction of a 5,000-square-foot addition based on Deaton's original design. Huggins also intends to renovate a small inoperative elevator reputed to be the inspiration for the movie's "orgasmatron," a sort of virtual sex machine.

Deaton, a self-taught commercial architect and industrial designer whose largest project was the two-stadium Harry S. Truman Sports Complex in Kansas City, Mo., died in 1996 at age 75. In a 1965 article in *Art in America*, "The Sculptured

House," Deaton called his mountain aerie "an act of freedom. I am out of the box, off the streeted grid."

Before Deaton died, Antonopoulos—who is married to one of Deaton's daughters—began working on plans to complete the house. But Deaton ended up selling it to California real estate developer Larry Polhill, who owned the house for eight years before selling it to Huggins. Now Antonopoulos' work can continue.

Stunning views

"It really is a sculpture," says Huggins, who plans to use the house for weekend getaways, parties, and political fund-raisers. "From the balcony, you can see the Continental Divide to the west and Denver International Airport to the east. But my favorite room is the midsection of the pedestal. When you stand in the middle and look out the windows, you have a feeling that you're floating over the mountains."

For the interior, Deaton envisioned curved couches and "beds shaped like overgrown watermelon seeds." Huggins says a prototype bed was actually built for the house, but only a deteriorated piece of plywood remains. "We're definitely going to have to build a lot of furniture specifically for the house. There's hardly a straight line in the place." *David Hill*

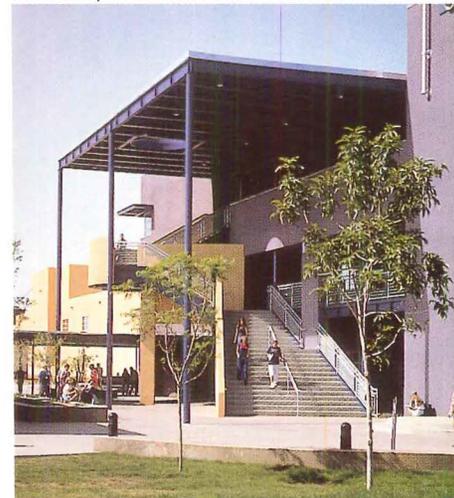
SASAKI CREATES AN ENTIRE CAMPUS FOR A GROWING DESERT COMMUNITY

In 1986, Sasaki Associates created a master plan for Chandler Gilbert Community College, a new institution in Chandler, Ariz. The campus was intended as a landmark for an emerging community—and now the landmark is expanding dramatically, mirroring the growth Chandler itself has experienced.

Sasaki is now instituting phase two: an expansion and master plan update that includes a new library (right) and more classroom and laboratory buildings. As with their predecessors, the designs emphasize solar orientation, easy pedestrian movement, and the integration of outdoor spaces. The master plan treats the site as an enclave, defined at the edges by plantings of cypress trees

and oleander hedges.

The architectural aesthetic—described by Sasaki principal N. Scott Smith, AIA, as "functional



modernism"—is inspired by its desert surroundings. "A lot of work [in the Southwest] isn't cognizant of the desert," he says. "We wanted this to truly be a part of the community." *S.L.*

SAN JOSE BUILDING AN UNUSUAL, MULTIUSE LIBRARY

Gunnar Birkerts Architects and Carrier Johnson are jointly designing a new city and university library in San Jose, Calif., that is being touted as the first large-scale combined academic and municipal library in the U.S. The \$100 million, 465,000-square-foot building will house 3 million books and combine the operations of the San Jose State library and the main branch of the city's public library. Construction begins next year. *S.L.*



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CIRCLE 37 ON INQUIRY CARD

LORD FOSTER FORGES ON WITH A NEW TOWER AND STADIUM



It continues to be a good year for Lord Norman Foster, HON. FAIA, who is poised to have more impact on the look of London than any architect this century. Having won the competitions for the London Assembly headquarters, a bridge across the Thames, and the renovation of the British Museum, he has now unveiled plans for a huge, innovative office building (right) and a world-class sports stadium (above).

Foster insists that the design for the 40-story, 450,000-square-foot headquarters for Swiss Re in the City of London—already dubbed “the gherkin” because of its long,

tapered form—was approached “with no preconceptions except the aim of creating an environmentally responsible building, with a natural economy of form and a detailed understanding of the urban context in which it is placed.”

The rotation of the floor plates means that a void at the edge becomes in section a spiraling atrium, interrupted every six floors with gardens that provide social space and create a healthy microclimate (and act as fire breaks). Pressure differentials around the exterior surface help draw natural ventilation through horizontal slots

in the cladding, reducing greatly the amount of mechanical ventilation needed. The glazing wraps around a diagonally braced structure.

The form allows the 590-foot-high building to appear less bulky than would a rectangle of similar floor area. It also reduces reflection and encourages wind to flow around the face and not deflect to the ground level, which has been carefully designed to function as a public space.

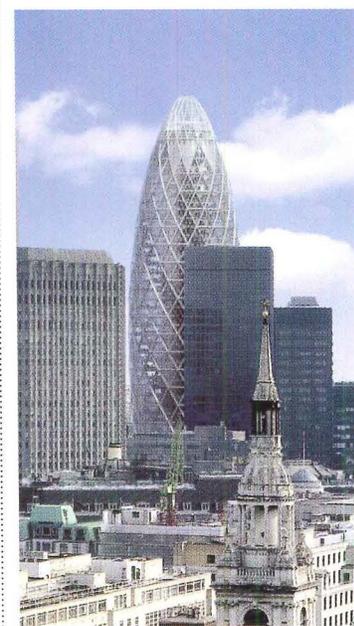
The base contains two levels of retail space in a double-height arcade. At the northeast corner of the site will be another six-story building that will house a cafe and bar, a management office, and the physical plant. Interestingly, the site was the scene of a devastating IRA bomb attack in 1992 and later was the proposed location for Foster’s controversial 1,260-foot-tall “millennium tower,” which would have been the tallest building in London. The plan was eventually abandoned.

Foster and Partners’ second prominent project is the new English National Stadium, which replaces Wembley Stadium, built in the 1920s and long the premier venue for sports in England, but no longer adequate. The proposal for the \$780 million project from Foster

along with HOK+LOBB Sports Architecture was chosen through competitive interview.

Boldly, the design dispenses with the existing stadium’s iconic twin towers, replacing them with four 425-foot masts. The stadium will have 90,000 seats, a retractable roof that will allow sunlight to reach the entire playing area, a 2,000-seat glazed banquet hall, offices, and a luxury hotel. It will be ready by spring 2003 and should be a major component of England’s bid to host the 2006 World Cup.

Steven Spier



CESAR PELLI MAKING ANOTHER MARK IN ORANGE COUNTY

Cesar Pelli, FAIA, is creating schematic designs for a \$200 million expansion of the Orange County Performing Arts Center in Costa Mesa, Calif. He says design decisions will be made public in about five months. So far, plans call for the center to add a 1,800-seat concert hall, a 500-seat music hall, and an outdoor plaza for gatherings and performances.

The acoustics of the concert hall are the utmost priority and will be “comparable to the best two or three concert halls in the world,” claims Pelli, principal of Cesar Pelli & Associates in New Haven, Conn. The acoustician for the new center is Russell Johnson, owner of Artec Consultants in New York City.

Officials at the center say they chose Pelli for his expertise in concert hall design and for his familiarity with this southern



California community. A decade ago, Pelli designed the Plaza Tower, a stainless-steel-clad office building regarded as a local landmark and adjacent to the performing arts center’s site.

A couple of years after opening in 1986, the performing arts center outgrew its 3,000-seat Segerstrom Hall and 300-seat black box theater, designed by Caudill Rowlett Scott. The Segerstrom family, local philanthropists, had donated five acres for the original center and later earmarked six more for the expansion.

Pelli notes that the new center is being built without government funding, unlike all the other performing arts centers he has designed. Funding for both the old and new Orange County buildings is from private donors. The project is expected to be completed in about five years.

Susan R. Bleznick

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CIRCLE 38 ON INQUIRY CARD



CUNINGHAM CROSSES CULTURES TO BUILD A SCHOOL IN FINLAND

A new American-designed elementary school is making a positive impact in Heinavaara, Finland. Designed by Minneapolis-based Cuningham Group, Heinavaara Elementary's interior embodies a new kind of learning environment: there are no double-loaded corridors or closed-in classrooms here. Instead, the design goal was to provide flexible learning spaces of varying sizes. Meanwhile, the traditional red metal roof and wooden exterior reflect the local vernacular.

After hearing Bruce Jilk, AIA, educational facilities specialist for Cuningham, speak in Helsinki about new ways to design schools, impressed Finns from Heinavaara decided to build a school for their children embodying the latest architectural theories.

They also wanted to learn to build an all-wood schoolhouse using American platform-framing construction, which is faster and more economical than the Finns' balloon framing, in which single, vertical timbers are erected for all floors at once. In the American method, one story is constructed

first, then used as a platform for each successive floor.

Following several meetings with the clients, Jilk and project manager Judy Hoskins worked out a design solution. The result is a charming, almost old-fashioned-looking small schoolhouse, with an interior layout that is radically different but still warm and inviting. To admit more daylight, windows reach down almost to floor level. When children enter on cold dark mornings, they will be greeted with the fragrance of homemade pies baking in a traditional Karelian oven installed in the gathering room's fireplace. This space will also accommodate a media center, and music and art areas and will serve the whole community after hours.

The school houses just 160 students and at 26,000 square feet is the smallest ever designed by Cuningham. According to Hoskins, the Finns "shared our goals of working out the best learning environments for their children. This was a rare gem of a commission."

Bette Hammel

STUDENTS STORM MIAMI BEACH FOR EDAW'S SUMMER PROGRAM

Most design firms call their intern programs "hands on." At EDAW, a landscape architecture and urban planning firm, interns take this to the extreme. The summer student program organized by the San Francisco-based company begins with a two-week, real-life project—complete with client meetings, public workshops, site investigations, and intensive, interdisciplinary design sessions. The program culminates in the students' formally presenting their work to the client—after a crash course in public speaking, courtesy of EDAW Chief Executive Officer Joe Brown.

A beach town's issues

Miami Beach City Manager Janet Gavarrete agreed to host this year's program. The city was seeking ideas for the area around Indian Creek, which has long played second fiddle to the community's famous (and mostly private) beaches. Area residents—especially those living along "Condo Canyon" who couldn't find safe and pleasant public places for walking—had convinced city leaders that a valuable resource is being wasted.

With guidance from EDAW professionals from the firm's San Francisco, Orlando, London, Atlanta, and Seattle offices, 15 undergraduate and graduate students from around the world teamed up in Miami Beach in May. During the first week, they studied the site and met with local officials and experts, such

as Randall Atlas, AIA, who helped explore design strategies that can help limit criminal activity, and architect Daniel Williams, FAIA, an expert on sustainable development for communities in the Everglades watershed. Morris Lapidus, the 97-year-old architect whose Fontainebleau Hotel helped set the tone of this tourist mecca, added eminence in the second week.

Student solutions

The students came up with six projects, including the Brittany Bay Ecology Zone, a strategy designed to make room for pedestrians, and the Indian Creek Greenway, a lush strip along the eastern bank of the creek. They emphasized the importance of links between the creek and the beach, a distance of only a few blocks in some areas.

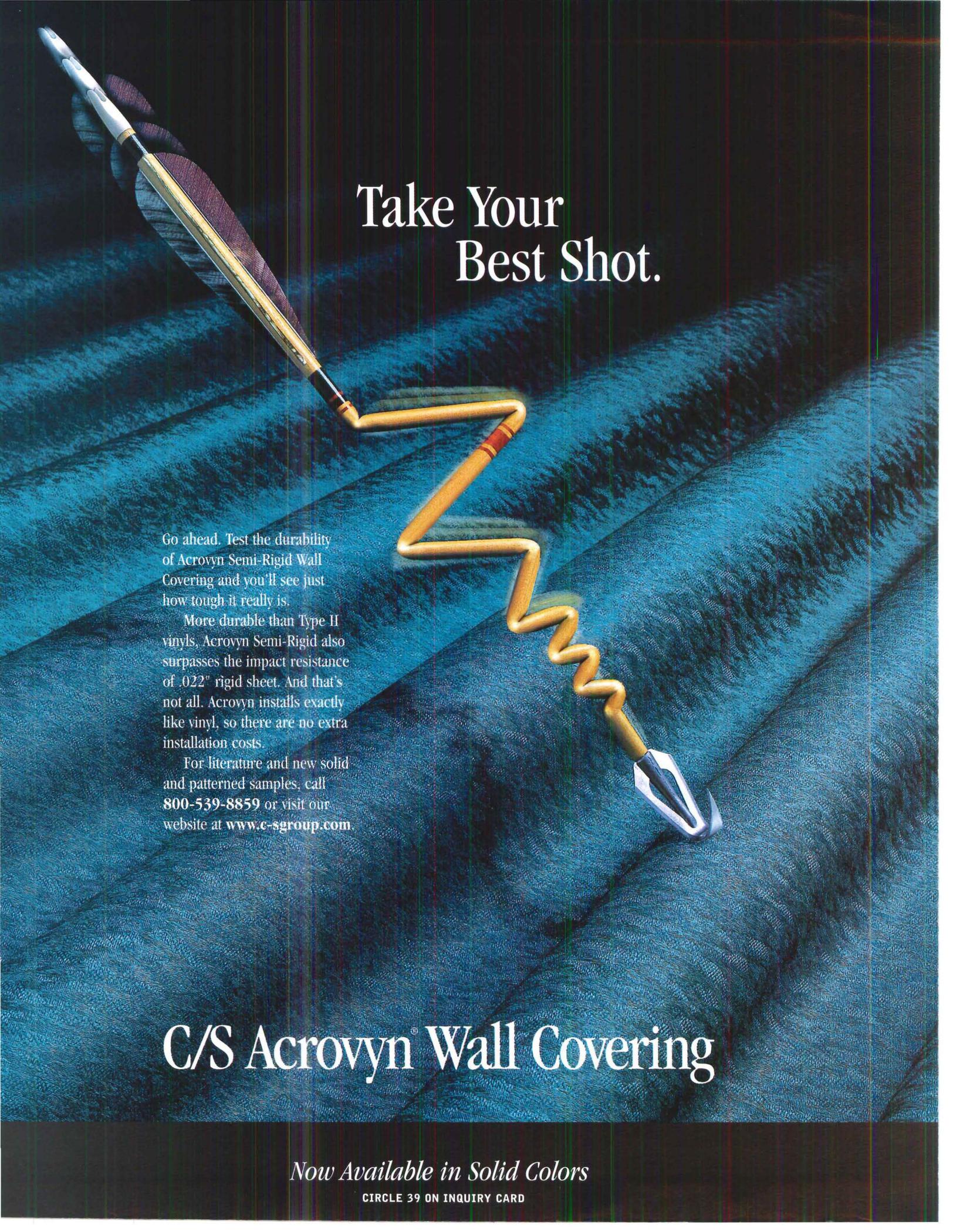
Todd Hill, senior associate and director of EDAW's Orlando office, has been involved with five of the summer student programs since he participated in one as a student in 1985. "We don't do the design. We work with them to clarify their vision," he says, adding that students aren't burdened with the traditional client restraints.

"Because they are not on the clock, pressure to stick to the client's preconception of what's possible isn't there," Hill notes. "Thus, the City of Miami Beach gains a whole range of ideas that might not have been explored in a traditional project setting." *Kira L. Gould*

BMW USES DESIGN TO BOOST CAR SALES

For a new BMW dealership in Greenwich, Conn., Spector Group, headquartered in North Hills, N.Y., has transcended typical car-lot dreariness. Most of the services are below grade, while the upper portion appears to emerge organically from the landscape. A 475-foot-long wall, quarried from local granite, travels the length of the structure, which is divided into sleek spaces enclosed by glass. Marc B. Spector, AIA, says the design "allows architecture, in conjunction with the product, to draw people to the sight." *Soren Larson*





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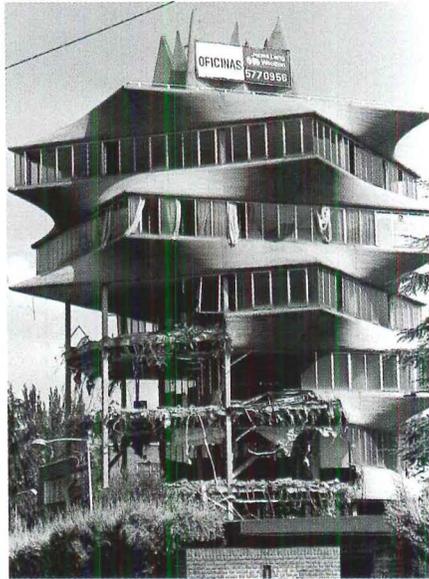
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CIRCLE 39 ON INQUIRY CARD

NEWS BRIEFS

Return to Sydney Danish architect Joern Utzon, who designed the Sydney Opera House but quit before it was completed, has been given a chance to finish the job: Utzon is consulting on the building's new revamping project, which includes an update of its interiors (the concert hall has long been criticized for poor acoustics). Utzon, 82, has never seen the opera house; he quit the project in 1966, seven years before it was finished, after scandals about costs and arguments about design. He will work with Australian architecture firm Denton Corker Marshall, which is overseeing the project.

Piano plays Dallas Renzo Piano has been selected to design the Nasher Sculpture Center, which will encompass an outdoor sculpture garden and indoor gallery on a site adjacent to the Dallas Museum of Art and the Meyerson Symphony Hall. Completion of the project,



Demolition of a Madrilénian icon, Miguel Fisac's 1965 Jorba Laboratory, begins.

which will house the Nasher Foundation collection, is expected in 2001.

A team for Tunisia The U.S. State Department has selected Tai Soo Kim Partners of Hartford to design a

new embassy complex in Tunis. The commission includes a master plan for a 22-acre site and the design of an 80,000-square-foot embassy and two accompanying townhouses. The architects of the \$42 million project will address the government's desire for tighter security after recent bombings of other U.S. embassies in Africa.

On the border In another government commission, the General Services Administration has chosen a team comprising Los Angeles-based Siegel Diamond Architecture and Calgary-based Culham

Pedersen Valentine to design the U.S./Canada Port of Entry at Sweetgrass, Mont., and Coutts, Alberta. The spot will host the busiest border-crossing station between the Pacific Ocean and the

Great Lakes. Construction is estimated at \$20 million and occupancy is expected in 2003.

Locals chosen in Singapore A little-known local practice, Swan & Maclaren Architects, has topped a list of established international architects, including Michael Graves, FAIA, and Moshe Safdie, FAIA, winning the competition to design the National Library of Singapore. Swan & Maclaren won the contract in association with T R Hamzah & Yeang, whose Ken Yeang is a senior partner at Swan & Maclaren.

Madness in Madrid An icon of Spanish modern architecture was demolished in July in Madrid. Miguel Fisac's 1965 Jorba Laboratory, a futuristic-looking pagodalike tower of six floors rotated 45 degrees over one another, stood on a prominent site beside a main highway outside the city. Fisac used innovative techniques—of his own invention—in reinforced concrete to project the

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daring cantilevered corners of each floor. Like many modern landmarks, the structure was not on Madrid's list of protected buildings, and it did not meet fire-safety standards, lacking a second means of egress, for example. When new owners applied to the city for a demolition permit, it was accepted with scant review. Only when demolition began was there outcry from the architectural community, but it was too late. Juan Navarro compared the demolition to the burning of a painting, and Javier Carvajal called it a disgrace. The College of Architects, the local professional organization, announced it will now review modern buildings for inclusion in the landmarks register.

The big, expensive Apple The cost of residential construction in New York City is the highest in the country, and corruption, outdated and burdensome regulations, and excessive labor and material costs contribute to the expense, according to a study commissioned by the

city. The study recommends that all construction managers be investigated and licensed to weed out those connected to organized crime.

Arkansas update The University of Arkansas (UA) has unveiled conceptual plans for Razorback Stadium that should prove more popular with the UA board of trustees than the prior plan designed by New York architect Peter Eisenman, FAIA. The trustees rejected Eisenman's plan, presented last September, after describing it as "futuristic" and "exotic." Trustees have seen the new proposal—by Steve Cash of Heery International in Atlanta—and like its more traditional look.

New faces George Ranalli, a former professor at Yale, has become dean of the school of architecture at the City College of New York. Across town, Catherine Ingraham has been named chair of the graduate architecture and urban design program



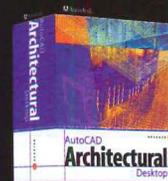
at Pratt Institute. Meanwhile, James Wines is the new head of the department of architecture at Penn State's school of architecture and landscape architecture.

Omaha looks up Leo A. Daly, FAIA, has completed the master plan for a nine-block campus in downtown Omaha for the First National Bank of Omaha. The centerpiece is a 40-story, 950,000-square-foot commercial tower (above) that will

dominate the city's skyline when it opens in 2002. Curving glass flanks the tapering form, which is clad in pale buff granite.

Ando in England Japanese architect Tadao Ando is designing his first building in the U.K., in the northwestern city of Manchester, as a member of a team charged with redeveloping the city's Piccadilly Gardens. His contribution will be a long, low pavilion with a curving wall. ■

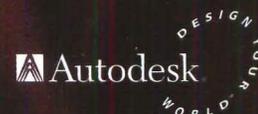
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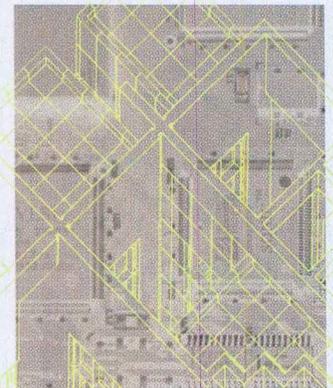
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DATESEVENTS

Calendar

La Casa Prossima Futura—The Home of the Near Future

New York City

September 15

An exhibit featuring futuristic products and concepts and the role that electronics will play in personalizing these environments. This display will be open to the public on the ninth floor of Saks Fifth Avenue. 914/697-9711.

Architecture and Revolution: Escuelas Nacionales de Arte en La Habana **Vienna**

Through September 19

This exhibition comprises original drawings of the Escuelas Nacionales de Arte, Cuba's forgotten national arts schools, and photographs documenting the structures when first completed as well as their present-day state. MAK Works on Paper Room. 1/711 36-233.

Prague Architecture Throughout the Centuries

New York City

September 15-December 5

This exhibition focuses on Prague's architectural development over the last 600 years—from the Romanesque and Gothic expressions of the medieval era, the Renaissance and Baroque influences of the modern era, the "national revival" of the mid-19th century, to, finally, the postwar independent form of Modernism. National Academy of Design. 212/369-4880.

Design on the Edge Merchant Prince and Master Builder: Kaufmann and Wright **Pittsburgh**

Through October 3

An exhibition exploring the belief shared by Frank Lloyd Wright and his client Edgar Kaufmann—for whom Wright designed Fallingwater in 1936—that good design has the power to change the lives of human beings. Heinz Architectural Center, Carnegie Museum of Art. 412/622-3131.

Breaking Through: The Creative Engineer **Miami, Fla.**

October 1-December 31

An examination, through a series of eight case studies, of the role and process of creativity in the field of engineering. Miami Museum of Science and Space Transit Planetarium. 305/854-4247.

Preserving the 20th Century Building Envelope

Cambridge, Mass.

October 3-4

This conference will explore practical, cost-effective strategies for the care and preservation of 20th-century buildings that will extend their useful life into the next century. 617/623-4488.

56th Annual Sheet Metal and Air Conditioning Contractors' Convention **Palm Desert, Calif.**

October 10-14

A wide variety of educational, motivational and self-developmental sessions presented by industry experts who provide technical and business management solutions to contractors' problems. Scheduled forums include Custom Fabricating and Manufacturer, HVAC Contractors, Industrial Contractors, National Residential Contractors and Service Contractors. Marriott's Desert Springs Resort and Spa. 703/995-4035.

METALCON International '99 **Chicago**

October 12-14

Annual conference and exhibition focusing on the use of metal in design and construction, bringing together metal-construction professionals, architects, engineers, builders, developers, and contractors from more than 40 different countries. Rosemont Convention Center. 617/965-0055.

Design-Build: Reaching for the Leading Edge

Dallas

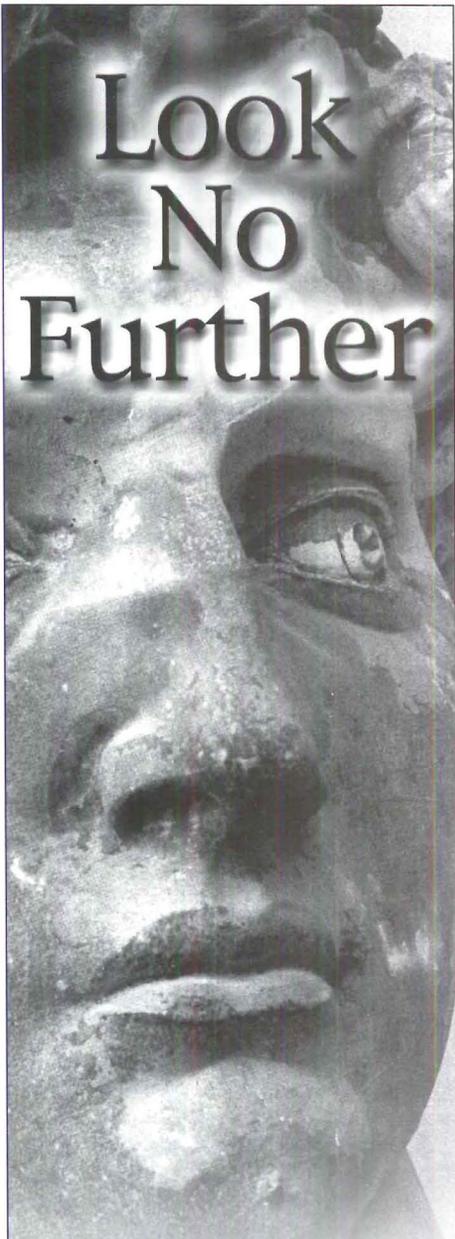
October 13-15

The three-day event will feature 85 speakers and panelists and a showcase of products and services that support the design-build industry, with special emphasis on civil infrastructure projects. The 1999 conference is cosponsored by the National Society of Professional Engineers. Adams Mark Hotel. 202/682-0110.

Modern Times **Glendale, Calif.**

October 16-17

A wide range of work from the twenties to the seventies by American and European industrial and interior designers will be displayed at the 13th annual fall Modern Times 20th Century Design Show & Sale. Glendale Civic Auditorium. 310/455-2894.



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CIRCLE 40 ON INQUIRY CARD

The Lamps of Tiffany: Highlights from the Egon and Hildegard Neustadt Collection Wilmington, Del.

October 8-January 2, 2000

More than 45 examples provide an overview of the achievements in glass by the Corona, N.Y., workshops of the Tiffany Glass and Decorating Co. The selection profiles the inventive approach to lamp design by Louis Comfort Tiffany. Delaware Art Museum. 302/571-9590.

Celebration of Design: World Class '99 Dallas

October 27-29

Decorative Center Dallas is holding its second annual Celebration of Design. Three days of activities include showroom seminars, keynote speakers, panel discussions and the presentation of the first annual Design Achievement Award. Decorative Center Dallas. 214/698-1350.

1999 Remodelers Show Philadelphia

November 5-7

Industry experts in remodeling, custom building,

and senior housing will participate in educational programs and demonstrations at the National Association of Home Builders joint remodelers, custom builders, and seniors housing show. Philadelphia Convention Center. 202/822-8861.

Restoration & Renovation Expo & Conference Charleston, S.C.

November 7-9

A tradeshow and conference dedicated to architectural rehabilitation, cultural landscape preservation, collections care, and historically inspired new construction. Westin Francis Marion Hotel. 978/664-6455 x0.

The Sense of the City: Louis Kahn's Design for an Office Building in Kansas City, 1966-1973 Manhattan, Kans.

Through November 28

An exhibition featuring Louis Kahn's drawings and models centered around institutional and public architecture, as well as his design for the unbuilt

Kansas City Office Building. Beach Museum of Art. 785/532-7718.

Competitions

1999 Design Awards Program New York City

Submission deadline: September 8

The American Institute of Architects New York Chapter announces the 1999 Design Awards Program eligible to AIA New York chapter members or registered architects practicing in New York City. The categories are Built Work, Interiors, and Projects. For more information, call the AIA, New York Chapter. 212/683-0023.

Graphisoft Prize '99 Competition

Submission date: September 10.

Graphisoft—developers of the integrated architectural CAD program—is holding this year's Graphisoft Prize competition based on a collection of diverse and inspired themes. Each year, the collection of themes is drawn from literature, film, poetry, mythology, music, and fine art. Architecture students and professional architects are invited to interpret buildings that exist only in the imagination. Competitors must register to participate at www.gsprize.com.

tkts2k

Submission deadline: October 4

New York City Mayor Rudolph W. Giuliani has announced tkts2k, an international competition among professional architects and designers to redesign the tkts booth in Times Square for the new millennium. The winner will be announced in December. To register and receive a competition packet, contact the Van Alen Institute at 212/924-7000, x18.

The Dryvit International Design Competition

Submission deadline: December 1

Dryvit Systems, Inc., a manufacturer of exterior insulation and finish systems, is seeking entries in the annual Dryvit International Design Competition. A \$5,000 first prize will be awarded to the architect whose work best reflects the design freedom Dryvit provides in the building process. The winning design will also be featured in a two-page spread that will appear in the February 2001 issue of ARCHITECTURAL RECORD. For more information, call 1/800/4DRYVIT. ■

Please submit information for events and competitions at least six weeks prior to the magazine's publication date (September 15 for the November issue).

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CIRCLE 47 ON INQUIRY CARD

A928 5/99

A Modernist Masterpiece in

AFTER DECADES OF DECLINE, RICHARD NEUTRA'S CLASSIC PALM SPRINGS ICON IS BACK.

ARCHITECTS MARMOL AND RADZINER HAVE REAWAKENED THE KAUFMANN HOUSE'S RICH MATERIALS PALETTE, EXPANSIVE INTERIORS, AND PANORAMIC OUTDOOR ROOMS.

by David Hay

To understand the extraordinary invention that is Richard Neutra's 1946 Kaufmann House, it helps to lie back on a chaise longue atop the gloriette, a sheltered second-floor deck, whose name, the architect believed, referred to the highest deck of a ship. From here, 360-degree views of the rugged mountains and desert around Palm Springs unfold. Shiny sails—55 nine-foot-tall stainless-steel louvers—keep the hot, dry winds and afternoon sun at bay. Creature comforts, a dumb waiter and, for the winter, a fireplace, are housed in two exquisitely laid Utah buff sandstone columns. A tongue-and-groove Douglas Fir ceiling offers shade, while the pool's cool blue surface beckons from below. After a while, a sense of being dreamily at ease with the elemental forces of nature and design takes over. You begin to feel you're floating—a sensation, it turns out, often associated with this house, which an early critic described as a ship riding on rocks and sand.

Modernist icon radically transformed

Seven years ago, a very different sight greeted the current owners, Brent and Beth Harris, when they walked through the front door. The house had been somewhat tragically transformed since its completion in 1946. The celestial views from the gloriette were interrupted, first by an ugly railing and then by clunky air-conditioning units, rooftop ducts, and even exposed electrical conduits. The slatted wooden floor, which once gave

David Hay, who lives in Neutra's 1942 Bonnet House, frequently covers architecture and the arts from Los Angeles.



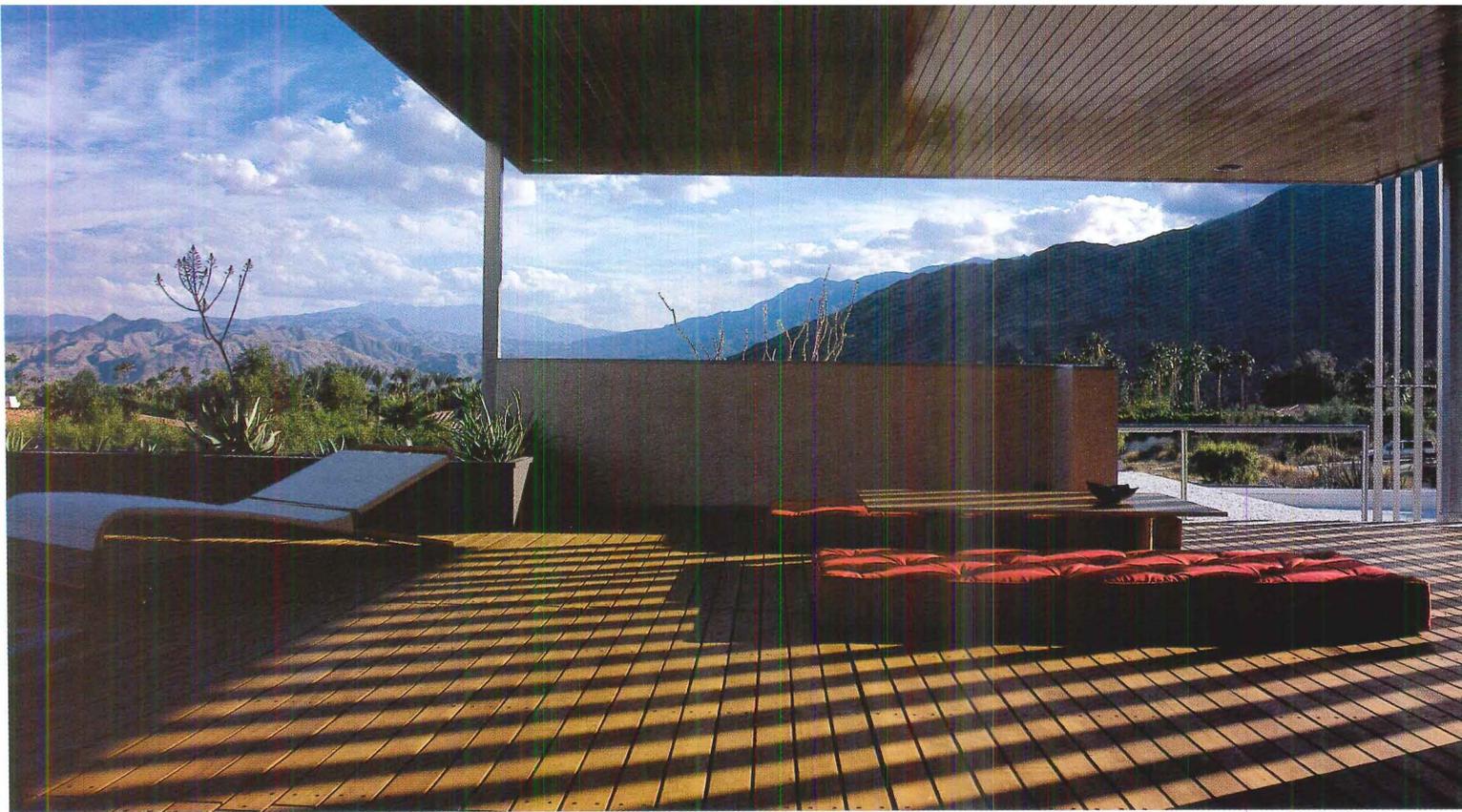
Remarkably open and expansive, the interiors seem to merge with the surrounding landscape, as in views from the master bedroom toward the pool (right). The same fluid space characterizes Julius Shulman's classic 1947 image from the pool looking back toward the master suite (below left).

PHOTOGRAPHY: © JULIUS SHULMAN (LEFT); DAVID GLOMB (RIGHT)



the Desert Is Reborn.





With its unsightly accretions removed, the newly rebuilt glori-ette—a second-story deck or outdoor living room—now offers unobstructed panoramic views (above). An open-riser stair, along the side of the house, leads from the patio up to the glori-ette (below).

the deck its visual lightness, had been replaced by concrete terrazzo. The changes were more than superficial. Successive renovations, increasing the square footage from 3,200 to 5,100, had all but obliterated Neutra's original vision.

The house's illustrious beginnings

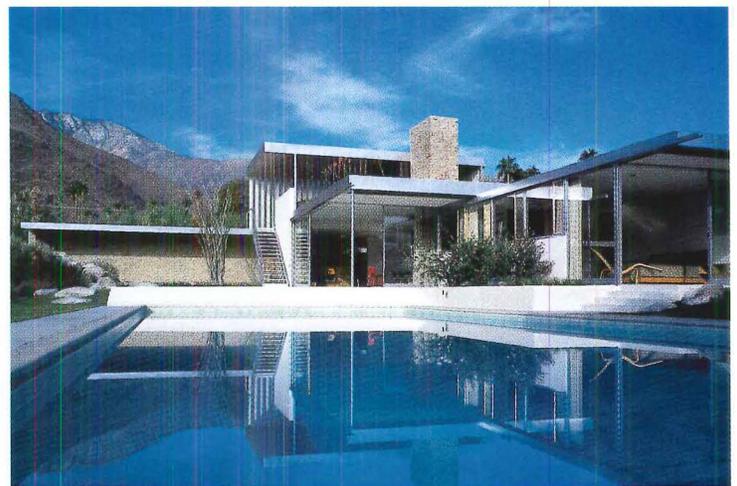
Designed for Pittsburgh department store owner Edgar Kaufmann—famous for commissioning Frank Lloyd Wright's Fallingwater, six years earlier—this Palm Springs house was one of the purest realizations of Neutra's Modernist ideals. Expressively incorporating the latest industrial materials, the house promoted his concept of easy, flowing spaces for the increasingly nonhierarchical 20th-century family. Harmony between man and nature, between interior and exterior was also essential. Here, on a

KAUFMANN CORRESPONDED WITH NEUTRA ALMOST DAILY AND LAVISHED \$100 PER SQUARE FOOT ON THE PROJECT WHEN THE AVERAGE HOME COST \$6 PER SQUARE FOOT.

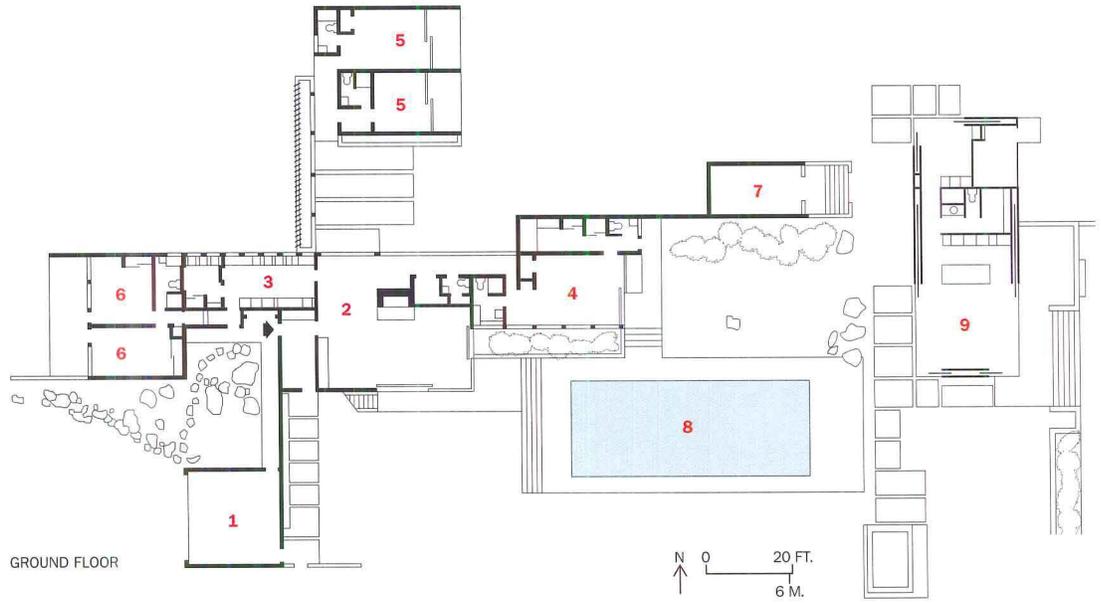
hillside street in a small town, these ideas all came together in a design that elegantly balanced glass and steel, wood and sandstone, and whose plan roughly resembled a pinwheel.

This desert site—which Neutra described as the most “rugged and almost uninhabitable” place imaginable next to the moon—truly inspired him. But, unlike Wright, he saw his building as a “machine in the garden,” rather than a form echoing the landscape. But, as the views from the gloriette and interiors suggest, Neutra also considered the house a sanctuary from which to embrace the natural surroundings.

The design's success owed much to an unusually supportive and astute client. Kaufmann corresponded with his architect almost daily during construction and lavished \$300,000 on the project, roughly \$100 per



1. Car shelter
2. Dining/Living
3. Kitchen
4. Master bedroom
5. Guest room
6. Staff
7. Utility
8. Pool
9. Pool house



Beyond the dining table, designed by Neutra, stands the original Utah buff sandstone chimney. Corner sliding doors, opened to the pool patio, enhance indoor-outdoor ambiguities (below).





JULIUS SHULMAN'S TWILIGHT SHOT — ONE OF THE BEST-KNOWN IMAGES OF MODERNIST ARCHITECTURE — ENHANCED THE HOUSE'S FAME AND REPUTATION.

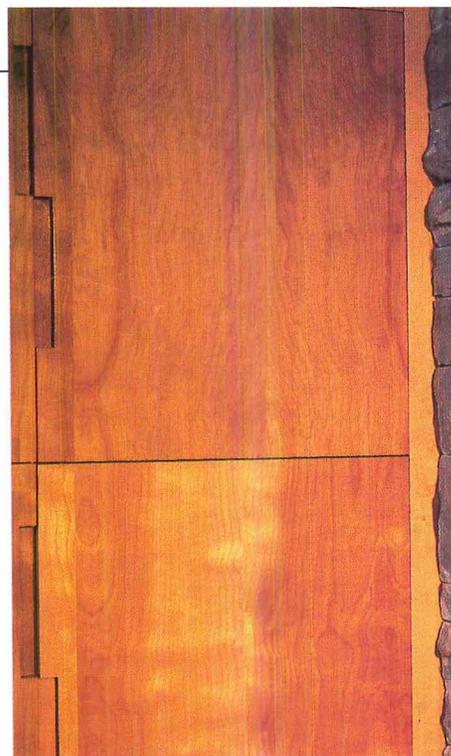
square foot—an astronomical sum at a time when the average American home cost \$6 per square foot.

A photographic ideal vs. subsequent incarnations

Even if buried, Neutra's vision was still discernible in 1992, when Beth Harris, a PhD candidate in architectural history at UCLA, and her husband, Brent, a financial executive in Los Angeles, entered the living room. There, recalls Brent Harris, "we saw immediately how the window walls met in the corner without anything between them. We slid back the windows—with some difficulty—and went out to the end of the pool and looked back. If you squinted, the house looked pretty much the way it appeared in the photograph."

The photograph, of course, is the classic twilight image by Julius Shulman. One of the best-known portraits of California Modernist architecture, it has enhanced the Kaufmann House's fame and reputation.

But beyond the remnants of the photographic ideal, the HARRISES could see how awkward additions had overwhelmed the plan's original clarity and interrupted the consistency of such materials as birch veneer. The changes included a new dressing room off the master bedroom for the wardrobe of Nelda Linsk, a realtor—famed for her poolside fashion shows—who sold the home four times, once to herself. Someone



New windows edge the way to the master bedroom (top left). Birch-veneer panels (left) match the original grain. Based on Neutra's drawings, the kitchen countertops and floor are faced with cork (above right). In a child's room (opposite top) and throughout the house, the cabinets are replicas, and the paint colors were remixed by Neutra's original supplier. The perforated panel (opposite bottom) originally fronted a hi-fi, but now hides an air-conditioning duct.



had enclosed the patio between the living quarters and guest wing. And Barry Manilow, the owner preceding the Harrises, had decorated each room in a different theme, including a bedroom with an English garden motif and a living room with faux French Regency furnishings.

But those who owned the house after Edgar Kaufmann's death there in 1955 were not simply imposing their tastes on a masterpiece. They were also attempting to make a winter retreat livable all year-round. Though Neutra installed radiant heating in the floors, he'd met his client's request for a seasonal home and supplied no air conditioning—an essential amenity in a region where summer temperatures hit 120 degrees.

The new owners' bold approach

When Brent and Beth Harris bought the house and evaluated the repairs necessary to keep it from disintegrating, they made a bold decision. They would go further, bringing the architecture back to the moment they felt most clearly coincided with Neutra's original intent. That was the twilight evening in 1947 when Julius Shulman fortuitously asked Mrs. Kaufmann to lie by the pool—to block a light—and took the photograph.

Ironically, as midcentury architecture ages, the Harrises, like others, set out to historically restore or recapture Modernism: a philosophically ahistorical style.





Recreating Neutra's finishes, Marmol and Radziner paved Mrs. Kaufmann's (left) and the other bathrooms in cork—and even tiled the floor and walls of her husband's shower stall with this luxuriant (and improbable) material.

Their decision to reclaim a 1947 ideal challenged a traditional approach to architectural restoration, which demands a more straightforward refurbishment of what remains on-site. In the Kaufmann House, however, so many original elements had been destroyed that pure restoration was out of the question. But what was the house like in 1947? What records would show it in full detail? To carry out the revitalization, the Harrises engaged the Santa Monica firm of Marmol and Radziner, which had restored Neutra's 1950 Kun House #2 in the Hollywood Hills.

By 1995, the Kaufmann House "resembled a carcass," says Ron Radziner, AIA, the effervescent, long-haired architect, who, with partner Leo Marmol, AIA, had already started down the long road of revitalizing it. They demolished the additions and shipped away many original surfaces for refurbishing. In fact, they tore down so much that many onlookers perceived the architects and their clients as destructive, but few could have predicted the lengths to which the design team would go to preserve what remained and accurately replicate what had been lost.

Marmol and Radziner began at the UCLA Research Library's Special Collections Branch, where the original drawings were kept. Denied permission by Neutra's son Dion to photocopy them, they hand-copied the sketches, including every notation down to paint colors. They interviewed those who knew the house well: architect Albert Frey, who designed a home for Raymond Loewy on the adjacent lot, and the Moorten family, who had landscaped the original garden.

The most accurate record of what had actually been installed lay in Julius Shulman's 1947 photographs, some of which had never before been printed. But perhaps the greatest map to the house lay buried in its own walls and floors. In a servant's rooms, for instance, the word "oyster," the color used, was penciled onto the plaster beneath many coats of paint. "It was like an archeological dig," recalls Radziner.

On the exterior, Neutra had applied a plaster-and-mica mixture. He thought the shiny mica flecks would reflect sunlight and thus reduce

heat impact. Marmol and Radziner contacted the U.S. Bureau of Mines to locate current sources for the mineral. Matching wall samples with those from active mines, they painstakingly replicated Neutra's recipe and devised a fabrication technique: Moments after one painter lay on new glazing compound, another would spray on the mineral.

The architects not only rebuilt birch-veneer cabinets throughout the house, but also identified the grain of each panel from photographs and matched it precisely. In a daring display of luxury, Neutra had even lined Mr. Kaufmann's shower stall with cork—a finish that Marmol and Radziner recreated with urethane coatings to prevent water damage.

The installation of a sophisticated heating and cooling system presented another challenge. Not wishing to interfere with the aesthetic integrity of Neutra's design—a visually and conceptually thin piece of architecture without plenum or crawl space—the architects tunneled ducts under the house, channeling cool air from a unit in a new pool house that they designed. They cleverly used built-in furniture to hide other vents and ductwork. A huge return-air outlet lurks behind a perforated panel in a living-room cabinet, which had concealed a hi-fi speaker in its first incarnation.

This project, an extraordinary act of rejuvenation, taking more than five years, certainly cost many times the original \$300,000. (The Harrises decline to disclose their budget publicly, but *Vanity Fair* has cited a "rumored \$4.5 million" price tag.) One result of placing new historically correct materials alongside original intact elements is a contrast in patinas. The concrete path from the front gate into the entrance hall, for example, displays its age, whereas the recently poured concrete floor in the living room, which abuts it, has a bright sheen. Until time melds the patinas, many of the interior details will announce themselves as replicas.

The Harrises, all too familiar with the house's checkered past, made a gesture of patronage worthy of Edgar Kaufmann. Swearing to keep history from repeating itself, they are determined to protect the building from future deterioration. To reinforce the structure, they placed steel reinforcing beams in the plaster walls where space allowed. Their complex new heating and air-conditioning system will slow the aging process accelerated by the harsh desert climate. New drains, sunken and hidden from view in the flat roofs, assist water runoff. The Harrises purchased two adjacent lots and landscaped them to protect future views.

This Modernist icon now serves as a weekend retreat for the owners and their two small children. Contemporary Californians, they spend considerable time in the new pool house, which contains, among other amenities, a spa. The olive-green, open-air structure was consciously designed not to compete with the main house. But even from here, as from the wonderfully primordial desert garden, which now surrounds the house, Neutra's reinvented masterpiece is never far from its guardians' watchful eyes. ■

Project: *The Kaufmann House Restoration*

Architect, interior designer, contractor: *Marmol and Radziner Architects—Leo Marmol, AIA, and Ron Radziner, AIA, principals*

Client: *Brent and Beth Harris*

Consultants: *Cass Rogers (structural); Mel Bilow & Associates (mechanical); John Snyder & Associates (electrical); Seebohm Ltd. (architectural conservation); Reginald Hough (concrete); Eric Lamers and William Kopelk (landscape)*

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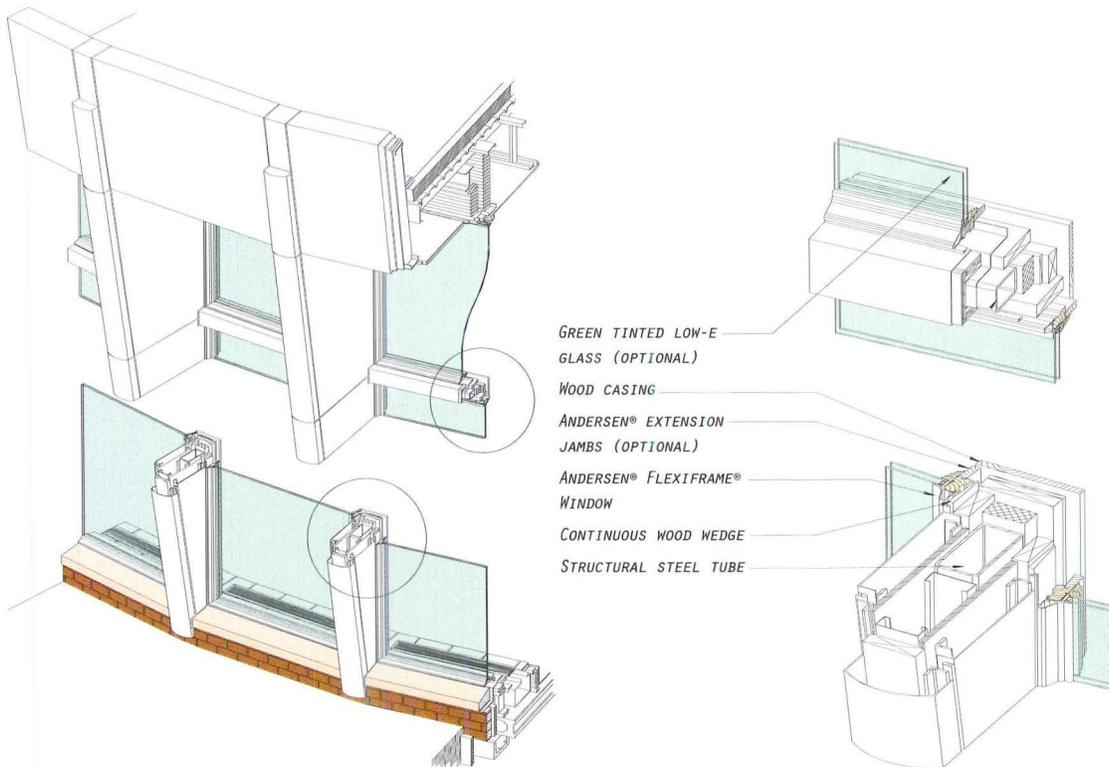
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Ingenious Interventions

by Suzanne Stephens

Compact, inventively complex architectural elements can quickly transform an interior. A chair, a cantilevered stair, a contraptionlike kitchen, and other projects by three young design firms show the architectonic elegance of such interventions. Carefully composed lines, planes, and volumes, executed in highly polished or luminous materials, give these functional and sometimes whimsical artifacts a powerful presence. Some are cobbled together ad hoc from found elements, and others are highly custom-designed; some are portable, and others permanent, yet they all define the spaces around them.



FACE DESIGN AND FABRICATION

FACE is making a name in the New York design world. Ever since its formation in 1992 by three recent architecture school graduates—Todd Fouser (center) from Kansas State with Chris Otterbine (left) and Reuben Jorsling (right) from Cooper Union—FACE has become known for drilling, cutting, and welding, as well as designing.

In the early days, the principals began fabricating furniture and small architectural elements for architects. Increasingly they took on design-build commissions for houses and interiors, including a gallery for art dealer Holly Solomon



"Spatial equipment" is FACE's term for their steel, glass, and wood, 24-foot-long, 9-foot-high kitchen unit, which they designed and fabricated in their own workshop before installing it in a New York City office.



and the offices for ad agency Mad Dogs and Englishmen, both in Manhattan. In the latter venue, a contraption that FACE prefers to call "spatial equipment" (previous pages) is a freestanding, all-in-one kitchen machine.

Fabricated from stainless steel, wood, and glass, the unit contains an oven, stove, and sink with counters for slicing, dicing, and dining (replete with benches on wheels). FACE assembled the kitchen in its Brooklyn shop before transporting it to Manhattan and hooking it up in the offices of Mad Dogs and Englishmen, for which the architects also designed steel-framed workstations, lamps, and vitrines.

In a residential loft (right below), FACE's steel cantilevered stair—skinnier than a fire escape—shows that anorexia in architecture can be stunning. Because the steel treads are cantilevered, only one stringer is needed, not two, creating a remarkably lithe and lean object. "We tried to exploit the qualities of steel," says Fouser. (Warning: Do not descend after three martinis.)



PHOTOGRAPHY: © LOOM (PROJECTS, RALPH NELSON; PORTRAIT, COURTESY OF THE ARCHITECT); SUMO (PROJECTS, PIERO RIBELLI; PORTRAIT, ALEJANDRO HERRERO-OLAIZOLA)



STUDIO SUMO

Keep it light, flexible, detachable, and demountable: this axiom defines the approach of the four-year-old studio of Sunil Bald (above left) and Yolande Daniels (above right). As their Flip-Flop Store/Studio in New York illustrates, design can do much to mitigate the dilemmas of nomadic life. The two partners, who earned master's degrees in architecture from Columbia, work together as a firm, but teach apart—she at the University of Michigan and he at Cornell.

In converting the 300-square-foot storefront for living and working, Daniels and Bald wanted an interior

LOOM

As the name suggests, this six-year-old Berkeley-based studio takes seriously the interweaving of architecture, art, and environmental design. Formed by Ralph Nelson

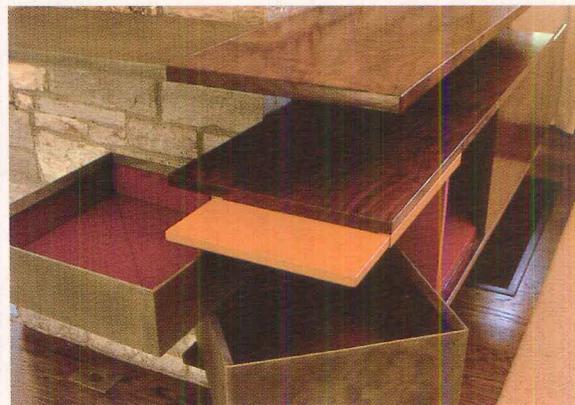
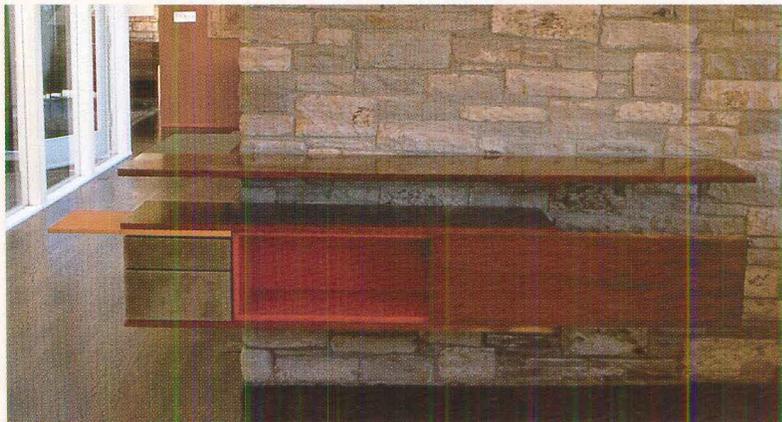
(left), who earned his master's in architecture at Yale, and Raveevan Choksombatchai, who holds master's degrees in architecture and

landscape architecture from Harvard, LOOM makes even small interior elements highly architectural.

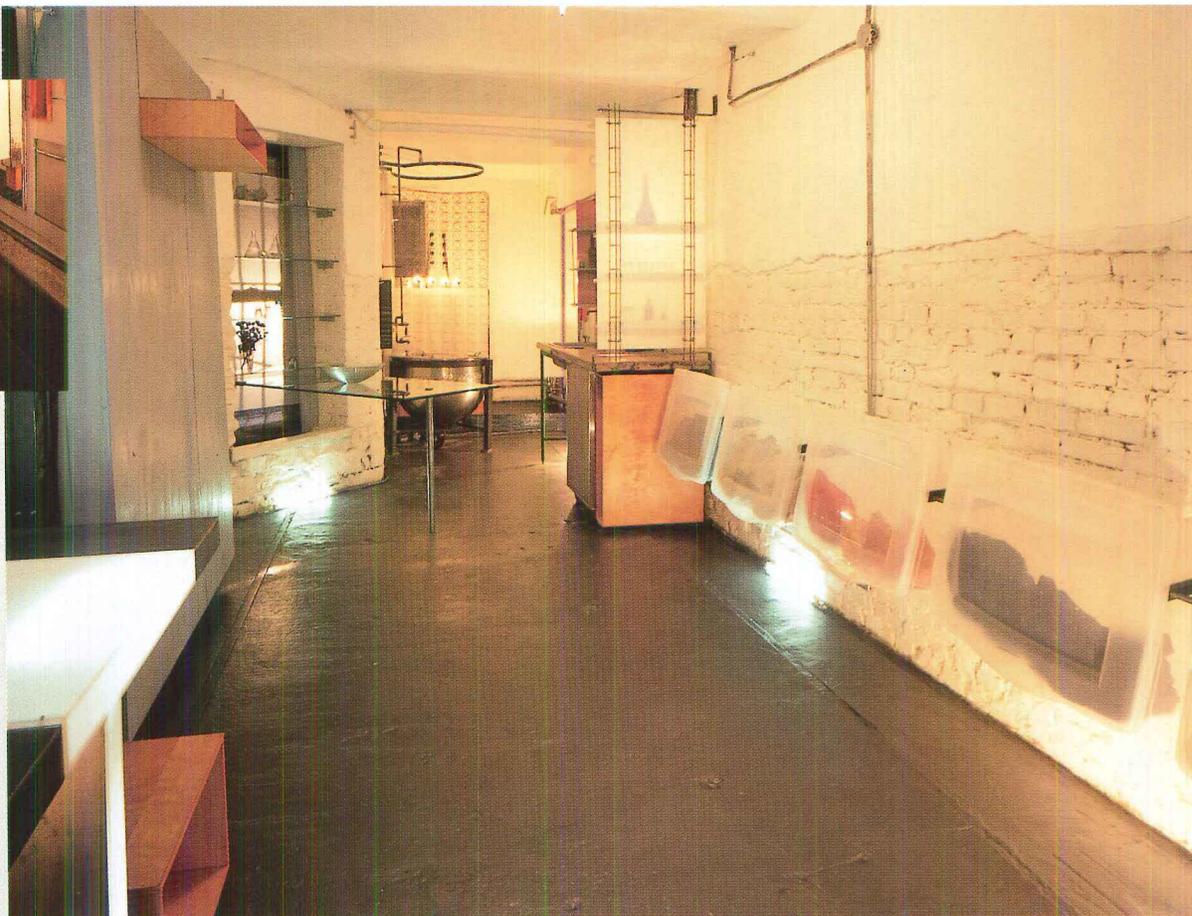
The design of their layered, steel-rod-and-mesh "shadow chair" was generated by casting shadows with a spotlight on a conventional chair. It's not a chair where you're "going to watch TV and drink a beer," says Nelson, "it's more of a temporal chair, where you'd sit to take off

your shoes." Moving to accommodate the human body, it creates a spatial dynamism through the angularity of its frame and diaphanous quality of its steel wire mesh.

A bar and buffet, mounted on a stone fireplace in a Berkeley house, has linear steel sections, nickel-silver drawers on pivot hinges, and walnut cabinetry. Its length extends from six feet, six inches to 11 feet, 6 inches. Dramatically turning the corner, it animates the space.



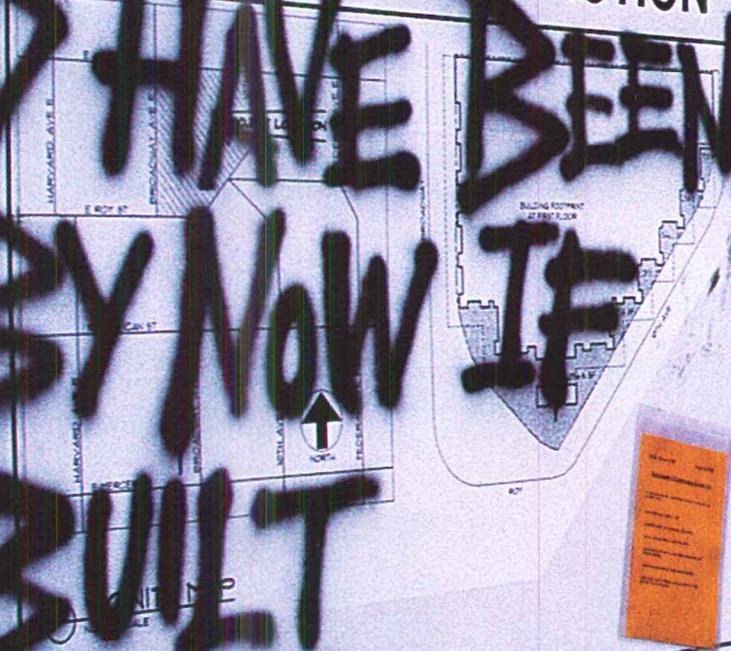
they could assemble and disassemble quickly and efficiently. Combining custom design with everyday found objects, they devised wall-mounted detachable elements that could all pack into a 4-by-5-by-10-foot cubicle. Rubbermaid containers became storage cabinets, and an industrial, 32-inch-diameter stainless-steel steam kettle—probably from a restaurant—was transformed into a bathtub. A cantilevered table of folded and polyurethaned sheet steel is another improvised installation in the partition-free open space.



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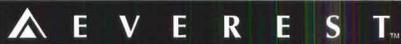
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CIRCLE 54 ON INQUIRY CARD

Back to

by Lee D. Mitgang

As the century's final school year begins, are architects ready at last to make peace with the institutions that educated them? For years, architects have greeted questions about the state of architectural education with a grumpy litany of the things they believe young graduates should know—but all too often don't—about the real world of practice. To find out if this view still predominates, RECORD posed 10 questions to a sample of our readers. Some answers were expected, and others were surprising.

Many of the respondents continue to believe that too many architectural educators are deaf to the evolving requirements of a complex, global profession: 53 percent of our sample disagreed either "strongly" or "somewhat" that the schools they attended prepared them well for office realities.

"Architects have always talked about the lack of preparation for practice that architecture schools provide. The schools do not listen," wrote Stephen H. Gegner, AIA, who has his own firm in Marietta, Ohio.

A strong majority favored pressing schools to include more practical content in their curricula—in particular, they advocated requiring practical experience as a condition for graduation and permitting students to take the Architect Registration Examination (ARE) immediately after school.

At the same time, our findings hint that more positive forces may be at work in shaping future relations between education and practice. Overall, we detected declining animosity toward academia and increasing readiness to applaud architectural education's distinctive characteristics than we did a few years ago when magazines were apt to carry apocalyptic headlines such as, "The Schools: How They're Failing The Profession," (Progressive Architecture, September 1995).

More than 6 out of 10 respondents, for example, felt their schools provided solid liberal educations. Despite recent criticisms, design juries got a resounding vote of confidence from more than two-thirds of our respondents. And whatever the strengths and shortcomings of the nation's architectural faculty, most people in our sample rejected the idea of requiring all faculty to be licensed architects. Our survey produced other surprises. More than half of the respondents thought schools should make racial and ethnic diversity among students and faculty a top priority. And even as computer skills have become essential to young architects seeking jobs, 55 percent worried that schools may be sacrificing drafting skills by overemphasizing computer-aided design.

Whether these collective findings signal a belief that schools have actually improved, or merely that a booming economy has put practitioners in a more generous mood, we found a willingness to temper habitual criticisms with acknowledgment of architectural education's strengths. Even more encouraging, we sensed a growing readiness to take responsibility for the system's chronic shortcomings: more than 6 out of 10 respondents conceded that practicing architects could be doing more to support schools and students.

School

ARCHITECTS SOUND OFF ON 10 CRITICAL ISSUES FACING ARCHITECTURAL EDUCATION

A RECORD READER POLL

RESPONDENT PROFILE

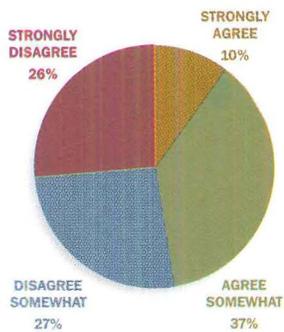
TITLE/POSITION	GENDER	ARCHITECTURE SCHOOL ATTENDED	
PRINCIPAL38	MALE.....126	HARVARD UNIVERSITY18	UNIVERSITY OF DETROIT1
PRESIDENT/CEO25	FEMALE.....27	CORNELL UNIVERSITY.....8	UNIVERSITY OF MEMPHIS1
VICE PRESIDENT1		COOPER UNION.....5	PRATT INSTITUTE.....7
BOARD CHAIRMAN2	HIGHEST DEGREE EARNED	UNIVERSITY OF IDAHO1	UNIVERSITY OF OKLAHOMA.....3
SOLE PROPRIETOR/OWNER12	B ARCH.....65	UNIVERSITY OF PENNSYLVANIA.....10	OKLAHOMA STATE UNIVERSITY1
PARTNER31	M ARCH75	UNIVERSITY OF OREGON1	UNIVERSITY OF MARYLAND.....3
ASSOCIATE5	BS ARCH1	NORTH CAROLINA STATE4	THE CATHOLIC UNIVERSITY1
SENIOR ARCHITECT2	BFA.....1	COLUMBIA UNIVERSITY.....19	FRANK LLOYD WRIGHT SCHOOL OF ARCHITECTURE ..1
ARCHITECT3	PHD3	YALE UNIVERSITY.....16	UNIVERSITY OF KENTUCKY1
DIRECTOR OF DESIGN/.....5	M BUSINESS ADMIN2	PENNSYLVANIA STATE UNIVERSITY2	NEW YORK INSTITUTE OF TECHNOLOGY1
DESIGN PARTNER	M BUSINESS POLICY.....1	UNIVERSITY OF VIRGINIA4	UNIVERSITY OF ILLINOIS, URBANA.....2
PROFESSOR OF ARCHITECTURE2	M URBAN DESIGN3	RICE UNIVERSITY2	MIAMI UNIVERSITY (OHIO)1
JOB CAPTAIN1	M BUILDING DESIGN.....1	SYRACUSE UNIVERSITY.....6	OHIO STATE UNIVERSITY1
DESIGNER.....1		UNIVERSITY OF CALIFORNIA, BERKELEY9	IOWA STATE UNIVERSITY4
JUNIOR ARCHITECT1		GEORGIA INSTITUTE OF TECHNOLOGY5	RENSSELAER POLYTECHNIC INSTITUTE.....2
ARCHITECT ASSISTANT1		WASHINGTON UNIVERSITY.....3	UNIVERSITY OF PUERTO RICO.....1
INTERN ARCHITECT.....8		KANSAS STATE UNIVERSITY.....1	UNIVERSITY OF FLORIDA.....3
PROJECT COORDINATOR1		PRINCETON UNIVERSITY2	CARNEGIE MELLON UNIVERSITY.....3
		UNIVERSITY OF CALIFORNIA, LOS ANGELES.....5	UNIVERSITY OF ARKANSAS.....1
		CLEMSON UNIVERSITY1	UNIVERSITY OF WASHINGTON.....1
		TULANE UNIVERSITY.....2	WASHINGTON STATE UNIVERSITY.....3
		CITY COLLEGE OF NEW YORK.....3	NORTH DAKOTA STATE UNIVERSITY1
		UNIVERSITY OF MIAMI.....1	THE ARCHITECTURAL ASSOCIATION.....2
		UNIVERSITY OF COLORADO1	SOUTHBANK UNIVERSITY.....1
		MASSACHUSETTS INSTITUTE OF TECHNOLOGY6	UNIVERSITY OF SOUTH FLORIDA.....1
		RHODE ISLAND SCHOOL OF DESIGN4	ARIZONA STATE UNIVERSITY1
		UNIVERSITY OF ILLINOIS, CHICAGO1	CRANBROOK ACADEMY1
		TEXAS TECH UNIVERSITY.....4	JORDAN UNIVERSITY.....1
		VIRGINIA POLYTECHNIC INSTITUTE.....2	UNIVERSITY OF NORTH CAROLINA, CHARLOTTE.....1
		UNIVERSITY OF SOUTHERN CALIFORNIA.....4	NEW JERSEY INSTITUTE OF TECHNOLOGY1
		UNIVERSITY OF CINCINNATI.....2	UNIVERSITY OF TEXAS, AUSTIN1
		UNIVERSITY OF MICHIGAN3	CALIFORNIA POLYTECHNIC STATE UNIVERSITY1
		TEXAS A&M UNIVERSITY3	SAN LUIS OBISPO
		UNIVERSITY OF LONDON.....1	

ABOUT THE SURVEY

Survey instruments were mailed to 450 RECORD readers in May and June. The sample was not scientifically randomized, but the 153 who returned completed surveys ended up well-balanced in terms of geography and the years they attended school. Over 17 percent were women, virtually identical to the actual percentage of females in the profession, according to latest federal data. Collectively, respondents attended 66 U.S. and foreign schools of architecture for part or all of their professional education. We invited participants to elaborate on their answers to our 10 questions in writing. In addition, we interviewed more than two dozen respondents by telephone. By good luck, our sample turned out to be highly informed, articulate, and diverse in their views on education and the profession. They included world-renowned designers, such as Richard Meier, FAIA, and Michael Graves, FAIA; 114 respondents who identified themselves as top executives or firm owners; at least 20 who both teach and practice actively; and 15 recent graduates who now occupy junior positions in architecture firms.

Lee D. Mitgang, a contributing editor, was coauthor of the 1996 Carnegie Foundation report, "Building Community: A New Future for Architectural Education and Practice."

1 The architecture school(s) I attended did a good job preparing me for the realities of business and practice.



It may be a tired question—even an “absolute red herring” as one New York City architect—who also teaches—tartly characterized it. Still, the contention that architecture schools as a group are too theoretical and disconnected to the realities of the practice has been at the heart of the profession’s complaints for decades. And that ancient lament remains in full force, according to our poll.

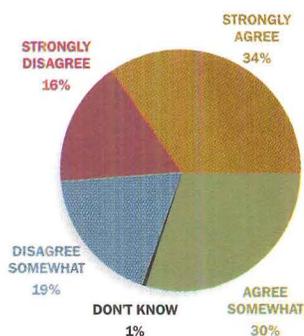
“My school didn’t prepare me for the real world,” said a recent MIT graduate with her own practice in New York City. “We interview students who expect to come in and design, not realizing that they don’t have a clue about how to build.”

Our survey suggests that the old lament that schools are too distant from the practice world remains widely held. Some respondents were particularly concerned over the lack of preparation for teamwork. “The model of future practices will include the assembly of teams of differentiated talents and will require extraordinary competence, ease, and self-awareness when working in groups,” wrote W. Mason Smith III, AIA, president of Shepley Bulfinch Richardson & Abbott in Boston.

Others questioned whether school was the best time or place to be overly preoccupied with practical matters. “We didn’t spend much time on the business of architectural practice when I was in school,” said Brian F. Larson, AIA, vice president of Ayres Associates in Eau Claire, Wis., who attended the University of Illinois’ architecture program in the 1950s. “I don’t believe the phrase accounts receivable ever passed anyone’s lips. But I also don’t believe I would have been very interested, to tell the truth. Architecture was what interested me. The schools can’t teach everything.”

“Schools only do part of the job of preparing architects,” agreed Kevin Hart, AIA, director of design at Gensler and Associates in San Francisco, who attended North Carolina State and Yale during the 1970s. “It’s okay for schools to be different. Messy vitality is better than dull, uniformly effective regimentation.”

2 The architecture school(s) I attended did a good job providing a well-rounded liberal education.



Besides demands for more professional content, architecture schools have always faced the accompanying challenge of providing graduates with a broad liberal education to prepare them as well-rounded, polished, flexible, ethical professionals ready to adapt to complex problems and to express themselves and their ideas. Most respondents, in fact, gave their schools higher marks in the

liberal arts; but as with practical and business knowledge, the messages were mixed.

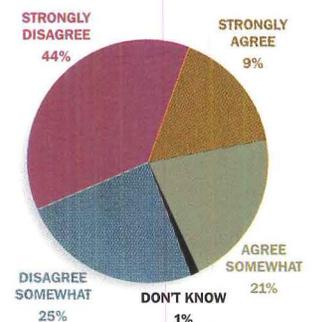
Nearly two out of three, especially those who studied architecture as graduate students, praised the breadth of education they received. “Architecture students need to learn proper English, writing, spelling, debating, and negotiation skills,” wrote Andrea Clark Brown, AIA, principal architect of Andrea Clark Brown Architects, in Naples, Fla., who strongly agreed that her years at the University of Virginia during the 1970s gave her a solid diet of liberal-arts studies.

Others commented on the weak grounding in liberal studies in some recent graduates, especially those who attended five-year degree programs. “The BArch degree provides a fast-track means of learning a great deal about architecture, architectural technologies, design, and history,” wrote Andrei S. Harwell, an intern architect at Hardy Holzman Pfeiffer Associates in New York City who “strongly disagreed” that his BArch at Carnegie Mellon in the 1990s provided a good liberal-arts education. “It does not, however, prepare you to be a well-educated, well-rounded, well-read, intellectual individual.”

“I’ve had employees who can barely read specifications or topographical maps or write a business letter,” a Bristol, Conn., practitioner told us. “There’s a whole generation that can’t spell. What if one of these people needed to write a proposal for a client? What kind of impression would that leave?” “The ones who have done best,” he added, “got a liberal education first, then went on to graduate school for their professional degree.”

3 The jury system of evaluating design work in schools of architecture is abusive, undermines teamwork, and should be reconsidered.

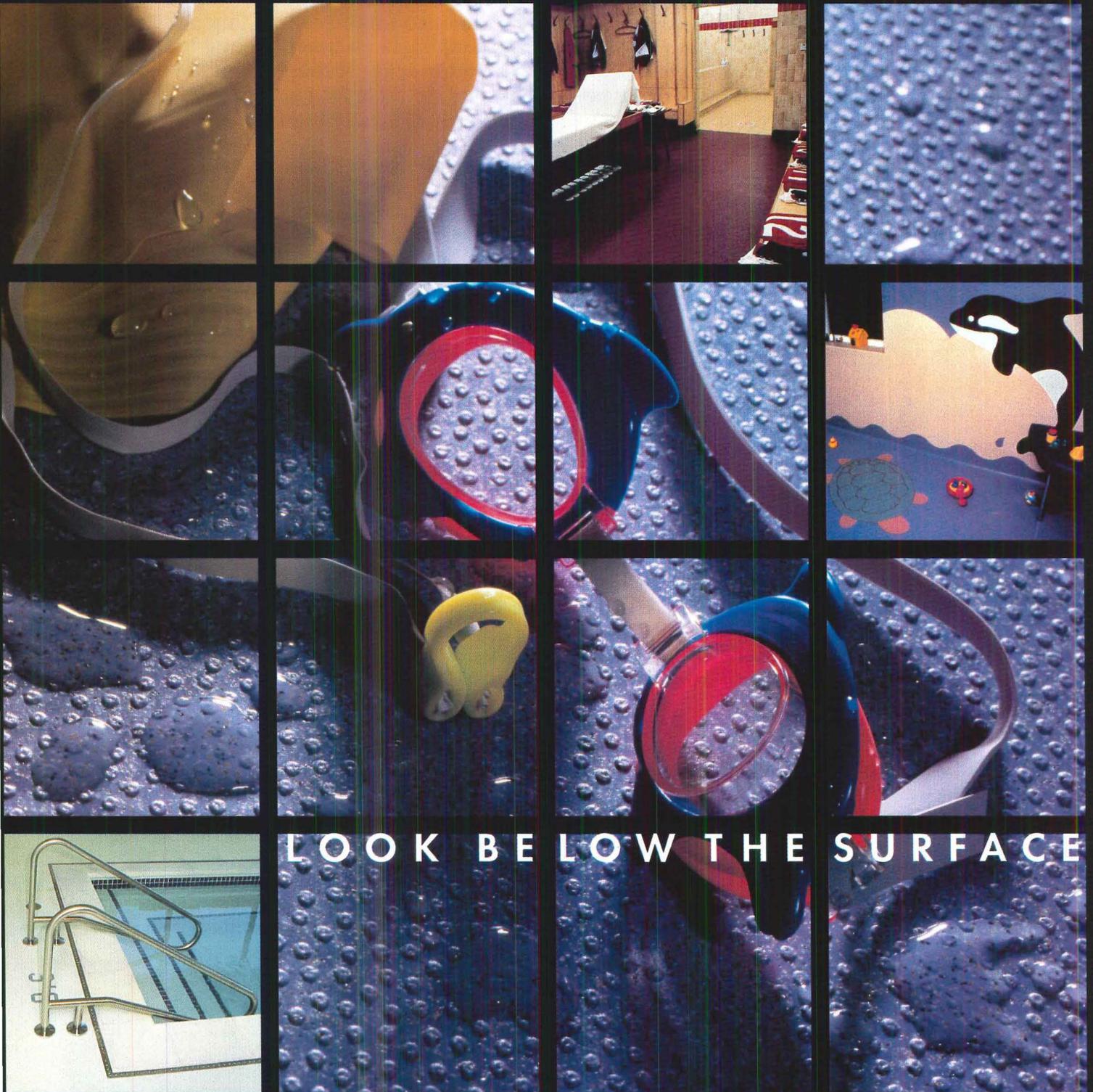
Even before Kathryn H. Anthony’s 1991 landmark book, *Design Juries on Trial: The Renaissance of the Design Studio* (1991, Van Nostrand Reinhold, New York), decried the star-chamber atmosphere of juries at some schools, faculty at the University of Oregon, Miami University of Ohio, and Southern California Institute of Architecture were turning to less Kafka-esque ways of evaluating studio work. While some echoed the concerns about the conduct and educational worth of juries, a solid majority of our sample considered them a powerful teaching tool that provided lasting lessons about the rigors of professional life.



“The jury system is one of the finest teaching tools we have,” said William Cannady, FAIA, design principal at Willis, Bricker & Cannady in Houston and an architecture professor at Rice University. “Students get the chance to defend their thinking before their peers and faculty. We’ve seen bullying, but you see that in the real world.”

“I don’t think it’s any more abusive than real life,” said Christopher Mehren, AIA, a principal of Michael Maltzan Architecture in Los Angeles. “It’s a great training ground to justify your work.”

A critic of juries, Mark Simon, FAIA, a partner in Centerbrook Architects and Planners, in Centerbrook, Conn., who has taught at Yale, the University of Maryland, the Rhode Island School of Design, and North Carolina State, called them “a poor imitation of real life.”



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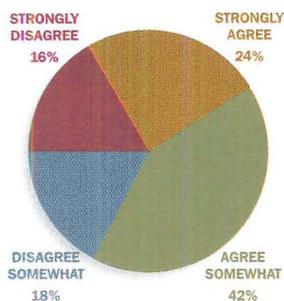
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“As an architect,” he said in a telephone interview, “there are so many people you have to learn to get along with: clients, contractors, code officials, team members, and that’s just for starters. Juries may be good for some people; for others, they can be terrible. Either way, it’s a very incomplete system of education.”

4 There should be a better balance in architecture school between the time spent in design studio and the time devoted to learning other subjects, such as the technical and business aspects of the profession.



As with juries, studio time has a near-mythic hold on the affections and recollections of most architects. But among our sample, the majority thought some reform was in order.

On paper, design studios typically account for 40 percent or less of the required credit hours for a professional degree. But the actual time and energy spent on studio projects is typically far more than that—enough to

elbow aside other aspects of the profession that students should be learning. Many in our poll defended design studios as superb teaching tools for applying and synthesizing knowledge. We also heard from others who felt that the all-nighter studio culture that is the rule at many schools teaches the wrong lessons about time management, teamwork, and other aspects of the profession besides design.

Wayne Hughes, AIA, president of Hughes Group Architects in Sterling, Va., noted that “less than 20 percent of the profession are designers and less than 10 percent of their time is design time. We need to train architects with technical and administrative skills.”

Some told us the solution was not necessarily to reduce studio time, but to use it more creatively. “I think the big key is integration of design with everything else—technology, business, codes,” wrote Linda Searl, FAIA, president of Searl and Associates in Chicago. “I have taught graduate studios where the students not only couldn’t draw but also couldn’t even design a stair or exit in a building. We will not be crucial to the construction process unless this problem is overcome.”

Others questioned whether any such shift in curricular emphasis would be effective. “In my experience,” wrote Margaret Gorman, a recent graduate of Columbia University’s architecture program, “I spent a significant amount of time in technical seminars and business classes, but I don’t feel that I retained much of this information because it was so far removed from the reality of construction and project management. The technical and business aspects are simply better learned in the work environment where there is a direct application.”

5 To encourage schools to place greater emphasis on practical and technical knowledge, students should be permitted to take at least part of the ARE immediately after graduating.

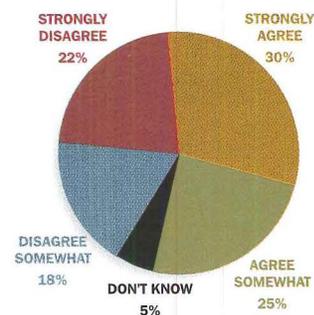
Lawyers can take the bar exam immediately after completing their professional degrees. Civil engineers take half their licensing exams at the end of their fourth year. Earlier this year, the boards of the AIA and the American Institute of Architecture Students endorsed the idea of allowing students to take the ARE immediately after graduation, instead of making them wait until

after internship, as they now must do in all but four states. Students believe that this approach, which would require state-by-state approval by licensing boards, would help boost their early pay and job status. The AIA board thinks it might help bridge the gap between education and practice by prompting schools to emphasize more practical and technical knowledge.

Michael Graves, FAIA, who has taught at Princeton for 37 years, was one of those who strongly agreed with letting recent graduates take those test portions dealing with subjects like structures and mechanical systems learned mainly in school.

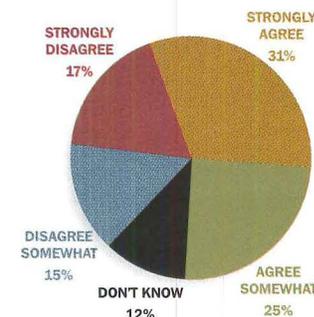
Charles Gwathmey, FAIA, a partner in Gwathmey Siegel & Associates Architects in New York, also favored the idea: “There are courses during school that are part of the base knowledge on the test, like structures. To have to come back after three years and try to reconstitute that knowledge is a waste of time.”

Others doubted that changing the timing of the test would benefit students or curricula: “Too much real-world teaching will diminish emphasis on problem solving and creative thinking,” said Rand Elliott, FAIA, president of Elliott & Associates in Oklahoma City. “There is time after graduation to learn the boring stuff.”



6 Schools of architecture are overemphasizing computer-aided design at the expense of drawing skills.

This one of the great ironies of our profession. While almost every help-wanted ad contains some version of the requisite “CAD skills a must,” practicing architects bemoan the fact that recent graduates don’t know how to draw. As schools have struggled to respond



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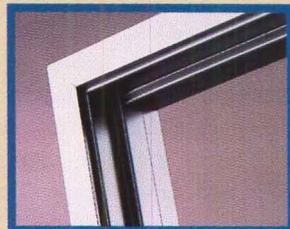
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to those market demands, our survey reveals worries among practitioners that the rush to computerized education may occur at the expense of creativity, the ability to visualize and think spatially, and knowledge gained through learning traditional drafting.

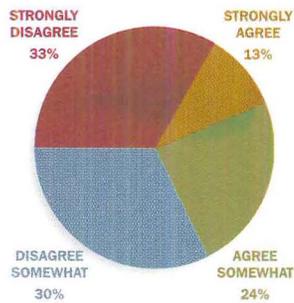
"Architects must know how to draw; it is fundamental to the way we think," Cathy Simon, FAIA, president of Simon Martin-Vegue Winkelstein Moris in San Francisco, told us. "Ours is a totally electronic office, but I still think schools do a total disservice if they require all presentations in CAD." Schools like Berkeley, where she teaches a graduate studio, emphasize computers but have not sacrificed drawing skills.

"Many students coming out of architecture school today know how to use the computer but not much more," wrote Jennifer Mauldin, a recent graduate of Texas A&M and an intern at Three Architecture in Dallas.

William Cannady, FAIA, teaches a course called "Pencils and Computers" at Rice University and discovered that students who have learned only CAD often lack very basic knowledge such as how to draw shadows and how the sun works.

Others argued that schools still aren't stressing computers enough: "There hasn't been a drawing table in our firm in almost 10 years," said R. Nicholas Loope, FAIA, president and chief executive of The Durrant Group, Inc., in Phoenix. "I don't think we should stop teaching students to draw. But this paradigm shift is dramatic, and we need to do much more in school to respond to it."

7 All faculty at accredited schools of architecture should be licensed architects.



Of the 4,149 full- and part-time architecture faculty teaching at accredited programs in the 1997-98 academic year, fewer than half—1,982—were licensed architects, according to data from the National Architectural Accrediting Board (NAAB). Still, nearly two-thirds of our participants rejected the notion of banishing all nonarchitects from faculty. Some indicated that they

might have agreed if the question were limited to design faculty. But many more seemed to feel that the key to improving the quality of faculty was not to narrow its perspectives, but to maintain a varied mix of backgrounds and viewpoints. Above all, our poll indicated that it is most important to ensure that the faculty are skilled at teaching.

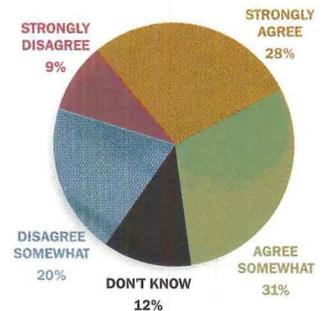
"Many of the best teachers I had were not licensed architects," wrote a recent graduate of the Georgia Institute of Technology. "I see no connection between what makes a good teacher and the ability to pass the ARE."

Requiring most or all faculty to be licensed is rare but not unheard of. Montana State University's School of Architecture has such a policy (modified two years ago to permit a few unlicensed new hires and those with PhD's in related fields to teach). Clark Llewellyn, the school's director, says the policy has had at least two payoffs. An exceptionally high portion—90 percent—of the school's graduates successfully enter the profession. And faculty who have experienced the teamwork found in real offices tend to display a camaraderie in curricular matters not typical at many other schools.

The dissenting opinion held that a readiness to practice should not necessarily be the schools' primary goal. Architecture is a complex profession and the faculty should reflect that richness. Stephen Muse, FAIA, principal of Muse Architects in Washington, D.C., told us that a rich faculty mix is vital not only for schools, but also for the profession: "There are many who feel that schools should just produce ready-made practitioners. But schools have to walk a fine line. They have to support the profession while asking questions and trying to make architecture better. A diverse faculty with diverse perspectives can help do that."

8 As a group, practicing architects and architecture firms have not been committed enough to supporting schools of architecture financially or through volunteer efforts and mentoring.

Do architects believe they are living up to their collective responsibility to support architectural education? Certainly, many practicing architects give guest lectures, join alumni associations, or sit on juries. Not long ago, Kansas State University listed more than three dozen ways that local architects interact with academia, such as design char-



rettes, career fairs, exhibitions, and other events. Still, a clear majority of our sample agreed that too often, practitioners remain at arms' length from the schools. "While some firms give a lot, most give nothing," said Calvin F. Lewis, FAIA, principal of Herbert Lewis Kruse Blunck Architects in Des Moines.

Lack of student mentoring was a particular weakness cited by respondents, even at schools with reputations for warm relations with area practitioners. "I don't see practicing architects taking any real interest," said Randy Brown, AIA, principal of Randy Brown Architects in Omaha, an adjunct professor at the University of Nebraska who volunteers several times a year as a juror.

MANY SEEMED TO FEEL THAT THE KEY TO IMPROVING THE QUALITY OF FACULTY WAS NOT TO NARROW PERSPECTIVES, BUT TO MAINTAIN A VARIED MIX OF BACKGROUNDS AND VIEWPOINTS.

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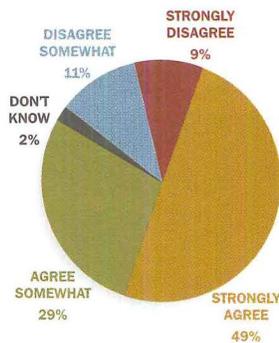
Many argued that the failure to connect goes both ways. Several Boston-area architects wrote us, for example, that with the exception of the Boston Architectural Center, whose faculty draws heavily from the region's practice community, many New England architectural schools are perceived as indifferent to area firms.

"The schools do not appear interested in the profession," wrote James McCullar, FAIA, principal of James McCullar & Associates in New York City who attended Rice and Columbia universities in the 1960s. "This is in contrast to when I was in school, when the schools solicited the involvement of the profession and when deans were practitioners. This is a real problem at a time when the profession is becoming more complex."

Bruce Fowle, FAIA, principal of Fox & Fowle Architects in New York City, wrote that while he agreed "somewhat" that architecture firms could be doing more for schools, "providing apprenticeship to the untrained and paying a \$30,000-plus salary is a major contribution."

Finally, some argued that the disconnect is a telling barometer of the lack of synchronicity that persists between academia and the practice world: "When lack of support occurs," wrote Frank Ricks, principal of Looney Ricks Kiss in Memphis, "it is often due to a difference in goals or perspectives. Alignment would bring support."

9 All architecture schools should require students to have some form of practical experience as a condition for graduation.



Requiring practical experience for a professional degree drew more support than any other issue in our survey: nearly 79 percent backed the idea strongly or somewhat. Architecture schools, our respondents seemed to say, cannot be expected to teach all aspects of the profession because it is far too multifaceted. A practical-experience requirement would help fill the void.

By one recent count, only about 15 percent of the nation's 108 accredited architecture schools require internship or practical experience to graduate. The preceptorship program at Rice University and the cooperative internships at the University of Cincinnati are long-standing examples. Proponents point out that there are many other ways to gain practical experience, such as mentoring arrangements with firms or incorporating work-site experience into studio projects.

Even those who agreed with the idea, however, foresaw practical difficulties if it were universally required. It might prove to be a particular hardship for students attending schools in remote or depressed locations where work opportunities for novices could easily dry up in lean times.

Others, like Cathy Simon, said such a requirement might have little value: "Student interns, unless they work for a very dedicated firm, usually end up as go-fers."

10 Schools of architecture should make gender, racial, and ethnic diversity in their faculties and student bodies a top priority.

The biggest surprise in our reader poll came last: a majority of our predominantly male respondents agreed that schools need to help rid architecture of its reputation as a "white, male profession."

In the 1997-98 academic year, 36 percent of the 33,673 undergraduate and graduate students enrolled in architecture

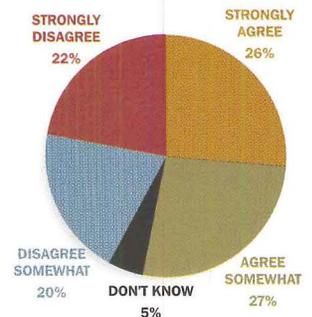
programs were women, up slightly from 32 percent five years earlier, according to the latest annual NAAB data. But only 5.8 percent of the nation's architecture students are African American, little changed during the 1990s. Hispanic students accounted for 7.4 percent of the national total in 1997-98, down from nearly 9 percent in 1993-94.

Of the nation's architectural faculty, there were 873 (21 percent) women in 1997-98—but only 166 were tenured, according to the NAAB data. In the entire nation, there were 117 African American architecture faculty and just 37 were tenured—a drop from five years earlier when there were 126 African American faculty total, and 44 were tenured.

Still, many in our sample disagreed that diversity should be a top priority in schools. Although they, too, would like to see more women and minorities enter the profession, they feared that excellence and talent might be compromised if that goal were too vigorously pursued. "Qualification for the profession of architecture should be a matter of merit only and should not be related in any way to gender or race," said Taha Al-Douri, an intern at Perkins Eastman Architects, PC, in New York City.

Some argued that a richer mix of interests and philosophies should be a more important objective than racial and gender diversity. "In architecture, it would be more interesting to think of diversity in terms of having a good mix of urbanists, modernists, and postmodernists, rather than 'Hispanicists' or 'womanists,' said Joe Sultan, AIA, principal at Gran Sultan Associates in New York City.

A majority felt, however, that the relative lack of gender, racial, and ethnic diversity among students and faculty helps perpetuate a parochialism that places the profession dangerously out of touch with the client pool. "The world is half women and is made up of totally diverse people," said J. Robert Hillier, FAIA, chief executive officer of the Princeton, N.J.-based Hillier Group who also teaches at Princeton University. "Why shouldn't this profession be the same?" ■



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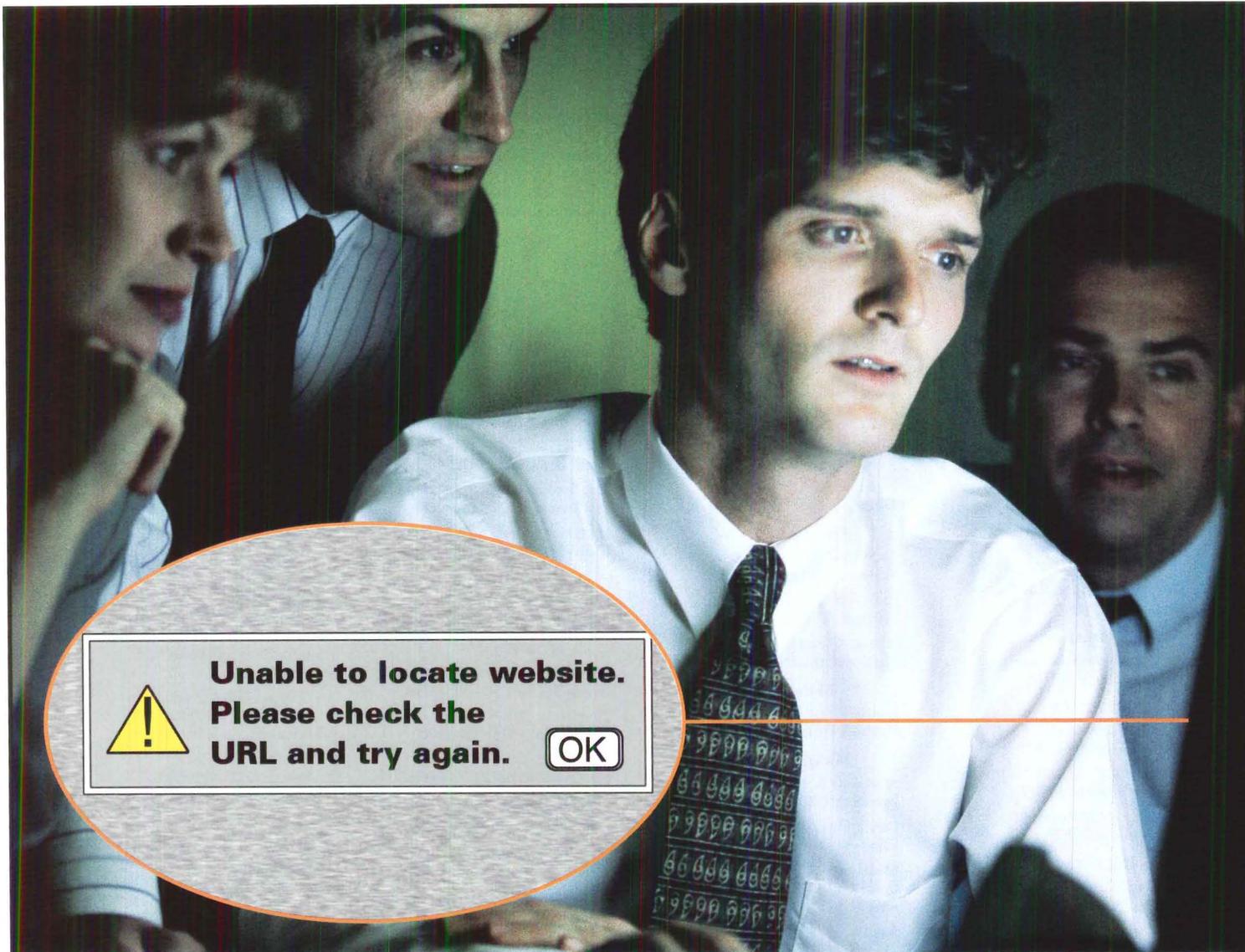


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Record Interiors 1999

Brilliant interior architecture, especially in existing buildings, is an elusive animal. Highly accomplished architects have been known to scoff at interiors work: “breaking carpet, not ground,” some implicitly suggest with a sniff. When designing major buildings, architects often leave the interior work to others.

But interior architecture need not be the profession’s neglected stepchild: Carving out exceptional indoor realms is a feat requiring as much talent and skill as inspired exteriors. For this issue, we sifted through hundreds of projects, avoiding outright interior decoration—however tasteful or seductive—in favor of truly architectonic interventions. We looked for projects distinguished by qualities of light, spatial sequencing, and formal invention.

The resolution of details—the joints, colors, and textures—was as important as the larger compositions and experiential resonance.

Drawing from regions across America and throughout the world, we chose six programmatically and visually diverse projects. This year’s Record Interiors selection begins and ends with

contrasting venues for art. Both of these projects—Maya Lin’s design for an art collector’s New York pied-à-terre and Czech architect Emil Prikryl’s gallery in the medieval ramparts of western Bohemia—integrate Modernist sensibilities into semi-underground spaces. But there the similarities end. Whereas the gallery has clean-lined yet dramatically thick-walled and vaulted spaces, the apartment recalls the exquisite lightness of shoji screens and tatami mats.

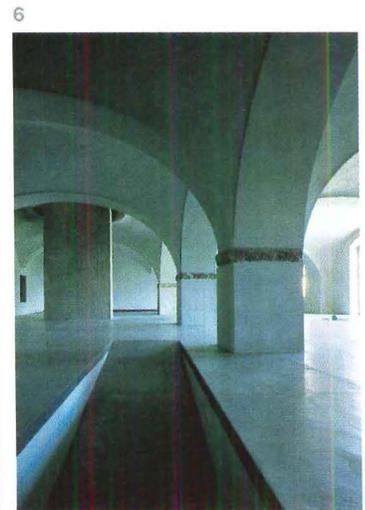
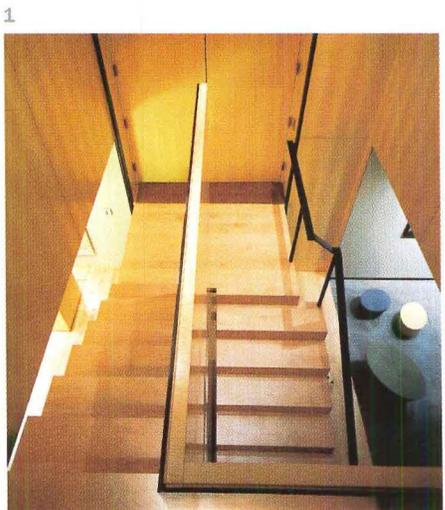
Our other projects range from a spectacle-filled Las Vegas restaurant to a futuristic Tokyo boutique, from a literally dazzling Los Angeles nightclub to a tranquil Vancouver airport lounge. While much of the work explores subtle palettes and natural materials—wood, concrete, and stone—some experiments with the surreal qualities of edgy man-made surfaces and vibrant colors.

Despite the differences, each of these architectural works creates a strong sense of place. Crossing the entry thresholds—coming from an apartment building lobby, a boisterous food court, a narrow alleyway, an airport thoroughfare, or an open-air market square—one enters an all-embracing realm: in every case, distinct from the setting left behind.

—Sarah Amelar

The firms featured are:

1. Maya Lin Studio
2. Adam D. Tihany International, Ltd.
3. John Friedman Alice Kimm Architects
4. Rei Kawakubo: Concept and Design
5. Patkau Architects
6. Emil Prikryl, Architect





From the duplex's entrance (on a landing), stairs lead up to the bedrooms and down to the more public spaces.

Within the chaos of New York City, Maya Lin turns the **NORTON APARTMENT** into a tranquil, Zen-like hideaway.

by Sarah Amelar

With the serene precision of a Japanese puzzle box, architect Maya Lin's Norton Apartment delicately unfolds and reveals itself. Finely crafted, this is a place where panels pivot and glide open to unmask hidden elements, fluidly transforming the compositions of walls and rooms—all without any sense of contraption or mechanical bravura.

Though the apartment is now an elegantly integrated piece of architecture, Lin—most famous for her design of the Vietnam Veterans Memorial in Washington, D.C.—began with a quirky, if not awkward, space. In fact, she initially questioned its virtues when her friend, software entrepreneur and art collector Peter Norton, approached her to turn the 2,500-square-foot, semi-underground duplex into a pied-à-terre for himself, his wife, and two children. To Lin's eye, the space seemed too small for their needs, and she expressed concern about the lack of views and limited sources of daylight. But Norton maintained he liked those very features, desiring a quiet, introspective home, one small enough to feel intimate even when he was there alone.

"The apartment had its difficulties and challenges," admits Norton, but he also underscores the commission's extraordinary positive features. "In a way," he says, "I wanted to make an ideal project for Maya: no fixed budget, no fixed schedule, no overriding design parameters, and no heavy-fisted client intervention."

Lin's concept for an internally focused, exceptionally flexible space soon emerged. Transcending the limits of square footage, the duplex can readily convert itself—through moving parts—to accommodate the inhabitants of the moment: a couple (with or without two children), a single person, overnight visitors, or cocktail guests.

Working closely with architect David Hotson, Lin's collaborator on such projects as the Museum for African Art, she distilled a tranquil, yet texturally and experientially rich minimalism. Such qualities, typical of Lin's work, are apparent as soon as one steps through the front door—just off the lobby of a five-story apartment building—to arrive on a landing midway between the duplex's two floors. Here, the first view is of two vertical lines: the simple edges of a plate of blackened steel against a



Atop the duplex's stairs, views span the double entry doors, the partition wall of steel wrapping sycamore, and concrete stools by Lin in the living room.

Project: Norton Apartment

Client: Peter and Eileen Norton

Architect: Maya Lin Studio

Associate architect: David Hotson

General contractor: Giovanniti, Inc.

Consultants: Friedman Structural

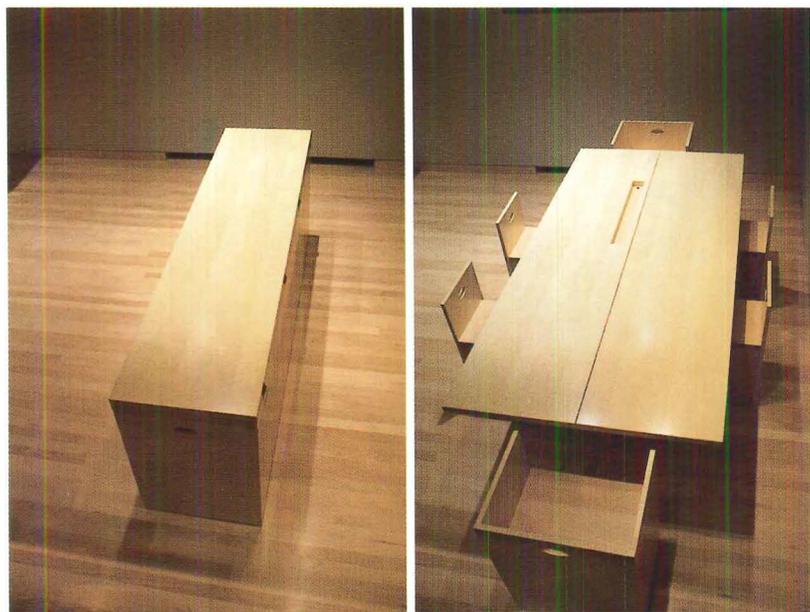
Engineering; Renee Cooley Lighting

Design



Seen from the kitchen and dining area, the stair run has an origami quality—as if a single sheet of steel and one of wood were folded together. Beyond the stair, in the living room, Lin's sculpture of shattered glass fills one corner (opposite). The architect also designed the cart on wheels (this page).



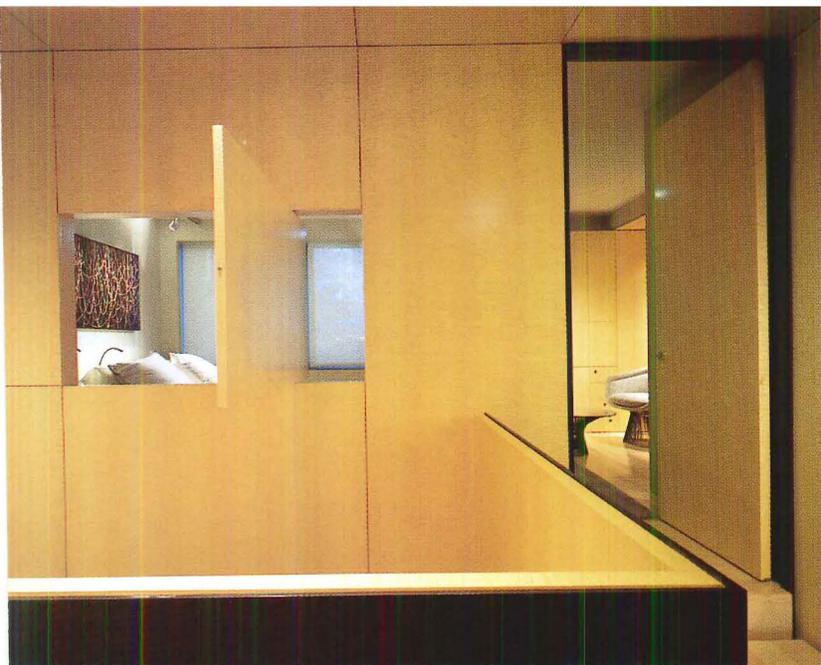


In the kitchen, appliances, such as the refrigerator, oven, and washer with dryer, are concealed behind sycamore panels (above). The simple, unassuming volumes of Lin's custom-designed workstation (above) and sideboard/dining table (left) come apart to reveal chairs that fit like puzzle pieces beneath them.



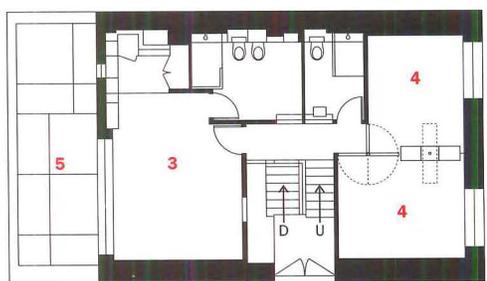
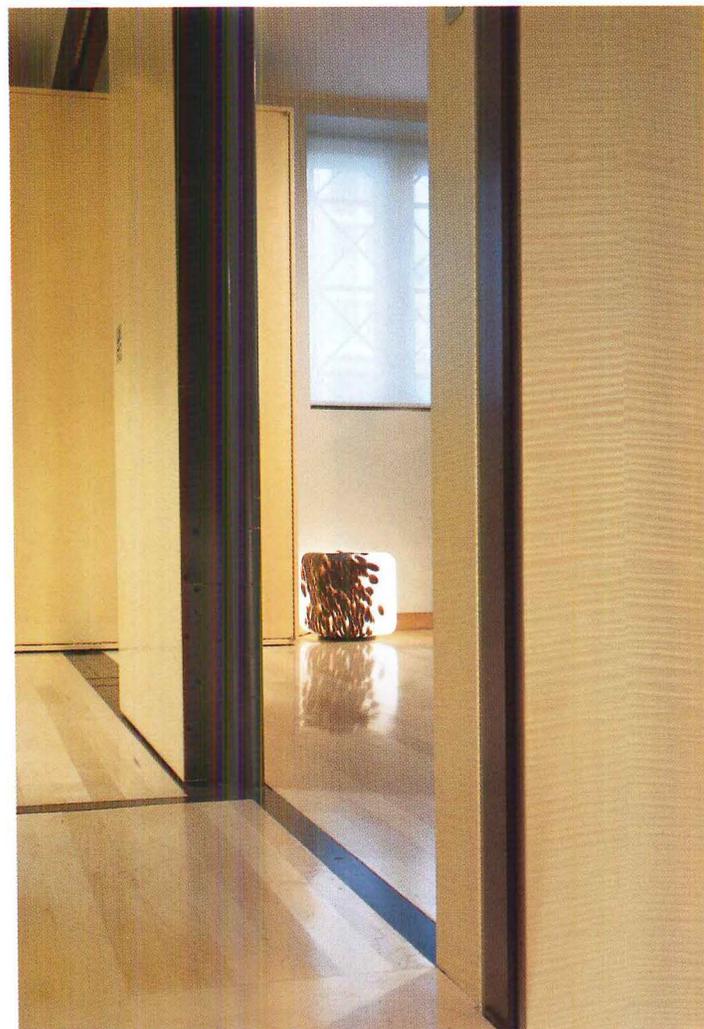
Sandblasted-glass shower doors occupy multiple positions (left). A sliding panel (above) can convert the bathroom suite into two separate rooms.

Behind the custom freestanding sink, a wooden wall is precisely carved to receive the door handle. Lin's concrete stools stand in the foreground (above).



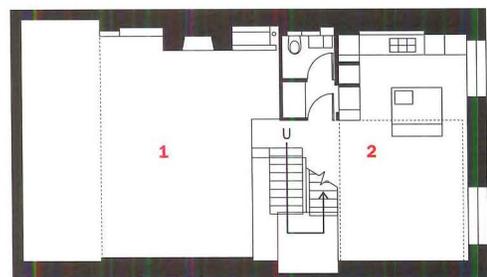
A pivoting panel in the master bedroom opens just beyond the top stair landing (left). The other bedroom's partition wall and gliding,

rotating armoire on a track have many configurations that rely on a custom-made three-pivot hinge (below and opposite).



UPPER LEVEL

0 10 FT.
3 M.



LOWER LEVEL

→ N

1. Living
2. Kitchen/dining
3. Master bedroom
4. Bedroom
5. Skylight

thin plane of pale-blond sycamore. Forming the stair's central partition wall, these paired layers separate two runs of stairs—one ascending to the private sanctum of bedrooms, and the other, a slightly wider flight, leading down to the public arena for dining, living, and cooking—before bending in unison to become a balcony rail on the upper level. Like a paper fan, the steps almost appear folded from a single sheet of sycamore over steel.

Behind the stairs, diffuse light glows from a floor-to-ceiling volume, whose translucent panels of sandblasted glass, framed in blackened steel, resemble shoji screens. This luminous vertical element (with its skin teasingly veiling bathrooms within) visually links the two floors.

Throughout the space, self-contained forms quietly divulge their kinetic potential. In one of the two bedrooms, a sycamore partition with myriad configurations and an armoire on a track can split the room into two. Similarly, the upstairs bathroom suite becomes a pair of bathrooms. And a study folds into a wall of the master bedroom. In the kitchen, the work island and sideboard can also metamorphose, their apparently solid bases breaking into chairs that fit together like puzzle pieces.

The entire project is remarkably detailed, down to its custom hardware and the consistency of its reveals. Instead of door stops, a perfect imprint of each door handle and lockset is carved into the wood or plaster of the wall behind it. The ubiquitous sycamore veneer was consistently applied in four-inch widths—an unbroken module—and the wood's figure always continues down from one cabinet door to the panel below it. For the stair, 12-foot-long pieces of steel and entire runs, welded off-site, came in through a window. As Hotson recalls, "It was like building a ship in a bottle."

After finessing the spatial details, Lin and Hotson spent six to eight months of this two-year project on the furniture alone. "I'd always wanted to do something like this," says Lin, "architecture that's really a complete whole." ■

Sources

Skylight: Hope

Lighting: Nulux, Litelab, Belfer Litetouch (controls)

Plumbing: Kroin (custom), Duravit

Locksets: FSB

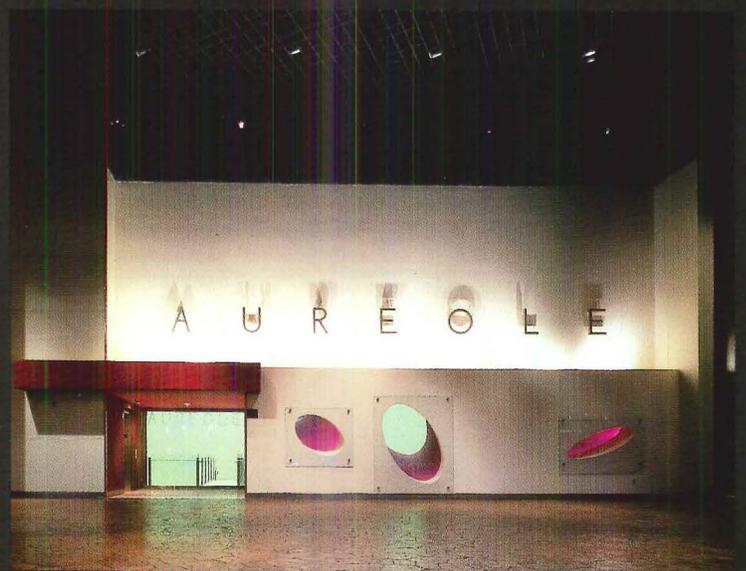
Cast-cement stools: Maya Lin for Knoll Inc.

A photograph of a modern interior hallway. The walls and ceiling are clad in light-colored wood panels, likely sycamore. A prominent blackened steel frame runs vertically and horizontally, creating a grid-like structure. The floor is also made of light wood. In the background, a door with a silver handle is visible. The lighting is soft and even, highlighting the textures of the materials.

Blackened steel, framing sycamore and sandblasted-glass panels, recalls the proportions of tatami mats and shoji screens. The glazed, backlit wall rises the entire height of the duplex. Distinct volumes and reveals are clearly expressed throughout the project.



Patrons entering Aureole (above) cross a bridge in a dramatic 50-by-50-by-50-foot room and catch a glimpse of the glazed wine tower. The restaurant's facade, perforated by 10-foot-deep rose-tinted elliptical windows (right) has a serene presence in a busy foodcourt.



Amid Las Vegas' hype and glitz, Adam Tihany's **AUREOLE** restaurant strives to marry good taste and spectacular feats.

by David Hay

Late one night in early 1998, architect Adam Tihany paced the floor of his Las Vegas hotel room. The architect, responsible for dining establishments such as Le Cirque 2000 and Palladin in New York City, had been asked to submit a restaurant design for what he considered “a dream space.”

Unfortunately, the 9,000-square-foot site—which included a dramatic 50-by-50-by-50-foot entry volume—in the soon-to-be-completed 42-story Mandalay Bay Resort did not come unencumbered. Circus Circus Development had already ordered a monumental staircase, which would curve down from the entrance level into the restaurant. Tihany felt that this giant flight of fancy would not only define the space but also add to Las Vegas’ “two-dimensional, papier mâché iconography.” But when pressed for an alternative, he came up short. His clients kindly gave him a night to think some more.

Mulling anxiously over his initial idea for a sophisticated, contemporary New York-inspired restaurant, Tihany flipped on the television. On came the movie *Mission Impossible*. The 51-year-old architect soon became engrossed in the scene where Tom Cruise, hooked to a cable, works his way around the computer center at CIA headquarters. Suddenly, Tihany sat forward. He had the answer to his design problem.

In place of the staircase, Tihany decided to build a glass-and-steel-framed tower, accessible by a bridge from the restaurant’s entrance level. An homage to—rather than a replica of—a New York skyscraper, it would house a renowned wine collection acquired by the restaurant’s owners. High-flying aerialists, using cables, would scale the tower (with the agility of Tom Cruise) to retrieve the bottles.

The next morning, Tihany presented this design to Circus Circus’ point man, who readily embraced it. The restaurant, called Aureole like its sister establishment in New York, opened last March.

Tihany’s design conceit is an abstract, rather than literal, interpretation of Las Vegas’ design philosophy. “They always want you to feel you’re somewhere else,” says the architect. But making an abstraction in Las Vegas was no easy feat, especially given Aureole’s setting. The two-story restaurant spans the entry and lower levels of the bronze-windowed Mandalay Bay, whose gaudy casino masquerades as colonial Burma. Here, large caged parrots greet visitors entering the building’s marble-floored lobby. Outside, beyond a *Jurassic Park*-style jungle, arti-

David Hay, a Los Angeles-based writer, has covered architecture and the arts for The New York Times, Los Angeles Times, House Beautiful, Preservation, and many other publications.

ficially created, six-foot waves crash onto the imported sand of “Mandalay Beach.”

Getting to Aureole means a trip through the heart of this casino: the gaming rooms and a football field-size hall full of slot machines. In a hectic restaurant court, Aureole’s white front wall stands apart from the brash eateries around it. On its facade, three rose-tinted halolike windows seem to float. Tihany created these deep sculptural ellipses by projecting circles onto clear cubes. The result is a trio of shimmering aureoles.

Diners walk through a relatively simple doorway and cross a bridge to Tihany’s opening scene—the wine tower—before catching their first glimpse of the 9,000 bottles within. (Five humidifiers and an equal

HOISTED UP THE 42-FOOT TOWER, AERIALISTS RETRIEVE THE WINE.

number of air conditioners assure a constant 70 percent humidity level and 55-degree cellar temperature.) Winding around the 42-foot tower, the stairs allow for close views of the “wine angels.” Attached by rappelling clamps to electrically powered cables, the aerialists are hoisted up the tower, where they retrieve bottles and slip them into wine holsters for the journey back to earth.

The stairs lead to the bar and lounge. With cream-colored limestone floors and its walls partly faced in deep brown Italian suede, the space feels surprisingly calm. Dark walnut paneling on the small bar, side tables, and maitre’d’s desk reflect Tihany’s desire to make this area “more masculine and somber.”

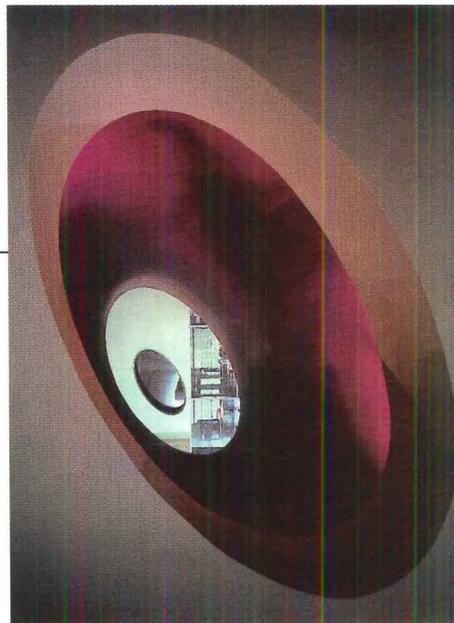
Project: Aureole at Mandalay Bay

Client: Circus Circus Development

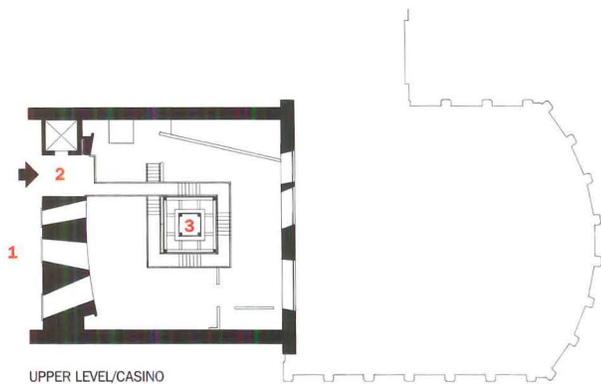
Architect: Adam D. Tihany

International, Ltd.—Adam D. Tihany, principal-in-charge; Brannen L. Brock, designer/project manager; Martin Vahtra, designer

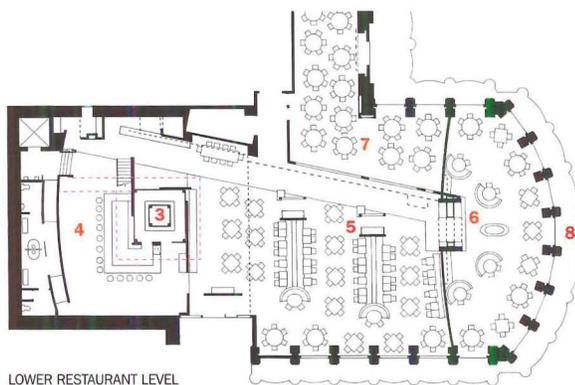
Architect of record: Klai Juba Architects



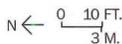
Consultants: JBA Engineers (mechanical and electrical), Lochsa Engineering (structural), Thomas Thompson Lighting Design (lighting), Bee Engineering (hoisting and rigging equipment), Sierra Glass & Mirror (glazing and doors)



UPPER LEVEL/CASINO



LOWER RESTAURANT LEVEL



Trained aerialists, using electrical hoisting cables, ascend the wine tower's interior (right) to retrieve bottles. The wine and the aerial spectacle are visible from the bar and lounge (opposite). A gold-leafed boat form hovers above the Swan Court (below left).

1. Casino
2. Entry
3. Wine tower
4. Bar and lounge
5. Main dining
6. Swan Court
7. Private party room
8. Terrace



Continuing around the tower's base and into the 180-seat restaurant, the design changes gears. Following the "wow" of the entry sequence, the architect wanted to give diners a "pretty and seductive" eating area. To achieve this intimacy, the main dining room has a lower ceiling and four light boxes that emit soft, diffuse light. The room is divided into three areas, separated by sycamore-paneled, glass-topped banquettes. The pale-blond imported wood further sets this room apart from the wine tower's pyrotechnics.

Still, Tihany's work was not done. With a renowned chef in the kitchen, Aureole's owners really wanted to pull in the high rollers. When the truly moneyed make their way beyond the main dining room, they continue through a doorway, framed by water falling between two sheets

WITH AUREOLE, TIHANY SET OUT TO OVERTURN A LOCAL CLICHE.

of glass: the haplessly named "water gate." The VIP guests have arrived at Swan Court, a semioval room with French doors, opening to an outdoor pond and waterfall. This quieter room rises to an extraordinary ceiling, centered around an ethereal, gold-leafed ellipse that recalls a boat's hull.

At this point, Tihany's allusive forms—the aureoles, the boat hull, and even the wine tower—become so numerous and varied that the New York metaphor begins to break down, and it seems hard to imagine being anywhere but Las Vegas. The architect walked a fine line: recognizing the need for spectacle, he also sought a quality of subtle detail unheard of in this town. Turning a local cliché on its head, Tihany set out to create "something which has some depth to it, and thus would last." With Aureole, Las Vegas may just be ready for such a challenge. ■

Sources

Paint: Benjamin Moore

Hardware: Custom by Adam D.

Tihany, fabricated by Valli & Valli

Stone and tile: Western Tile and Marble

Lighting: Custom by Adam D. Tihany, fabricated by T.A. Greene







A polycarbonate wall separating the dance floor from the rest-rooms (this page) and a steel-coil curtain that closes off the bar area (opposite) seem to float below the old roof trusses.

At the hot new **CLUB SUGAR** in Santa Monica, John Friedman and Alice Kimm choreograph a dance for scrims, screens, lights, and bodies.

by Clifford A. Pearson

Clubs are all about seeing and being seen," says John Friedman, AIA, during a nighttime jag at Club Sugar, the Santa Monica, Calif., nightclub he designed with his partner, Alice Kimm, AIA. "So we used a lot of new plastics with contradictory qualities of transparency and reflectivity," adds Kimm. Aware of the importance of anticipation and distortion in the late-night scene, the architects created a place that encourages views through screens, scrims, translucent panels, and colored surfaces. Even the sharks and eels in a 17-foot-long aquarium see the world through water backlit by purple neon.

Set in an industrial building that was reincarnated as a reggae club a few years ago, the 3,000-square-foot Sugar combines slick new materials with the exposed brick and old wood joists of the existing structure. Juxtaposing modern and vintage, cool and warm, was a key strategy of Friedman and Kimm. To accentuate the contrast, the architects inserted elements such as partitions and screens below an 8-foot-6 inch datum line, above which the original roof structure appears. "The idea," says Friedman, "was to have the new and the old just kiss."

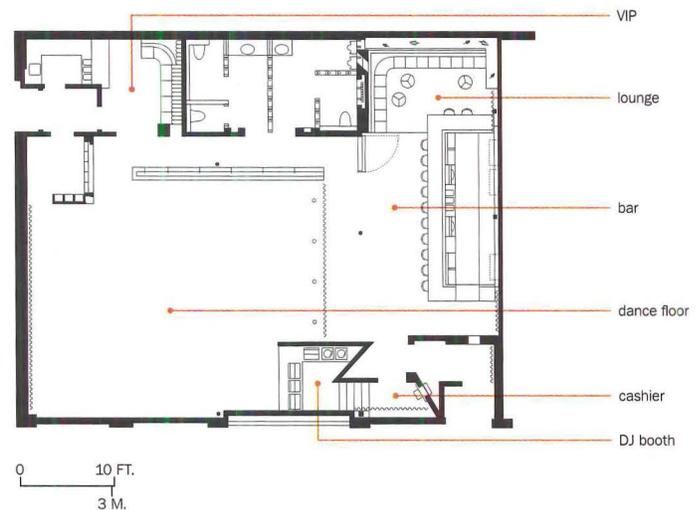
Featured elements—the black epoxy-covered concrete floor, the zinc-clad entry wall, and the bar of honeycomb acrylic panels beneath a clear two-inch-thick acrylic counter—have a

"THE IDEA WAS TO HAVE THE NEW AND THE OLD JUST KISS," SAYS FRIEDMAN.

cool manner that is very much of the moment. But a few softer, warmer touches also make themselves felt: chic upholstery on a curving banquette and plush drapes covering much of the wall behind the bar, for example. The sense of opposites attracting in the realm of architecture, asserts Kimm, reflects the human dance being played out in the club.

The client, David Reiss, participated in the design process but never had a particular look in mind. As he says, "I wanted a place that people would talk about and remember."

"David has an adventurous spirit," explains Friedman. "He hired us even though we had never done a nightclub, and he really enjoyed exploring new ideas." Much of that exploration dealt with finding the right materials, modern ones that would be easy to maintain. Although he owns a hot restaurant, Red, and is himself a fixture in L.A.'s late-night scene, Reiss had never owned a club before Sugar.





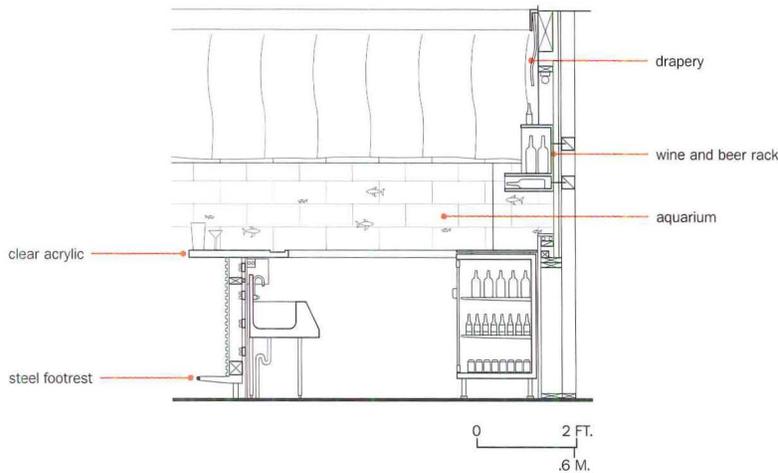
The architects stripped the 3,000-square-foot space to its structural shell, poured a new concrete floor and covered it with black epoxy, then divided the club with a series of partitions that offer

distorted glimpses of what's happening in other parts of the joint. Dancers can sit on the bench-size steel channel at the base of the wall between the dance floor and restrooms (left in photo).





Acrylic abounds in the honeycomb sheeting over the bar front (left) and the two-inch-thick clear slab above it. Restroom doors are also clear acrylic (below), offering views to the lavatories.

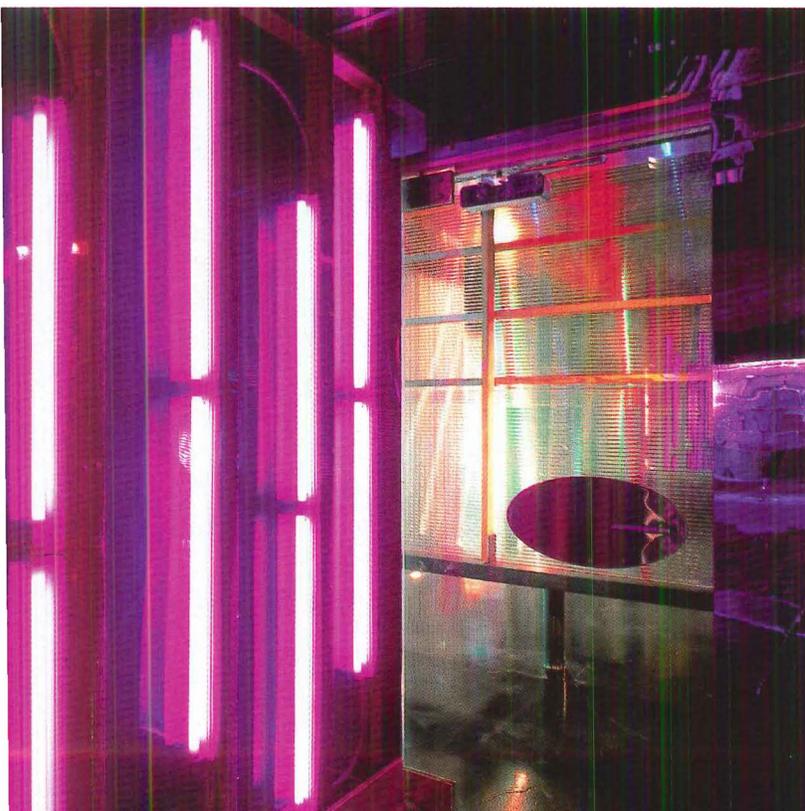


To create a sense of intimacy on slow nights when most people are sitting down, Reiss asked the architects to find a way to close off the bar area from the dance floor. Friedman and Kimm's solution was a curtain of stainless-steel coils that offers a sense of enclosure without completely blocking views through the club. On busy nights, the curtain opens as bodies fill the dance floor.

Separating the dance space from the corridor to the restrooms—called the "tunnel"—is a different kind of partition, one of ribbed polycarbonate rising above an 18-inch-wide steel channel that doubles as a bench for tired dancers. The translucent quality of the polycarbonate brings cloudy images of dancing bodies into the tunnel while providing a sound buffer between the two parts of the club.

From the beginning, Reiss told Friedman and Kimm that the restrooms would be critical to the success of the project. In today's club world, restrooms are signature spaces. At Sugar they tease, first with clear acrylic doors offering views to the lavatories and then with colored lights that recall a peep show. Walls and ceilings in the restrooms are colored acrylic panels backlit by staggered fluorescent strips, so visitors are enveloped in garish but hip colors—fuchsia for the girls, aqua for the boys. The wash counter for the two restrooms is one long piece of acrylic that penetrates the dividing wall through an opening just large enough to offer a peek to the other side (if you bend down and turn your head). Guys standing at the urinals get an extra treat: a view through a two-way mirror to the aquarium and raised seating area near the bar.

Sugar is still a work-in-progress. A VIP room in the back and the facade await more work. But since the architects designed the place as a combination of rough and slick, it easily accommodates such unfinished business. Dressed in all the latest materials and colors, Sugar has enough attitude to attract the fickle after-hours clubhopper. Yet it knows when to wink with the right offbeat touch so no one takes it too seriously. ■



Project: Club Sugar, Santa Monica, Calif.
Architect: John Friedman Alice Kimm Architects—John Friedman, AIA, Alice Kimm, AIA, principals; Nina Lesser, Dan Brunn, Felix Cheng, Joe Fleischer, Marlin Watson, Chris Samuelian

Engineer: William K. Koh & Associates
Consultant: Fire Ltd. (lighting)

Sources
Honeycomb plastic sheeting: Norfield
Polycarbonate sheeting: Polygal
Stainless-steel curtain: Cascade Coil



Backlit walls and ceilings of colored acrylic envelop restroom visitors in a warm electric glow. The standard four-by-eight-foot panels can be easily replaced if damaged.



A futuristic **COMME DES GARCONS** store in Tokyo beckons shoppers down its meandering paths.

Passersby can see clothes behind an undulating facade of glass stenciled with a blue dot screen. Behind one wave, a swerving electric-blue counter displays shirts for Tokyo shoppers (below right).

by Soren Larson

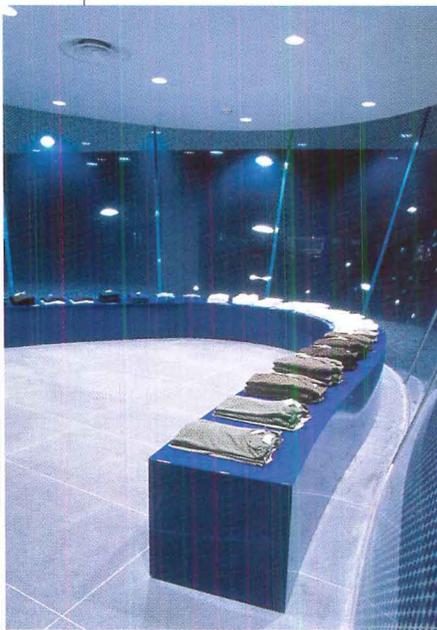
Comme des Garçons is anything but predictable. In March, a month before opening its revamped Tokyo boutique, the fashion house unveiled a new store in New York City whose entrance implies inscrutability and exclusivity. The doorway is silent, a small opening in an old brick facade under a sign that still announces the previous owner: the Heavenly Body Works auto repair shop. Considering Comme des Garçons' avant-garde reputation, the presentation seems to say, "If you aren't in the know, then don't even bother."

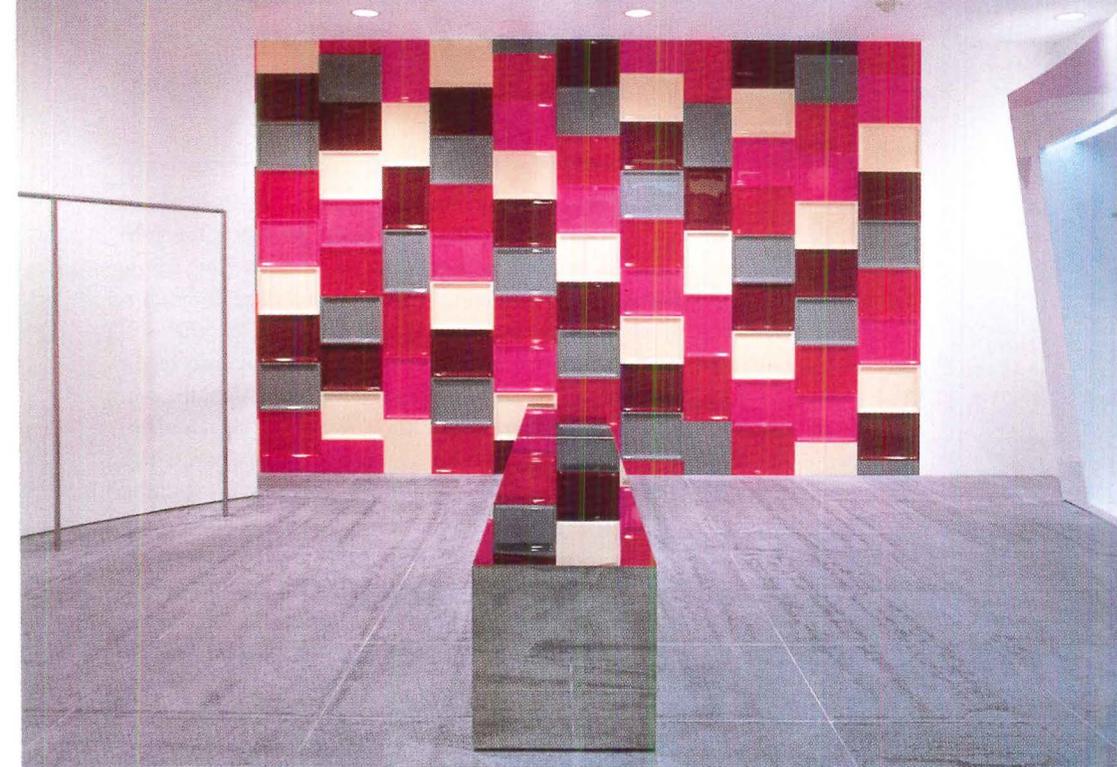
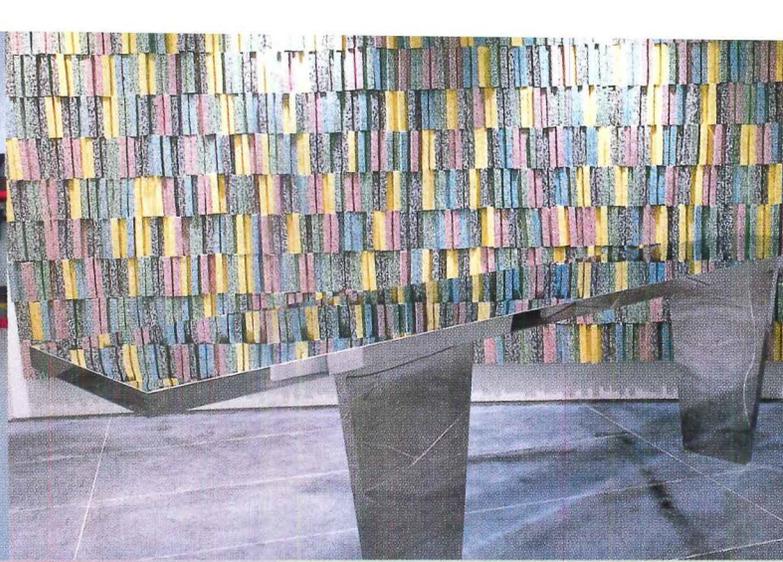
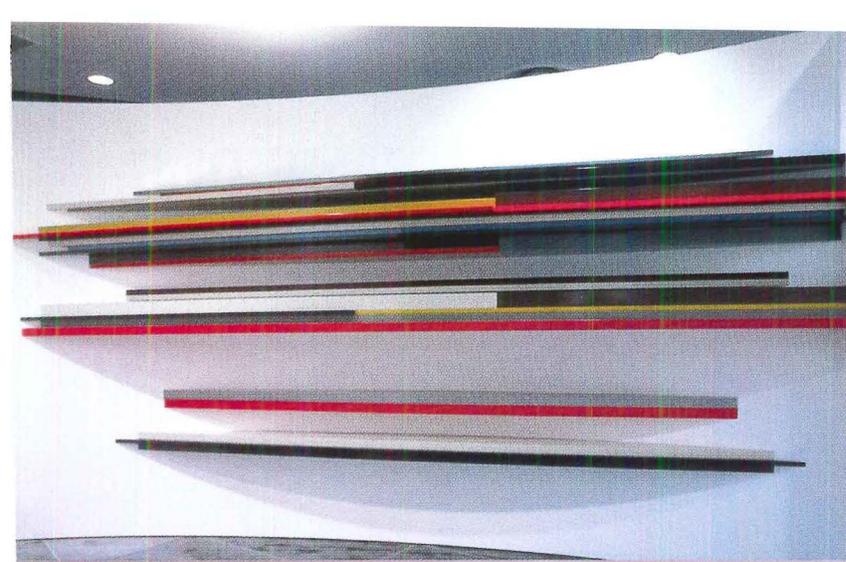
But this isn't the case with the remodeled Tokyo store, which was designed, as were the firm's other boutiques, by company founder

and lead creative force Rei Kawakubo. The front facade—at the ground level of an office building in the chic Aoyama district—is a glowing, transparent beacon, constructed of space-age, undulating glass walls stenciled with a blue dot screen. Passersby can see through the electric-blue bubble to the shirts and ready-to-wear areas, which occupy the two bulging forms on either side of the front door. "Each store will have its own particular feeling, its own character," says Kawakubo. "In New York, we found the existing facade interesting to keep. In Tokyo, we [updated] a location to make it stronger, completely changing the facade as well as entirely renovating the interior."

The new facade was designed by London's Future Systems, which collaborated with Comme des Garçons on previous efforts, including the new New York boutique. But the interior of the rectangular, 7,500-square-foot Tokyo store, which reopened in April, is all Kawakubo: her unorthodox fashion sense and notions of private creativity permeate the overall layout, as well as the ambiance of each of the various spaces.

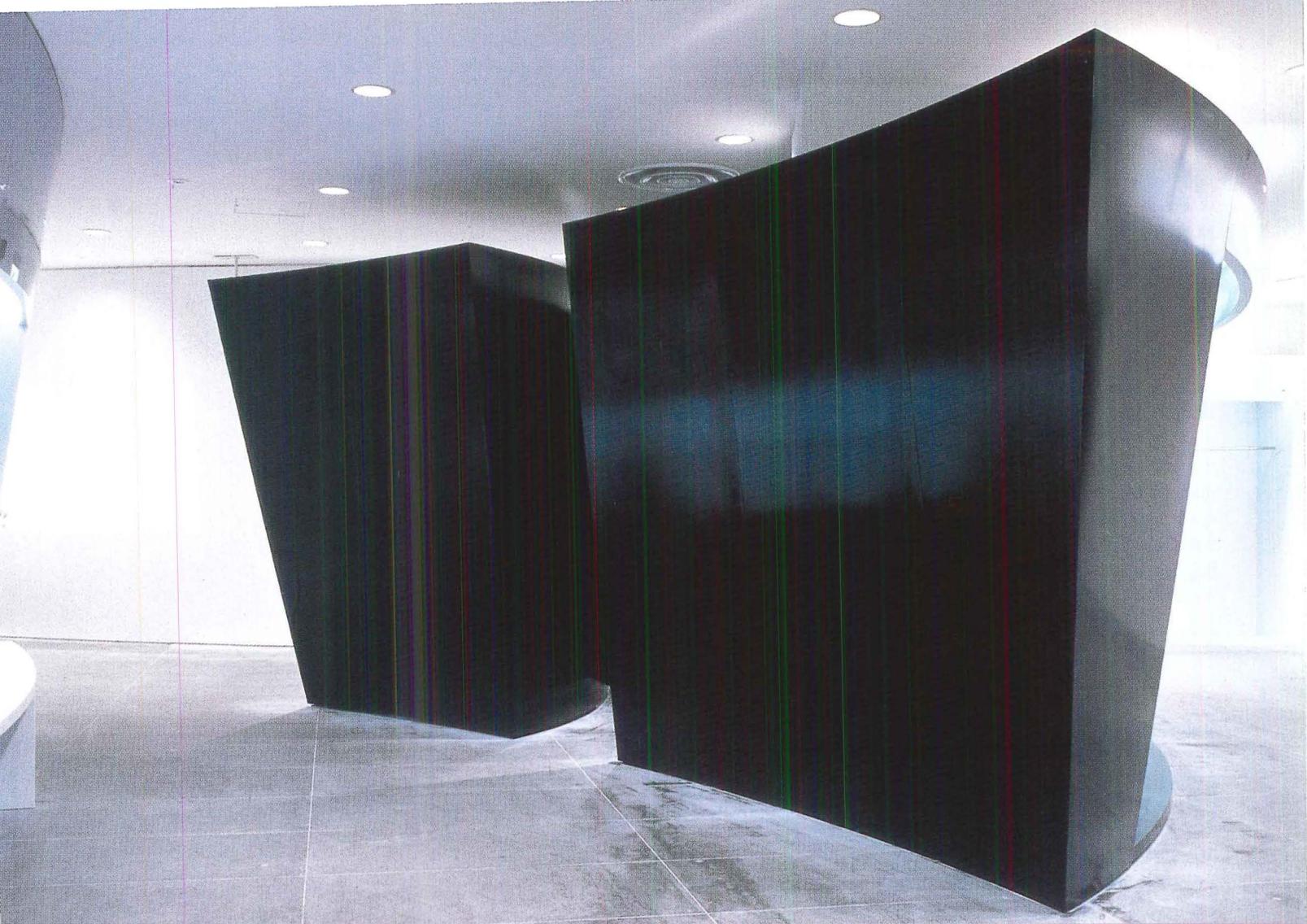
This turns out to be no easy-to-digest chain store. Though some shelves and clothes are visible from outside, on the inside, privacy



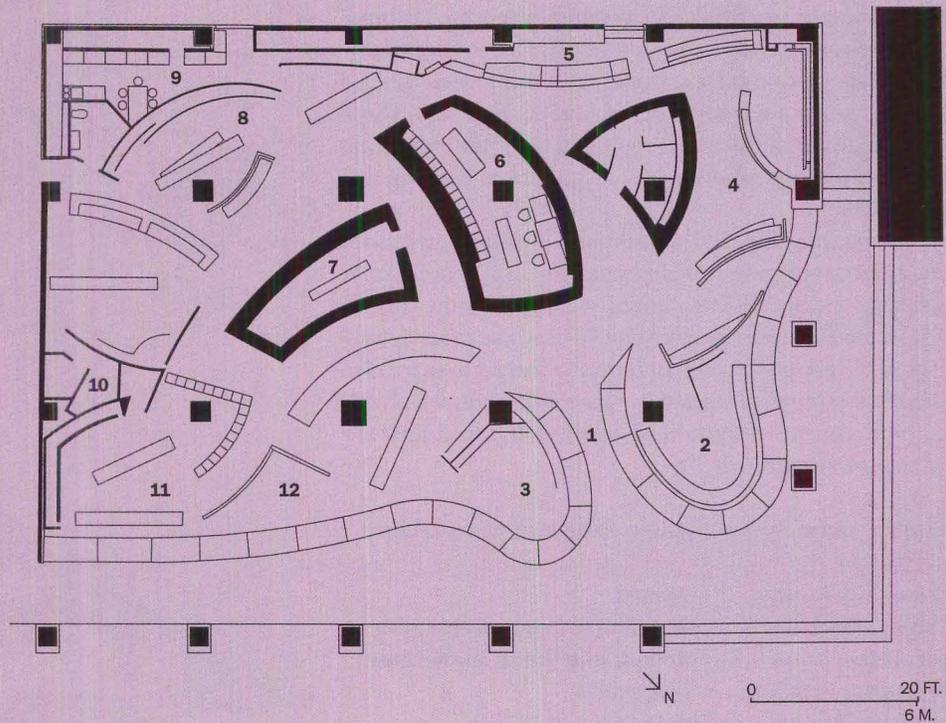


Varied wall treatment distinguishes individual merchandise areas. For instance, artist Christian Astuguevieille was commissioned to create one installation (bottom right), while artist Sophie Smallhorn was tapped to design another (top left). Some of the thick, curving forms (opposite page) contain storage spaces for stock.





1. Front entrance
2. Shirts
3. Comme/Comme collection
4. Comme des Garçons collection
5. Cashier
6. Stock and office
7. Stock
8. Homme Deux
9. Staff
10. Changing rooms
11. Homme Plus
12. Fragrances



is paramount. Upon passing the threshold, the first space visitors enter is bare of merchandise. The walls and ceiling are simple, clean and white, while the floor is sand-blasted granite. Customers choose which pathway to follow, and then meander into the inner, hidden merchandise areas. “This leads the customer on the voyage of discovery,” explains Kawakubo. “The store focuses on movement and exploration. One has to dare to wander around to discover all the products and different spaces.”

The walkways pass between a succession of curved walls—mostly made of aluminum plates rolled with glossy white enamel paint—behind which Kawakubo placed some of the product stock and office areas. Intermittently, the passageways widen to introduce a new environment (the store sells six Comme des Garçons clothing brands, plus accessories and fragrances). While the floors and walls remain similar throughout the boutique, each individual merchandise area is distinguished by a unique wall hanging, painting, or installation. One space contains shelves full of urns created by artist Christian Astuguevieille, while another area houses artist Sophie Smallhorn’s bright wall of horizontal stripes fashioned from medium-density fiberboard and acrylic paint. Other walls display an array of patterns, colors,

THE CUSTOMER IS LED ON A VOYAGE OF EXPLORATION AND DISCOVERY.

and textures developed by Kawakubo. The booths that hold the merchandise are high-gloss baked-finish steel, while the bulk of the fixtures—custom manufactured by the contractor, Ishimaru K.K.—are built of polished stainless pipes or stainless mirror glass and plate glass.

Though artists were involved in the creation of the inner chambers, Kawakubo downplays the artistic side: “The various colored walls are not in any way to be regarded as art but as a structural part of the architecture. I simply felt like creating different types of wall in color and texture to create a strong and interesting difference between spaces.”

As in the interior of the New York store, the concept, says Kawakubo, is of a “more concentrated, superficially unaccommodating space which expresses the pure will of the designer, where the customer can enjoy a private comfortable feeling and experience a sense of discovery.” This new approach is a far cry from the Comme des Garçons style when its first stores were going up around 20 years ago. Those structures, Kawakubo has noted, were simple and boxy; the entire look of Comme des Garçons was expressed in one gesture, in a strong and minimalist environment.

The complexities and hidden qualities Kawakubo now creates make for a more personal and surprising shopping experience. But in her typical fashion, she has no intention of sticking with the current approach. “We wanted to make something totally new that looks toward the future,” she says. “The underlying concept is to constantly search for the new and not yet existing, to break down barriers and dispense with preconceived notions, and to try to push forward and look into the future using the power of creativity.” ■

Project: *Remodeling of Tokyo Comme des Garçons flagship store*

Architect: *Rei Kawakubo (concept and design); Takao Kawasaki (interior designer); Future Systems (facade)*

General Contractor: *Ishimaru K.K.*

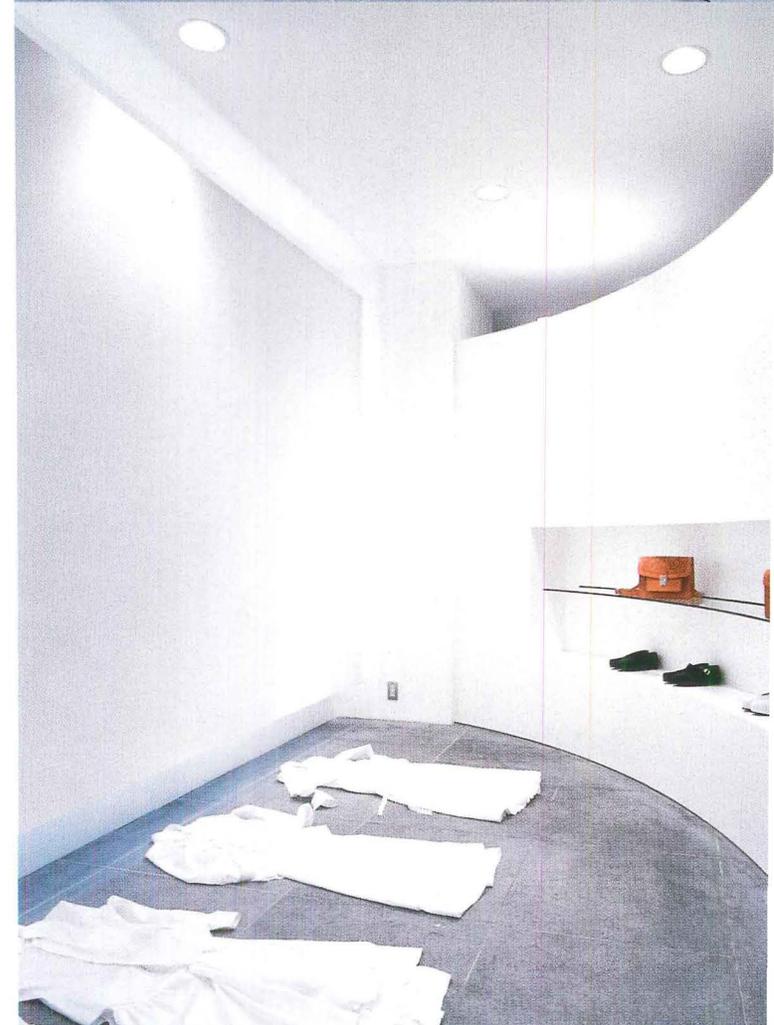
Interior art direction: *Christian*

Astuguevieille and Sophie Smallhorn

Sources

Glass and stainless-steel facades, fixtures, steel booths and furniture: *Ishimaru K.K.*

Lighting: *Iwasaki*



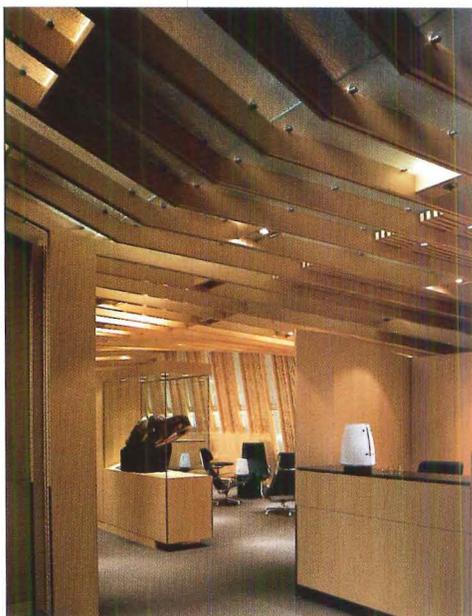
Narrow passageways lead visitors into unexpected spaces (left), including one of the ready-to-wear areas (below).





Air Canada's lounge gives arriving business-class travelers, mostly from Asian cities, a place to rest, freshen up, and retrieve messages.

Evoking the Pacific Northwest, Patkau Architects' ARRIVALS LOUNGE ministers to the jet-lagged frequent flyer.



An unprepossessing corridor from the arrivals area offers little preparation for the lounge experience—womblike, evocative, yet recognizably specific to the Pacific Northwest (left).

It's a commonplace paradox that the farther and faster we go, the more places look the same. Exhibit A: the airline passenger terminal. If it's Tuesday, wonders the harried frequent flier, is this acreage of metal, glass, suspended ceiling, and moving walkways Dubai? Or Dubuque?

One airline has struck a blow for the particularity of place. Air Canada asked how it might make the experience memorable for valued but jet-lagged trans-Pacific customers arriving in Vancouver. Airline management decided to create a unique arrivals lounge that travelers would associate with Air Canada and the character of the Pacific Northwest. "The trick was to determine what is local," explains Ralph Orr, the airline's manager of facilities design. It would have been easy to scatter some soft couches with the velour du jour across tranquilizingly patterned wall-

Project: Air Canada Arrivals Lounge, Vancouver, British Columbia

Architect: Patkau Architects—Timothy Newton, John Patkau, Patricia Patkau,

David Shone (design team)

Engineer: Mew Consultants (mechanical, electrical, lighting)

Contractor: Heron Construction

by James S. Russell, AIA

to-wall, then slap on some familiar images: mountains, sea gulls, fishing boats, or totem poles. But Orr was looking for "something more substantial, in which the intrinsic design would be more powerful."

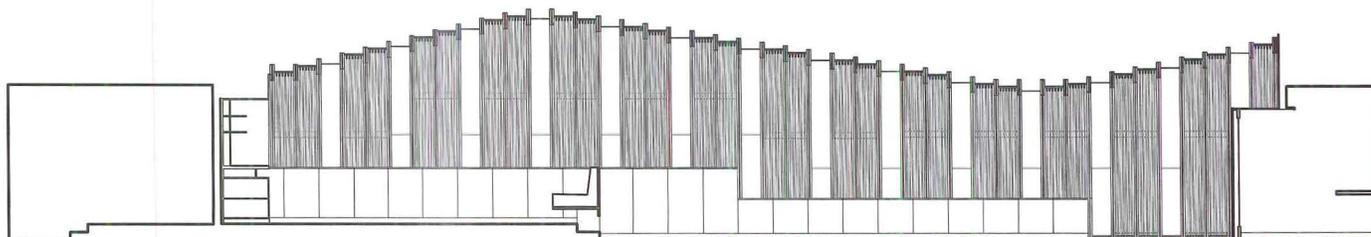
He chose Patkau Architects, a Vancouver firm, headed by John and Patricia Patkau, with a reputation for skillfully molding architecture that responds to clients' needs, as well as the Pacific Northwest's spectacular landscapes [May 1996, page 40]. The lounge's site, a characterless, drywall-clad rectangular space deep inside the terminal, offered no apparent poetic possibilities—not even an exterior wall in which to punch a window.

The lack of character offered a challenge that actually appealed to the architects. Above a suspended ceiling they found a 10-foot-high plenum only partly occupied by a tangle of pipes, wiring, ductwork, and luggage conveyors. Within this space, they formed a self-supporting wall-and-ceiling system of maple ribs, which fan up and down, around the mechanicals, becoming a gently undulating enclosure. Between the ribs, metal clips support backlit patterned-glass panels.

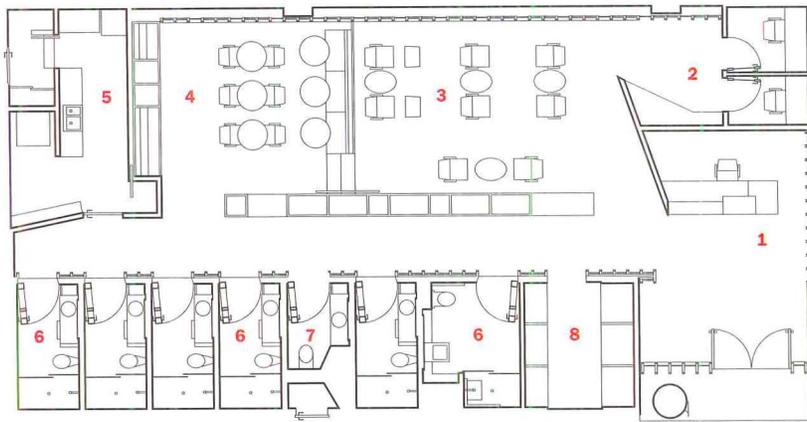
Abstract, even womblike, the cabinet-quality construction is rich with Pacific Northwest associations: traditional Asian tea-houses,

**"THE TRICK WAS TO DETERMINE
WHAT IS LOCAL," SAYS RALPH ORR.**

native tribal longhouses, and wooden ship hulls. Native art, borrowed on a rotating basis from the city's Museum of Anthropology, makes the local connection even more obvious. Was the airline management concerned the lounge wouldn't offer the standard trappings of hospitality design? "I wondered if the average customer could identify with this," admits Orr. But judging by the guest logs that he regularly reviews, he needn't have worried. The bottom line, he says, is "people find it unbelievable." ■

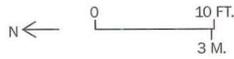


EAST ELEVATION

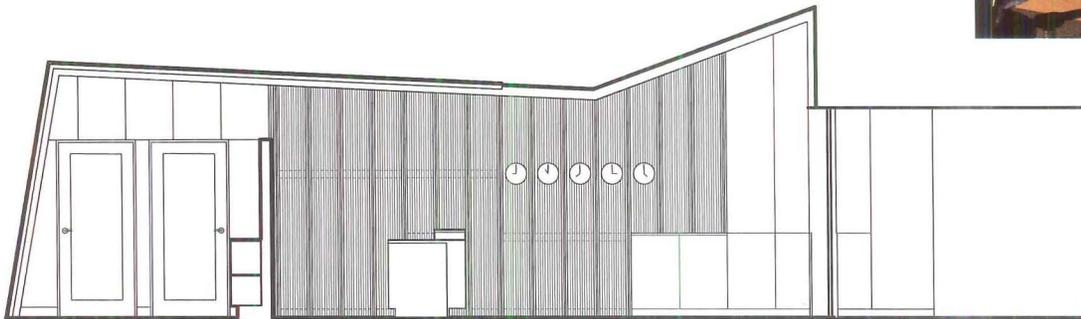


1. Reception
2. Business center
3. Lounge
4. Breakfast area
5. Kitchen
6. Shower
7. Washroom
8. Luggage

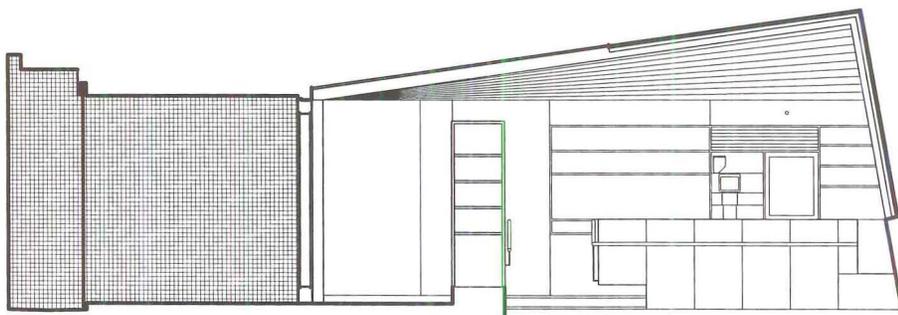
FLOOR PLAN



REFLECTED CEILING PLAN



SOUTH ELEVATION

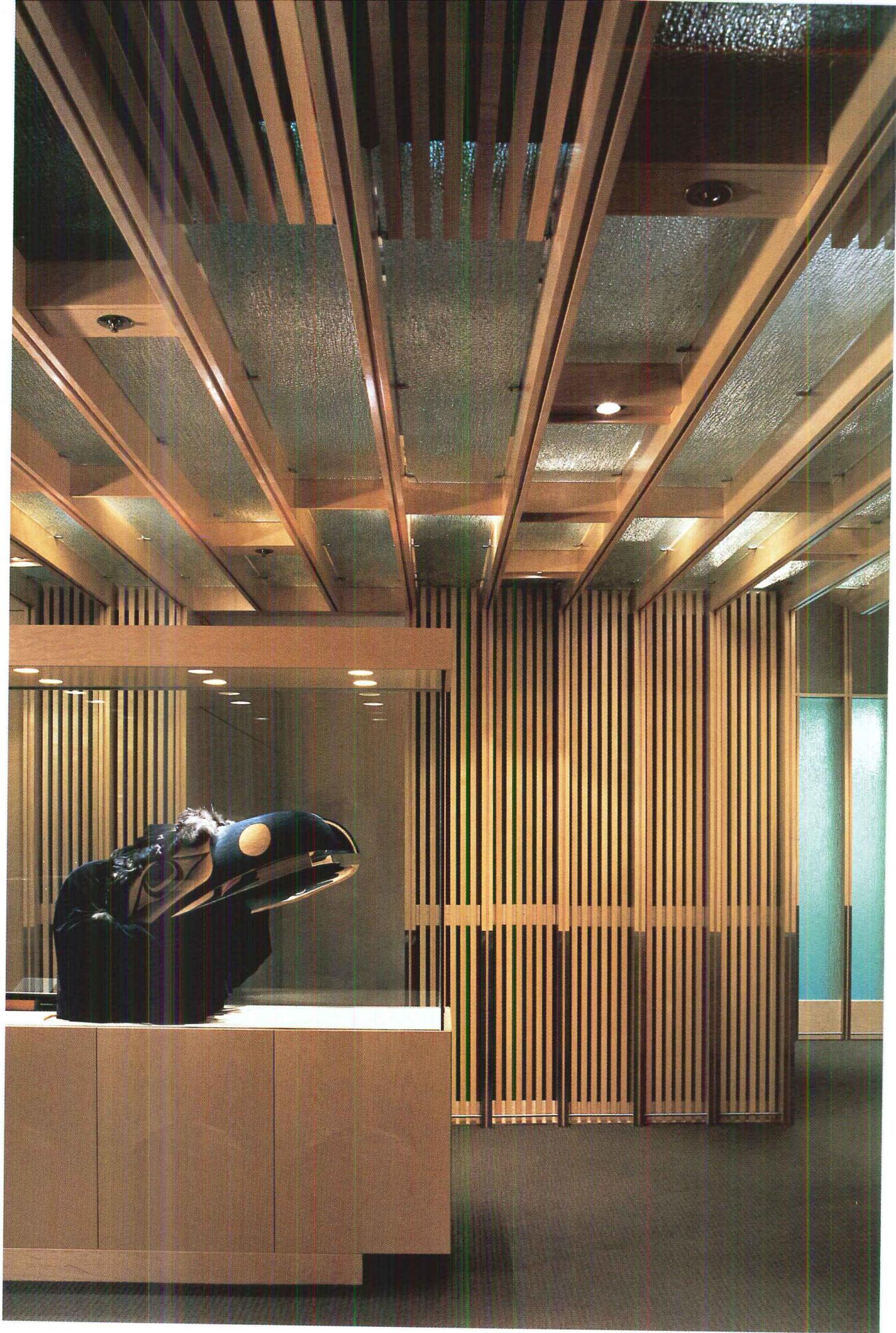


NORTH ELEVATION



Sources

- Hardware:** Schlage, Stanley, Soss, LCN, CBH, Forms + Surfaces
Resilient flooring: Armstrong
Carpet: Fortune Contract
Chairs: Herman Miller, Fritz Hansen
Lighting: Juno, Danante, Lithonia, Sistemalux
Lighting controls: Lutron, Leviton



The indirect incandescent lighting, calibrated to evoke daylight, glows through laminated, patterned glass, animating the architects' system of maple ribs and battens (over air outlets and sound-absorption material, as needed). A preset dimming system constantly varies the lighting as if clouds were passing overhead.



New round skylights and geometrically reconfigured windows illuminate the entrance hall (this page). Outside, an allée of standard telephone poles (opposite) announces the front entrance.

A baroque brewery is reincarnated as the **BENEDIKT REJT** **GALLERY** in Bohemia.

by **S. A. Miller**

The Benedikt Rejt Gallery rises within the medieval ramparts of Louny, a small city near Prague. Entered from a market square near the edge of town, the structure descends three

stories along a steep embankment on the Ohre River. "Like many Czech buildings, it was built and rebuilt over so many years," observes the gallery's most recent architect, Emil Prikryl, "that it's sometimes hard to say just what's 'original.'"

Indeed the building's provenance is hardly well established. Possibly in the 17th century, a baroque brewery was erected on the site. But its beer-making eventually became obsolete, and a new plant elsewhere in Louny had replaced the so-called Old Brewery by the outset of World War II. During wartime occupation, the Germans deemed the brewery's medieval fortifications advantageous and altered the building—demolishing large above-grade sections while expanding the lower vaulted levels.

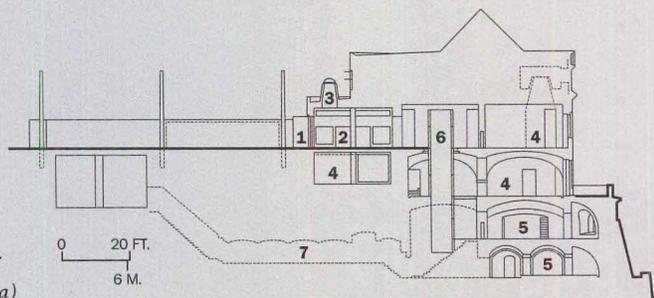
By the 1950s, the old brewery began its exceedingly gradual rebirth as a place for art. In 1965, after vaguely exploring possibilities for donating the building to Louny's art museum, the Czech government designated it an exhibition space independent of the museum. The gallery's first director envisioned devoting it to Czech Constructivist art, but scarce funds reduced the work to stops and starts. During this period, the building's dilapidated market-square facades were partially stripped down and the pitched roof raised to accommodate a new attic.

Following Czechoslovakia's Velvet Revolution in 1989 and the subsequent change in power, the gallery's new curator, Alice Stefancikova,

S.A. Miller is a freelance writer, specializing in architecture and design.

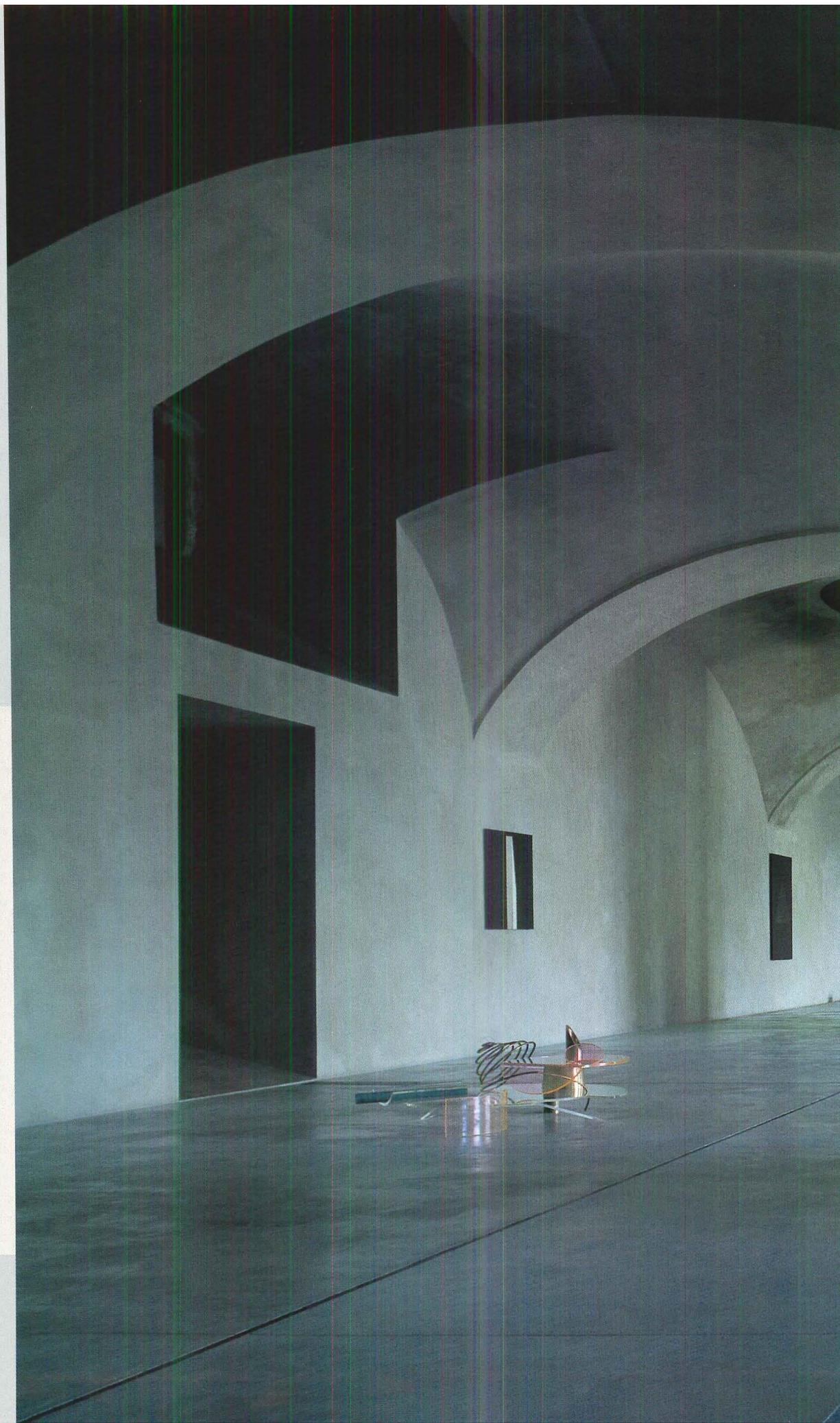


1. Entrance
(plaza level)
2. Reception hall
3. New skylight
4. Gallery
5. Future gallery
6. Elevator shaft
7. Tunnel to bunker
(World War II era)



PHOTOGRAPHY: © JAN MALÝ

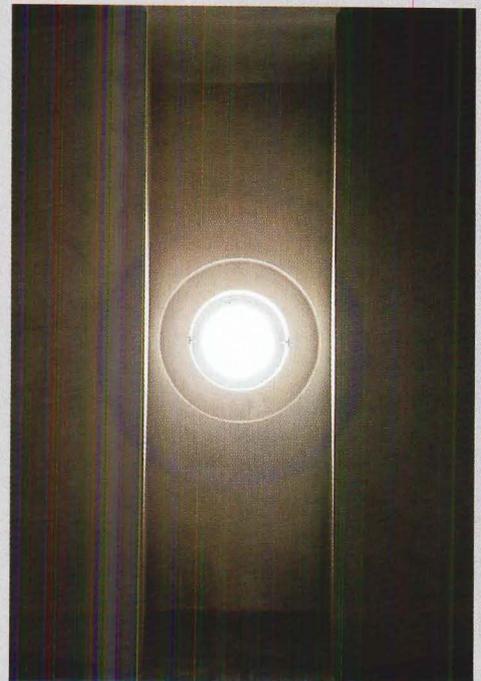
One level below the gallery's entrance, sculptures occupy a mysterious, cryptlike vaulted space. The elevator shaft appears (this page) as a simple concrete vertical element. With the lower floors set against an embankment, their windows puncture only the wall facing the river. The ramp (opposite) leads a few feet down to an ancillary exhibition space.

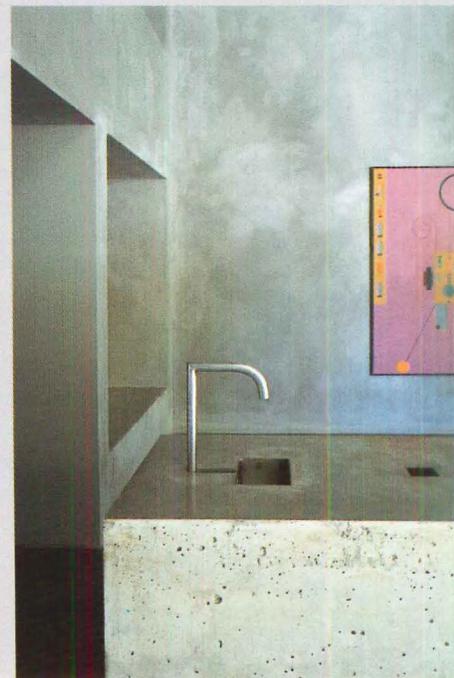
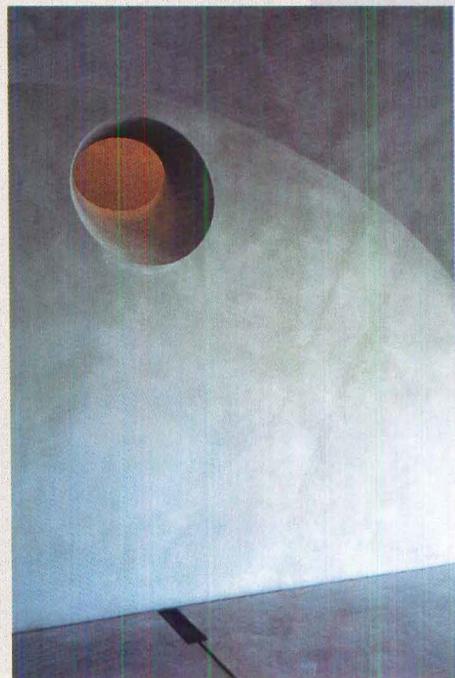


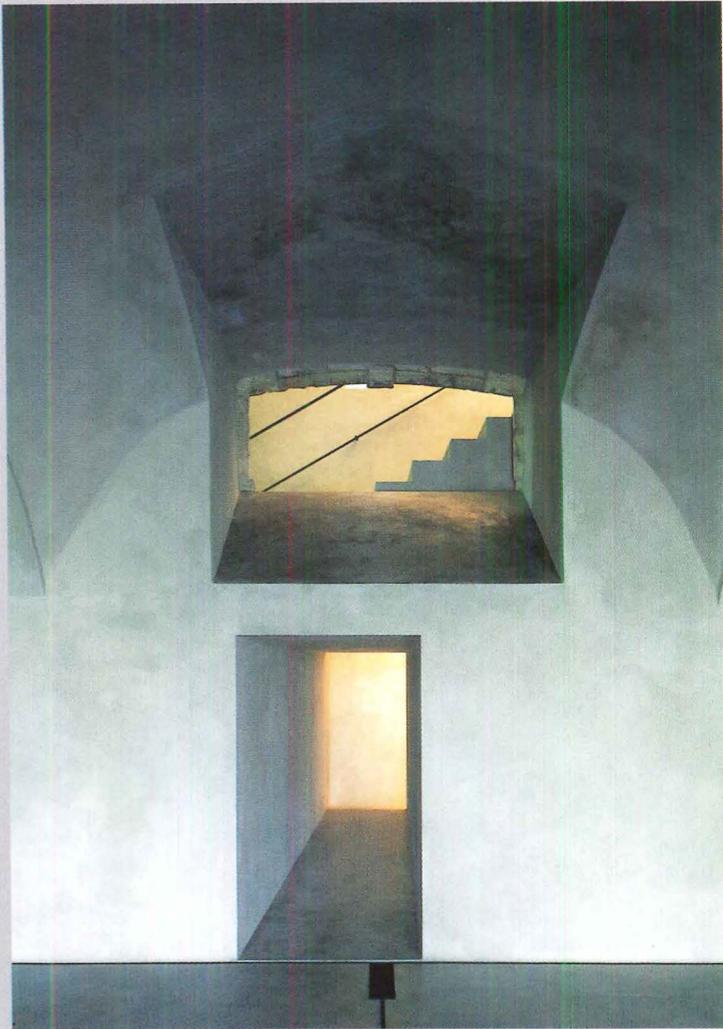




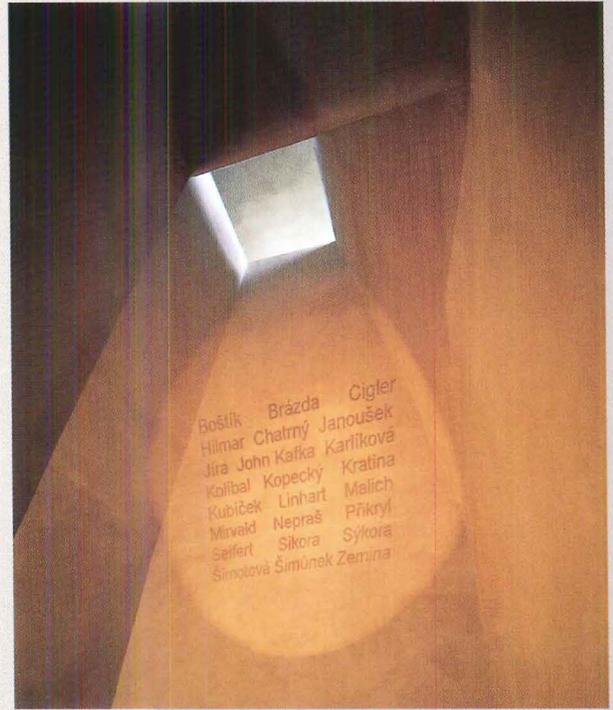
With an economy of means, the stair rail is a simple steel rod (left), while ordinary radiators, turned sideways, become sculptural (opposite, below left). Existing openings were made circular (left and below). Black steel insets in the concrete floor cover electrical conduits (opposite top and below center). In the reception hall, an elegant cast-concrete form with a retractable faucet (opposite, below right) provides a counter for gallery openings.







Prikryl streamlined existing geometries, remaking stairs and simplifying openings (left). At a gallery opening, artists' names were projected on a wall (below).



secured a minimal government grant to create a showplace primarily for art of the 1960s and later—work that the Communist regime had largely discouraged. She engaged Emil Prikryl, head of the Prague Academy of Art's school of architecture, to take up the architectural baton. Actual construction did not begin for three years, not until 1995.

With a small work crew and a breathtakingly tight budget, Prikryl proceeded with ingenuity. In a Modernist vein, he cleaned up the lines of the facade and created a sense of place outside it with an allée of ordinary 18-foot-tall telephone poles, bold signage from painted scrap metal, and what he describes as the “absolute cheapest” wood decking.

Given the building's introspective, cryptlike qualities, Prikryl's work focused largely on the interiors, where he opened up spacious rectangular galleries, as well as several small, ancillary exhibition rooms, based on quirky existing configurations (including one with a star-shaped plan). So far, the architect has fully renovated 8,000 square feet, comprising only the entry level and one floor below it.

Low-cost, often industrial-grade finishes and products—applied with a startlingly simple elegance—inform the spaces. Waxed poured-concrete floors extend throughout, except in the entry hall, which is paved in terrazzo. Plaster, tinted with gray mineral pigments, lines the walls. In the galleries, standard, black steel radiators, mounted on end like vertical sculptures, have a surprisingly totemic presence.

What Prikryl lacked in funds for luxuriant materials, he made up through the generosity of time—using the prolonged construction

schedule to resolve details. Recalling the work of Carlo Scarpa, the concrete flooring is inlaid with blackened steel strips, visually anchored by broader end plates. Beneath these long steel insets lie readily accessible electrical conduits. On some insets stand fleets of torchieres: adjustable-height floor lamps, which Prikryl designed to incorporate off-the-shelf halogen floodlights with blackened steel stands and bases. Elsewhere, naked fluorescent bulbs reinforce the rhythms of stairs and vaults.

Linking the floors with a concrete elevator shaft, the architect carefully surrounded this vertical intervention with reveals and steel grating to provide unbroken readings of the tall penetrating element. The grating also allows light to diffuse between the floors.

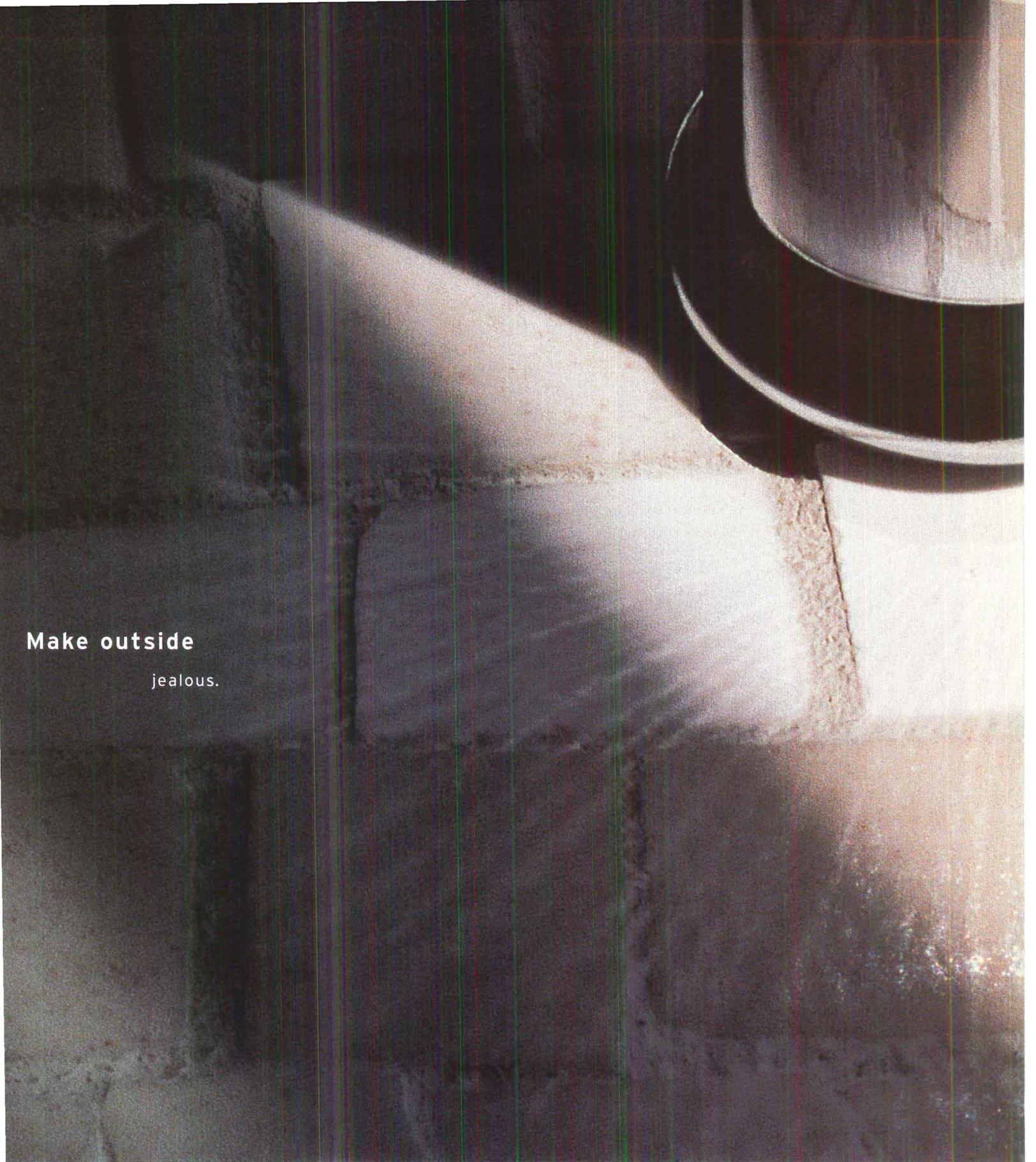
Applying a sensibility consistent with his exterior treatment, the architect modified the geometries of many existing openings and interior forms, creating round windows and making the historic fabric simpler, cleaner, and more legible. He thus accentuated the walls' massiveness.

When asked if he'd have done things differently with a more expansive budget, Prikryl maintains, “I'm actually happy I had no money. It made me work with traditional materials—and think about the possibilities for even the cheapest hardware.” ■

Project: *Benedikt Rejt Gallery: Renovation of former Louny Brewery*
Client: *Czech Ministry of Culture*
Architect: *Emil Prikryl (architect-in-*

charge); Emil Prikryl, Tomas Bczpalec, and Tomas Novotny (documentation and feasibility studies).

Contractor: *OSP Louny*



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The Open Kitchen as Theater

IN MANY RESTAURANTS, THE VISIBLE KITCHEN IS MORE THAN AN AESTHETIC ELEMENT, IT'S ENTERTAINMENT; BUT THE REAL WORK IS DONE IN THE BACK.

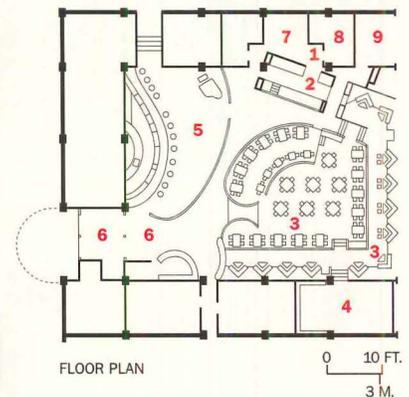
by Elaine Martin Petrowski

A serious, swarthy-looking chef is manning the grill with the kind of deftness that tells the diners at El Gaucho, a Seattle steak house, that their filet mignons and New York strips are in good hands. Eyes fixed on the hot brazier, the chef looks like he's ready to pounce on the neatly trimmed steaks. Suddenly, he slips his tongs around a steak the size of a platter and quickly flips it; conversations pause as the sizzling sound fills the room.

Increasingly, dining in restaurants is more than a meal away from home, it's a carefully concocted show: the diners are the audience, the chefs are the stars, and the visible portion of the kitchen is the stage. The open-kitchen trend started about 10 years ago as a way for chefs to show off the freshness of their ingredients and the cleanliness of their kitchens. Now, the open kitchen has evolved into entertainment, a frenzy of activity just a few feet from the table. Teaching kitchens at cooking schools require similar staging skills. The preparation areas must be clearly visible to students—whether they are in the kitchen, assisting with the preparation, or observing from a viewing area. The acoustics of the room must be good enough that the instructor can be heard above the clatter. And, because most of these schools have a dining area surrounding the kitchen, the rules of restaurant design apply.

Architects asked to design open-kitchen space must understand the elements of culinary suspense and how commercial kitchens work. To do this, they rely on a carefully assembled team that usually includes the restaurant owner, a mechanical engineer, a professional foodservice consultant or commercial kitchen designer, a lighting consultant, an interior designer, and the chef. "The architect functions as the maestro of the

Elaine Martin Petrowski is a freelance writer specializing in kitchens and bathrooms. She is based in Ridgewood, N.J.



SEATTLE'S EL GAUCHO, designed by Arellano/Christofides Architects, has a stainless-steel, 36-inch-tall pass shelf between the front line and the 230-seat dining room. That's low enough for an unobstructed view of both the vertical and horizontal charcoal-fire grill, but high enough to hide countertop debris. All the display kitchen surfaces are polished stainless steel, with the exception of the tile backsplash. Four or five chefs occupy the space at peak times. The visible kitchen was intended to give the restaurant a focal point. "We had to do something to create drama; there was no view, no daylight, and the windows are walled over," Margot Arellano, AIA, says. The clublike decor suggests the 1940s, with boomerang-shaped booths, salvaged fixtures from the era, and a midnight-blue and black color scheme.

1. Kitchen
2. Open kitchen
3. Dining area
4. Banquet room
5. Bar
6. Entry
7. Storage
8. Refrigeration
9. Dishwashing



CONTINUING EDUCATION

Use the following learning objectives to focus your study while reading this month's ARCHITECTURAL RECORD/ AIA Continuing Education article. To receive credit, turn to page 178 and follow the instructions.

LEARNING OBJECTIVES

After reading this article, you should be able to:

1. Describe the concept of restaurant dining as theater.
2. Explain what drives the design of a commercial kitchen.
3. Describe the types of materials specified for commercial kitchens.
4. Explain how acoustics, lighting, and ventilation influence the design of a visible kitchen.

orchestra, making sure everyone comes in at the right time,” says William Eaton, senior vice president at Cini-Little International, a foodservice consulting firm in Rockville, Md. Each of these individuals brings an area of expertise to what is, for such a small space, a complex design process.

What's on the menu?

The design of an entire kitchen, including the portion that is visible and the larger area hidden behind doors, is driven by the menu. A steak house, for example, has a different kitchen, one that is focused on the cooking of meat, than an Italian restaurant, where a pizza oven is emphasized. The architect meets with the chef and/or owner to analyze the menu and its requirements in detail. Every step of the food-preparation process is thought through. For example, where do the trucks make their deliveries? Where are ingredients stored? At what stages in the cooking process should there be access to water? How much work-space is required? At what point do operations move from the back of the house to the demonstration area? Is a workstation required near the oven? If so, how close?

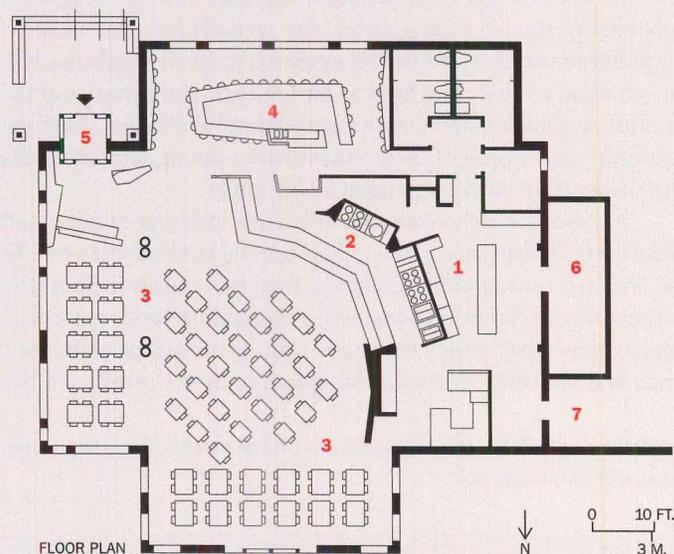
Also early in the design process, the chef, the owner, and the architect decide the division of space within the restaurant. The kitchen typically occupies 25 to 30 percent of the total area. Within the seating area, about 30 square feet is allotted to each diner. A 6,000-square-foot restaurant accommodates 200 to 225 diners. The remainder of the space

is used for restrooms and support functions. Thus, a 6,000-square-foot restaurant contains a 1,500- to 1,800-square-foot kitchen. The portion that is visible is much smaller, perhaps 450 square feet, depending on how much of the process the chef wants to display.

“The budget plays a part in this, too. An open kitchen requires attractive finishes, while the hidden kitchen is made of service materials—surfaces that are durable and clean easily but aren't necessarily attractive,” says Eric Engstrom, an interior designer with theatrical experience. He and his partner, Jennifer Johanson, AIA, run Engstrom Design Group, restaurant designers in San Rafael, Calif. “An open kitchen demands decorative tile, a custom ventilation hood, a soffit to hide mechanicals, a granite top on the serving line—all this adds 25 to 30 percent over the cost of a standard kitchen,” he says.

The initial floor plan is fine-tuned by a professional foodservice consultant or a commercial kitchen designer. The latter usually represents a kitchen-equipment distributor or manufacturer, while a foodservice consultant often operates independently. In both cases, designers are often trained as professional chefs, though many are also architects or engineers. They have different areas of expertise—some do white-linen restaurants and others fast food.

Consultants understand professional cooking and kitchen traffic flow. They advise the architect on the optimal layout of appliances, work areas, and sinks, aiming to minimize the number of steps in preparing a



EVERYTHING ABOUT THE DESIGN OF MONSOON Restaurant, in Hanover, N.H., complements the contemporary Southeast Asian bistro menu. Designed by Jim Batchelor, AIA, of Arrowstreet Inc., and Paul Lukez, AIA, both of Somerville, Mass., the kitchen includes a salamander, a broiler that sits above the range; double narrow fryers that generate up to 55,000 British Thermal Units each (an average kitchen burner generates 6,000 BTU); a six-hole wok range; a custom wood-fired grill; and a steam cabinet, a small convection steamer used for rice and vegetables. Custom stainless-steel tables fill spaces between appliances. The floor is sealed concrete. Copper and laminate-faced panels are used on the restaurant side of the stainless-

1. Kitchen
2. Open kitchen
3. Dining area
4. Bar
5. Entry
6. Refrigeration
7. Service area

lobster or a leg of lamb. They also provide guidance in selecting shelving, countertops, appliances, and cooking equipment.

Line 'em up

Although space constraints may demand another solution, most professional kitchens are designed as a series of parallel counters, called "lines," the number of which varies according to the size of the kitchen. The lines are set up back-to-back, like Pullman kitchens. The line farthest from the dining room is adjacent to the cold and dry storage areas, where cans are opened, bulk ingredients are measured, and items are retrieved from the back pantries. At the next line, vegetables are washed, peeled, and chopped; fish are cleaned; and meats and poultry are cut. Cooking begins at the third line, where soups and stocks are assembled and simmered, breads and desserts are baked, and sauces are made. Normally, the back lines are kept out of sight. No one wants to see fish being cleaned, the dishwasher, or the brand names on the dairy products stashed in the coolers.

Once the food moves to the front line, things get interesting. This is generally the part of the kitchen on view. Here, the cooking is finished and food is plated, garnished, and served; it's also where the crabs are steamed, the chops are grilled, the pizza comes out of the brick oven, and buttery sauces are drizzled over entrees.

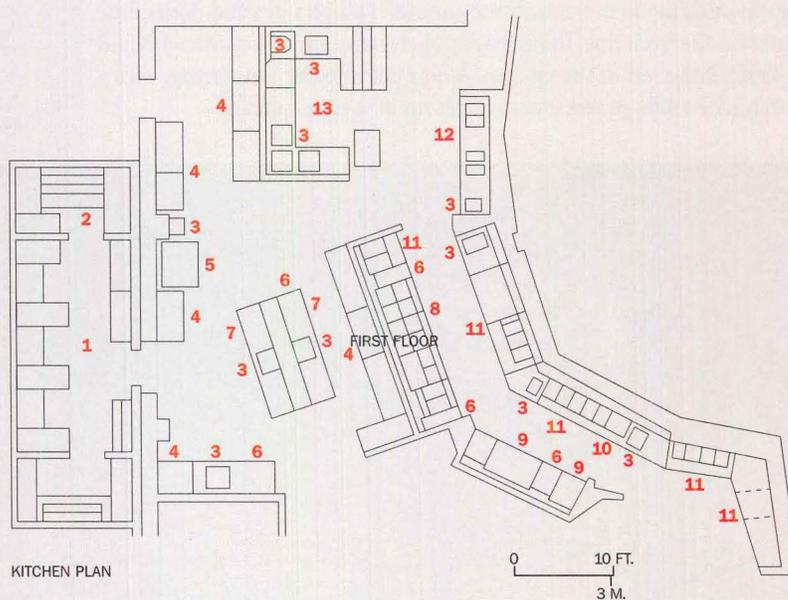
Controlling what the patrons see is what visible kitchens are all

about. "Everything involved in the final preparation is in full view," Engstrom says. "Here you have lots of activity—four to five chefs moving around, putting up food for customers to see, the wait staff coming in for pickups—and everyone in the place is watching."

Margot Arellano, AIA, of Arellano/Christofides Architecture and Interior Designs in Seattle, agrees. About 40 percent of the firm's business is restaurant design. "You must choose what you want the audience to see," she says. "Confine the view to what's interesting and action-packed: glinting ladles, puffs of steam, the lick of flame." In some restaurants, chefs are even encouraged to splash a little oil over the side of the pan now and then to create a fearsome flash of fire.

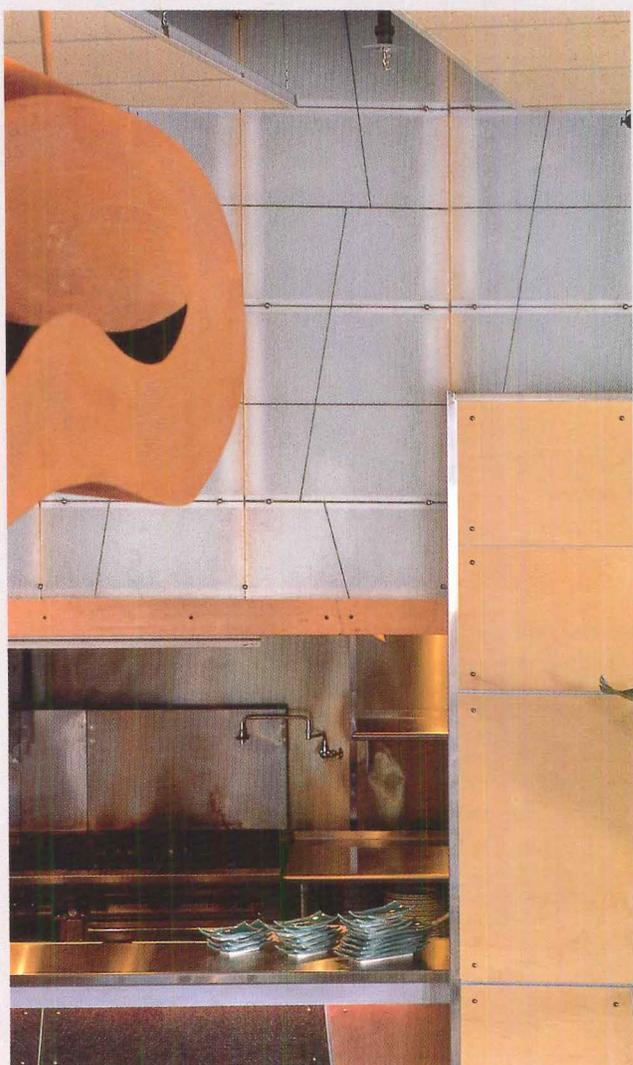
"Let patrons see the final assembly. Highlight the expeditor, the person who makes sure that the orders get into the kitchen and hands off the finished plates to the wait staff. Put him or her at a clean, stainless-steel counter with a shelf above for plates and neat bins for garnishes," Arellano adds. Along with the show, food preparation should look sanitary and graceful. With an efficient setup, the chefs are in a dance, their movements economical and productive. Dishes shouldn't break, food shouldn't slop onto the floor, and chefs shouldn't bump into each other as they prepare their specialties.

Labor represents as much as 40 percent of a restaurant's operating costs. That makes a smooth workflow essential. "The cooks shouldn't have to take an extra step or do acrobatics to reach the ingredi-



steel pass shelf. Translucent plastic shoji screens provide decorative elements. Paper would have absorbed cooking oils and disintegrated. The rusted iron panel hides the ventilation system. A canted plaster canopy and the daily presentation of fresh vegetables and other ingredients below it is meant to resemble an open-market stall. The canopy also helps hide the mechanical system. The low ceiling in the kitchen sets that space apart from the 150-seat restaurant and contains the ventilation system. Carpeted floors and bamboo wrapping on structural-steel pillars help to keep the noise level under control in the seating area.

1. Refrigeration
2. Freezer
3. Sink
4. Shelving
5. Ice machine
6. Work table
7. Ovens
8. Ranges with ovens
9. Broilers
10. Steam cabinet
11. Undercounter refrigeration
12. Wait-staff station
13. Skullery



ents,” says Bob Mesher, AIA, of Mesher Shing Associates, a Seattle firm that has designed many restaurants. The kitchen should be compact and efficient, though not too small. “There should be enough circulation around the visible kitchen and its position must relate well, not only to the dining/public side, but also to the prep kitchen,” he adds.

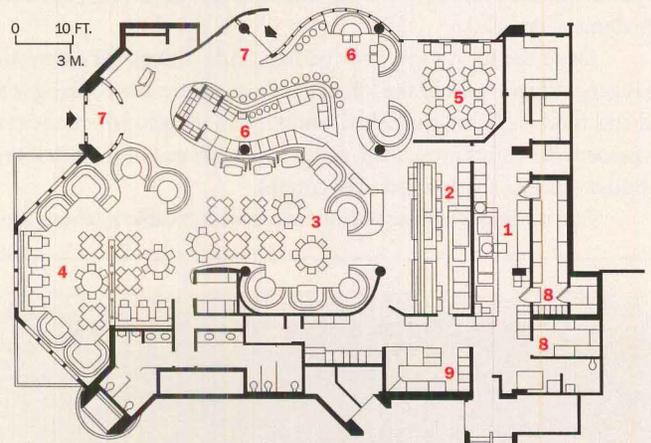
Keeping the flow circular means the wait staff can get where they need to go without backtracking. Workers should not go near the food prep areas with soiled dishes, so the path to the skullery should be kept separate. Some areas, such as where main courses are picked up, are always busy. Putting the dessert or salad station on top of those areas adds to the chaos. Diners will feel nervous if the wait staff looks harried and disorganized, thanks to poor design.

An unobstructed sightline is most important whether the demonstration kitchen is located in a restaurant or a cooking school. In the latter, care must be taken not to block views of the instructor and the preparation surface. A downdraft ventilation system, for example, eliminates the bulky ventilation hood that could get in the way. It also frees space above the cooktop for a reflective surface, such as highly polished stainless steel, allowing students and guests to see what’s going on.

Some cooking functions are just not attractive, such as frying food or steaming rice, and these are best kept off the front line. If they must be there, install visual barriers. A low or translucent barrier, like an elevated pass counter (or service line) or a fritted glass wall between the kitchen and the dining room, hides spills and scraps at counter level. Some equipment and appliances, such as refrigerators, can be kept out of sight by tucking them beneath the counter. Drawers or solid doors hide clutter on the front line, though open shelves are easier to work with and are best for the rest of the kitchen. A hole cut into the countertop, with a trash bin beneath, makes it easy to get rid of messes quickly.

THE CALIFORNIA CAFE BAR & GRILL IN SCHAUMBURG, ILL., by Engstrom Design Group, serves California cuisine. The open kitchen, visible from all 200 seats in the restaurant, directs views away from the adjacent Woodfield Mall and its huge parking area. The kitchen is divided with a granite-topped pass shelf that is clad in wood veneer on the restaurant side. Work counters are maple butcher block or stainless steel. The back wall of the open kitchen is covered in ceramic tile and stainless steel, and acid-etched copper panels hide the exhaust hood. The floors are quarry tile. Actual cooking ingredients are set on metal shelves on the wall behind the pantry. Noise is mitigated in the dining room with a combination of drop-in acoustical ceiling tiles, carpeting, fully upholstered booths, and heavy draperies dividing open, private, and semiprivate dining areas.

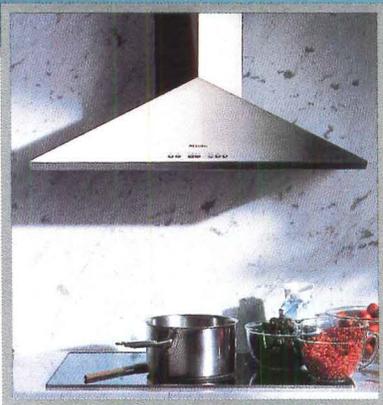
1. Kitchen
2. Open kitchen
3. Dining area
4. Semiprivate dining
5. Private dining
6. Bar
7. Entry
8. Refrigeration
9. Dishwasher



FLOOR PLAN



**THE PROJECT REQUIRED SUPERB VENTILATION,
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Whether wall-mounted or above an island, each of these hoods is quiet yet powerful, keeping kitchens clean and odor-free. Integral halogen lights, an optical display and precision

touch controls are just a few of their sophisticated features. Adding to the design flexibility, Miele also offers several ventless options, as well as sleek built-in ventilation hoods.

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CIRCLE 67 ON INQUIRY CARD

Lights! Noise! Ventilation!

Lighting presents a conflict in an exhibition kitchen: the space cannot be so bright that it distracts from the dining experience, but the front line is a work area and workers need to be able to see. Lighting levels here are also regulated by health departments, which dictate that lamps must be covered with lenses to prevent broken glass from falling into food.

Philip Christofides, AIA, solves the discrepancy in lighting levels by using the same type of lighting for both the front line and the dining room. "We use incandescent lamps and downlight the perimeter of the front line so that you can see deep into the space. Keeping the dining room a notch darker makes the kitchen a focal point," he says.

Dino Sakellar, AIA, of Sakellar Associates Architects and Planners in Tucson, who specializes in restaurant design, avoids ceiling-mounted lights and installs task lighting—a shelf with lamps directed onto the work surface. The shelf doubles as a place for finished plates to await pickup. Heat lamps above the shelf keep food warm.

The open kitchen can also be highlighted with spotlights directed toward dramatic areas—the expeditor's counter, the grill, or an interesting appliance, such as a tile- or brick-clad wood-fired oven. The rest of the space can be lighted with temperature-corrected fluorescents.

Sound is another element that can be controlled to create a lively restaurant or one that's subdued. Some clatter raises the energy level. "The sound of food sizzling is appealing, but the kitchen is basically a food factory, and factories are noisy," Christofides says. Conversation among workers, chopping, and the sound of equipment running adds to the din. The very nature of the materials mandated by health regulations defy any attempt to attenuate the noise. For example, everything must be

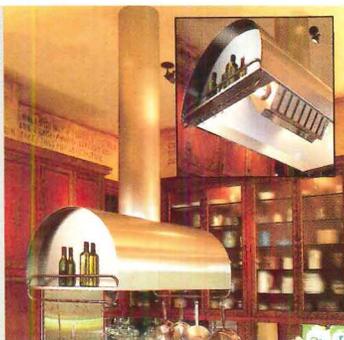
washable, including the ceiling. That eliminates acoustical ceilings. Most open kitchens use drop ceilings (to allow access to ventilation) with ceramic-coated ceiling tiles. Sound-absorbing ceiling tiles, carpeting, table linens, and upholstered chairs and banquettes reduce noise in a restaurant. Placing the tables several feet from the line also helps.

At some restaurants, including Spago in Beverly Hills, open kitchens are encased in glass; diners see the operation, but can't hear the noise. At the opposite extreme are kitchen tables, which allow "dedicated foodies" to sit in the kitchen with the chefs, says Engstrom.

Ventilation systems, which suck as much as 8,000 cubic feet of air per minute, evacuate the moisture, odors, smoke, and other cooking effluent. In addition, natural gas combustion emits noxious gases, and cooking accidents can flood a room with smoke and odors. Excess heat from a wood-burning oven, for example, which can reach 700°F, will overtax an air-conditioning system. All these must be vented.

Ventilation is custom designed for each space. As a rule, a canopy over the range is more efficient at evacuating smoke and steam than a downdraft, though the latter allows a better view of the kitchen. A downdraft system must be about 20 percent stronger than a hood because it must capture the hot air and pull it down, instead of allowing it to rise, according to the laws of physics.

"Ventilation is a science," says Mark Stech-Novak, owner of MSNRCD, a restaurant design firm in Oakland. He designed the kitchens for Le Cirque 2000 in New York City and Aureole in Las Vegas. Stech-Novak does his own initial ballpark figures on the ventilation system but relies on the calculations of a manufacturer. Specifying these systems correctly also avoids drafts blowing on the staff or the diners, which can

**P R O D U C T S**

If the open kitchen adds drama to dining out, then the commercial ranges and hoods below play important roles. Consider durability, ease of maintenance, and required daily upkeep when shopping around.

Rita F. Catinella

Ranges**Garland Commercial**

Industries The Master Designer Island Suite (right) includes a char-broiler, open-burner top, oven, fryer, 12-gauge stainless-steel worktop, refrigerator, and storage base. 800/424-2411. www.garlandgroup.com

U.S. Range The SunFire Series line offers 24-, 36-, and 60-inch-wide models, a stainless exterior, and 22,000 BTU burners. 800/424-2411. www.garland-group.com

Wolf Range Products include convection ovens and stock-pot ranges. Wolf also offers a selection of ovens, broilers, and grills. 800/637-9653.

Vulcan-Hart Company Convection oven, induction, and stock-pot ranges. Also a variety of steamers, ovens, and broilers. 800/814-2028.

Southbend A range of gas, electric, and steam professional cooking equipment. Chinese, induction, and stock-pot ranges are available. 800/348-2558. www.middleby.com

Bonnet Cidelcem Grande

Cuisine This French company offers custom-designed cooking suites, featuring highly technical cooking elements inside a one-piece unit with a solid titanium surface. 201/444-2682.

Jade Products Company

Kitchen cooking equipment includes gas ranges, stoves, open burners, and griddle tops, with cabinet and oven bases. Fire and Ice System features a range top and refrigerator base built as one. 800/884-5233.

Dynamic Cooking Systems

Professional Restaurant Range Series includes a stainless-steel stock pot, counter hot plate, char-broiler, and counter griddle. 800/433-8466. www.dcs-range.com

Hoods

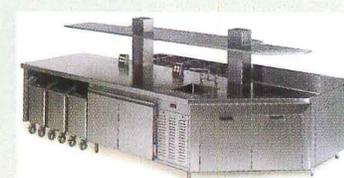
Gaylord Industries Water-wash ventilators; energy-saving, low-air-volume ventilators, air-to-air heat reclaim units, smoke pollution control units, and water-spray fire protection systems. 800/547-9696. www.gaylordusa.com

Carroll Manufacturing Intl. The Five Series has over 200 model configurations available to vent exhaust from any type of cooking

equipment. 800/444-9696. www.carrollmi.com

Abbaka Hoods (top left) may be ordered for use in commercial kitchens. Specs must be provided for in-hood fire-extinguishing systems and lighting. 800/548-3932. www.abbaka.com

Vent Master A selection of stainless-steel hoods, from a filter to water wash, depending on cooking needs. 800/565-2981. www.garland-group.com



Caddy Corporation Caddy offers a selection of kitchen ventilation hoods and utility distribution systems for commercial kitchens. 609/467-4222. www.caddycorp.com/airsystems.html

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CIRCLE 68 ON INQUIRY CARD

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The International Exhibition of Ceramics for the Building Industry and Bathroom Furnishings. Bologna, Italy, September 28 - October 3, 1999. www.cersaie.it. For more information or for a tile dealer near you, contact the Italian Trade Commission, I.C.E./Tile Center, 499 Park Ave., NY, NY 10022 (212) 980-1500 Fax (212) 758-1050. italytile.com

make the restaurant uncomfortable and cool the food. Ventilation returns should be located in the ceiling away from the food and prep areas.

Safety first

Health regulations for an open kitchen are the same as those for a closed kitchen: the number and location of wash sinks are mandated, as are non-slip floors. Ample passages and aisles are required by the ADA.

BRAIDS OF GARLIC, BOTTLES OF OIL, STRINGS OF PEPPERS ADD TO THE DRAMA, AND ANYTHING INVOLVING FIRE WILL ELICIT A FEW WELL-EARNED GASPS.

Equipment must be movable so that the floor can be thoroughly cleaned. Countertops, work surfaces, walls, ceilings, and equipment must be easily disinfected without the risk of cleaning agents coming in contact with the food. Flooring choices are few. Poured epoxy-resin flooring, which is seamless, is preferred because it's easy to clean and can be cushiony, making it more comfortable for those who have to stand on it all day. Textured concrete must be treated with sealer to make it impervious to spills and crumbs. "We like quarry tile with a 15 percent carborundum grit," Eaton says. It's durable, safe, and mops easily. He also recommends putting a trench in the floor with a nonskid grid directly in front of any appliance that drains water, such as ice machines or steamers.

Butcher block is allowed in parts of the kitchen, but the overwhelming preference is stainless steel, with joints sealed for cleanliness. On the pass shelf, laminates and synthetics aren't normally used unless there are budget constraints. Better choices are nonporous stone and stainless steel. Sinks of stainless steel are also first choice because of dura-

bility and cleanability; 14 gauge is sufficient; 12 gauge is better, but costs more. Slop sinks must be separate from those used for food.

Appliances should be chosen with service in mind. "When it breaks on Friday night you need service then, not on Monday," Sakellar says. "Chefs and managers know the products and deal with them all the time. If they have a preference, we go with that." The equipment needs to be versatile enough to accommodate changes in the menu, Eaton says.

Single-use items, like a tortilla maker or a customized grill, take up large amounts of space. These items are best if they serve as a focal point in a visible kitchen or make a statement about the cuisine that is served.

Showtime

Safety, code requirements, and industrial-strength cooking equipment leave little room for aesthetic considerations. Here, again, the menu dictates the show. "There's a lot of drama in Mediterranean cuisine," Engstrom says. Braids of garlic, bottles of oil, strings of peppers—all these add to the setting. And anything that involves fire, like a wood-burning oven, will elicit a few well-earned gasps from the diners.

Otherwise, says Mesher, "A well-designed space speaks for itself. You don't need to add a lot of extras." A tile backsplash, stainless-steel cases, a beautiful range hood, and iced displays of shellfish, fresh vegetables, or desserts, along with the clean design of stainless-steel commercial appliances—these establish the atmosphere. ■



AIA/ARCHITECTURAL RECORD CONTINUING EDUCATION

INSTRUCTIONS

- ◆ Read the article "The Open Kitchen as Theater" using the learning objectives provided.
- ◆ Complete the questions below, then check your answers (page 210).
- ◆ Fill out and submit the AIA/CES education reporting form (page 210) or file the form on ARCHITECTURAL RECORD's Web site at www.archrecord.com to receive two AIA/CES learning units (LUs) at Quality Level 2, including one hour of health, safety and welfare credit.

QUESTIONS

1. How does a restaurant function as a theater?

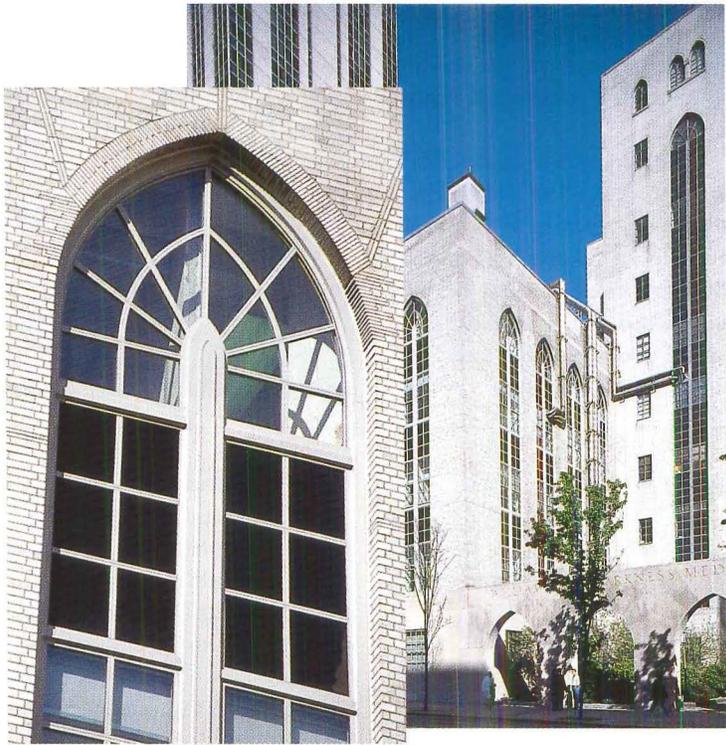
2. What drives the design of a kitchen?

3. What is the make up and function of the design team for a commercial kitchen?

4. What aspects need to be considered when specifying materials and designing a commercial kitchen?

5. What elements affect the atmosphere of a restaurant?

NEW PRODUCTS



WINDOWS KEEP HEPATITIS RESEARCH FROM GOING DOWN THE DRAIN

Traco didn't know the test its windows would undergo when it completed the replacement of close to 1,000 historic windows in five buildings of the historic Joan and Sanford I. Weill Medical College and Graduate School of Medical Sciences of Cornell University, New York City. Traco, which manufactures custom-designed residential and commercial windows and doors primarily for retrofit and historic renovation projects, worked in conjunction with Kilroy Metal Products to replace the windows of the entire medical facility.

The test would come on July 14, 1998, when the city experienced a major water-main break that released 10 million gallons of water, flooding the streets surrounding the medical college. The water quickly rose three quarters of the way up the windows outside the biochemistry laboratory that researches hepatitis viruses, affecting the TR-9100 series windows at sub-street level.

When Dr. Hugh Robertson, of the biochemistry lab, heard the news of the water break, he was frantic, fearing for the safety of the equipment and the medicines. However, the Traco windows did not collapse under the tremendous water pressure, helping avoid a potentially disastrous situation for the school.

"The windows passed the second water test," said Tim Hartley of Cornell facilities development, when he informed Kilroy of the water break. Traco windows must first pass their own in-house water testing to meet industry standards.

Traco's specialized manufacturing processes include glass tempering, anodize and paint finishing, glass insulating, and aluminum extruding for windows and doors for commercial, institutional, high-rise, and low-rise buildings. Since 1943, it has replaced windows in some of America's most famous landmarks. 800/837-7002. Traco, Cranberry Township, Pa. **CIRCLE 200**

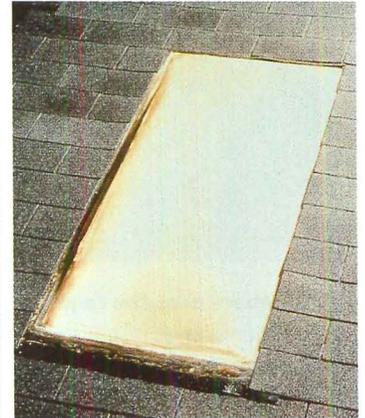
What better helps us enjoy our interior spaces than the windows and skylights that let in natural light? These products also protect us from the natural and unnatural forces that might otherwise ruin our day. The case study below explains how the windows of the Cornell Medical School were able to withstand the sudden force of a water-main break, preventing a costly clean up and the loss of valuable research. The following pages feature a roundup of skylights and windows, as well as a collection of interior products, several of which are designed by your fellow architects. *Rita F. Catinella, Products Editor*

NEW SKYLIGHT INTENDED AS AN ALTERNATIVE TO ACRYLIC STYLES

Velux-America Inc. has expanded its fixed skylight window offering with a new size, which it claims to perform better than the 30-by-30-inch types currently in use.

The new Model FS Fixed Skylight (FS 302), designed for out-of-reach installations, provides an economical way to capture abundant daylight for rooms in which maximum lighting is the only requirement, such as hallways, stairwells, and other closed-in, dark spaces.

The skylight was created as an alternative to acrylic skylights in new construction and to replace the estimated thousands of deteriorated 30-by-30-inch skylights across the country, says Gary Hyman, director of marketing. "These old-fashioned skylights,



often the acrylic bubble type, are not energy efficient and are usually adhered to the roof with mastic or sealants that expand and contract with temperature changes, eventually causing the seal to break, resulting in costly leaks." According to Hyman, acrylic

bubble skylights are likely to become cloudy, hazy, and brittle with prolonged exposure to the sun (above). Glass skylights do not react to the sun's rays like plastic, he adds. As with all Velux roof windows and skylights, FS 302 meets the requirements of the Energy Star Windows program established by the U.S. Department of Energy and the U.S. Environmental Protection Agency. 800/283-2831. Velux-America, Greenwood, S.C. **CIRCLE 201**





▲ Somewhere over the rainbow

Wausau's curtain-wall systems are available with a variety of thermal barriers, glazing systems, and color-matched coatings. The curtain-wall systems also accommodate granite

and metal panels for expanded design options. Shown here is a custom curtain wall for Niagara Falls' Rainbow Bridge. 877/678-2983. Wausau Window and Wall Systems, Wausau, Wis. **CIRCLE 202**



▲▶ Repeating history

The Richmond Mosque, Richmond, required Graham Architectural Products to replicate 330 ornate, original wood windows (above) in more durable aluminum, with high-performance insulated glazing. The windows are a combination of double-hung and casement windows,

featuring springline transoms.

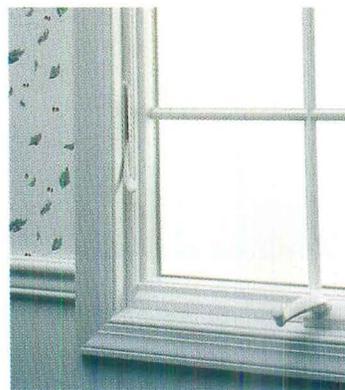
Also in Richmond, the Anheuser-Busch Brew-house historic restoration project required Graham to replace about 200 wood windows (below) with modern thermal versions, aesthetically indistinguishable from the originals. 800/755-6274. Graham Architectural Products, York, Pa. **CIRCLE 203**



▶ European favorite

Kolbe's Magnum Tilt-Turn window has the look of a traditional casement but features special hardware that allows it to operate as an inswing casement, a hopper, or both.

A favorite in Europe, the Tilt-Turn comes standard with 7/8-inch-thick insulating glass with argon fill. The Tilt-Turn is available with Kolbe's numerous division options, including true divided light. Kolbe & Kolbe Millwork Co., Inc., Wausau, Wis. 800/955-8177. **CIRCLE 204**



▼ Architectural jewelry

ThermoGold glass, with gold particles manufactured into the glass for improved thermal performance, is now available as a standard glazing option for all Weather Shield Legacy Series windows. 800/477-6808. Weather Shield Mfg., Inc., Medford, Wis. **CIRCLE 206**



▲ Preapplied, prefinished

The Perma-Shield casement features a thicker frame, aligned grooves for easier extension jamb application on mullied windows, and a new long-track hinge. 800/426-4261. Andersen Windows, Inc., Bayport, Minn. **CIRCLE 205**

▼ Hearing aid

Milgard's Sound Control series is a line of windows designed for sound reduction. Once a frame type has been selected, Milgard will build the

windows with the precise glazing configuration that meets the customer's specific sound requirement. 800/MILGARD. Milgard Manufacturing, Inc., Tacoma, Wash. **CIRCLE 207**



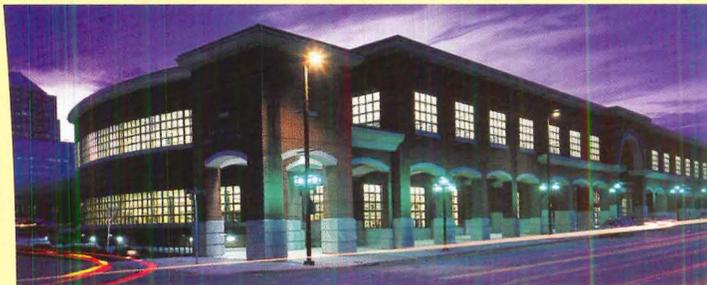
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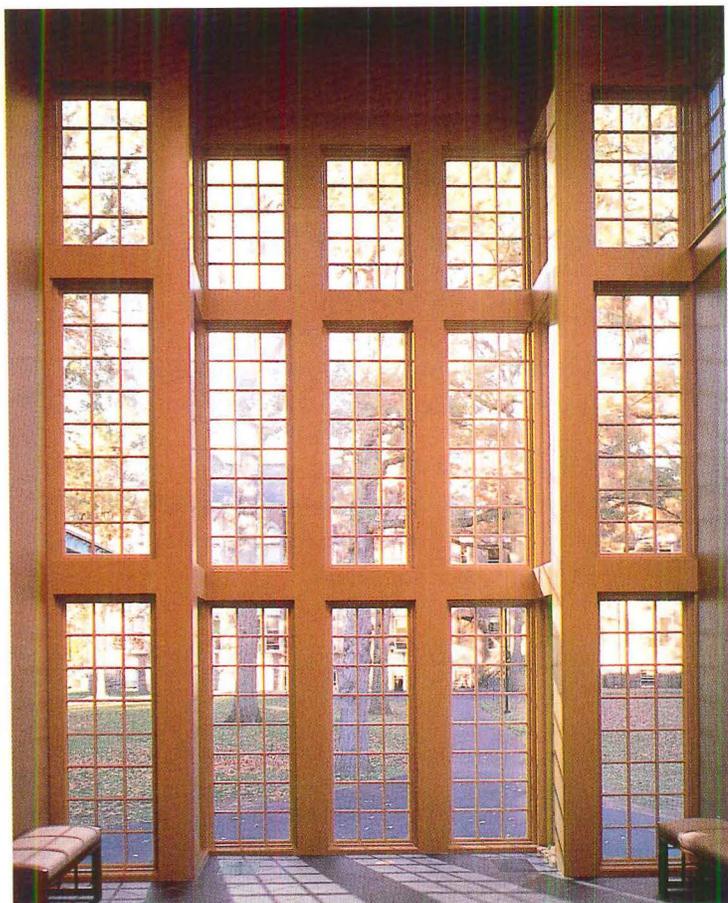


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CIRCLE 74 ON INQUIRY CARD

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▲ From reps to rehearsals

Architect Michael Schnoering of New Jersey firm Ford Farewell Mills and Gatsch transformed Drew University's 1909 gymnasium into a theater. The design called for rehabilitating certain sections of the structure along with building a new

addition. Pella duplicated the historic windows with an aluminum-clad window system that included the appearance of true divided light. A 25-foot-tall window-wall system (above) adds drama to the entry and lobby area. 800/84-PELLA. Pella Corp., Pella, Iowa. **CIRCLE 208**

► Easier breathing

YKK AP America Inc. has introduced its new YES SSG Vent window system for commercial properties. This new system provides ventilation for storefront applications without adding the obtrusive sightline of a traditional window. It is available in casement outswing and project-out configurations with ¾-inch or 1-inch glazing. Screens are also available as an option. 800/955-9551. YKK AP America Inc., Atlanta. **CIRCLE 210**

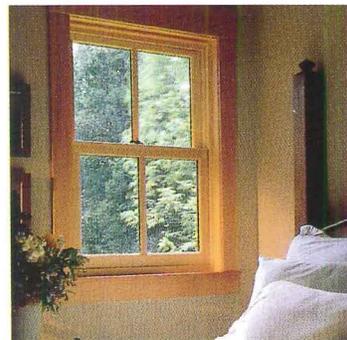


◀ Single and on a budget

EFCO has added a single hung window with a 3¼-inch frame depth to its full line of windows, curtain walls, entrances, and storefront systems. Series 3400 is for schools and other projects where tight budgets are a concern. The window is available in commercial and heavy commercial ratings. 800/221-4169. EFCO Corp., Monett, Mo. **CIRCLE 211**

► Easy to stain, easy to clean

Marvin has replaced the jamb liner in the new Marvin Clad Ultimate Double Hung Window with a wood interior that can be painted or stained and that makes the window smoother to operate. With a flick of the wrist, the user can tilt the bottom sash for easy cleaning. Marvin Windows & Doors, Warroad, Mich. 888/537-8269. **CIRCLE 212**



▲ Warming up the kitchen

Handcrafted from Western Pine, Pozzi windows feature a four-step reveal and a clear wood interior that readily accepts paint or stains. Pozzi

windows offer weatherproof, low-maintenance, aluminum cladding in 4 standard and 27 designer colors. 800/257-9663. Pozzi Window Company, Bend, Ore. **CIRCLE 209**

◀ Finish colors added

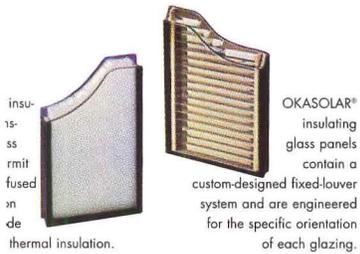
Eagle Window & Door has introduced 6 new standard colors: antique white, sandstone, cinnamon toast, slate, country blue, and harbor mist. This makes a total of 10 standard exterior finish colors offered in Eagle's line of aluminum-clad windows. Eagle also offers 40 designer colors, including a range of pastels and earth tones. 800/453-3633. Eagle Window & Door, Inc., Dubuque, Iowa. **CIRCLE 213**



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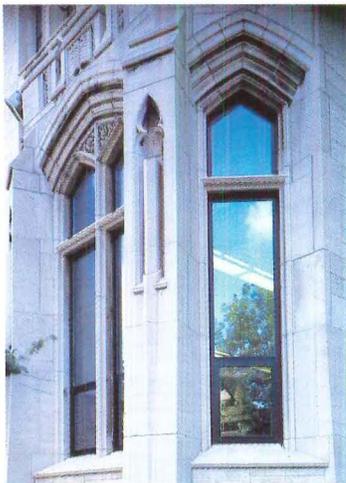
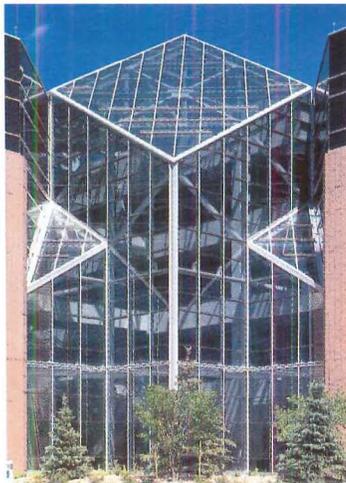
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CIRCLE 75 ON INQUIRY CARD

SCHOTT
glass made of ideas

► From modern to Gothic

Kawneer's 1600 Slope Glazing (S.G.) provides the performance of a curtain wall in a monumental slope system (below). The stick system is fully factory fabricated, and the flush grid exterior has a narrow 2½-inch sightline with a variety of rafter depths and standard silicone glazed purlin. 1600 S.G. accepts infills ranging from ⅜ of an inch to 1⅝ inches and handles inside and



outside corner applications. Kawneer's Sealair 6200 Thermal and 5200 Non-Thermal Windows (above) provide performance with cost effectiveness. Available as fixed, projected, casement, and drophead, options include factory glazing and dual or triple glazing with or without venetian blinds. 770/449-5555. Kawneer Company, Inc., Norcross, Ga.

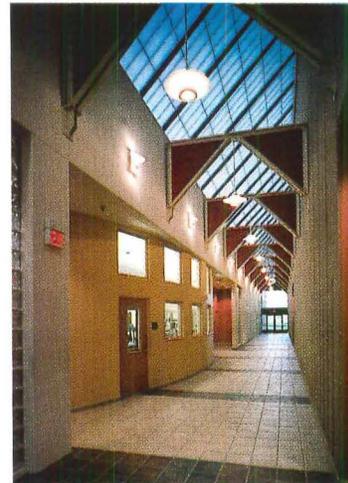
CIRCLE 214

► Making gym class brighter

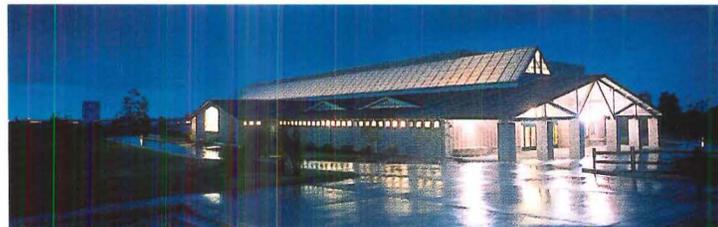
When the Alexander Dawson School in Lafayette, Colo., needed a new gym, they hired Hutton Ford Architects to design a 29,000-square-foot building that would allow for future growth. The firm knew right away that they wanted to daylight the lobby and the entire length of the main corridor.

"We did not want the appearance of individual skylights, but rather the effect of being open to the sky," says Hutton.

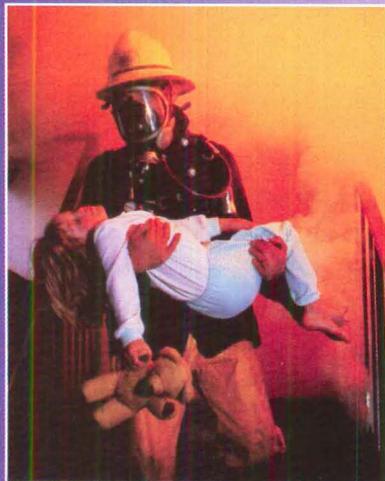
The system is a structural composite sandwich panel formed by permanently bonding fiberglass-reinforced translucent faces to a grid core constructed of interlocked, structural I-beams. Kalwalls' light



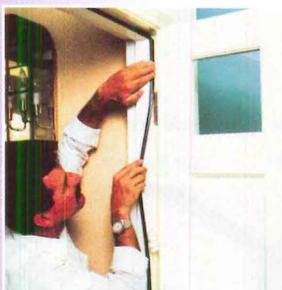
properties deliver balanced daylight while eliminating harsh glare, hot spots, and shadows. 603/627-3861. Kalwall, Manchester, N.H. CIRCLE 215



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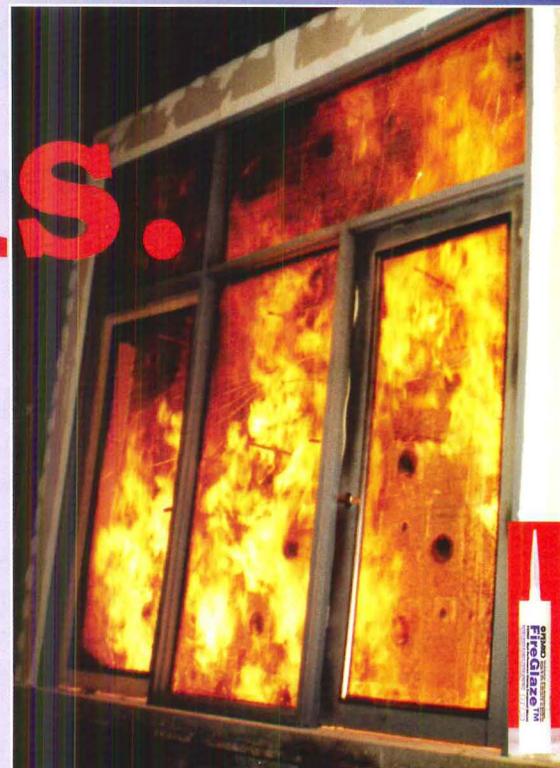


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► **Leaving in a hurry?**

The Roto Roof Door turns upper-floor rooms into bright living space while meeting emergency egress requirements for windows. The Roto Door claims to be the only egress unit that opens from the side like a standard door. The door can be open in three positions; either fully open or in one of two partially open ventilating positions. 800/243-0893. Roto Frank of America, Inc., Chester, Conn. **CIRCLE 216**



▼► **Illuminating designs**

The new Vista 14-inch tubular skylight from ODL features an improved Solar Lens Dome (below). Able to spread light evenly up to 300 square feet, the strong, UV-resistant, acrylic-domed skylight offers clarity and scratch resistance.

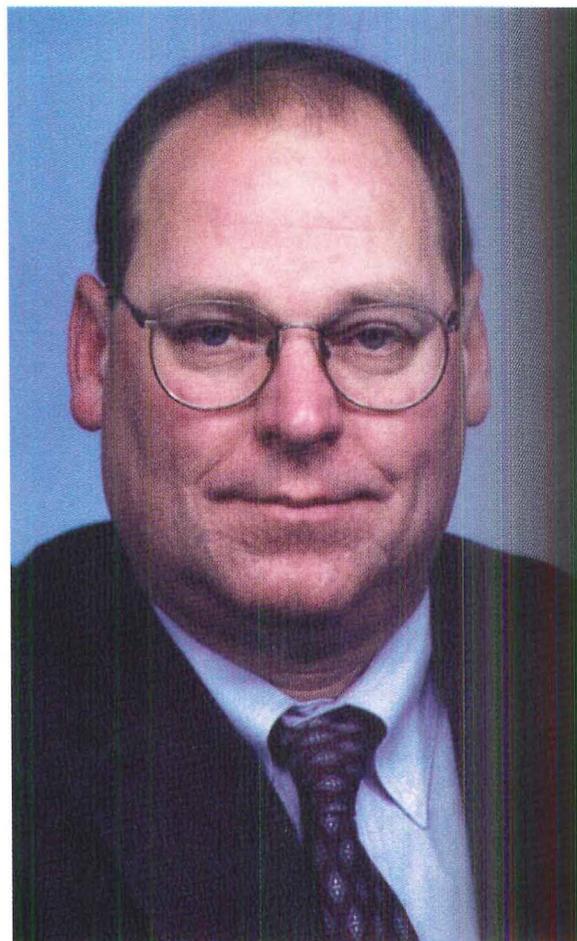
ODL has also introduced a new Solar Flair diffuser accessory with four designs (right). The 22-inch diameter diffuser fits ODL's 14-inch tubular skylight creating a different type of natural lighting experience.



The design flares away from the ceiling, allowing sunlight to illuminate the diffuser while casting a warm glow on the ceiling. The etched blue cone accent can be positioned as a pendulum from the diffuser or inverted for two different looks. A pierced aluminum disk set in the diffuser gives a night-sky constellation appearance. 800/253-3900. ODL, Zeeland, Mich. **CIRCLE 218**

◀ **Installation in a snap**

The new Andersen skylight with the snap-in sash features simplified roof brackets and a separate frame and sash for easy handling and quick installation; a response to installers' common concerns. The skylight features 12 standard vertical sizes, ranging from 16 to 44 inches wide and 27 to 72 inches long. Custom sizes are also available. 800/426-4261. Andersen Windows, Inc., Bayport, Minn. **CIRCLE 217**



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—Vince Irwin, Irwin Products, Inc., St. Louis, MO

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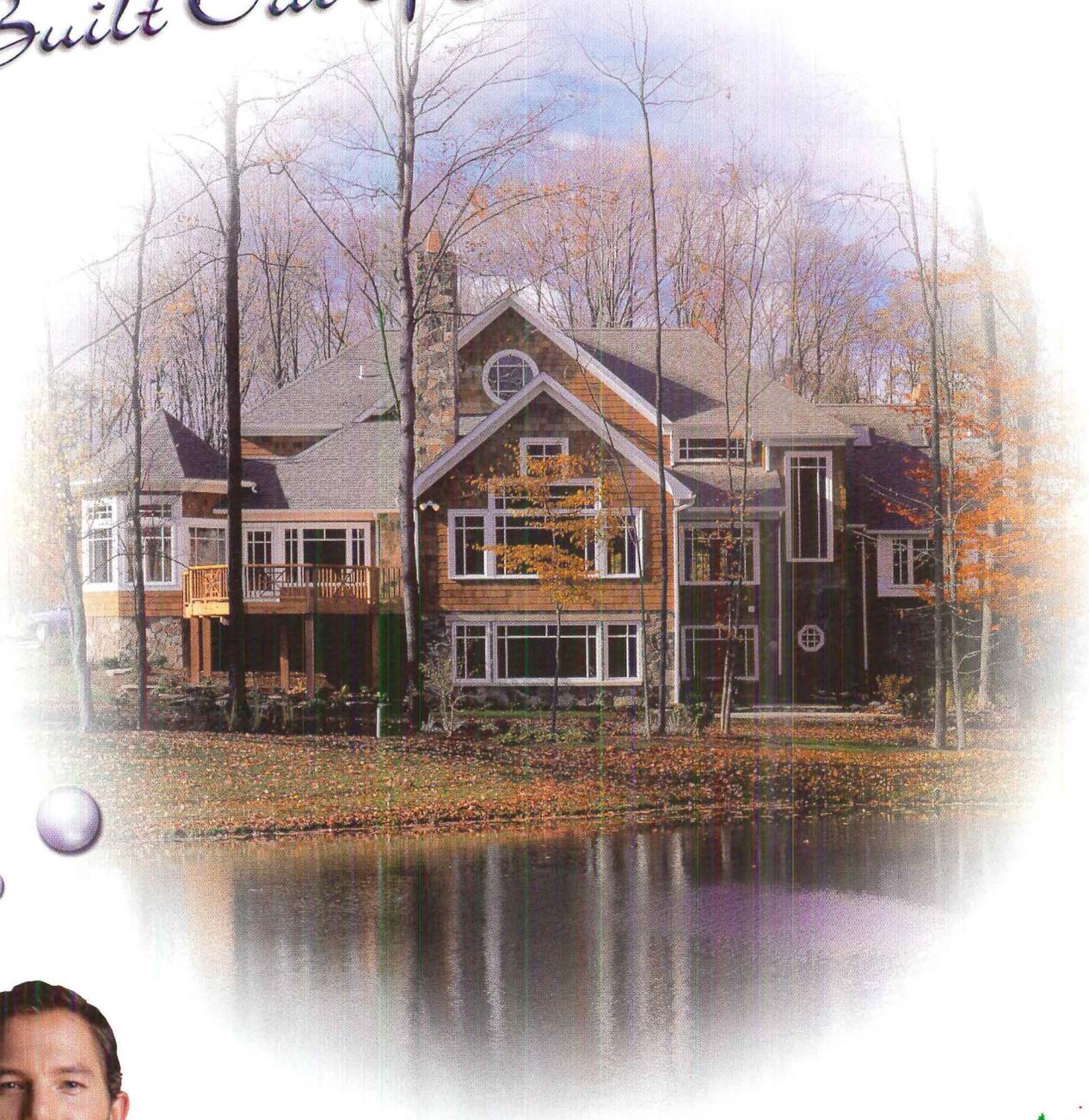
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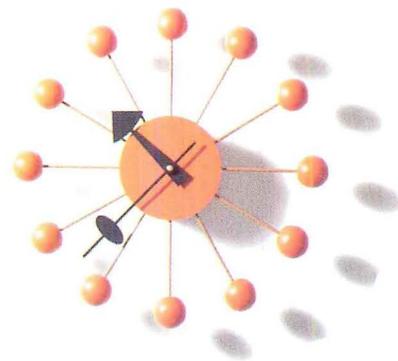
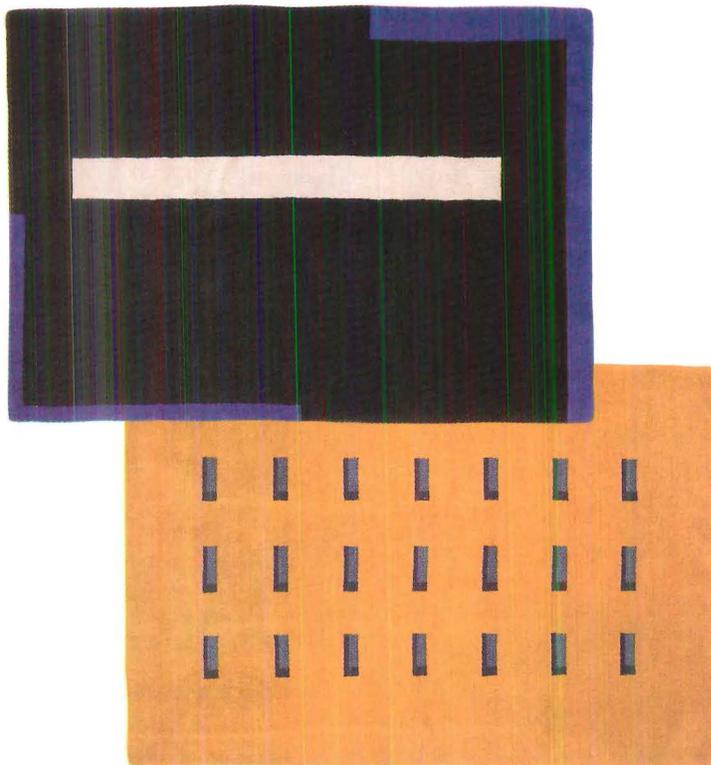


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CIRCLE 78 ON INQUIRY

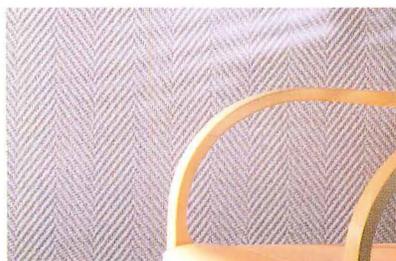
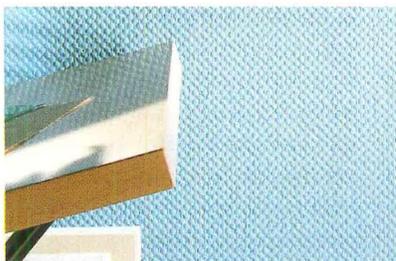
PRODUCT BRIEFS

► **Translating Tibet**

"Tibetan Modern: The Architects Collection" is a collaboration between world-renowned modern architects and master Tibetan rug weavers in an exhibit and collection of custom-designed rugs. Architects involved in the project include Steven Holl, AIA (top rug shown), Michael Rotondi, FAIA, and Paulett Taggart, AIA (bottom rug shown), all of whom produced designs reflecting their own interpretations of Tibet. The exhibit will premiere in Manhattan at the Tibet House Gallery on October 7 and remain on view until the end of the month. It will then go to San Francisco's LIMN Gallery, where it will be from November 19 to December 31. A limited number of each design will be produced, and a portion of the proceeds will benefit the Tibet House New York. 415/441-6604. Elson & Company, San Francisco. **CIRCLE 219**

▲ **Time for a comeback**

The Vitra Design Museum has reissued George Nelson Wall Clocks originally designed between 1948 and 1952. The Ball Clock (shown) was originally created for clock manufacturer Howard Miller and appeared in countless advertisements depicting the modern kitchen. Produced in the U.S. until the mid-1970s, the clocks will be available through the Vitra Design Museum Collection and at museum stores nationally, including MoMA in New York. 212/539-1900. Vitra, Inc., New York City. **CIRCLE 222**

◀ **New type of glass wall**

Johns Manville has introduced Textura, a new glass textile wall finish system, to the U.S. and Canadian markets. It is manufactured from the fine glass yarns that are spun from quartz sand, soda, lime, and dolomite. The line of paintable wallcoverings, which has been used extensively in Europe for 40 years, is resistant to fire, and creates minimal toxicity in fire situations. Its ability to breathe minimizes potential for the growth of mold and mildew. 303/978-2000. Johns Manville Corporation, Denver, Colo. **CIRCLE 220**

► **Docking dining furniture**

The Integrated Dining Collection from Robert Martin Designs features an expandable dining table that docks with a versatile, sideboard/desk (shown). All pieces can be executed in cherry, walnut, ash, or maple (other woods are available upon special request) and feature brushed aluminum hardware. The sideboard on its own measures 72 inches long and 24 inches deep; two retractable leaves increase its

width so it can be docked with the table. 718/797-1183. Robert Martin Designs Inc., Brooklyn, N.Y. **CIRCLE 221**

▲ **Stretch your imagination**

A laterally suspended textile system, Eurospan, features a locking knit-weave manufacturing technique that assures stability and strength when stretched into place. An option for ceiling coffer areas, large floating clouds, domes, and barrel vaults, Eurospan is made from 100 percent Trevira CS fibers, which are permanently flame resistant and impervious to moisture and humidity. Eurospan

comes in white and is difficult to distinguish from white plaster or drywall. Cost competitive with other custom acoustical panels and systems, Eurospan may be field painted with a special colorant without diminishing acoustical performance. Eurospan is appropriate for commercial and residential renovation or new projects such as offices, hotel corridors, and schools. 303/466-3700. Wall Technology, Broomfield, Colo. **CIRCLE 223**

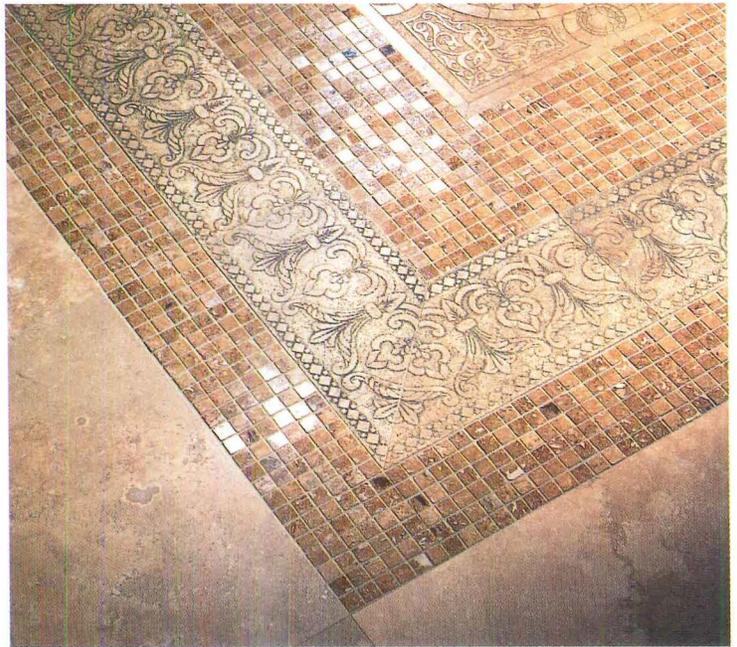
PRODUCT BRIEFS



◀ **Naturally (insect) repelling**

K5's natural woven twine is made of 100 percent linen and is crafted in France. The primary uses of the three patterns shown below are for alternative looking heavy-duty upholstery, wallcoverings, and residential floorcovering. K5, the designer, manufacturer, and importer of the fabric, recommends backing for every application. This eco-friendly product has the interesting property of being naturally insect repellent. The material is available 58 inches wide. 212/953-5245. K5, New York City.

CIRCLE 224



▲▼ **Ancient inspirations**

Since the 16th century, when artists traced designs into a wax coating on copper plates to reveal their imaginations, the Acquaforde, or acid-etching technique, has been used to design art-

work. Handcrafted in Italy, the Akros collection of stone tiles applies the ancient technique to etched marble. Akros may be used in small quantities in 3-by-3-foot, 8-by-8-foot, or 16-by-16-foot tiles as decorative highlighting to a floor or wall, or, as in the application above, mixed with polished marble. The Illuminated Manuscripts ceramic tiles (left) are inspired by those books of prayer penned by monks centuries ago. Made in Italy, the tiles may be used as accents in a field of tile or may be concentrated for high-design impact. 212/727-9331. Artistic Tile, New York City.



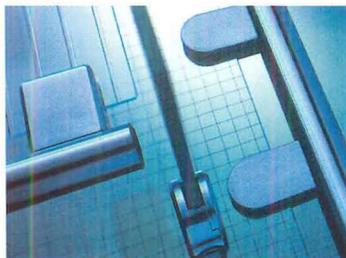
CIRCLE 227



▲ **Sleeping easier**

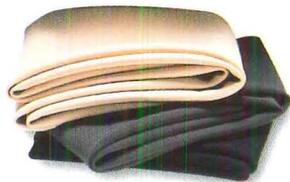
The award-winning ADD Day Bed simplifies hospital furnishings and maximizes space by replacing freestanding and space-consuming sleeper sofas and recliners. Developed in conjunction with Northwestern Memorial Hospital in Chicago, the bed is now in use in every

patient room in the hospital's new facility. Made of heavy steel construction, the Day Bed converts a 22-inch-deep sofa or window seat to a 30-inch sleep surface, employing a backrest that flips forward in one easy motion. 800/424-2432. ADD Specialized Support Technology, Inc., Los Angeles. CIRCLE 225



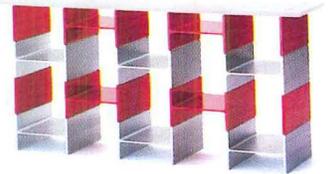
▲ **German glass fittings**

Bendheim is introducing a new line of German compression glass fittings. The clamps for glass shelving, stair railings, and partition walls are offered in a number of shapes, sizes, colors, and finishes including zinc, chrome, brass, and stainless steel. 800/835-5304. Bendheim, New York City. CIRCLE 226



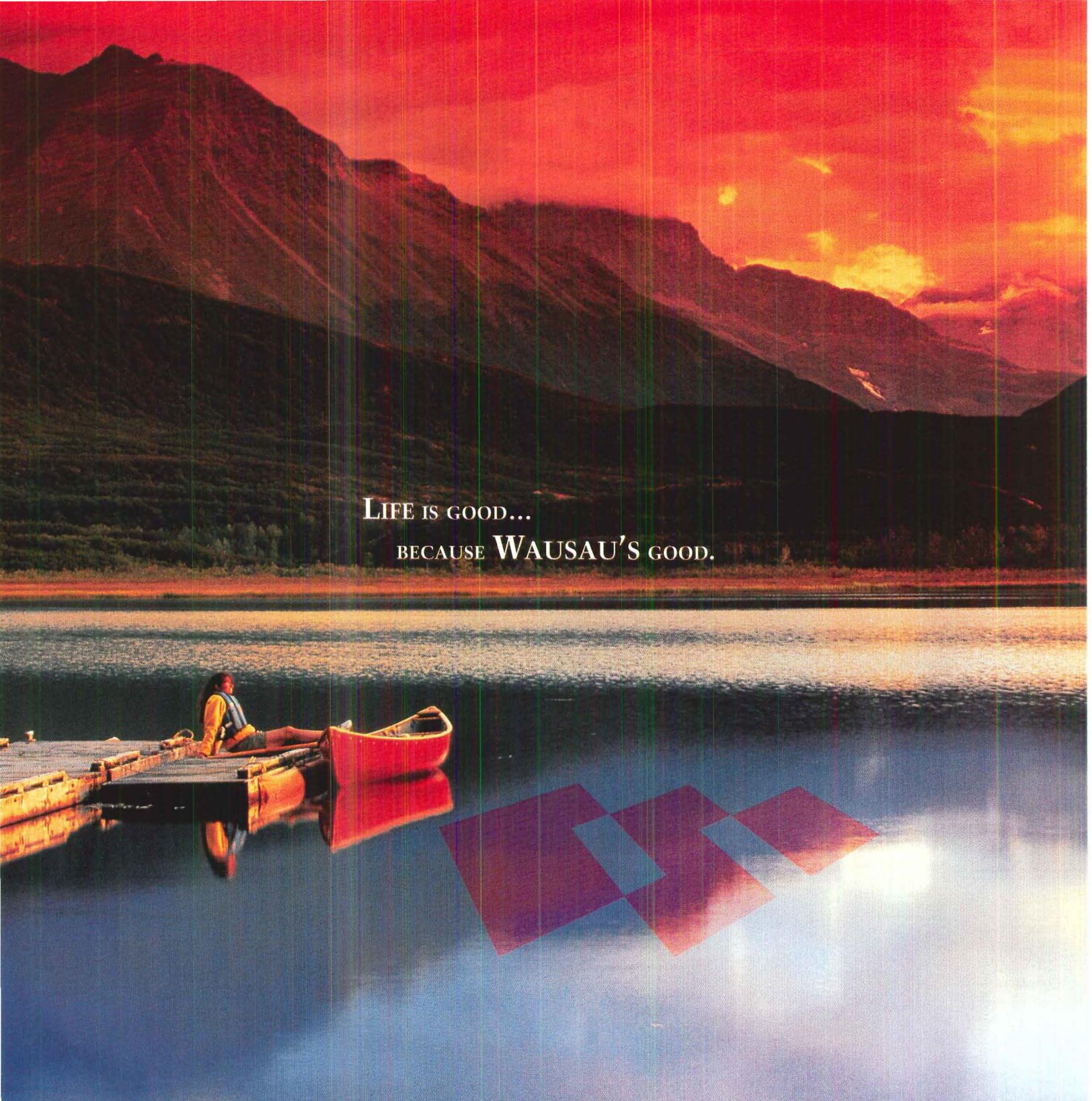
◀ **Y2K compliant textiles**

With the feel of a SCUBA suit, Una (top) is designed to hug the contours of a chair or sofa. Designed by Suzanne Tick, Una features a pliable, solid-color fabric with a smooth matte finish, knit construction, and fiber content of 72 percent nylon and 28 percent elastin. Also from Tick is En Route (bottom), a solid-color, vertically ribbed wallcovering with a soft metallic sheen. Inspired by the type of vinyl used by the fashion industry for accessories, Tick has adapted En Route for the contract market and given it vertical striations and a palette of metallic colors, including aluminum and gunmetal. 212/343-4000. KnollTextiles, New York City. CIRCLE 228

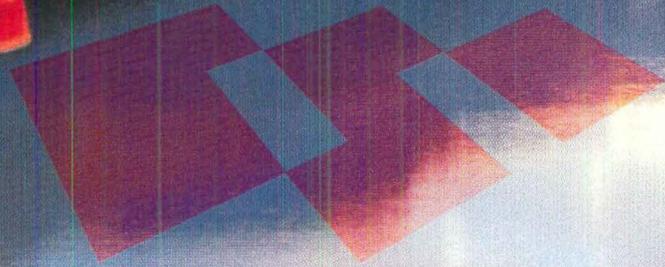


▲ **Building blocks**

The i-beam credenza, part of the new stacking i-beam furniture line, is the work of husband and wife design team Stuart Basseches, an architect, and Judith Hudson, a graphic designer. The modular units are made from standard aluminum i-beam extrusions, and a pin connection system allows for the furniture to be easily taken apart and restacked in different orders or configurations. 212/255-3033. biproduct, New York City. CIRCLE 229



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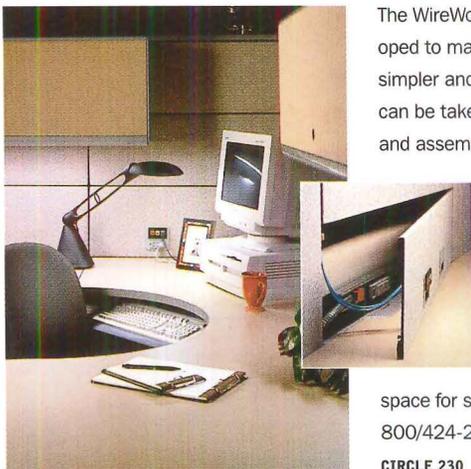
◀ Getting wired without coffee

The WireWorks panel system was developed to make facility reorganization simpler and more economical. Panels can be taken out in the middle of a run, and assembly and reconfiguration are possible without special tools or fasteners. The panel is available in three styles: low-cost monolithic, stylish segmented, and stackable. All three provide ample interior

space for storing excess cables.

800/424-2432. KI, Green Bay, Wis.

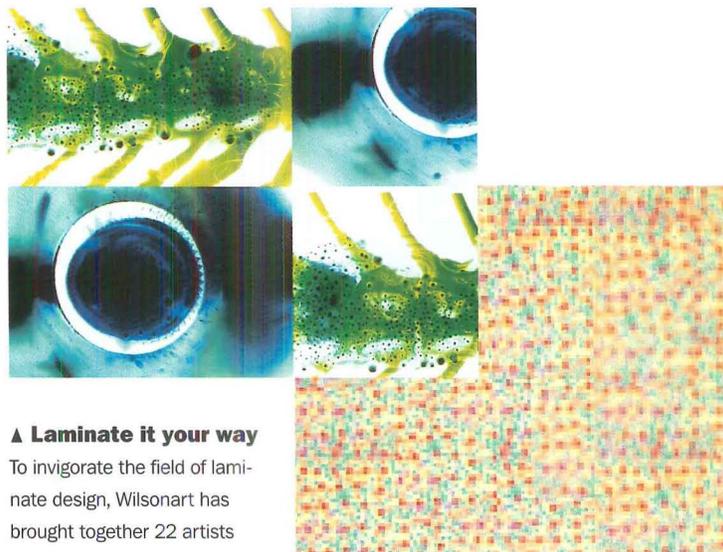
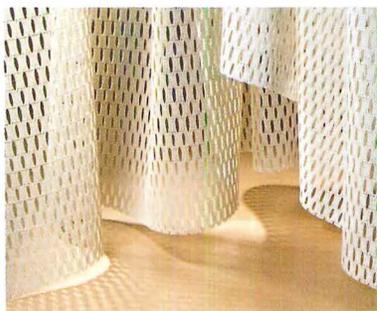
CIRCLE 230



▶ Technological knit

Techno, featuring a soft, matte surface and open-knit structure, is a new contemporary window fabric from Pollack & Associates. Knitted in Switzerland, Techno is inherently flame retardant, 118 inches wide, and available in three colors.

212/627-7766. Pollack & Associates, New York City. CIRCLE 231



▲ Laminate it your way

To invigorate the field of laminate design, Wilsonart has brought together 22 artists and designers working in all areas of design—from textiles, architecture, and illustration to video and tattoo—to create a collection of radically new laminate designs. Designers who participated include ceramist Jonathan Adler, furniture designer Nick Dine, and industrial designer Karim Rashid. While in the past the high cost of developing a single laminate design meant that manufacturers had to sell millions of square

feet of a single pattern to recoup their investment, Wilsonart Custom Laminate, with its state-of-the-art computer lab, allows customers to submit unique designs with no minimum order requirements. Laminates can be delivered within four to five weeks of design approval. 800/433-3222. Wilsonart International Inc., Temple, Tex.

CIRCLE 232

RECORD 2000 HOUSES

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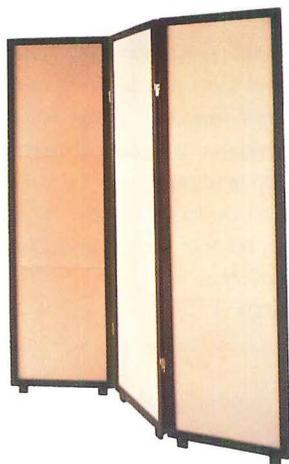
The editors of ARCHITECTURAL RECORD announce the 44th annual RECORD HOUSES awards program. This program is open to any registered architect; work previously published in other national design magazines is disqualified. Of particular interest are projects that incorporate innovative programs, building technologies, and use of materials. There is an entry fee of \$50 per submission; please make checks payable to ARCHITECTURAL RECORD.

Submissions must also include plan(s), photographs (transparencies, slides, or prints), and a brief project description bound firmly in an 8½-by-11-inch folder, and must be postmarked no later than October 31, 1999. Winning entries will be featured in the 2000 RECORD HOUSES. Other submissions will either be returned or scheduled for a future issue. If you would like your entry returned, please include a self-addressed envelope with appropriate postage.

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Two Penn Plaza, New York, New York 10121-2298

PRODUCT BRIEFS



▲ **Accessorizing with leather**
Coach, known for handbags and other leather accessories, has joined with Baker Furniture to create a collection that includes sofas, chairs, ottomans, and accessory items. The three-panel Coach Manhattan Folding Screen displays an exposed mahogany-finished frame, recessed hardware, and stitched glove tanned leather on both the front and back panels. 800/262-2411. Coach Furniture, Grand Rapids, Mich. **CIRCLE 233**

▼ **Can't stand the heat?**
Six new kitchen hoods from Cheng Design feature 16-gauge nonmagnetic stainless-steel construction, halogen lighting, and commercial stainless-steel baffled filters. Silex, shown below, features a factory welded off-set flue and apron, a wraparound utensil rail, and is designed to accept plaster finish. 510/849-3272. Cheng Design, Berkeley, Calif. **CIRCLE 234**



▲ **Opening design options**
Aperture is a new furniture system by designers Jordan Goldstein, ASSOC. AIA, and Jeff Henry. Henry is vice president of Gensler San Francisco and Goldstein is an architect and product designer in the firm's Washington, D.C., office. Aperture's main organizational element is created by the intersection of deep and shallow storage zones. The resulting frame can be tailored by combining different veneers and Halcon's Chemcolor finishes, creating unique compositions from catalog components. 507/533-4235. Halcon, Stewartville, Minn. **CIRCLE 235**



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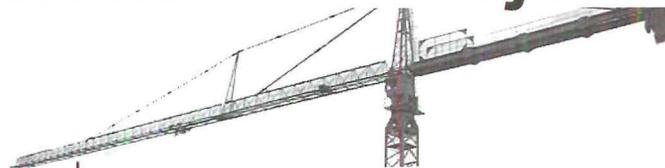
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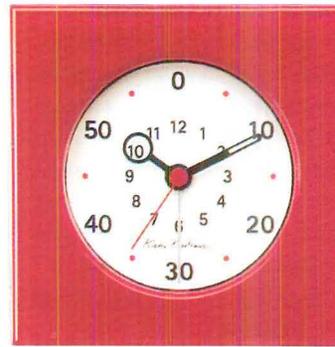
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PRODUCT BRIEFS

▼ Italian cooking

Snaidero offers three new kitchens redesigned for the new millennium by Ferrari stylist Paolo Pininfarina; Idea (shown below), Viva, and Ola. The streamlined, handle-free look of Idea, which has been in production for 15 years, has been completely rethought by Snaidero for modern purists. New colors and features, such as a seamless stain-

less-steel channel system with integrated finishing panels, a 120-centimeter drawer unit, and the absence of all ornamentation in the island cooktop, add to the model's design and functionality. A 15-centimeter-deep, aluminum worktop features a bottle holder, knife rack, utensil holder, and electrical outlets for counter-top appliances. 310/516-8499. Snaidero USA, Inc., Los Angeles. **CIRCLE 236**



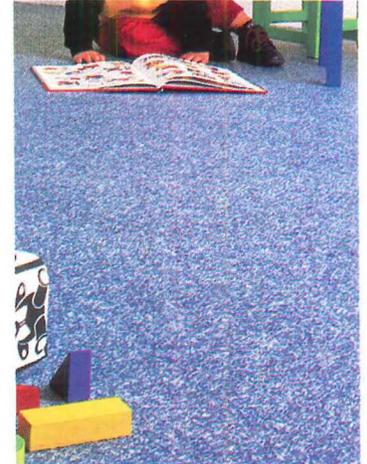
◀ Alarming inspiration

Richard Gluckman, FAIA, Michael Graves, FAIA, Kisho Kurokawa, HON FAIA, and Laurinda Spear, FAIA, each contributed to Building Timepieces II, a collection of alarm clocks that draws inspiration from several famous museums around the world. Kurokawa's "Inspiration" clock is shown. 781/932-9444. Projects, USA, Woburn, Mass.

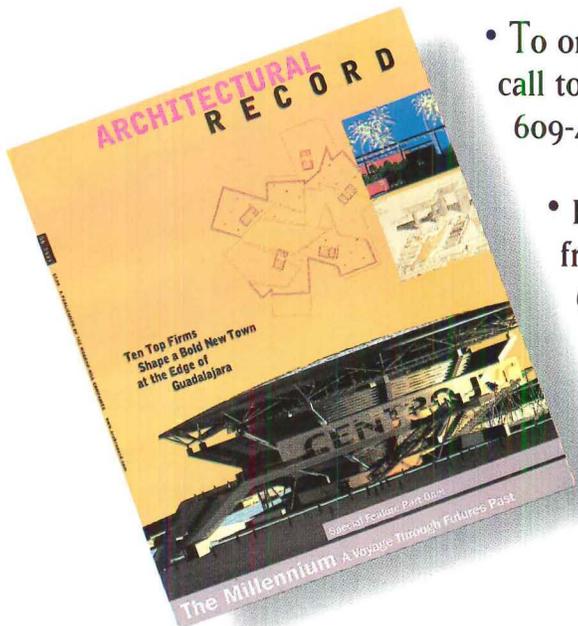
CIRCLE 237

▶ Entering another dimension

The slip resistance of Marley Dimension sheet-vinyl flooring is enhanced by granules made from postconsumer waste, which toughen the surface and aid durability. A combination of opaque and pearlescent chips are suspended within a clear wear layer, providing a 3D effect. Dimension is available in 16 colors, has a built-in bacteriostat for added hygiene, and is intended for a variety of environments, from health care, education, and retail to hospitality and commercial kitchens. 800/633-3151. Marley Flexco, Tuscumbia, Ala. **CIRCLE 238**



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PRODUCT BRIEFS

▼ **Alternative routes**

Mobile T-screens. Warehouses. Shortbeds. The vocabulary of Detour's work systems might not sound familiar, but its influences are libraries, casual dress, and transportation. Detour creates open-space work settings of freestanding elements that can shift easily with the patterns of people and their projects for the changing directions of work.

Detour designed their system by

observing several trends that share an impact on our work-lives, such as how casual dress reveals a cultural and demographic correlation between informal wear and informal work. For Detour's designers, success hinges on user-centered solutions that enable mobile workers to quickly acclimate themselves to temporary and unfamiliar work settings. 650/697-6790. Metropolitan Furniture Corporation, Burlingame, Calif.

CIRCLE 239



▲ **Levitating meditation**

Cherry Tree offers custom shoji screens in several American hardwoods and custom stains. The manufacturer can fashion custom-designed shoji for commercial and hospitality projects that have myriad of applications, such as window coverings, doors, freestanding panels, and room partitions. Shoji are available with a variety of grid styles, durable facings, and track mounts. The ceiling lattice (shown above)

can enhance a suspended ceiling light in an office, restaurant, or home setting, creating a serene and soothing interior for visitors and staff. Facings are available in a variety of durable, yet translucent materials, from glass to acrylics. The ceiling lattice comes standard or custom-made in the U.S. from the finest hardwoods. 800/634-3268. Cherry Tree Design, Bozeman, Mont.

CIRCLE 240

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PRODUCT LITERATURE

New furniture resource

Offering classic favorites as well as products new to the U.S. market, this direct-resource catalog sells reasonably priced, quality furniture that is in stock and can be shipped immediately. 800/944-2233. Design Within Reach, San Francisco.

CIRCLE 241

Ductless fume-hood brochure

A new four-page brochure from Fisher Hamilton features the company's SafeAire Ductless Laboratory Fume Hood. 920/793-1121. Fisher Hamilton, Inc., Two Rivers, Wis. CIRCLE 242

Daylighting highlights

An eight-page brochure from Velux-America, *The Daylight Advantage*, highlights seven nonresidential projects throughout the country that have benefited from the strategic use of daylighting. 800/888-3589. Velux-America, Inc., Greenwood, S.C. CIRCLE 243

Decorative product brochure

A new brochure from Lightolier contains

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www.duraartstone.com
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www.ppgcoexcoatings.com
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www.dwr.com

detailed descriptions of the decorative elements of the BowShield product line. 800/215-1068. Lightolier, Fall River, Mass. CIRCLE 244

Back-saving brochure

Dauphin's Ergonomics Brochure contains ergonomic research findings, combined with tips and an easy-to-use checklist summary. A new screensaver also provides educational training. 800/995-6500. Dauphin, Boonton, N.J. CIRCLE 245



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PRODUCT LITERATURE

School lighting solutions

A new 24-page brochure from Holophane catalogs fluorescent lighting solutions to suit various schoolroom designs. 614/575-4240. Holophane Corporation, Columbus, Ohio. **CIRCLE 246**

Brick installation information

A brick installation package from the Brick Industry Association includes an instructional brochure on how to install a brick walkway, patio, and driveway, and a video on how to install a brick driveway. 703/620-0010. Brick Industry Association, Reston, Va. **CIRCLE 247**

Molding profile catalog

The MDF Moulding division of SierraPine has introduced a catalog containing over 175 profiles in their MDF molding line. 888/633-7477. SierraPine Limited, Roseville, Calif. **CIRCLE 248**

EIFS educational video

A free, six-minute educational video from Parex describes the features, benefits, and key installation steps of EIFS.

800/537-2739. Parex, Inc., Redan, Ga. **CIRCLE 249**

All-weather heater brochure

A new six-page illustrated brochure highlights the opportunities of the Suntube Compact Heater to provide safe, infrared comfort heating, indoors and outdoors. 800/223-5335. Solaronics, Inc., Rochester, Mich. **CIRCLE 250**

Stone project guide

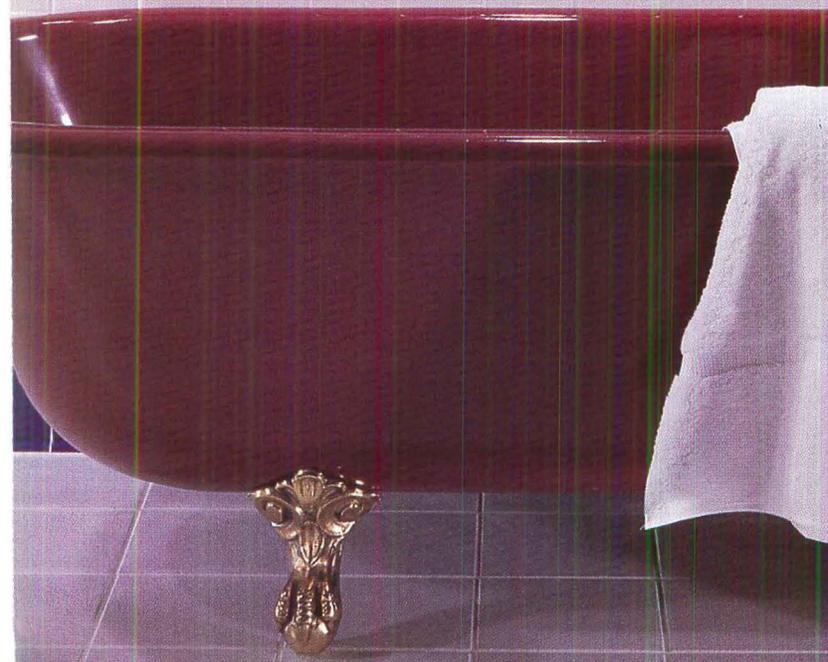
A 24-page project guide includes a variety of interior and exterior projects with instructions for installing designer stone over any structurally sound surface. 800/295-6023. Vengeance Creek Stone, Murphy, N.C. **CIRCLE 251**

Concrete bridge deck report

A 12-page report, *Field Investigations of Existing and New Construction Concrete Bridge Decks*, compiles the results of extensive field investigation of existing and new construction bridge decks in Indiana. 847/517-1200. Concrete Reinforcing Steel Institute, Schaumburg, Ill. **CIRCLE 252**

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The Center for Energy Research/Education/Service (CERES) and the Department of Architecture are seeking a candidate for a position as Resident Environmental Systems Researcher/Educator beginning January 10, 2000. The successful candidate will be appointed as a staff member in CERES and will hold a tenure-track academic position in the Department of Architecture at rank and salary commensurate with experience. The successful candidate will undertake a half-time research/half-time teaching assignment during the 10 month academic year appointment; summer load for additional teaching and/or research is contingent upon available funding.

The research component will be comprised of energy-related research in the areas of building systems, building design and/or community design. The successful candidate, in fulfilling the research load, will undertake project development and funding solicitation in support of personal research interests and will collaborate with CERES staff in securing funding for research which will utilize the collective expertise of CERES staff, affiliated faculty, and students.

The educational component will be comprised of teaching in the environmental systems technologies area in concert with CERES staff. The content areas covered in the existing environmental systems courses include the traditional subjects required for NAAB accreditation of the Department of Architecture curriculum. New initiatives in modularized teaching-a distribution of environmental control systems teaching across the degree program-are being developed. The successful candidate will be expected to contribute to and participate in this effort. Responsibilities may include teaching architectural design studio.

On-going developments such as the clustered minors in environmentally sustainable practices, the biannual Greening of the Campus conferences, the use of electronic media in the delivery of environmental systems content, and the development and maintenance of the ongoing visiting scholars program represent some of the CERES initiatives structures to link research and education and to foster interdisciplinary energy-related environmental systems research/education/service. The successful candidate will be expected to contribute to the implementation of these initiatives as well as the development of new interdisciplinary programs. Exceptional facilities, abundant technological resources, unique university positioning, substantial indirect support and summer employment options make this opportunity very attractive.

Minimum qualification: master of architecture by first day of employment. Preferred qualifications: registration (license to practice architecture or engineering); experience in teaching, experience in professional practice, and a record of publications and/or appropriate research projects as evidence of scholarly and professional contributions; expertise in a number of areas: solar and/or carbon fuel heating, natural vs. electrical ventilation, air conditioning, natural vs. electrical lighting, water services, fire prevention, egress/elevating, acoustics, energy conservation or building performance; domestic and foreign travel as related to research and professional involvement; professional degree in mechanical or electrical engineering.

Send letter of application; curriculum vitae; three letters of recommendation; and samples of professional, creative and/or academic course work to: Search Committee, Center for Energy Research/Education/Service, Ball State University, Muncie, IN 47306. (Tel: 762-285-1135; Fax: 765-285-5622) Nominations are encouraged. Review of qualifying applications will begin September 15, 1999, and will continue until the position is filled (www.bsu.edu/ceres) (www.bsu.edu/cap/arch.html)

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The Dean is the chief academic and administrative officer of the College and reports directly to the University Provost. Preferred qualifications for the position include: a professional degree or Ph.D. in one of the disciplines in the College or a related field with professional certification; appropriate administrative experience; a record of research and/or creative achievement; professional activities; teaching experience; experience in program planning and development; commitment to diversity; and the ability to manage budgets in a complex research university. Fund-raising ability is also essential. The Dean will be expected to provide strong academic leadership across the programs of the College and to possess excellent administrative and interpersonal skills.

The successful candidate will qualify for an appointment as full professor with tenure in one of the academic units in the College.

Anticipated starting date July 1, 2000. The salary is competitive and commensurate with experience and qualifications. The deadline for nominations is **October 15, 1999**, and the application deadline is **November 1, 1999**. Applicants should send a letter of interest, a curriculum vitae, and the names and contact information for five references to:

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THE FUTURE Consumers are buying goods on the Internet in growing numbers.

Will E-commerce doom retail architecture?

BY B. J. NOVITSKI

If shoppers begin to rely more on the Internet than on their local mall, will architects who depend on retail design feel the pinch? According to the AIA's 1997 *Firm Survey*, nearly 8 percent of firm billings come from retail construction. If predictions about the increase of online sales come true, firms that specialize in the retail sector could suffer. But lessons learned from E-commerce can also mitigate its potential negative effects on practice.

The trend began with Amazon.com (www.amazon.com), which was unknown when it started selling books on the Internet in 1995. Today, just four years later, it's one of the biggest booksellers in the country. Egghead Software, a popular computer products retailer, once operated a national chain, but closed all its stores, opting for just its online address instead: www.egghead.com.

Hundreds of electronic storefronts sell everything from Aegean cruises to Zen alarm clocks. According to the online newsletter eMarketer (www.emarketer.com), sales volume of E-commerce were estimated at \$1.8 billion in 1997; by 2002, they're expected to reach \$26 billion. It's no wonder considering the convenience, product choice, discounts, and security E-commerce can offer consumers.

Notwithstanding the impressive numbers, online book sales captured a mere 3 percent of that market last year. Robert Murray, of F.W. Dodge, who prepares five-year forecasts of the construction industry, notes that despite more frequent predictions that online shopping will render built stores

obsolete, 1998 saw the highest level of store construction ever.

"This year," he notes, "there's a 5 percent decline from that all-time peak, but this sector is still very healthy by historical standards. Online shopping may have had some dampening effect, but retailers are competing to differentiate their offerings and replacing a lot of outdated, 25-year-old space."

How long can that building boom continue? Futurist Graham T. T. Molitor, president of Public Policy Forecasting and vice president and legal counsel of the World Future Society, projects the growth of E-commerce to continue exponentially. He expects it to approximate that of interconnected computers, which numbered 500 in 1983 and will likely reach 500 million next year. Despite this growth, he argues, bemoaning the loss of retail outlets is like lamenting the loss of the elevator operator. True, unemployment will result in some areas, but this won't necessarily mean a net loss of work.

Delivery services, for example, will boom, along with the built infrastructure to support them. He predicts an increase in demand for stores that offer never-out-of-stock, frequently purchased items and stores that have high-volume, highly specialized products. Other building types will grow in importance. Molitor cites huge, state-of-the-art warehouses, such as those that enable Amazon to ship most popular books from on-hand stock. He also believes there will be increased demand for planned cities built on what is now inexpensive rural land,

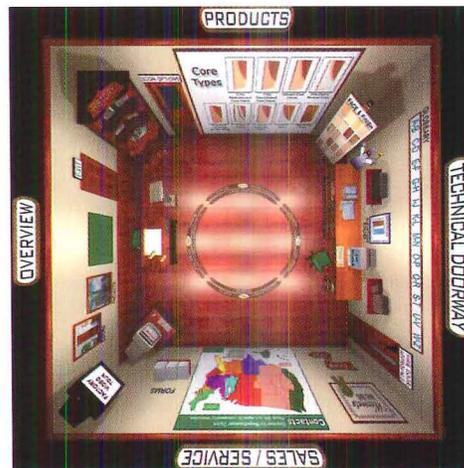
distant from existing cities. An increase in telecommuting and, eventually, high-speed rail and automated highways will make these communities feasible.

Designing innovative building types will help architects compensate for some loss of retail construction, but there are other options, too. Already, some archi-

In one recent example, VISCOMM, which maintains and distributes information to the design and construction community, has developed a roomlike interface for information about Weyerhaeuser Doors. The architect or homeowner navigates the site by clicking on posters, doors, and other icons that lead to different types of data. Although such an

interface might tax today's typically low-speed Internet connection, it offers clear wayfinding based on a relatively universal understanding of spatial cues.

Finally, architectural practice itself will change. Architect Peter Anders, author of *Envisioning Cyberspace* (McGraw-Hill, 1999), has coined the term *cybrid*, meaning a hybrid of cyberspace and real space. Business owners wanting to replace some real estate with



Information packager VISCOMM has developed an architectural front end to a door manufacturer's product information.

itects are exploiting the E-commerce trend by creating firm Web sites that display their digitized work and advertise their services. Of course, high-priced professional services do not sell as readily as consumer products, but the effectiveness of these sites will probably increase as potential clients become accustomed to going online to find what they need.

In addition, some architects are finding work applying their sorely needed design skills to E-commerce sites, using the metaphor of physical space as an interface to information.

online operations can hire an architect to design a Web site and building as a single package, creating resemblances between real and digital environments that can help employees find information online. Although Anders doesn't yet have statistics to prove this, he argues that a cybrid makes better financial sense for a client than a building alone. But for architects to get paid for these services, they'll have to negotiate fee creatively, basing them on more than built square feet. In the future, clients will pay E-architects to build less. ■

21st Century Design Lab

by Charlie White, AIA

Our firm has been using computers as an integral part of our office organization and production system for 15 years. This past year we have seen significant advances in computer technology. Both hardware and software have become more effective and more affordable. In response to these changes we have created a new space for our architectural firm that we have designated as our Design Lab.

Why a Design Lab?

- Client Meetings
- Team Collaboration
- Design Process
- Training

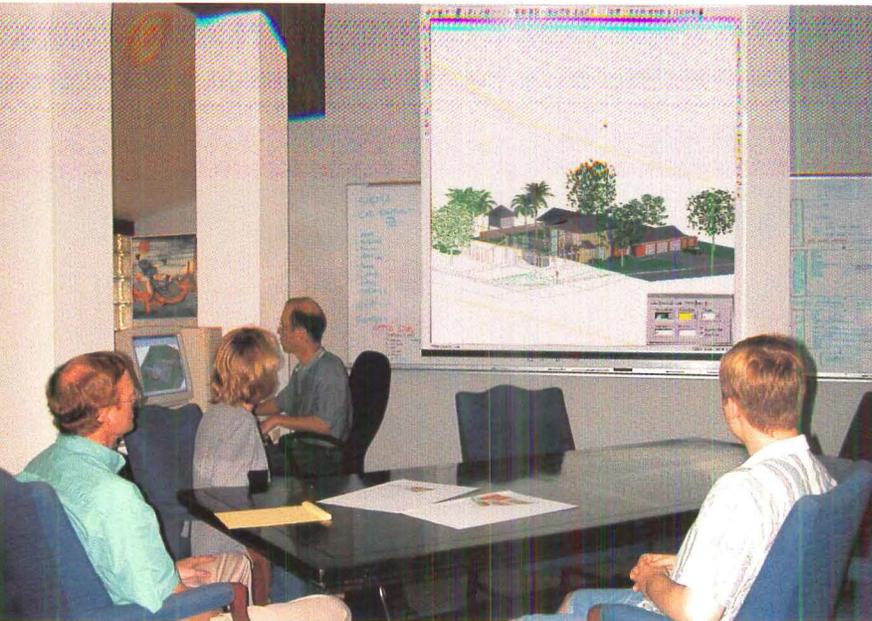
The Design Lab is the primary space within our office where we interact with clients. Using powerful networked computers and a new high-resolution projection system we can show their designs as never before. Clients can immediately and intimately participate in the design and decision-making process as their buildings are virtually created before their eyes. The design cycle is dramatically shortened as a result.

Within the office, the Lab provides an excellent venue for our firm to meet and work as a group. Because we have access to all the information in the office, we can easily explore issues in a much more focused environment. The Design Lab is where a majority of our design process takes form. It is an exciting new way of working together as a team.

The Design Lab is also an ideal space for the office's computer training. The technology in our Lab is state of the art and the room may be used without interrupting other important production activities in the firm.

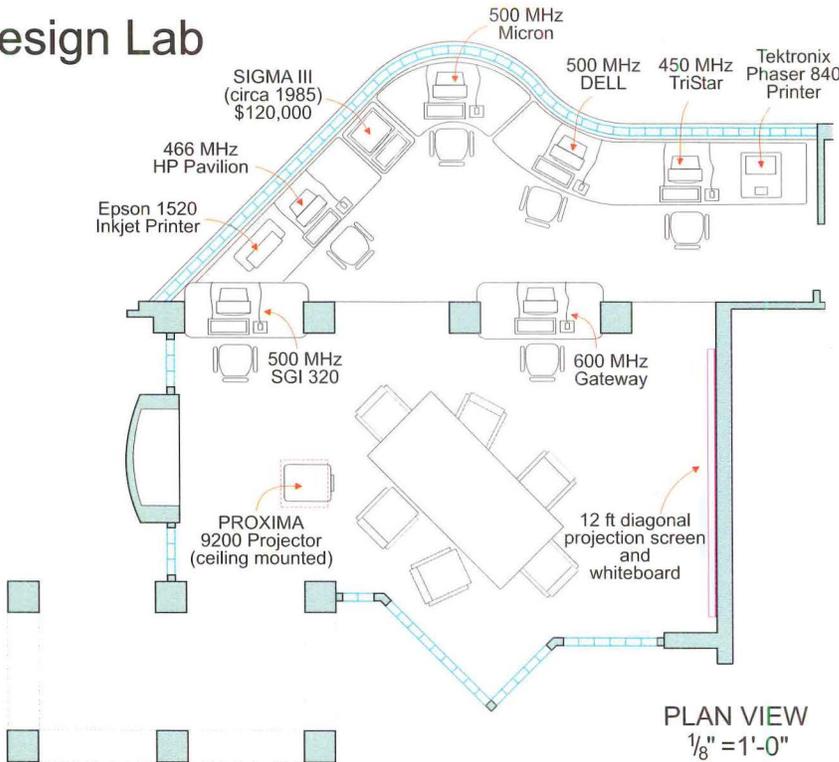
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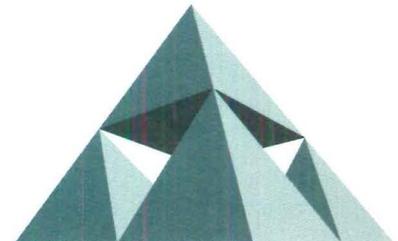
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