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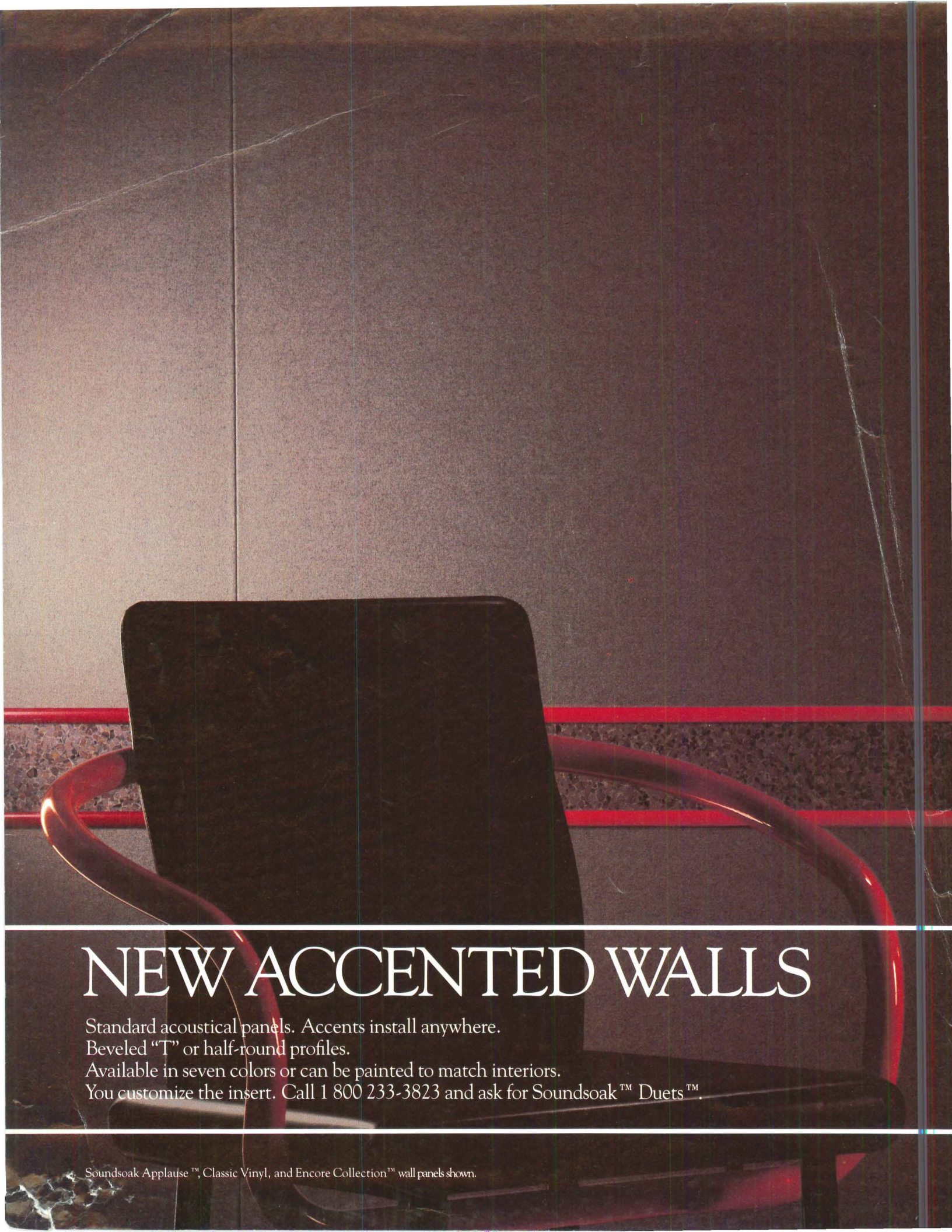

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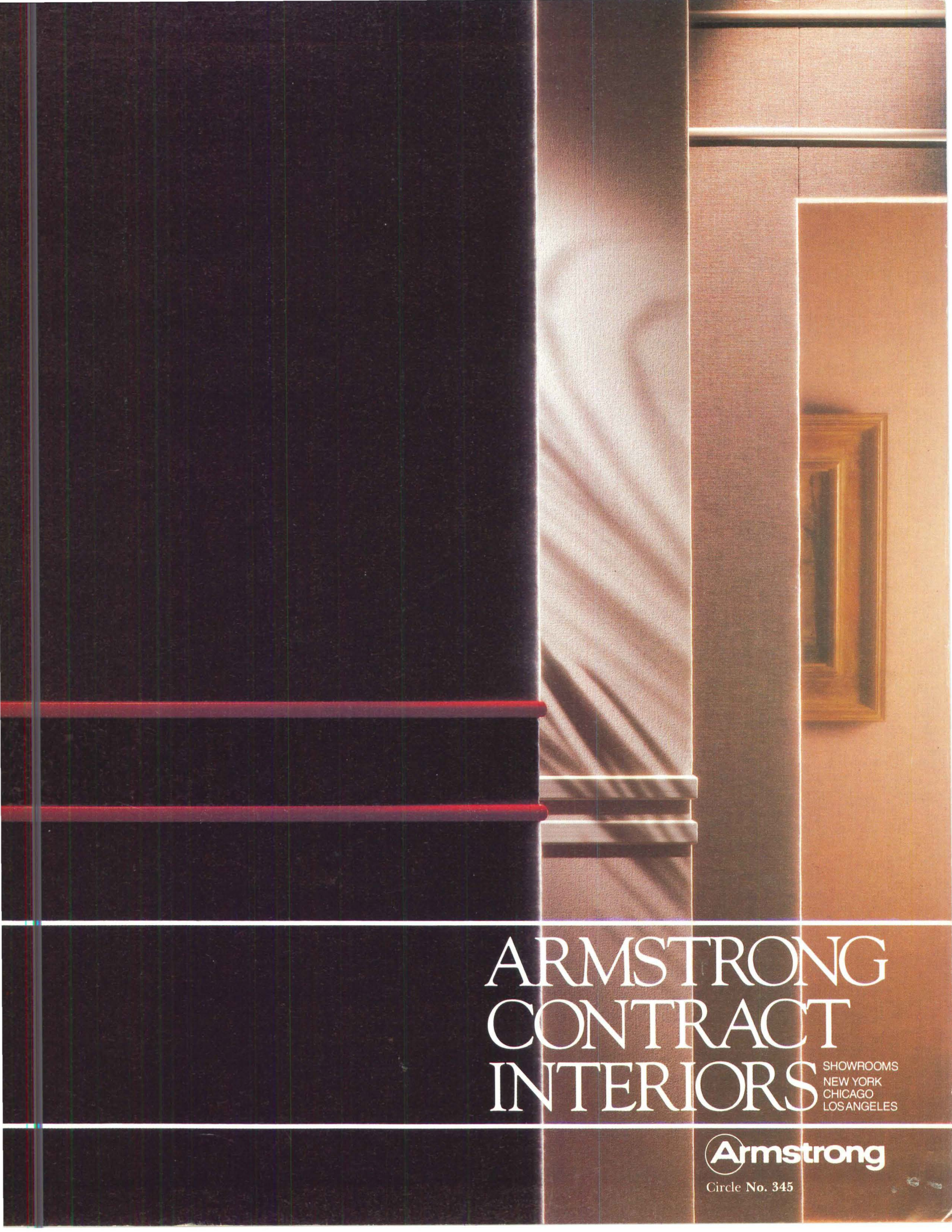

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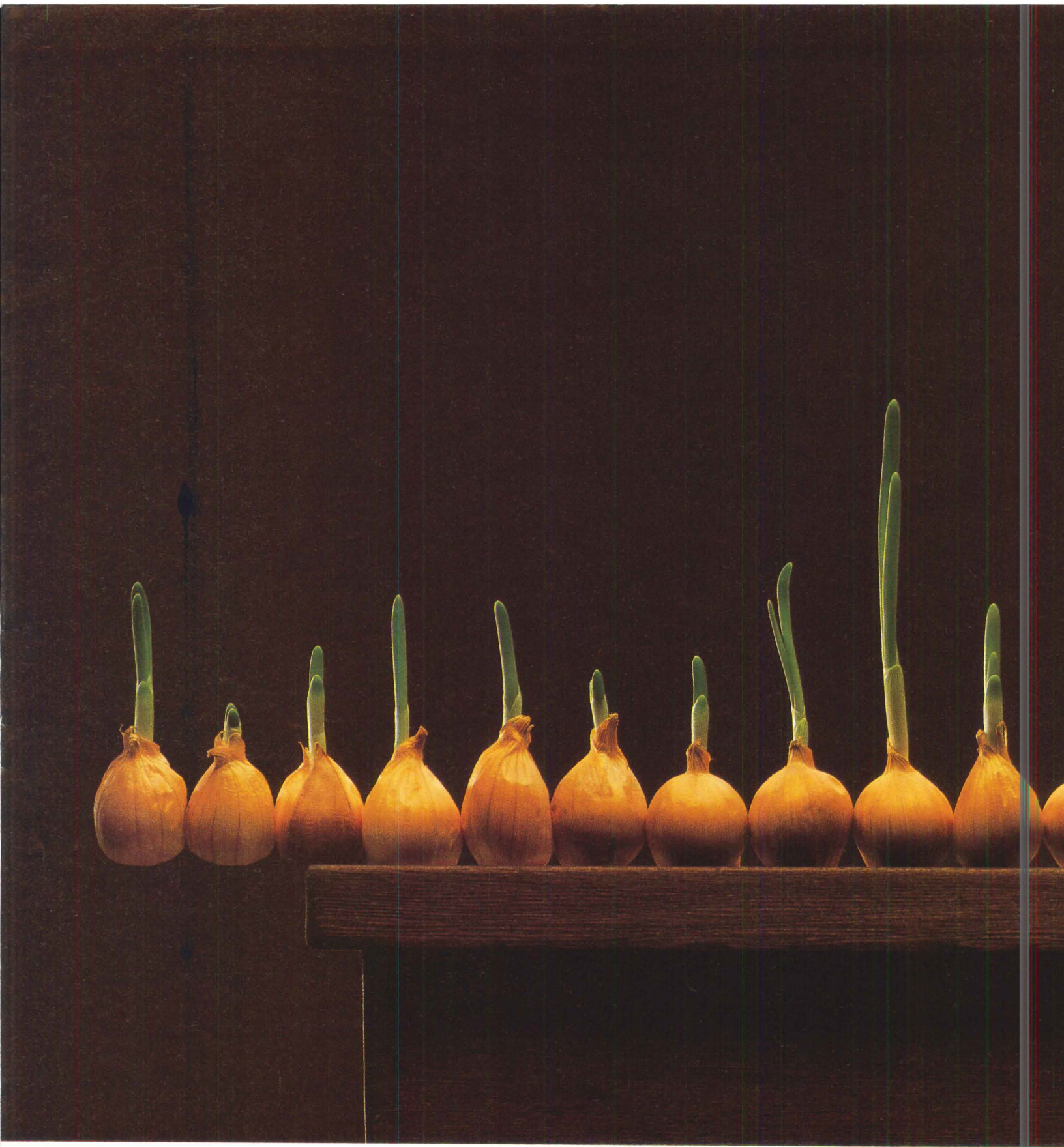

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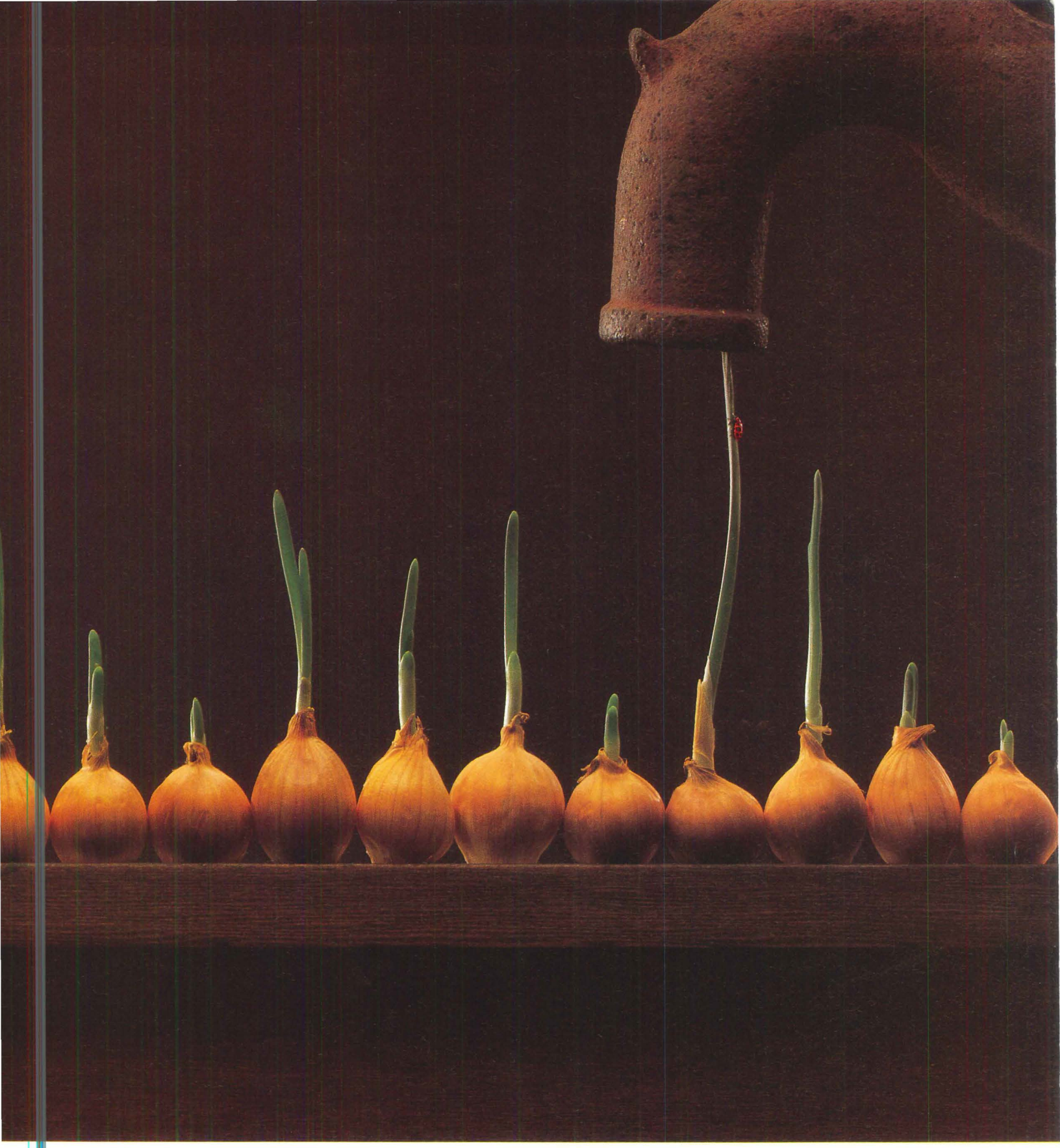

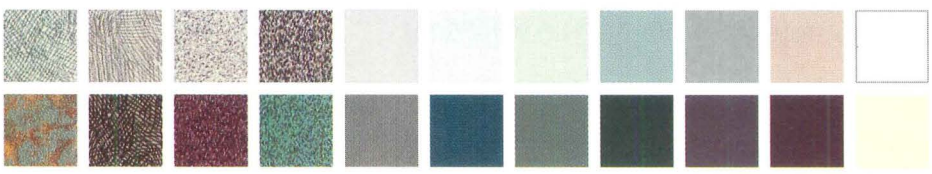

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Circle **No. 334**

Editorial: Classicism and Modernism

Uncertainty about the direction of today's architecture is reflected in – and partly caused by – confusion over our terminology.

"A little inaccuracy," said the writer Saki, "sometimes saves tons of explanation," although not tons of confusion. A young Wisconsin firm, Kubala Washatko Architects, recently presented me with the following statement: "It seems that much of your writing focuses on what you call the larger question of Classicism versus Modernism . . . We find it difficult to believe that a journal of such national prominence devotes so much print to a debate between two outmoded, archaic and socially/scientifically unresponsive dogmas." I found the statement telling, for, among other things, it reveals the inaccuracy and possible confusion inherent in words such as Classicism and Modernism.

The confusion arises, in part, from our use of those words in at least two different and sometimes conflicting ways. Classicism and Modernism most commonly refer to particular architectural styles, and while I don't think those styles are "outmoded" or even "socially unresponsive," I do agree that there is little point in devoting much print to discussing their relative merits. That is like debating the merits of Latin and English. Each language has its place, and it is not morally wrong (although in a given situation it might be inappropriate) to use one or the other.

But Classicism and Modernism also refer to broader sets of ideas or beliefs that have little to do with style, but a lot to do with current architecture. Classicism, according to Webster's Third New International Dictionary, involves an "adherence to or practice of the virtues thought to be . . . universally and enduringly valid." There are a number of architects today who embody this belief, even though their work doesn't look alike or even particularly Classical. Some, such as Allan Greenberg or Leon Krier, are literal Classicists, for whom the style and the idea of Classicism are one. But others, such as Christopher Alexander or Aldo Rossi, although they eschew the Classical style, nevertheless believe in fundamental patterns or typologies that have a universal validity over time or across cultures.

Modernism is a much less precise concept, defined by the same dictionary as "a self-conscious and deliberate break with the past and a search for new forms of expression." To add to the potential confusion, many Modernist architects today bring a Classical sensibility or vocabulary to their work. There are traditional Modernists such as I.M. Pei or Richard Meier who uphold the canon of early Modern architecture, and there are classicizing Modernists such as Michael Graves or Charles Moore who, in their later work, mix a Classical vocabulary with a Modern interest in idiosyncracy and irony.

Meanwhile, many other architects continue the Modern search for new forms of expression, whether inspired by the spirit of a place, as in the work of Steven Holl or Antoine Predock, or by the possibilities of technology, as in the work of Norman Foster or Renzo Piano, or by the promptings of the unconscious, as in the work of Frank Gehry or Gaetano Pesce. Still others, such as Peter Eisenman or Bernard Tschumi, argue that Modernism has simply continued Classicism's faith in reason. For them, the real self-conscious break with the past is only now occurring.

Classicism and Modernism are anything but obsolete; they are at the very heart of current architecture. To dismiss them as mere "dogmas" is to miss the point. They represent two very different views of the world on which every architect should take a stand. **Thomas Fisher** ■

Notice to Readers: With this issue, P/A switches to a slightly smaller page size – about 9″ × 11″ instead of 9″ × 12″. The new size is the same as many familiar magazines, such as Fortune, HG, and Art in America. Like these other magazines, we are adopting the new size in response to printing technology; only two U.S. printing companies now run presses that can produce a 9″ × 12″ publication of the quality P/A requires. We had decided earlier to change page size at the end of this year and had anticipated it in the recent redesign of the magazine, but the financial difficulties of the printer who had long been producing P/A caused us to advance our schedule. To print P/A in the new size, we have chosen Byrd Press, in Virginia, which produces over 200 fine specialized publications and whose expertise will allow us to improve the already high quality of the magazine.

You have seen a number of changes and improvements to P/A this year, and we plan to continue that evolutionary process. Coming over the next several months are a series of articles re-evaluating landmark buildings of recent decades and a special series on graphic communication.

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Views

Gatekeeper Analogy

Regarding your editorial in the May issue of P/A (Architecture's Gatekeepers, p. 9).

Imagine herds of architects grazing on a grassy plain while predators of all sorts (gatekeepers) stalk from the bushes. Most of these herds graze in one area for a while and then move on. Some herds are more sedentary and don't move on. Because their predators can predict their whereabouts they run the risk of being completely obliterated. Some herds are reduced to small numbers, but manage to survive and may over time make astonishing comebacks. Occasionally new herds spring up, born of the splinters of other herds. These new herds find new places to graze that are free of predators and they flourish. But in time they begin working the same tracks of migration, become predictable, and eventually are preyed upon also.

As in the wilderness the question of whether this component of evaluation should continue or not is a mute point. Whether there is a healthy relationship between predator and prey depends on the abundance of habitat and food, how well offspring are protected and survive, and the ratio of predator to prey.

William C. Petrone
Architect
New York

Post-Modern Conversation

"May I present Humburd Tombs, prominent architect, lecturer and teacher. Mr. Tombs, welcome to Environtime."

"Thank you. Delighted to be here."

"I would like to begin with a discussion of your latest work, the Earth First Amusement Park Building in California. Would you comment on the statues that top each of the four towers. Why a duck?"

"A Proustian inspiration, really. I felt it was the perfect icon for a great American shrine. Actually, I think this building is the definitive expression of my philosophy . . . and what I've been practicing for all these years."

"And the pastels . . . can you speak a bit on your use of the delicate mauves, blues, coral?"

"We need a kinder, gentler architecture. I feel we must just say 'No' to vulgarity."

"Regarding the housing crisis in this country. . . "

"You know, dear, these crisis alerts are really becoming tiresome. One day it's environmental pollution, the next day it's global warming or nuclear hazards or the destruction of the rain forests. It's all overblown rhetoric. I have a house; my friends have houses. Where is the housing crisis?"

"Now, if I may, I would like to hear your reaction to the criticism Prince Charles has leveled against Modern architecture."

"Ah, yes, the Prince. He has been quite vocal, hasn't he? One can't take these things too seriously. They are the naïve musings from a Royal with time on his hands . . . waiting to be King, you know."

"In conclusion, is there any advice you can offer to those entering the profession?"

"Go to your board with the dictum 'Make it *different*' and you can't go wrong."

"What do you see as the role architecture will play in the coming decades?"

"I see the final amalgamation of architecture and theater. All the world's a stage and I say we've got to give it our best shot."

"Thank you, Mr. Tombs"

"Thank you!"

F. Corrine Kutsenkow
Loomis, California

A Non-Degreed Designer Reports

Regarding your March 1990 editorial about university education now being the only entry into "licensed" architectural practice (P/A, March 1990, p. 9), and a similar editorial in Architectural Record (Nov. 1987):

I'm a "non-degreed" architect in Chicago. I guess that means I shouldn't be expressing my views publicly like this. I'm soon to be branded a "criminal" for doing what I've done for almost 10 years, "practicing without a license."

"Architecture is inherently a practice learned by doing real projects. The best architectural college graduates, the ones who are always snapped up first by firms, are the ones who spent the most time in co-op educational programs."

I attended IIT 1975–1976, completing one year of a good architecture program. But I could see that 5th-year students were still doing abstract, unreal projects, so I chose to leave the school environment, apprenticeship then still being an option. After working for several firms "under a licensed architect" for almost six years, I got generally fed up with the sneering, condescending attitudes from my "degreed" peers, and have worked strictly free-lance for the past four years. I still do not get much respect from the "legitimate" architectural community here, but at least I can earn as much as I was unable to as an employee, when it was "Oh, we can't pay you as much if you don't have a degree, even if it is for the same work."

I simply do not understand why a "degree" (and it need not be specifically an architectural degree in order to take the exam; any bachelor's degree will do!) confers status on someone, when virtually everybody agrees that it is about as relevant to the practice of architecture as an "art school" degree is to a real artist.

Most of my free-lance work is consulting work for small design firms that don't have a full time architect on staff. Now I find that this option, too, is lessening for me, as the conventional wisdom becomes one of hiring only "professional" consultants. I would like to contract directly with more clients, but am unable to stamp my own drawings, and am tired of seeing the names of other firms on sepias of my virtually untouched original drawings, except for the addition of their logo.

If a client throws a last-minute change at me, I bill extra. If a client presents me with a poorly defined program, I clarify it and get it in the contract. Students have no such options; the inanity of this is so far removed from any semblance of real architectural practice that it is absurd.

Architecture is inherently a practice learned by doing real projects. The best architectural college graduates, the ones who are always snapped up first by firms, are the ones who spent the most time in co-op educational programs.

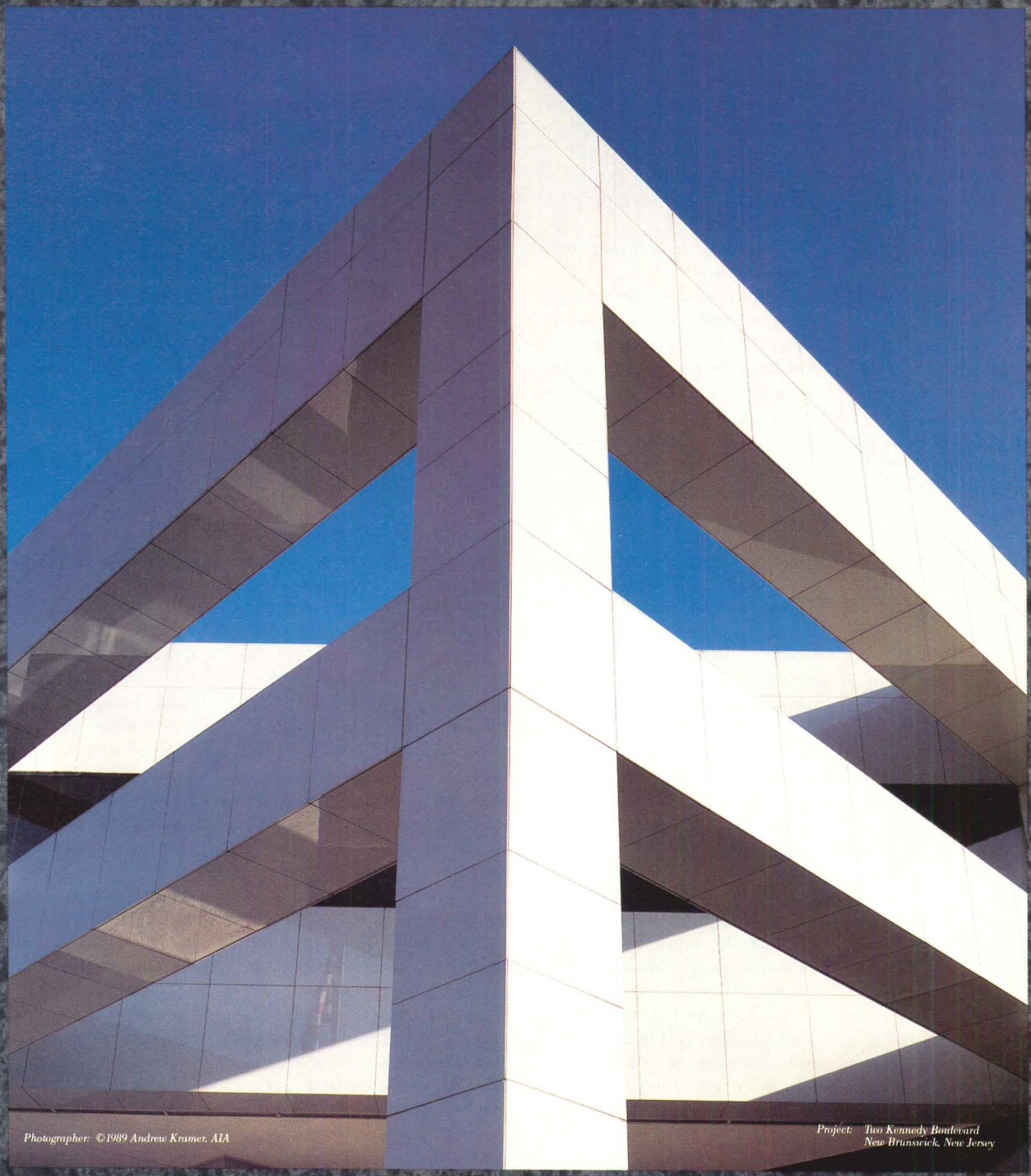
The trumped-up rationales used to explain why licensing is suddenly so essentially a college-derivative function are ridiculous.

The saddest part for architecture in America is that so many "educated" architects spend their careers subconsciously terrified to try anything that hasn't been done before, lest the "instructor" not "allow" it. Look at all the firms around the country just now completing their first skyscrapers with Post-Modern tops because they only jumped on that bandwagon after it became acceptable, after the few really talented people risked breaking the rules years earlier in developing something new.

This new pseudo "professionalism" that the licensing regulations are supposed to brings to architecture will not screen out the schlocky work done by bad architects; there are plenty of those now practicing who do have their degrees. It is a weak attempt to reduce the quantity of architects in an oversaturated field by arbitrarily screening out people in order to gain higher fees for a select few. For what good? So that people will turn away from architects as they are beginning to turn away from litigation and its prohibitive expense toward private arbitration

(continued on page 11)

Not Just Another Pretty Face



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(continued from page 9)

instead? As they turn from costly medical care to holistic treatment?

It is indeed very encouraging that Progressive Architecture still does cover stories (January 1990) on "self-educated" architects such as Tadao Ando. Perhaps the day is not far off when P/A will not be allowed to credit such fabulous structures as the Church of the Light as the work of an "architect."

Lee Kay
Architectural Graphics
Chicago

Housing Experience

I feel compelled to respond to your P/A Editorial "Homelessness and Housing Hardship" (P/A, November, 1989 p. 9). It has been my experience, unfortunately, that people in the positions such as you hold suffer from preachy know-it-all-isms, facilitated by their ivory-tower backgrounds, who just listen to what they want to hear and write what will please their privileged peers. In the past decade I have addressed similar editorials and editors such as Mr. Walter Wagner, Jr., of Architectural Record, but to no avail. Now I shall address you.

First, permit me to say that your editorial shows more balance over what I have come to expect, so perhaps there is hope. Unless you address the blatant idiosyncratic economics and justification of expenditure policies of previous, notable government-subsidized housing programs, your efforts will be in vain.

Prior to the current scandals of HUD, the following, in the opinion of this professional, led to the curtailment of taxpayer-funded, low-income, subsidized housing:

The New York State Urban Development Corporation (UDC), after some success in pioneering technological and architectural residential design, willfully decides that it is going to build low-income housing in an affluent community in Westchester. That, coupled with the near bankruptcy of New York City, a state which UDC contributed to, brings UDC to an untimely end.

Taino Towers in Harlem brought high cost, high quality luxury housing at taxpayers' expense to low-income minority residents. During the period when market-rate, middle-income housing was being constructed at $35,000 per D.U., Taino Towers was built at a cost of $78,000 per D.U. The justification for doing this in a neighborhood that resembles Beirut, Lebanon, today was that the community would be raised by example; but has that been the case?

Pruitt Igoe Housing in St. Louis, designed by competent architects and hailed as an ideal housing solution for low-income families, is no longer with us.

The list is as long as my arm, but what is the point? If "Massive investment in housing is needed to reverse this deepening crisis, and P/A will be supporting constructive efforts. . . " but unless you have the courage to listen to what you are not comfortable hearing, you will continue to travel around in circles.

Frederick Lee
Architect
New York

[*The notorious failure of certain public housing projects does not negate the need to take some kind of public action on the present housing problem. Nor do the failings of the New York State Urban Development Corporation justify the closing of vast "affluent" territories in and around our cities to poorer citizens. A democratic government can and must consider the welfare of its people, and effective ways could be found to ease our unprecedented housing problem, to the benefit of us all. – Editor*]

Memphis Correction

Overton Park, site of the Memphis Brooks Museum, was incorrectly attributed to Frederick Law Olmsted. (P/A, May 1990, p. 103–105). The park was designed in 1902 by the landscape architect, George E. Kessler of Kansas City and St. Louis.

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The photographer of Kiss, Cathcart & Anders' office show in "Macintosh for CAD" (P/A, June, p. 157) was Stanley Greenberg.

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Judging will take place during October 1990. Winners will be notified, confidentially, before October 31. Public announcement of winners will be made at a ceremony in New York in January 1991, and winning entries will be featured in the January issue of P/A. Clients, as well as professionals responsible, will be recognized. P/A will arrange for coverage of winning entries in national and local media.

Turn page for rules and entry forms.

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2 All entries must have been *commissioned, for compensation, by clients with the authority and the intention* to carry out the proposal submitted. In the case of design competitions, the submitted design must be the one the client intends to execute. (For special provision in Research category only, see Item 6.)
3 Prior publication does not affect eligibility.
4 Architectural design entries may include only buildings and complexes, new or remodeled, that are scheduled to be completed after January 1, 1991. Indicate *schedule* on synopsis page (Item 12).
5 Urban design entries must have been accepted by the client who intends to base actions on them. Explain *implementation plans* on synopsis page (Item 12).
6 Research entries may include only reports accepted by the client for implementation or research studies undertaken by entrant with intention to publish or market results. Explain basis of eligibility on synopsis page (Item 12).
7 The jury's decision to premiate any submission will be contingent on verification by P/A that it meets all eligibility requirements. For this purpose, clients of all entries selected for recognition will be contacted by P/A. P/A reserves final decision on eligibility and accepts no liability in that regard. Please be certain entry meets above rules before submitting.

Publication agreement

8 If the submission should win, the entrant agrees to make available further graphic material as needed by P/A.
9 In the case of architectural design entries, P/A must be granted the first opportunity among architectural magazines for feature publication of any winning project upon completion.

Submission requirements

10 Entries must consist of legibly reproduced graphic material and text adequate to explain proposal, *firmly bound* in binders no larger than 17″ in either dimension (9″ x 11″ preferred). No fold-out sheets; avoid fragile spiral or ring bindings. Unbound material in boxes, sleeves, etc., will *not be considered.*
11 No models, slides, films, or videotapes will be accepted. Original drawings are not required, and P/A will accept no liability for them.
12 Each submission *must include* a one-page synopsis, in English, on the first page inside the binder, identifying the project and location, clarifying eligibility (see Item 4, 5 or 6), and summarizing principal features that merit recognition in this program.
13 To maintain anonymity, no names of entrants or collaborating parties may appear on any part of submission, except on entry forms. Credits may be concealed by any simple means. Do *not* conceal identity and location of projects.
14 Each submission must be accompanied by a signed entry form, to be found on this page. Reproductions of this form are acceptable. All four sections of the form must be filled out, *legibly.* Insert entire form, intact into *unsealed* envelope attached inside back cover of submission.
15 For purposes of jury procedure only, please identify each entry as one of the following: *Education, Houses (Single-family), Housing (Multiple-unit), Commercial, Industrial, Governmental, Cultural, Recreational, Religious, Health, Urban Design, Applied Research.* Mixed-use entries should be classified by the larger function. If unable to classify, enter *Miscellaneous.*
16 Entry fee of $90 must accompany each submission. An early submission fee of $75 per entry will be accepted for entries postmarked August 22 or earlier. (Canadian offices please send drafts in U.S. dollars.) Fee must be inserted into *unsealed* envelope containing entry form (Item 14 above). Make check or money order (no cash, please) payable to *Progressive Architecture.*
17 P/A intends to return entries intact, but can assume no liability for loss or damage.
18 Deadline for sending entries is September 5, 1990. Early submission deadline is August 22 (Item 16). Any prompt method of delivery is acceptable. Entries must show postmark or other evidence of being en route by midnight, September 5 (August 22 for early submissions). Hand-delivered entries must be received at street address shown here, 6th floor reception desk, by 5 p.m. on specified date.

Pointers for submissions

based on recent jurors' observations

- *Document site and surroundings with photos and drawings.*
- *For additions and remodelings, clearly indicate old and new.*
- *If design projects involved substantial research, explain it concisely.*
- *For research entries, indicate applicability to design.*
- *For buildings and urban design, give basics of funding, rental of space, etc., as applicable.*

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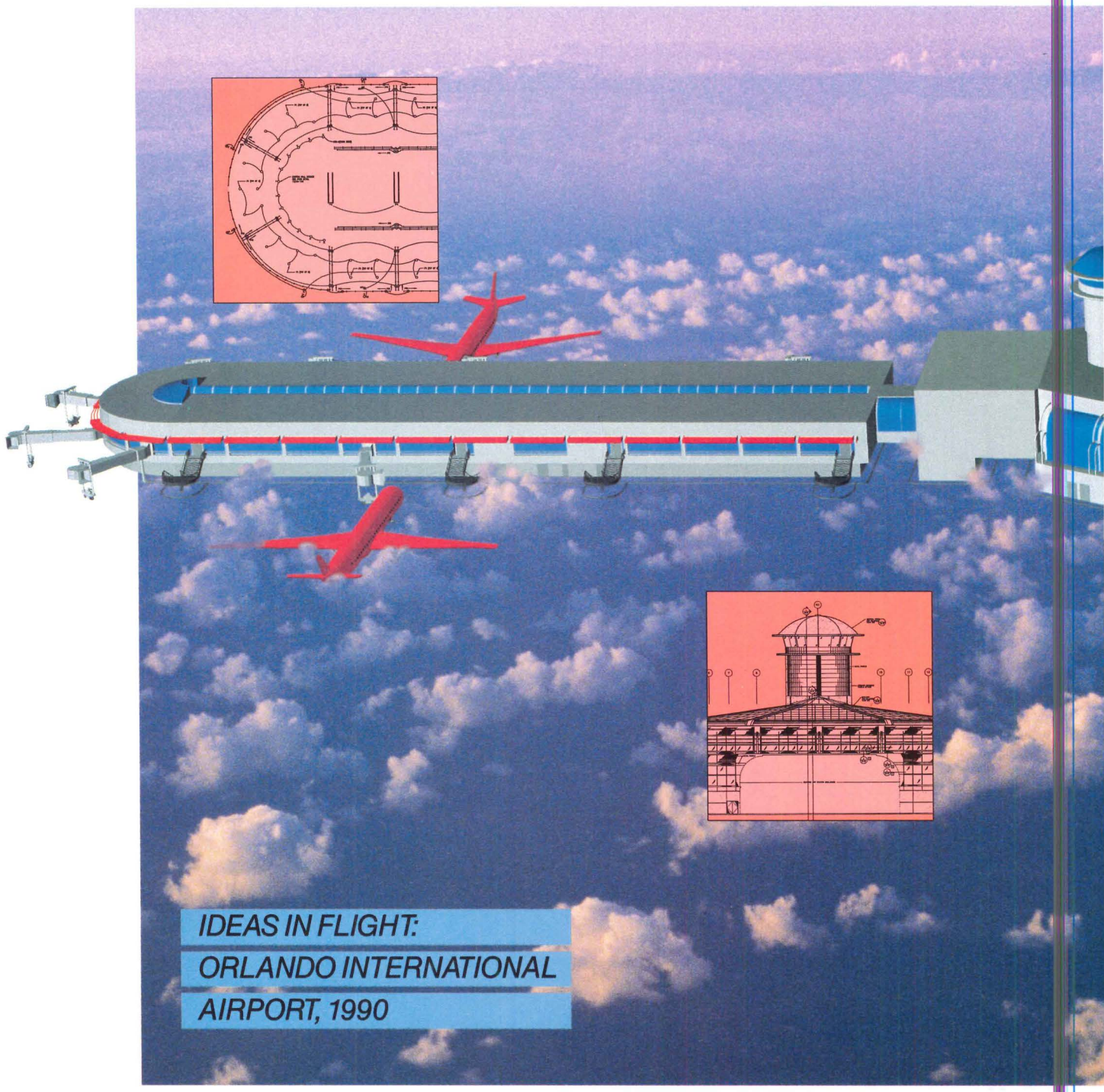

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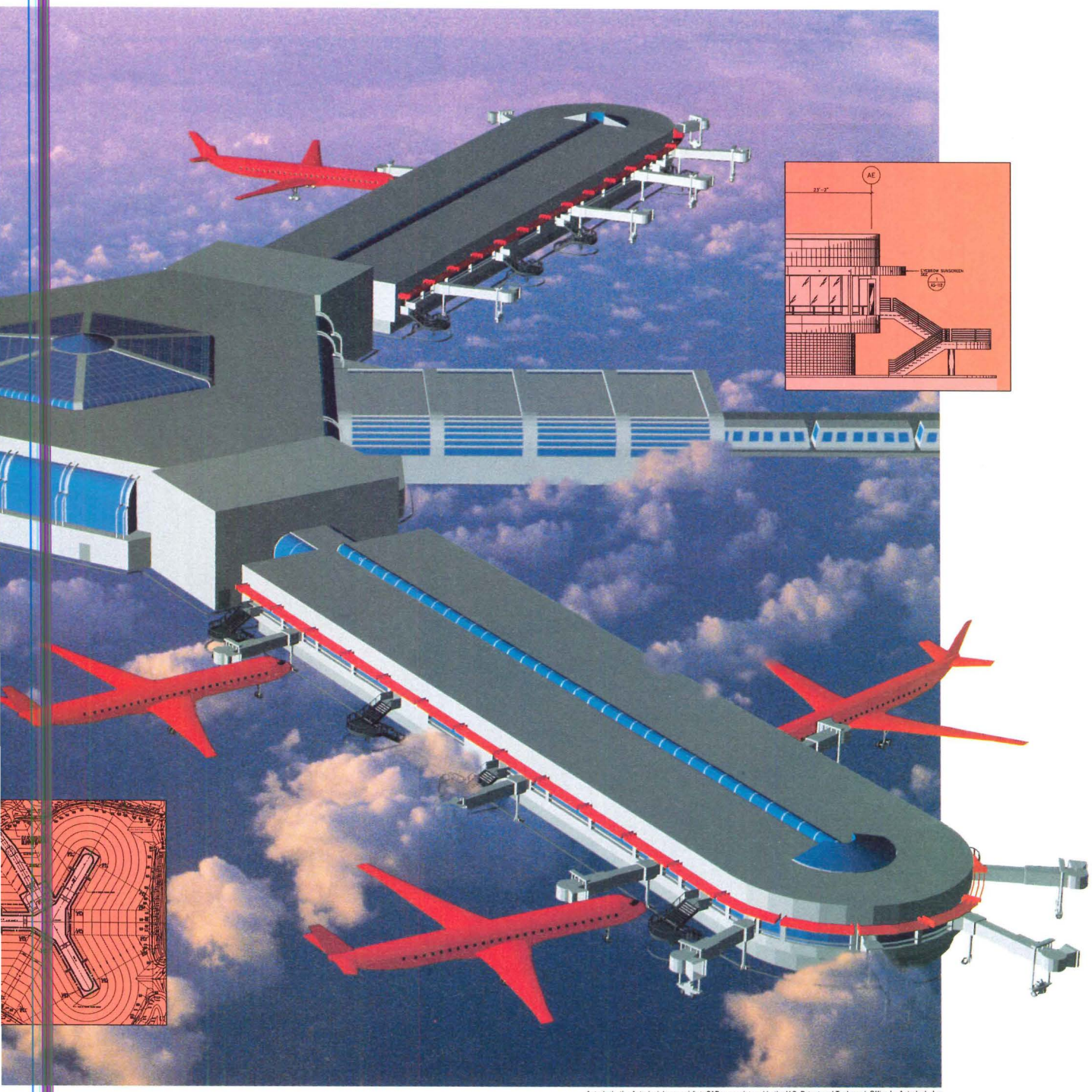

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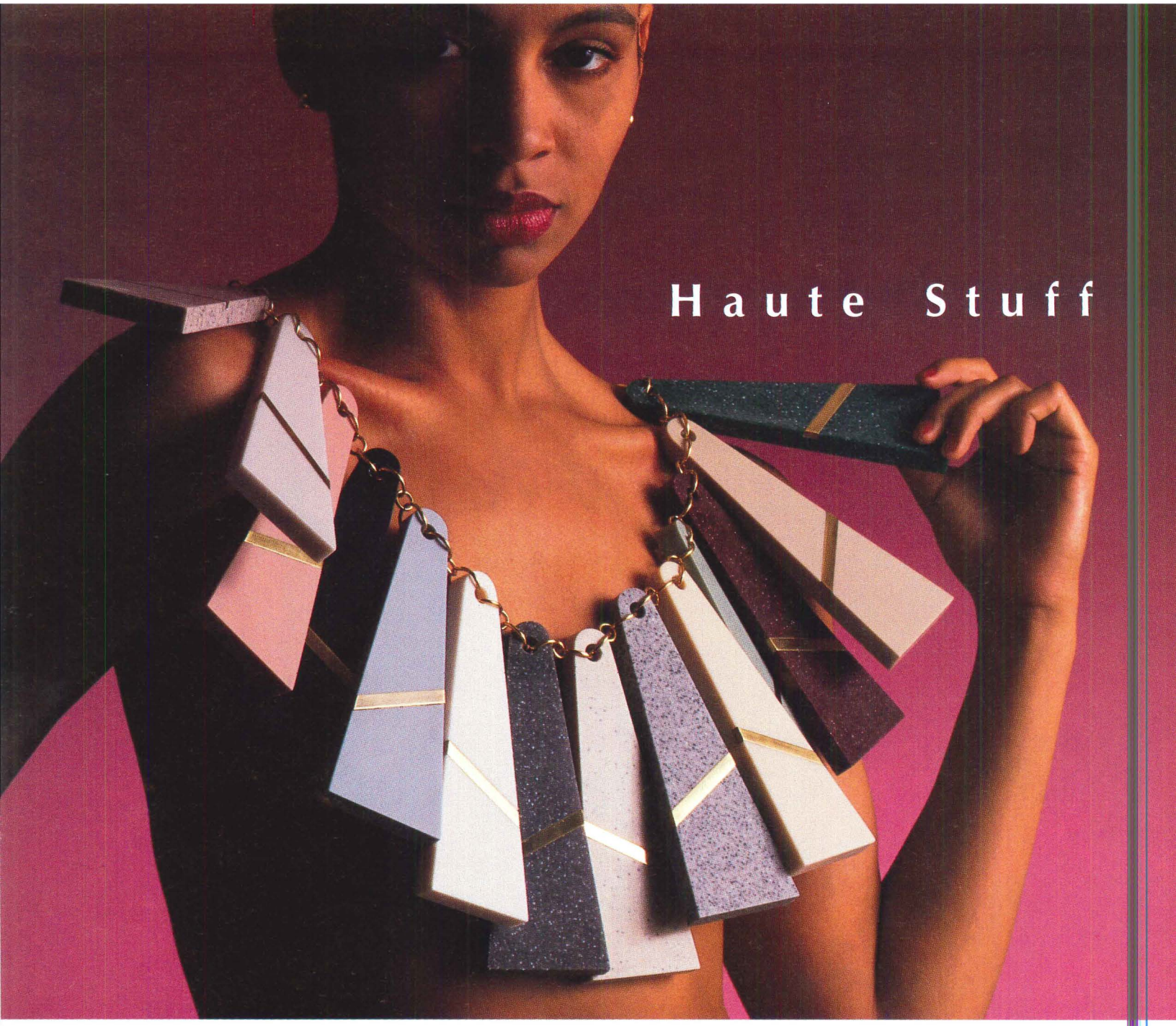

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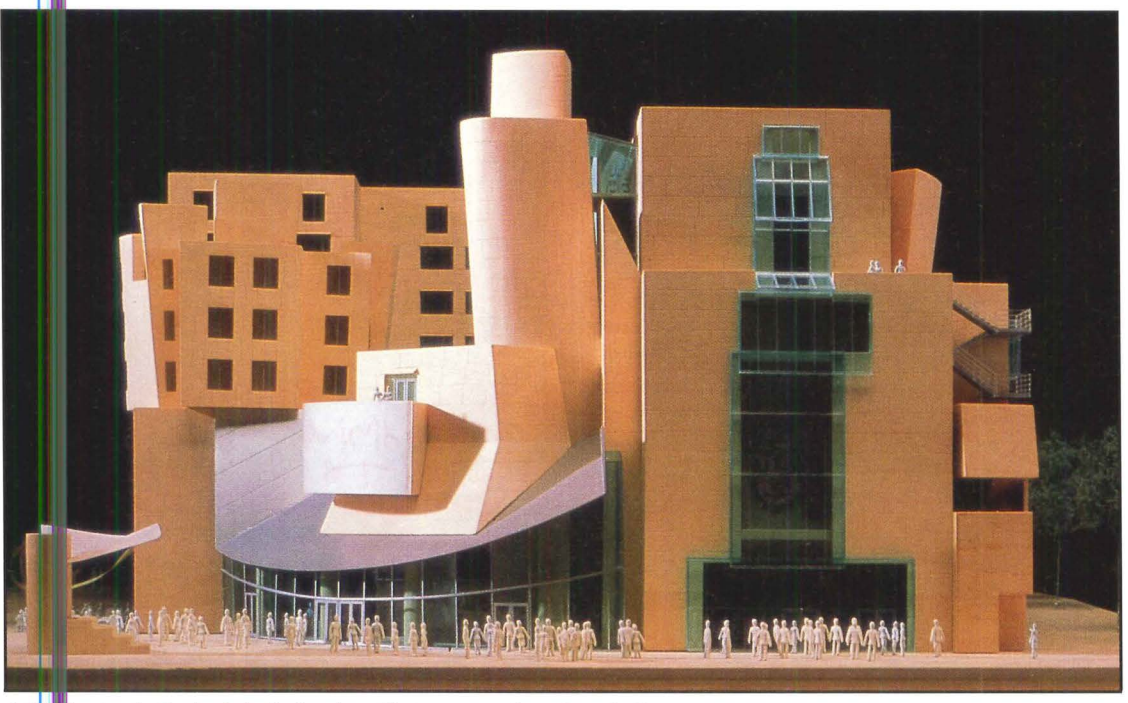

A Californian in Paris: Gehry's American Center as seen from Parc de Bercy.

Gehry Goes to Paris

Latest entry in the collection of modern landmarks in the French capital is the proposed American Center in Paris by Frank O. Gehry and Associates. Scheduled for completion in 1992, the $40-million structure will accommodate expanded programs for the private nonprofit American Center. Associated architects are Saubot & Jullien of Paris.

Like so many Paris institutions, the American Center is gaining more space by moving to an off-center location on the eastern fringe near the new Ministry of Finance and the proposed Grande Bibliothèque. The site, roughly 170 feet square, is on the north side of the rehabilitated Parc de Bercy.

The 175,000-square-foot complex will be clearly divided into two blocks joined by a tall, irregular atrium. Filling much of the rather monolithic east block will be a 350-seat auditorium with a convertible proscenium/thrust stage for the center's lectures, concerts, and theatrical events.

The animated forms of the west block will house 27 apartments reserved for visiting artists, scholars, and "opinion leaders." Also accommodated in the structure will be teaching areas for the center's active American Language program, a bookstore, a travel information service, and a "California style" restaurant. Fitting the center's diverse requirements into the allowable building envelope of the site has necessitated three levels of subterranean space, including a black box theater, recording studios, archives, dressing rooms, and parking.

On the outside, the center represents the impact of Paris building restrictions on Gehry's characteristic composition of colliding forms. The city's strict rules on height and setbacks were further complicated here by a requirement to leave a triangular open space at the southwest corner of the site facing the park. Gehry dealt with this rather arbitrary clipped-corner stipulation by generating a sweeping curve and putting his main entrance there. Above and around this prominent curve, Gehry has arranged some of his typically twisting and jostling forms, but on the other three quarters of the building perimeter, the architecture settles rather politely into the prescribed Parisian envelope. In further deference to "Parisian tradition," Gehry plans to clad almost the entire exterior in a uniform surface of French limestone. In the more sculptural zone around the main entrance, the stone surface will be interrupted with a broad zinc-coated awning and large areas of glass.

Dealing with the unique constraints of Paris has been anything but a handicap for Gehry. He has eloquently expressed the process of packing an inherently varied set of building volumes into a decreet envelope. The illusion that some portions around the southwest corner have not yet found – or will not accept – their proper places in the Parisian order of things is masterful. It has much to say about a position of modern architecture in a Classically patterned city and about the place of Americans in the culture of Paris. **John Morris Dixon** ■

Osaka's Expo Misses the Mark

That an exposition should be educational, architecturally innovative, or even edifying is a concept that seems to have passed with the advent of electronic media. What once represented forefront knowledge has now been reduced to pure entertainment. The 1990 International Garden and Greenery Exposition at Osaka demonstrates how far the downward spiral has descended. The so-called Flower Expo is, in sum, television and film spatialized, a mass experience in which the pavilion substitutes for the living room, and watching together constitutes our notion of the public realm.

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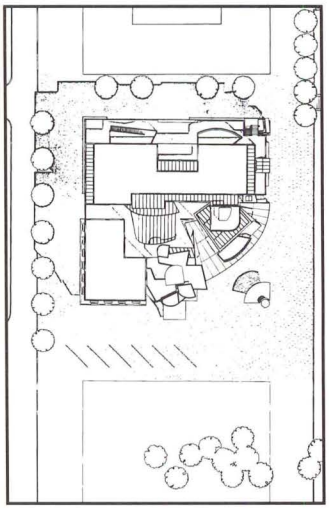


SITE PLAN, AMERICAN CENTER

N 40'/12m

Inside: Convention reports from the AIA in Houston (page 24) and the UIA in Montreal (page 26).

Pencil Points

Architectural honorees at the American Academy and Institute of Arts and Letters annual Ceremonial were: Kevin Roche, who received the Gold Medal; Steven Holl, recipient of the Arnold W. Brunner Memorial Prize in Architecture; James Stirling, who was elected a foreign honorary member; and Robert Venturi, inducted into the 250-member Institute.

Two American schools of architecture have appointed new deans: Alan Balfour has been named dean of the School of Architecture at Rice University, where he has been acting dean since Dean Paul Kennon's death last January; and Donald Watson, an architect, writer, and professor at Yale University, has been named dean of the School of Architecture at Rensselaer Polytechnic Institute.

A proposed $1-billion central terminal at JFK International Airport, New York, has been postponed indefinitely. The Port Authority of New York and New Jersey backed off from the proposal after airline officials argued that the terminal, designed by Pei Cobb Freed & Partners, was unnecessary and an untimely financial burden. Existing plans for a new 30-story air traffic control tower and a new heating and air conditioning system, however, will proceed.

The 1990 R.S. Reynolds Memorial Award for "distinguished architecture using aluminum" was won by the German Postal Museum, Frankfurt, West Germany. Museum architects Behnisch & Partners, Stuttgart, received a $25,000 honorarium at the AIA convention in Houston in May.

An unusual (and unprecedented) winning streak has been extended with the selection of the 1990 Rotch Travelling Scholarship winner: Mark Moeller is the fifth consecutive recipient of the scholarship from Jung/Brannen Associates, Boston. Moeller gets $18,500 for foreign travel.

Osaka *(continued from previous page)*

Given the wealth of architectural talent in Japan, one of the true mysteries of the Expo is how Osaka could produce a fair as architecturally uninteresting as this one. The major pavilions are less concerned with the position of architecture as a cultural or intellectual – or even a technological – phenomenon than with creating a shell for a media presentation.

Among the very few architectural bright spots is Arata Isozaki's International Friendship pavilion, an effective show of structural bravado characteristic of fairs past. Tadao Ando's austere and elegant Garden of Fine Art is probably the most interesting rethinking of what a pavilion could be. Replicas in ceramic tile of Leonardo's "Last Supper" and the Sistine Chapel ceiling provided the somewhat bizarre content and the only colors brighter than concrete gray.

On the whole, the architectural forefront was relegated to the role of court jester in 13 follies scattered through the grounds and designed by an international coterie of architects. Perhaps because of working at a distance, the architects seemed to have little control over the execution of their own designs and those of the immediate surroundings.

Almost all of the follies appeared misconceived. Hovering between sculpture and architecture, and seemingly unsure of which direction to go, their intricacies were lost in the mess of signs, stands, and structures that surrounded them. The realization of works by Daniel Libeskind and Zaha Hadid was a curiosity, given the widespread publication of their ideas, but neither of the works really came off. Libeskind's appeared as a drab and inert box, Hadid's as a limp collection of planes lost in a sea of asphalt, lacking both scale and power. Coop Himmelblau's "Tree of Promise," however, succeeded by adroitly balancing physicality and gravity. Ryoji Suzuki's aggressive structure for Minolta actually derived power from its context, but this was rare.

If the purpose of the Green Expo was to create an awareness of the role of vegetation in our lives and to propose new models for that interaction, it fell far short of the mark. As an architectural experience, it was a non-event. If these expos continue, one can only hope that more attention will be given to the interaction of all the elements of our built environment – both green and architectural – as a lesson in itself. **Marc Treib** ■

Ryoji Suzuki's folly for Minolta at Osaka expo.

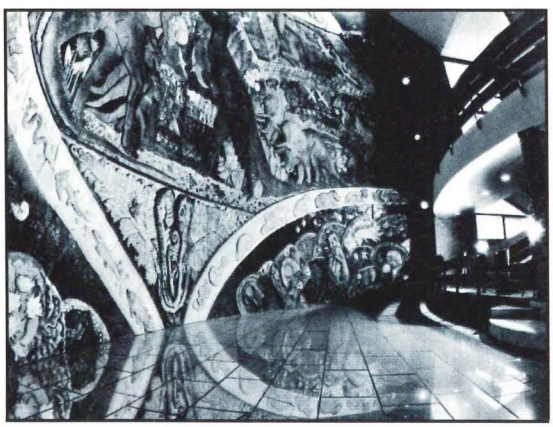
Garden of Fine Art at Osaka by Tadao Ando.

The author is a Professor of Architecture at the University of California, Berkeley, with a specialization in Japanese architecture and gardens.

ADPSR Exhibits US, USSR Work

Displaying work from the United States and the USSR that exhibits "social responsibility" is a worthy venture. But defining that term is tricky, as was demonstrated in the exhibition "The Socially Responsible Environment, USA/USSR, 1980–1990," which opened in Moscow and at New York's Knoll Design Center in May. Teams of American and Soviet jurors assembled by Architects/Designers/Planners for Social Responsibility and the USSR Union of Architects selected 62 projects from both countries for the exhibition. One observer of the jury process noted that while the American jurors tended to focus on the social virtues of project programs, the Soviets were more likely to equate social responsibility with good design.

The exhibition was divided into three categories: housing, institutional or public spaces, and the workplace. Projects were displayed in black-and-white photographs with explanatory text in English and Russian. Despite the organizers' stated goals of finding "previously unpublished" work by "younger, relatively unknown practitioners," much of the American work is familiar to readers of the design press. And many of these – Murphy/Jahn's United Terminal in Chicago, for example – met only a curiously

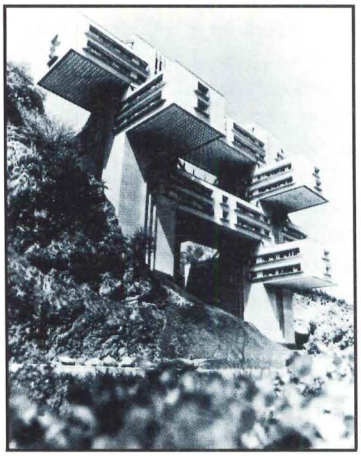


Paleontology Museum, Moscow, by Platonov, Kogan, Nagikh, and Yakovenko.

capitalistic definition of "socially responsible." It was in housing that the best American marriage of social goals and design was demonstrated, with projects like Koning Eizenberg's Santa Monica apartments (P/A, Oct. 1988, p. 70) and Kelbaugh and Lee's Roosevelt, New Jersey senior citizens housing (P/A, July 1984, p. 66–68).

The Soviet projects, on the other hand, quite naturally were less commercial but – with exceptions, most notably from the far reaches of the republics – reinforced the popular view of the USSR as a Brutalist backwater of design.

The exhibition's chief curator in the U.S. was Alexandra Latour of Columbia University; American jurors were Kenneth Frampton, Michael Rotondi, Mildred Schmertz, and John Loomis. The exhibition will travel this year and next year within the U.S. and the USSR. **Mark Alden Branch** ■



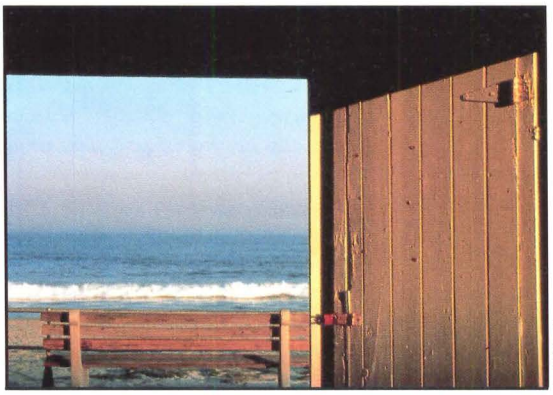
Administration Building, Tbilisi, Georgian SSR, by Architects Chakhava and Dzalagamia.

AIA Cites Top Photos

Terri Figliuzzi of New York took first place and a $1000 cash award in the 1990 photo contest sponsored by the AIA and the St. Louis Chapter, AIA. Figliuzzi's "Bus Stop," a beach scene from Ocean Grove, New Jersey, was among 2500 photos submitted by over 500 AIA members. She received her award at the AIA convention late in May.

Second place in the contest ($700) went to Houston architect Gerald Moorhead's photo "Feminist Hostel" in Amsterdam. Bruce Stewart of Los Angeles won third place ($300) for his "Industrial Nawlins," and Maria Esherick of San Francisco won the $500 Louise Bethune Award for "Bank Building," which documented a ruin in Rhyolite, Nevada. Ten citations and 40 awards of merit were also selected.

Jurors were photographer Ezra Stoller, AIA executive vice-president James P. Cramer, and graphic design professor Robert Smith. ■



Terri Figliuzzi

Gerald Moorhead

AIA winning photos: "Bus Stop" (above right) by Terri Figliuzzi and "Feminist Hostel" (right) by Gerald Moorhead.

Kohn Pedersen Fox Wins World Bank

A consortium headed by Kohn Pedersen Fox Associates has won an international competition for the new World Bank Main Complex building on a prominent Pennsylvania Avenue site, two blocks west of the White House. The new building will replace a group of older Bank buildings on the site, now being demolished.

The KPF design was chosen, said Bank vicepresident S. Shahid Husain, for "its great integrity and workability [and] because it reflects the diversity of the World Bank." He said that the new building harmonizes with the two existing buildings in the Main Complex that are to remain on the site.

Husain also characterized the KPF design as being "in consonance with the architecture of the Bank and non-Bank buildings in the area." The scheme for the two-million-square-foot building involves highly differentiated elevations, echoing the scale and pattern of the fenestration on nearby Modern buildings.

The design's centerpiece is a courtyard, covered by an arched glass roof, intended to provide access to all areas of the Main Complex. This feature could distinguish the new building along the monolithic and dull street wall of Pennsylvania Avenue, although it is not clear that the form of the arch will be visible from street level.

Initially, the Bank invited eight consortia to participate in the competition, out of a field of 76 teams submitting qualifications statements. The field was narrowed to three in a second stage: The KPF team, which includes KressCox Associates of Washington, West German designers Naegle Hofmann Tiede-

(continued on next page)

Tucker Awards for Use of Stone

The Building Stone Institute presented its 14th Annual Tucker Architectural Awards for "excellence in concept, design, construction and use of natural stone" to 13 firms on June 1. New nonresidential buildings honored were:

- NCNB Plaza, Tampa, Florida, (P/A, Feb. 1989, p. 59) by Harry C. Wolf with Odell Associates, Charlotte, North Carolina;
- Charlotte-Mecklenburg Government Center, Charlotte, North Carolina, by J.N. Pease Associates, Charlotte;
- Creative Artists Agency, Beverly Hills, California, by Pei Cobb Freed & Partners, New York;
- Lincoln Centre, Minneapolis, by Kohn Pedersen Fox Associates, New York;

Paul Warchol

Pei Cobb Freed's CAA lobby.

- State of Michigan Library and Historical Center, Lansing, Michigan, by William Kessler & Associates, Detroit;
- Chancellor Park, San Diego, by BSHA, Inc., San Diego.

Renovation and restoration projects honored were:

- 625 Madison Avenue, New York, by Der Scutt Architect, New York;
- The Clarendon Building,

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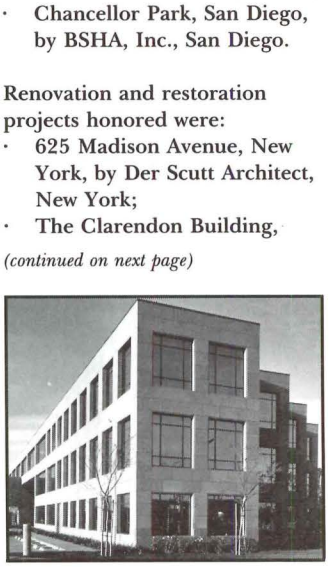
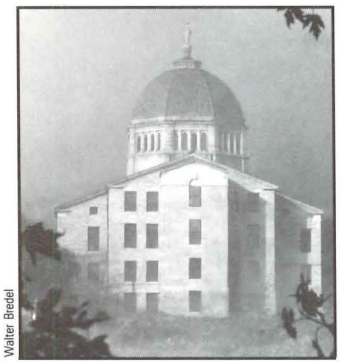


Chancellor Park by BSHA.

Tucker *(continued from previous page)*

Boston, by Jung/Brannen Associates, Boston;
- Bradford County Courthouse, Towanda, Pennsylvania, by R.K.R. Hess Associates, East Stroudsburg, Pennsylvania.



Walter Bredel

Restored Bradford County Courthouse by R. K. R. Hess.

Also honored were:
- 75 Rockefeller Plaza, New York, by Carson & Lundin, New York, for a stone building built at least 40 years ago and still in use;
- The Ward House, Great Cranberry Island, Maine, by Peter Forbes & Associates, Boston, for a new residential building;
- Australian Parliament House landscape design, Canberra, Australia (P/A, Aug. 1988, p. 65), by Peter G. Rolland & Associates, Rye, New York, for landscape architecture;
- 75 State Street, Boston, by Graham Gund Architects, Cambridge, Massachusetts, and Skidmore, Owings & Merrill, Chicago, for interiors.

Steve Rosenthal

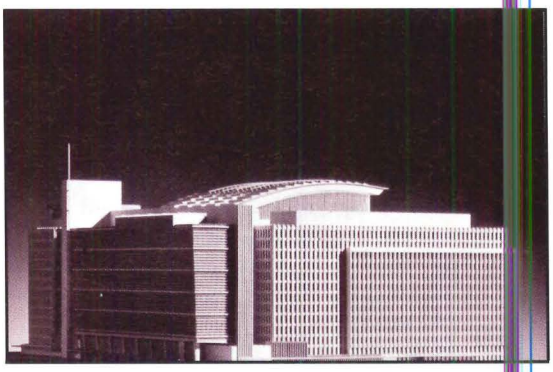
Gund's 75 State Street interior.

Jurors were architects Melvin Brecher and Eric A. Chung of Philadelphia and chairman Frank D. Nemeth, Minneapolis. ■

World Bank *(continued from previous page)*

mann, and engineers Weidlinger Associates and Flack & Kurtz; Cannon Corporation, with Canadian architects Moriyama & Teshima and Danish designers Dissing + Weitling; and Skidmore, Owings, & Merrill with Nikken Sekkei architects of Japan and the Indian architect Charles Correa.

The non-World Bank members of the international evaluation panel for the competition were Tokyo architect Yoshinobu Ashihara; John de Moncheaux, Dean of Architecture at MIT; French architect Jean Nouvel; Indian architect Ranjit Sabikhi; Architect of the Capitol George M. White; and human factors specialist John Zeisel. **Thomas Vonier** ■



Winning World Bank scheme by Kohn Pedersen Fox.

AIA Convention: Beating the Heat

Having a convention in Houston in May may not be such a bad idea: The high temperatures and oppressive humidity may have helped keep the attendees of this year's AIA convention inside the air-conditioned chill of the George Brown Convention Center. The climatically captive audience – 8300 strong, according to the AIA, although observers thought that figure was high – was witness to a typically uneventful convention punctuated with a few bright spots, such as the signing of an "Accord on Professionalism" by AIA president Sylvester Damianos and USSR Union of Architects president Yuri Platonov. The accord includes a number of general points calling for "enhanced cooperation" and a few specific provisions, including the exchange of convention delegations, biennial architectural exhibitions, journals, publications, and information.

Oscar & Associates

Yuri Platonov addresses convention; Sylvester Damianos looks on.

In official convention business, the delegates approved resolutions calling for an International Decade of Tropical Rain Forests and expressed support for the beleaguered National Endowment for the Arts. The delegates also elected University of Nebraska architecture dean W. Cecil Steward as first vicepresident/president elect, chose Douglas K. Engebretson of Agawam, Massachusetts, as secretary, and selected three new vice-presidents: L. William Chapin II, Rochester, New York; Donald H. Lutes, Springfield, Oregon; and Susan Maxman, Philadelphia.

The convention theme, "Pushing the Limits," was the tenuous tie among the three main speakers at the convention. Author/public television personality James Burke gave an insightful talk about society's ability to assimilate new technologies and information systems, *Washington Post* reporter Joel Garreau appealed to architects to take on the responsibility of making rapidly growing "edge cities" into viable communities, and architect Michael Rotondi of Morphosis, tapped to talk about pushing the limits of design, invoked images of natural forms from the subatomic to the cosmic and urged architects to set design goals "beyond any hope of achievement."

Other speakers to the general session included Fay Jones, who had already picked up this year's AIA Gold Medal in a White House ceremony in February. In a well-received, unpretentious address on his own work and his debt to Frank Lloyd Wright, Jones described his approach to design as taking an idea or precedent and "turning it upside down, inside out, shaking it up, and seeing what falls out." Architect Harvey Gantt, former Democratic mayor of Charlotte, North Carolina, promoted his upcoming race for the U.S. Senate seat held by Jesse Helms ("No architect has aspired to such a high national office since Thomas Jefferson," he observed) and encouraged architects to get more involved in public policy.

Among the scads of seminars and symposia were two (scheduled, unfortunately, at the same time) that addressed favorite current issues: affordable housing and environmental concerns. An upbeat panel moderated by Search for Shelter director Blake Chamblass featured four architects describing their successful design efforts in affordable housing, from SROs to single-family houses. A poorly attended forum on

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AIA officers at convention. Seated: VP/CEO James Crame[illegible] incoming president James Lawler, 1st VP Cecil Steward. Standing: secretary Douglas Engebretson, VPs Susan Maxman and William Chapin, treasurer Lawrence Leis, and VP Donald Lute[illegible]

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AIA *(continued from page 24)*

Oscar & Associates

Fellows investiture at Johnson & Burgee's University of Houston architecture school.

architects' roles in environmental preservation stressed the use of appropriate materials.

Off the convention site, the Houston chapter sent guests off to mystery locations in buses for their Host Chapter Party; perhaps the luckiest group ended up in an Astrodome skybox for a Houston Astros game. Other sites included restored houses and the skylobby of the Texas Commerce Bank. The investiture of new fellows took place at the University of Houston School of Architecture, Johnson and Burgee's parody of Ledoux's House of Education, and the annual Preservation Breakfast took place in an enclave of historic houses. The most enjoyable and enlightening evening was a Cajun-flavored party at the DiverseWorks gallery, the venue for an exhibition entitled "Project: Houston." The exhibition featured an interdisciplinary group of local designers who submitted projects that addressed political and social issues. The responses ranged from housing designs by Cameron Armstrong and Albert Pope & Roger Sherman (p. 82) to architect Rafael Longoria's proposal for a plaza – complete with alligator pit – on the site of Houston's Lamar Hotel, where power brokers once shaped the city's future in the infamous Suite 8-F. The projects documented well the fascination Houstonians have with their unique environment. **Mark Alden Branch** ■

UIA Meeting in Montréal: Archistroika

The Paris-based International Union of Architects (UIA) held its 17th world congress in Montréal early this summer. Veterans of UIA meetings, which are held every three years, called this five-day convocation on "cultures and technologies" among the best-attended and most upbeat in memory.

The UIA was established in 1948 to promote cooperation and interchange among architects throughout the world. It receives substantial support from UNESCO and bears the mark of the United Nations in structure and operations. The U.S. and the USSR have the largest delegations to the organization and pay the most in dues.

On occasion, some say, the UIA's general assembly has resembled the UN's in political rhetoric and rancor, but aside from mild debate on delegate credentials and proposals to restructure the UIA's regions, little dissent was apparent in the UIA business sessions, save for one incident that epitomized the polarities of interest present at the congress. After Italian critic Bruno Zevi delivered a forceful, but somewhat out-of-context lecture on light as an architectural formgiver, under the auspices of the International Committee of Architectural Critics (CICA), Soviet architect Viacheslav Glazichev took the podium. In hushed tones, he told the packed room that the disarray in his country and in many other parts of the world did not leave him kindly disposed to Zevi's "nice words and fine phrases." To applause, Glazichev parted by saying that architects and citizens had more important things to do, and stalked abruptly from the podium.

Architects from the USSR were in great evidence, along with delegates from Africa, Asia, the Middle East, Latin America, the United States, Europe, and Eastern Europe. The official Soviet delegation numbered nearly 50, representing, according to its head, architects from all of the USSR's republics. Many of the 3000 congress participants came from Canada, most of them from Québec. The presence of architects from Québec and the USSR's Baltic republics assured calls for the preservation of national, ethnic, and cultural identities, with architecture cited as one of the chief vehicles.

Most of the congress program was devoted to papers on a wide variety of subjects and meetings of the UIA's working groups on health, energy and architecture, architectural heritage, and habitat, among others. Also on the agenda was the presentation of the UIA Gold Medal to Indian architect Charles Correa.

The congress had several notable peripheral activities. The Montréal International Architecture and Urban Planning Film Festival, sponsored by Domtar corporation and the Montréal International Design Center, featured vintage and recent films, clips, and television specials on architects and architecture. The International Architects, Designers, and Planners for the Prevention of Nuclear War (IADPPNW) also held meetings throughout the congress, voting to change its name to "Arc-Peace," in response to the apparent lessening of tensions between the U.S. and USSR. Co-chairs Tician Papachristou of New York and Yuri Platanov, president of the Union of Soviet Architects, said that the group will continue to emphasize nuclear disarmament and world peace but hopes to focus greater attention and action on such problems as global warming, poverty, shelter, and environmental degradation.

The UIA's next world congress will be held in Chicago in 1993, adjacent in time and place to that year's AIA convention and the NEOCON exposition. Sounding for all the world like U.N. representatives, several members of the U.S. delegation (all past or present officers of the AIA, the entity that represents the U.S. in the UIA) expressed guarded optimism about prospects for that meeting. Described by one AIA officer as "a noble experiment that will probably cost us a lot of money," it may also be the largest international gathering of architects in history.

Thomas Vonier ■

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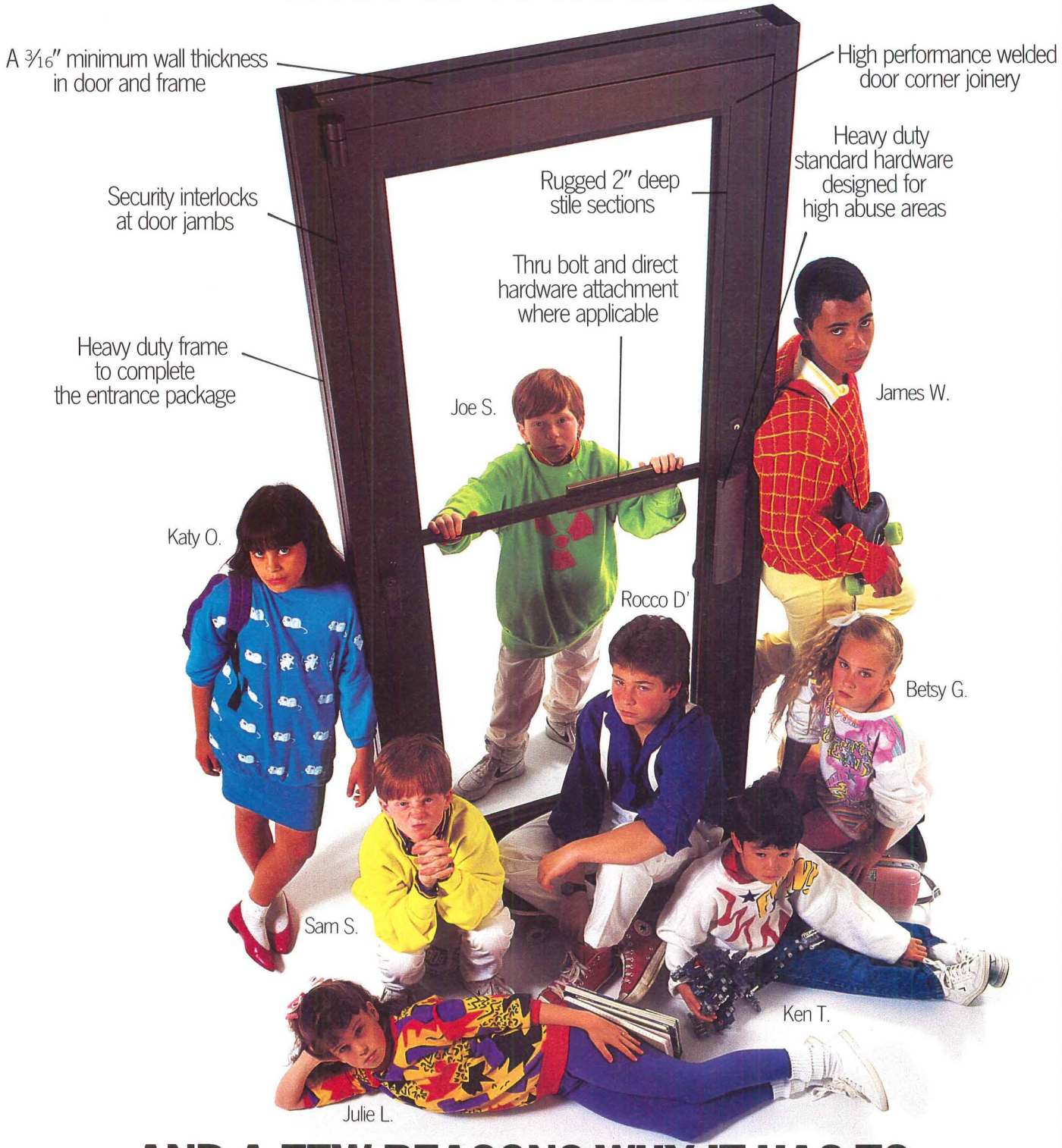

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Calendar

Exhibitions

Aspl[illegible] to Hadid
Throu[illegible] July 27

New York. Work by noted architects – from Buckminster Fuller to James Wines and Bernard Tschumi – are exhibited. A "changing selection" of drawings, lithographs, and etchings will be on display throughout the summer. Max Protetch Gallery.

Stanley Saitowitz
Throu[illegible] August 19

Minneapolis. Fourth in the Architecture Tomorrow series is "Geological Architecture: The Work of Stanley Saitowitz." The California architect expounds on his ideas of architecture as creation of landscape and horizon with an interactive installation: ". . . building models float on a glass surface supported by a wood and steel landscape consisting of a ramp, a bridge, and a stairway." Walker Art Center.

Visionary San Francisco
Through August 26

San Francisco. Utopian plans – both built and unrealized – for San Francisco from the turn of the century to the present are supplemented by four commissioned "visionary" plans by teams of architects and writers. Museum of Modern Art.

Constructivist Architecture
Through September 4

New York. Over 150 original works on loan from the Shschusev Architecture Museum in Moscow, shown for the first time in the United States, offer a look at one of the richest collections of Constructivist projects from the 1920s. Museum of Modern Art.

Architecture of IBM
Through September 30

Washington, D.C. "IBM: Excellence in Building" (P/A, May 1990, p. 26) documents architectural and landscape design of the company's corporate facilities from the 1950s to the present. National Building Museum.

The Doghouse
Through October 14

New York. The Cooper-Hewitt, in collaboration with Eyes for the Blind, invited architects and designers to submit proposals for doghouse designs for exhibition in the museum's garden; 24 realized schemes are on display. Braille labels, large-type signage and brochures, and specially designed paths are planned in an effort to make the show accessible to sight-impaired visitors. Cooper-Hewitt Museum.

Russian Constructivism
July 4–September 2

Seattle. "Art Into Life: Russian Constructivism 1914–1932" will offer a visual history of the work of artists, architects, designers, photographers, and others who flourished in the heady days of post-czarist, pre-Stalinist Russia. The show is organized by the Henry Art Gallery, USSR Ministry of Culture, and the E.V. Vuchetich National Art Production Union, in association with the Walker Art Center; the show will be at the Walker Fall 1990. Henry Art Gallery, University of Washington.

Competition × 3
July 1[illegible]–August 17

New York. Competition-winning designs for the Korean War Veterans Memorial, National Peace Garden, and Women in Military Service for America Memorial are to be exhibited. National Institute For Architectural Education.

Wright's Designs
July 1[illegible]–September 16

Buffalo. "Frank Lloyd Wright: Preserving an Architectural Heritage" is a traveling exhibition of the architect's work. Albright-Knox Gallery.

Kahn's Museums
July 1[illegible]–September 2

San Francisco. Louis Kahn's legacy of influential museum designs – Yale University Art Gallery, Kimbell Art Museum, Yale Center for British Art, and the unrealized de Menil Museum – are studied in this traveling exhibition through a series of sketches, ground plans, elevations, and presentation drawings. Museum of Modern Art.

Coop Himmelblau
July 21–August 18

Santa Monica, California. "Six Projects for Four Cities" will present recent work for sites in Los Angeles, Melun-Senart (near Paris), Vienna, and Sapporo, Japan. The exhibition will travel. Richard Kuhlenschmidt Gallery.

Communicating Ideas Artfully
July 23–August 17

Minneapolis. A collection of presentation drawings and models documents methods and media used to depict architectural projects. The show was curated by P/A Executive Editor Thomas Fisher and will travel nationally. International Market Square.

Eliel Saarinen
July 28–November 10

Indianapolis. "Eliel Saarinen, Finnish-American, 1873–1950" is a documentation of "major works" in Finland, Australia, Europe, and the United States. North Christian Church, designed by Eero Saarinen in 1964, is also included. Indianapolis Museum of Art-Columbus Gallery.

Competitions

World Habitat Awards
Entry deadline July 31

Leicestershire, England. Entrants in the two-stage international competition sponsored by Britain's Building and Social Housing Foundation are asked to submit housing projects that offer practical and human solutions to current housing problems worldwide. Contact Peter Elderfield, Building 4, Social Housing Foundation, Memorial Square, Coalville, Leicestershire LE6 4EU (530) 510444 or FAX (530) 510332.

Precast/Prestressed Concrete Awards
Entry deadline July 31

Chicago. A call has been made for the Precast/Prestressed Concrete Institute's 1990 Design Awards Competition for "any type of structure in the United States or Canada using plant-manufactured precast/prestressed concrete." Contact Precast/Prestressed Concrete Institute, 175 West Jackson Boulevard, Chicago, Illinois 60604 (312) 786-0300.

Chicago Museum
Nomination and submission deadline August 1

Chicago. A four-phase selection process has been organized in the search for an architect to design a new building and sculpture garden for the Museum of Contemporary Art. Eligibility is limited to practicing architects "with a minimum of five years professional experience who have successfully designed and completed at least one major public/commercial facility." Contact Architect Nominations, Museum of Contemporary Art, 237 East Ontario Street, Chicago 60611.

Fulbright in Architecture
Application deadline August 1

Washington, D.C. A Fulbright fellowship in architecture is being offered by the United Kingdom Fulbright Commission for nine months in the U.K. Applicants must be U.S. citizens and have a minimum of three years professional experience. "The award is appropriate for emerging or mid-career architects working outside academia. . . " Contact CIES, Box UKA, 3400 International Drive, N.W., Suite M-500, Washington, D.C. 20008 (202) 686-7878.

AISC Awards
Entry deadline August 4

Chicago. The American Institute of Steel Construction has announced a call for entries in its 1990 Architectural Awards of Excellence program. Registered architects practicing in the United States may enter steel-framed buildings of their design completed in 1987, 1988, or 1989. Contact AISC Awards Committee, 1 East Wacker Drive, Suite 3100, Chicago, Illinois 60601 (312) 670-2400.

Brickell Bridge
Registration deadline August 20, submission deadline November 20

Miami. A two-stage design competition for the "architectural enhancement and illumination" of the 70-year-old Brickell Avenue Bridge is being sponsored by the Downtown Development Authority of the City of Miami, through the

(continued on page 32)

Calendar *(continued from page 31)*

New World Center Foundation. Contact C
Judson, Downtown Development Authori
1818 One Biscayne Tower, Miami, Fla. 33

Schoolyards Competition
Registration deadline September 1,
Submission deadline October 1

New York. An international student compe
for the design of two elementary schoolya
sponsored by the Children's Environment
Research Group. First prize is $100; win
and selected entries will be displayed at th
Schoolyards Conference in New York, Oc
1990. Contact Rosario Mora/Schoolyards
Competition, Children's Environments Re
Group, City University Graduate Center,
West 42nd Street, New York 10036 (212)
2970 or FAX (212) 642-2971.

Shinkenchiku Competition
Entry deadline September 17–24

Tokyo. "The House is an Electronic Device
Living in" is both an updated version of
Corbusier's words and the theme for the
Shinkenchiku Residential Design Competi
Winners will be announced in the March
issue of *The Japan Architect;* details on the
competition are in the magazine's March
issue. Entries will not be returned. Contac
Entries Committee, Shinkenchiku Residen
Design Competition 1990, Shinkenchiku-s
Co., Ltd., 2–31–2 Yushima, Bunkyo Ward
Tokyo 113, Japan.

Conferences

Stanford Conference on Design
July 26–28

Stanford, California. Speakers at the 14th an
Stanford Conference on Design will "focu
the design process, going beyond their
portfolios in an exploration of problem-so
techniques resulting in original solutions."
Denise Scott Brown, Rolf Fehlbaum of Vi
Design, and Peter Arnell of Arnell Bickfo
Associates are among the scheduled speak
Contact Beverly Smith, Stanford Alumni
Association, Bowman Alumni House, Stan
California 94305–4005 (415) 723-2027.

SIGGRAPH '90
August 6–10

Dallas. The 17th International Conference
Computer Graphics and Interactive Techn
will offer courses, workshops, seminars, pa
and panel discussions, an exhibition of
computer graphics hardware, software and
applications, and an exhibtion of "cyberm
and social functions." Contact SIGGRAPH
Conference Management Office, 111 East
Wacker Drive, Suite 600, Chicago 60601 (
644-6610 or FAX (312) 938-1232.

Affordable Housing
August 13–19

Cambridge, Massachusetts. Harvard Univers
Graduate School of Design is holding a we
long institute to "address the design,
development, construction, rehabilitation,
management" of affordable housing. Thre
courses are offered and may be taken sepa
or as a group. Contact Professional
Development, Harvard University GSD, 4
Quincy Street, Cambridge, Massachusetts
(617) 495-9340 or FAX (617) 495-9347.

Adaptive Reuse
August 27–29

Helsinki, Finland. The Finnish Association o
Architects' annual Seminar on Architectur
Urban Planning will focus on the theme
"Adaptive Reuse of the Inner City." Contac
Finnish Association of Architects, Saara Uimo
Eteläesplanadi 22 A, 00130 Helsinki Finlan
358–0-640 801 or FAX 358–0-601 123.

Downtown Association Conference
September 8–12

Edmonton, Alberta. The 36th Annual
International Downtown Association
Conference, sponsored by the Edmonton
Downtown Development Corporation, will
held at the Convention Centre in Edmont
"Learning How To Compete Effectively" i
year's theme. Contact International Down
Association, 915 15th Street, N.W., Suite 9
Washington, D.C. 20005 (202) 783-4963.

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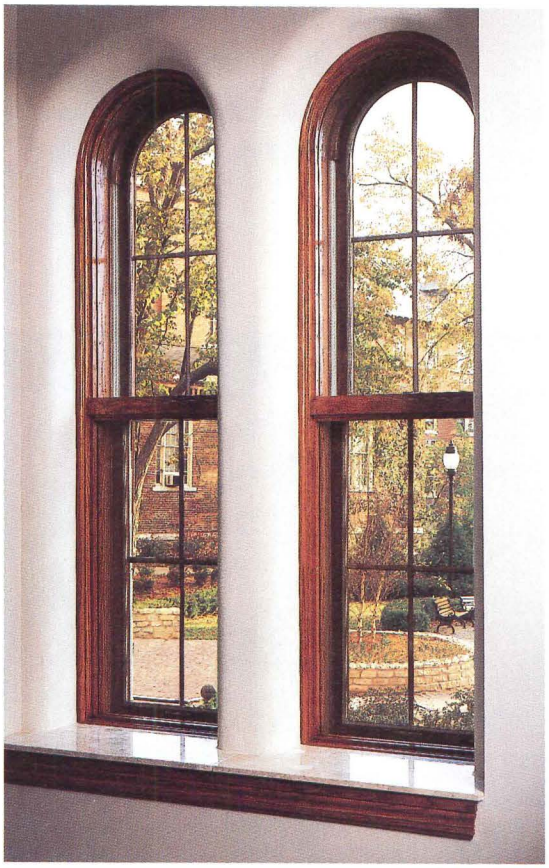

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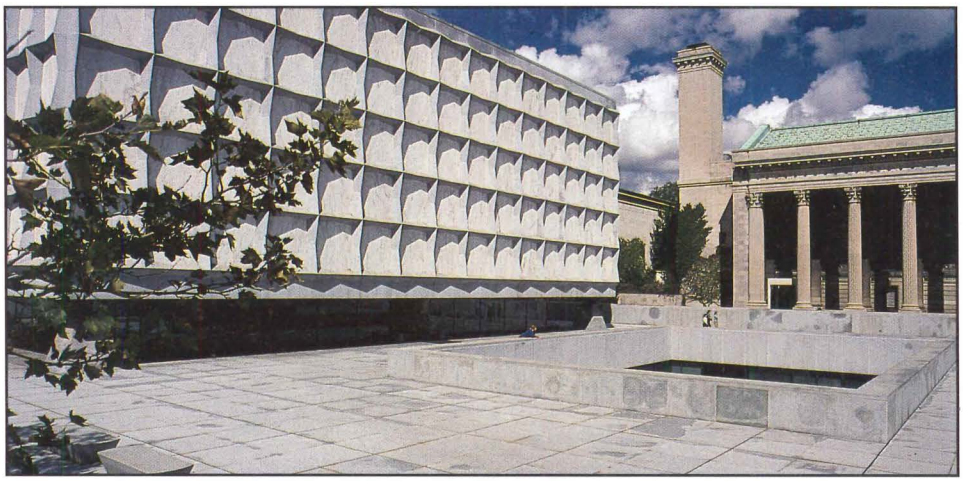
AO17GO

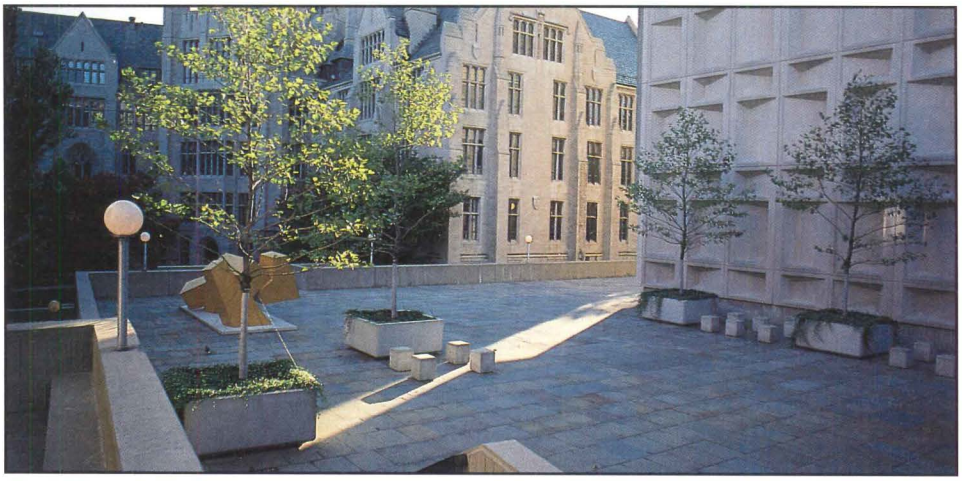
Technics: Roofs for Use

Roofs can be roofscapes — but not without challenging designers beyond ordinary details, issues, and understanding.



Beinecke Library Plaza (closed joint), Yale University, Skidmore Owings & Merrill, Architects.

Price Tower carports, Bartlesville, Oklahoma, Frank Lloyd Wright, Architect.



Becton Center Plaza (open joint), Yale University, Marcel Breuer, Architect.

Roof gardens are supposed to date from Biblical-era Babylon, but historically they have been more of a novelty than a commonplace. The idea of rooftop landscaping got a boost in the 1970s when environmental and energy-driven interest moved underground buildings out of the fringes and into the mainstream — not in terms of numbers of buildings, but certainly in terms of mainstream architects and mainstream clients. (The Smithsonian's new museums of African and Asian art, by Shepley, Bulfinch, Richardson and Abbott, and I.M. Pei's recent addition to the Louvre are two of the more recent, highly "visible" examples). Although environmentalism generally waned as a driving force in the 1980s, the cost of land and the pressure to preserve urban and campus open space has sustained interest in landscaping roofs through the decade and presumably into the next century.

Although the technical issues in designing and developing roof plazas and planted roofs are neither very complicated nor difficult to understand, the conditions are unforgiving; there are many actors in the play, and failures are costly and disruptive to correct. The technical issues are similar for most plaza and planted roof types, but they vary in detail according to whether the finish is vegetation or a hard-wearing surface like brick, stone, or concrete. The latter may be further categorized according to whether the primary drainage plane is at the surface (a closed joint system) or under the wearing surface (an open joint system).

Despite differences in details of plaza and roof garden types, the issues concerning the subsystems of waterproofing, drainage, and insulation are common to all. And, although interrelated, it is convenient to discuss these separately. Maxwell Baker's excellent book *Roofs* contains a chapter on systems that discusses the building physics of plaza and terrace roofs in terms that every designer approaching the subject should understand. It is a valuable introduction to the many aspects of the design problem.

Structure

Most grade-level plazas are formed with cast-in-place concrete to which the waterproof membrane (WPM) is directly applied. When this is the case, the structural deck should be pitched to roof drains. Diagnostics and design engineers Stephen Ruggiero and Dean Rutila of Simpson, Gumpertz & Heger report in ASTM STP 1084 that insufficient slope is the most common deficiency they find in plazas with

leakage or deterioration problems at the wearing surface. They concur with the standard recommendation of ⅛ to ¼ inch per foot slope but note that long-term creep in cast concrete slabs may null this or reduce it to less than ⅛ inch; they recommend an initial pitch of no less than ¼ inch per foot for cast concrete decks.

The type of waterproofing and deck preparation necessary to receive it should be considered at the time the deck itself is designed. Precast concrete, for example, may require a reinforced concrete topping slab (to cover plank joints) for fully-adhered membranes, but not for loosely laid ones, and the choice of deck type affects the economics and WPM systems.

Brian Mitchell, a landscape architect with POD/Sasaki, reports that the weights of landscape materials (called "overburden"loads) often are not fully appreciated by architects. He recommends that the landscape designer be brought into the project early on and that he have direct communication with the structural engineer. This sentiment is shared by landscape architect Theodore Osmundson, a long-time advocate and practitioner of roof garden design. Osmundson has often been brought in too late to discuss landscaping design loads with the structural engineer and has had to work with severe weight restrictions that limit design possibilities.

Mitchell has been compiling a file of weights of plant materials from different sources and notes that the major share of load from containerized plants is the weight of the soil and planter, both of which are easily determined. Heavy, saturated soils can weigh in excess of 120 pounds per cubic foot (pcf), while moist but well-drained soils weigh in around 100 pcf (between 35 and 55 percent of most soils is void space; water weighs 62.4 pcf, so saturating a cubic foot of dry soil can add over 30 pounds to its weight). Little information is available about the weight of very large trees, although foresters have developed different means of estimating the biomass of woodland trees. Researchers at the University of Maine, for example, have devised an equation that predicts the live weight of forest trees. How these predictions relate to trees grown in the open is unknown; one would expect lawn trees to be more densely branched and foliated, so the equation may significantly underestimate design loads.

Other live loads may be equally elusive, especially in knowing what to anticipate. Campus and urban buildings are often built underground to preserve or create public space that have become places of public assembly, and both the structure and components of the entire roof section have to accommodate this. In October 1979, Pope John Paul addressed an audience assembled on the park roof of an underground garage in Chicago. Unsure of the structure's ability to support the multitude, engineers were kept busy prior to the visit pre-loading the deck in order to observe deflection and signs of overstressing. Some grade-level plazas may have to support fire-fighting equipment; the service weight of a small, two-axle pumper can exceed 26,000 pounds, and such concentrated wheel loads have important implications for the wearing surface, as well as the structure.

Waterproofing

Many different waterproof membranes are available, although not all of these are suitable or warranted for plaza deck application. In contrast to vertical waterproofing, plaza decks are subject to greater thermal movement and mechanical and physical abuse during construction; penetrations through the membrane are especially vulnerable to leakage; they drain more slowly; and in many cases, when the membrane is overlaid with material other than gravel, the membrane may never dry, as it does in roofing. Ruggiero and Rutila consider a WPM with water absorption greater than 5 percent as unsatisfactory and describe superior membranes as having absorption of two percent or less. They also recommend a permeance of 0.2 to 0.5 perms for the completed membrane. Leakage failures rarely occur through the main body of the membrane, however; they happen at penetrations through the membrane (at drains, for instance), at improperly treated joints, at edge terminations, and at seams in the membrane material. The architect's details are critical, and inadequate detailing is frequently the cause of failure. The manufacturer's commitment to quality is often reflected in the thoroughness of its line of accessories for expansion and contraction joints, boots for pipe penetrations, standard details, and its warranty and contractor certification programs. Some manufacturers may be willing to provide copies of their installation and field inspection manuals, both of which can reveal a great deal about the strengths and weaknesses of the system, as well as the manufacturer's willingness to serve the architect's interests. An applicator's manual may also be necessary training for professionals who are required to inspect or observe work in progress.

A few segments of the industry have developed

Weight of Forest Trees

Foresters at the University of Maine have devised a formula for predicting the weight of living forest trees. This should not be used for estimating design loads, since it is intended to represent average weights – and trees grown under favorable conditions in the open are probably fuller and heavier than forest specimens. Nonetheless, it can serve as a check against other estimates. The formula can be worked on any calculator with standard trigonometric functions:

$$\log_e(W) = C + 2.2234\log_e(D) + 0.3390\log_e(H)$$

where $\log_e(W)$ is the natural logarithm of the tree weight in pounds; $\log_e(D)$ is the natural logarithm of the tree diameter at a height of 4.5 feet, in inches; and $\log_e(H)$ is the natural logarithm of the tree height in feet. The constant C varies with tree species, as listed below.

Species	C
Aspen	0.6800
Balsam fir	0.5882
Hemlock	0.6277
Red maple	0.6654
Red spruce	0.6972
White birch	0.8025
White pine	0.6592

Reference: *Preliminary Fresh and Dry Weight Tables for Seven Tree Species in Maine,* H.E. Young, L. Strong, and R. Altenberger, Technical Bulletin Number 12, Maine Agricultural Experiment Station, University of Maine, Orono, 1964.

standard recommended details and practices for different WPM material types. The most thorough documents so far are ASTM *Standard Guides* C-898 and C-981, which lay out issues, terminology, and cross references to other standards and specifications, and discuss standard details and relationships between materials in the roof assembly. They apply to cold liquid-applied and built-up bituminous membranes, respectively. The chairman of the committee that prepared those documents was architect Charles Parise of Smith, Hinchman, & Grylls, whose pages 336–338 in the eighth edition of *Architectural Graphic Standards* summarize — but are no substitute for — the C-898 and C-981 documents.

The American Concrete Institute's publication ACI 515.1R on protective barrier systems is written from a different perspective but is no less essential a guide to issues, especially concerning preparation of the substrate and orchestration of members of the construction team. A specifications checklist from the ACI 515 report has been expanded to include issues and items listed by the National Roofing Contractors Association as topics to be addressed at a pre-construction conference, which should be attended by representatives of the owner, architect, general contractor, waterproofing contractor, WPM materials manufacturer, and all subcontractors who may perform work on or through the membrane. This list, along with subchapters explaining the advantages and disadvantages of different WPM types, is contained in the University of Minnesota's *Building Foundation Design Handbook*. An interesting flowchart approach to selecting waterproofing materials and discussions of appropriate use and application considerations are contained in the little-known U.S. Navy Design Manual 1.4, *Earth Sheltered Buildings*. At $7.50, it is one of the best information buys available in the field. The extraordinary cost and inconvenience of fixing faulty details and sloppy workmanship make a good argument for using waterproofing consultants during design and third-party inspectors during substrate finishing, preparation for, and installation of the membrane.

Protection Layer

Plaza membranes are especially susceptible to damage from subsequent work activity, so immediate protection is required. ASTM C-898 and C-981 recommend either a temporary protection layer or a permanent, reinforced concrete "working" slab of sufficient thickness (but no less than three inches) to support construction activities without overstressing the membrane. The working slab is also recommended by ACI. With some WPM types, a slip sheet (cleavage plane) may be desirable to prevent shrinkage cracking in the working slab from stressing the membrane. A reinforced working slab greatly impedes access to the WPM and drainage systems for inspection and repair, however, and troubleshooters like Steve Ruggiero advise against them. Many geocomposite drainage boards and insulation materials are suitable as protection for the WPM in the finished assembly, but these often are not adequate during construction. Some plastic materials may be attacked by solvents released from curing membranes, and this also should be considered in the process.

Drainage Course

Diagnostics investigators, waterproofing manufacturers, and landscape architects all cite inadequate drainage as a major cause or contributor to many types of failure, including shallow root development and "wet wilt" of plant materials, frost heaving of pavers, and leakage into the building. The WPM should drain freely through a course of clean pea gravel or a geocomposite blanket to an all-level, large sump "plaza" or "promenade" drain. These typically contain a cylindrical perforated screen that extends from the bowl or sump up a surface grate (the extension height is adjustable), so that all levels of the assembly are drained simultaneously. Standard roof drains can by used if a separate all-level screen device is provided. All materials must be installed (with filter fabric "flashing" as necessary) to keep gravel, sand, and soil fines from migrating into the drain. The drain should also be protected from and accessible for cleaning out debris from the wearing surface.

Insulation

Insulation may be located below the structural deck, above the structural deck and beneath the waterproofing, or above the waterproofing. The latter is preferable from most considerations of building physics: The structural assembly and interior finish materials are all on the warm side of the vapor retarder (the WPM) and thermal bridges are eliminated. Both facts minimize potential for condensation and promote energy efficiency, as well as reducing seasonal thermal stresses in the WPM and maintaining it near room temperature (which helps maintain elastic and plastic properties of many rubber, asphaltic, and plastic materials). Although loosely laid membranes can be installed over insulation laid on the roof deck, leakage through damaged membranes can travel freely beneath it, enormously complicating the problem of finding the failure point.

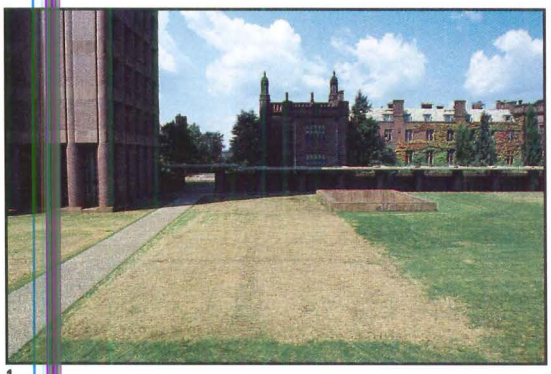
Insulation can be laid on the WPM or suspended above it. While insulation can serve as protection board, when placed on the WPM, it impedes drainage and the likelihood of its losing thermal resistance to water absorption is increased. Some Canadian sources recommend chamfering the corners and routing drainage channels in the bottom of insulation in contact with roofing and waterproofing membranes; others feel this is a poor compromise. ASTM C-898 and C-981 provide a thorough discussion of the issues and recommend laying the insulation on the drainage course. This keeps the drainage course underneath unfrozen and free from frost heaving. When the insulation is laid on the drainage layer, the insulation itself creates a drainage plane on which water can pond. The insulation plane, like the roof deck beneath it, should be pitched to collection drains. Depending on the wearing surface and other materials above, it may be desirable to install a second drainage course, filter fabric, polyester scrim sheet, or polyethylene drainage membrane directly over the insulation layer.

Blick's Approximation

The insulation value of soil is often wildly exaggerated and its thermal behavior on roofs misunderstood. Almost any roof plaza section contains sufficient thermal mass to damp out fluctuations in daily temperature and to effectively average these. From the indoor point of view, the outdoor temperature is constant from day to day, and the heat loss rate through the roof during the heating season is also constant throughout the day, and from one day to the next, at the rate

$$Q_{sf} = (T_i - T_o)/R_o$$

where Q_{sf} is the heat loss rate in Btu/ft^2(hr)F, T_i is the weekly average indoor temperature, T_o is the outdoor weekly average temperature, and R_o is the overall thermal resistance of the roof assembly. This expression was offered by Dr. Edward Blick, who compared it to more sophisticated computer methods and found agreement within 5 percent for winter conditions in Oklahoma (using monthly average temperatures). The approximation is only valid when the outdoor temperature plugged into the equation represents the roof surface temperature; because most weather stations measure temperatures over grass, local weather data can be used for turf roofs but not necessarily for other surface materials.



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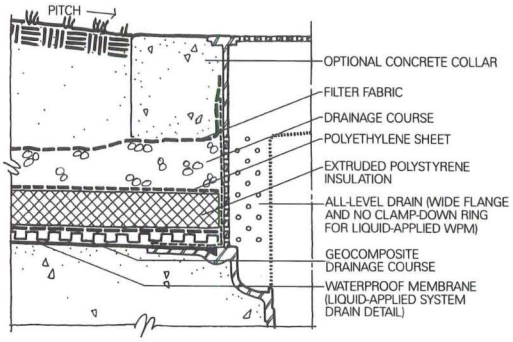
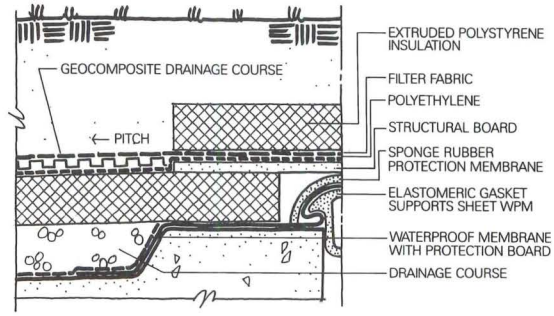


ALL-LEVEL DRAIN, EARTH-COVERED ROOF
3



EXPANSION JOINE, EARTH-COVERED ROOF
4

1 *Lack of water causes "browning off" of rooftop turf during drought, but – oddly enough – poor soil drainage thwarts deep rooting and can contribute to the problem.*

2 *Earth covered roofs may be reclaimed by nature, but they still need attention to drainage and irrigation if vigor is to be maintained.*

3 *All-level drains collect water from all strata within the roof section; the grade level inlet is not really necessary, but it helps locate the fixture for maintenance (adapted from NAVFAC DM 1.4).*

4 *Soil is capable of taking up some deck movement, so expansion joints do not necessarily have to be carried up to the surface (adapted from NAVFAC DM 1.4).*

Verdant Roofs

Roofs may be planted with ground cover, shrubs, trees, and other ornamentals. Rule-of-thumb soil depths are given on page 740 of *Graphic Standards* (8th edition). Some designers "roll" the terrain to accommodate differing needs, and sometimes the grade is held level at the greatest depth required. Various lightening devices such as foam blocks and capped void tubes have been used under shallow-rooted plants to reduce the weight and volume of soil required when a level surface is maintained. Lightweight soil mixes are also used, but these may provide inadequate "ballast" for tree roots under windy rooftop conditions.

"Browning off" is a very common (and preventable) failure of turf on roofs, and it occurs when the plant cannot extract sufficient moisture from the soil. Turfgrass is capable of rooting to depths of 12 to 18 inches, but studies have shown that 60 to 80 percent of the roots (by weight) are concentrated in the upper 4 to 5 inches of soil. While one foot of soil is adequate for most ground covers, this thickness has little water storage capacity to carry plants through drought periods – and there is no subsoil from which to supply moisture by capillary rise. Irrigation is part of – but not entirely – the solution. Ironically, too much water, poor drainage through the soil profile, and foot compaction can all hinder development of a deep and healthy root system, which is necessary to sustain plants through drought periods. Turf growing in soggy soils, therefore, may brown off sooner during a drought than turf in more ordinary soils.

Some lessons can be learned from the design of golf greens, especially for highly trafficked lawns. Greens are typically soilless – the growing medium is 75 to 80 percent sand, and the balance is an organic amendment such as peat, rice hulls, or sea weed to improve water holding capacity (super-absorbent polymers that hold up to 500 times their weight in water are marketed for horticultural use and could be used as an amendment for roof soils). According to Michael Hurdzan, a golf course architect trained as a plant physiologist, the objective is to drain the "soil" section (typically 12 to 14 inches) as quickly as possible, and to supply the necessary moisture as needed by irrigation. The greens surface is pitched 3 percent or more; the "soil" is underlaid with a gravel bed and pipe subdrainage system, and a surface water infiltration rate of 15 percent is desirable – although this is not a hard and fast rule. There are other, more water conservative approaches to greens design that make use of a subsurface water reservoir to supply moisture. Landscape architect Jake Frankhouser describes how the "PURR-Wick" (plastic under root reservoir with wick action) system for golf greens can be adapted for roof garden applications in the November 1980 issue of *Landscape Architecture*. Soilless greens, however, do require regular fertilizing and a diligent greenskeeper.

Donald Olson, a landscape architect with Sasaki Associates, suggests that overwatering is often more of a problem on rooftop landscapes than drying out and notes that irrigation systems ideally should be triggered by a soil moisture sensor, and not by a timer. He also points out that thought needs to be given to the long-term maintenance of plant materials and whether or not the contractor is knowledgeable enough to spot problems as they develop.

All this concern for maintenance is antithetical to the sympathies of many earth-covered building advocates, who see planted roofs as an environmental conservation strategy. The use of low maintenance and indigenous plant material for roof garden design are described in the University of Minnesota's *Earth Sheltered Residential Design Manual.*

The R-value of soil depends largely on moisture content. Wet soils can have a thermal resistance less than R-1 per foot, and dry soils may exceed R-1.5 per foot thickness; R-1 per foot is commonly assumed for design purposes, in the absence of better information. The combined resistance of the structure and overburden materials will seldom exceed R-5 without adding insulation, so from the standpoint of wintertime steady-state heat loss, the amount of insulation required is similar to that required for conventional roofs.

Example: Given an average indoor temperature of 70 F and a weekly average outdoor temperature of 35 F, the weekly average heat loss rate is approximately $(70\text{-}35)/R_o$, in Btu/ft^2 (hr). If the roof is a 12-inch concrete slab (R-1) with 18 inches of earth (R-1.5), 4 inches of extruded polystyrene (R-20), and 4 inches of gravel (less than R-0.5), the total R-value is about R-25, and the heat loss rate is about 1.4 Btu/ft^2 (hr). Although this rate varies slightly from week to week, it is essentially a constant hourly and daily value.

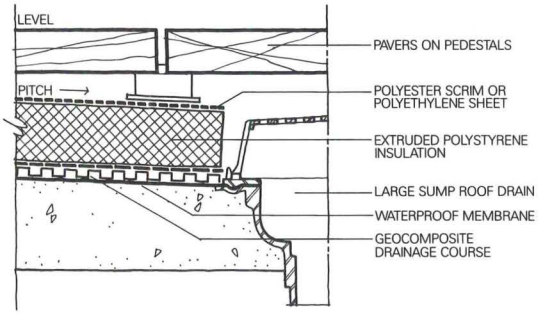
Reference: E.F. Blick, "A Simple Method for Determining Heat Flow through Earth Covered Roofs," *Earth Sheltered Building Design Innovations* conference, L.L. Boyer, editor, Oklahoma State University, Stillwater, 1980.

5 *Surface water drains through the paver joints and is collected at roof drains under the plaza; these must be capable of admitting water at the waterproofing membrane level, as well as from the top of the insulation (adapted from Ruggiero and Rutila, ASTM STP 1084).*

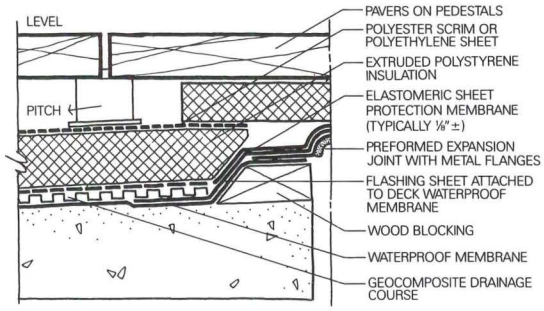
6 *Both ASTM and ACI recommend "watershed" treatment of expansion joints – elevating the working joint on a curb cast in place or set on 2x nailers (adapted from Ruggiero and Rutila, ASTM STP 1084).*

7 *While open joint plazas have many practical and visual advantages, debris (in this case, pine needles) can clog the joints and drainage system underneath; this plaza also has a few pavers that rock on their supports.*

8 *Open joint plaza slabs are easily removed and replaced – inspection, cleaning, and repair is simple, and there are no contrasting mortar joints as residue of the work.*



ROOF DRAIN, OPEN JOINT PLAZA
5



EXPANSION JOINT, OPEN JOINT PLAZA
6

7

8

Open Joint Plazas

Open joint plazas typically consist of rectangular precast concrete or natural stone paver slabs supported at their corners on pedestals of adjustable height or laid on a gravel drainage bed. Duckboard decks on sleepers are suitable for many – especially residential – applications. Slab pavers are usually spaced ⅛ to ¼ inch apart, and joint width is maintained with resilient spacers. These are incorporated in the design of most off-the-shelf pedestals. Open joint systems have many aesthetic and practical advantages: Drainage occurs under the finish surface, so no area drains are required, and the finish can be set dead level; thermal expansion and contraction in the paver slabs are taken up at the gaps between units, so no sealant joints are required; there is little likelihood of frost heaving of the wearing course, and the pavers are easily lifted for inspection and cleaning of the drainage system. There are also disadvantages: Debris may clog the joints or sift through and clog drains under the surface; excessively wide joints are hazardous to wearers of spike heels; imperfectly set pedestals allow pavers to rock under foot, and the system has limited load-carrying capacity that may not be suitable for plazas where vehicular access is necessary for snow removal, building maintenance, or fire fighting, for example.

Ruggiero and Rutila recommend that precast pavers be air entrained between 7 and 8 percent by the pressure method and that the concrete have less than 5 percent absorption, to ensure long-term durability to freeze-thaw cycling and other weathering stresses. Pedestals normally bear on high-density, extruded polystyrene foam insulation. Because the insulation creeps under sustained loads, a factor of safety of 3 for static and 5 for dynamic loads is recommended. Ruggiero prefers 40 to 60 psi insulation, but conditions should be analyzed on a case-by-case basis. Ruggiero and Rutila recommend installing a woven polyester scrim sheet over the insulation boards (under the pedestals) to prevent dirt from infiltrating the insulation joints and to protect the insulation from ultraviolet light – especially when duckboard decking is used. The scrim material is supplied by many WPM manufacturers, and its use should be discussed, along with the rest of the system design, with their technical services department.

Closed Joint Plazas

The wearing surface is the primary drainage plane in closed-joint plazas, although these must be designed with the anticipation that joint seals will fail over time and that a secondary drainage course must be provided at the WPM level. Closed-joint plaza wearing surface materials range from hand-size pavers of brick, stone, or concrete to cast-in-place concrete or asphalt paving. A major advantage of closed-joint surfaces is the variety of materials and sizes that can be used. The surface must be pitched to drain, and designers must not fail to plan the location of drains and the slope and area of the watershed. Landscape architect M. Paul Friedberg writes that straight lines appear wavy when imposed on an undulating surface and notes that, "on a two-dimensional plan this is not easily recognized, much to the chagrin of many designers who have only seen this mistake when it has been perpetuated over acres of decking," adding, "The visual effect is much like the storm tossed waves of Sheepshead Bay and has been known for bringing many a pedestrian to the verge of seasickness."

Closed-joint surfaces protect the WPM and drainage system from de-icing salts, sand, leaf debris, and other dirt, and can support greater loads than pedestal systems. Other advantages include protecting the insulation and WPM from exposure to water (in large quantities), and the same material and joint

9

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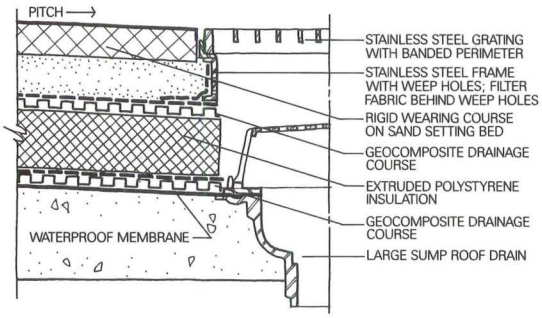
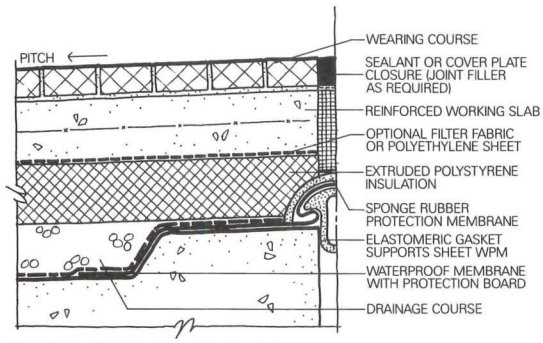
Photos: K. Labs



ROOF DRAIN, CLOSED JOINT PLAZA

11



Drawings: K. Labs

EXPANSION JOINT, CLOSED JOINT PLAZA

12

9 *Resilient fillers were provided in this closed joint plaza to take up thermal movement, but some joints have opened over time – pointing out the need for a secondary drainage system under the plaza surface.*

10 *Closed joint plazas are separated into individual watersheds. Some designers recommend increasing the pitch of the surface immediately surrounding the drain to keep puddles from spreading too far when drains clog – as they often do.*

11 *Surface water can be collected by an off-the-shelf, all-level drain, or the condition can be detailed to meet the need. This detail is suitable for pedestrian plazas but not for vehicular loads (adapted from Ruggiero and Rutila, ASTM STP 1084).*

12 *Closed joint wearing courses are normally rigid, meaning that expansion joints in the structure below have to be carried up through the section and are expressed at the surface (adapted from ASTM C 898).*

treatment can be continued off the plaza to other areas on grade. The disadvantages include: the need for expansion joints and maintenance of them; waterproofing and underdrainage systems are not readily accessible for inspection and maintenance; the mortar joints or seals between replaced paver units may not match the rest of the surface; unit pavers may be susceptible to frost heaving from water that leaks into setting beds and freezes; drains are visible and may be hazardous to foot traffic; clogged surface drains produce ponds at the surface that may freeze to form ice slicks, and expansion joints in the structure underneath must be expressed at the surface with coincident joint covers in the wearing surface. Joint issues are discussed more fully in ACI 515 and ASTM C-898 and C-981.

Closed-joint pavers may be laid in sand, mortar, or a dry-pack setting bed, although cementitious settings make trouble-shooting more difficult. Ruggiero and Rutila recommend that brick pavers have water absorption of less than 6 percent (ASTM C-67 test) and compressive strength of 10,000 psi and that they be set in sand with sand-swept joints. Strictly speaking, this is not a closed-joint system, even though the primary drainage course is at the surface. The sand bed should be laid on a filter fabric over the drainage course. Pea gravel is preferred to geocomposites by many designers when the wearing surface supports vehicular traffic. Membrane flashings should be carried at least 9 inches above the wearing surface when it abuts walls. This condition is a chronic problem that architects fail to detail adequately.

In the case of large stone slab pavers, flexible joint seals must be provided to accommodate movement within and at the termination of the wearing surface. Over the long term, these may work loose, and as the joints fill with debris, ice-jacking further dislodges the pavers to create leaky – and unsightly – joints.

Man-made Land

Theodore Osmundson relates that interest in and the technology for roofscaping in the U.S. lags behind that of many European countries and Japan, where roofs are more commonly viewed as a land resource. Problems occur when designers are not aware of or do not adequately address the physical issues of water, vapor, and thermal movements, and the environmental requirements of plant materials.

All these problems can be solved: Many cities and campuses have decades-old examples of grade level plazas and elevated roof gardens that testify to the fact. Whether to serve as a prominent public space or a secluded private retreat, roofs offer opportunities too good to overlook. **Kenneth Labs** ■

Recommended Reading

ACI 515.1R, *A Guide to the Use of Waterproofing, Dampproofing, Protective and Decorative Barrier Systems for Concrete*, American Concrete Institute, Detroit (313) 532-2600, 1988.

ASTM STP 1084, *Building Deck Waterproofing;*

ASTM C-898, *Standard Guide for Use of High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Separate Wearing Course*;

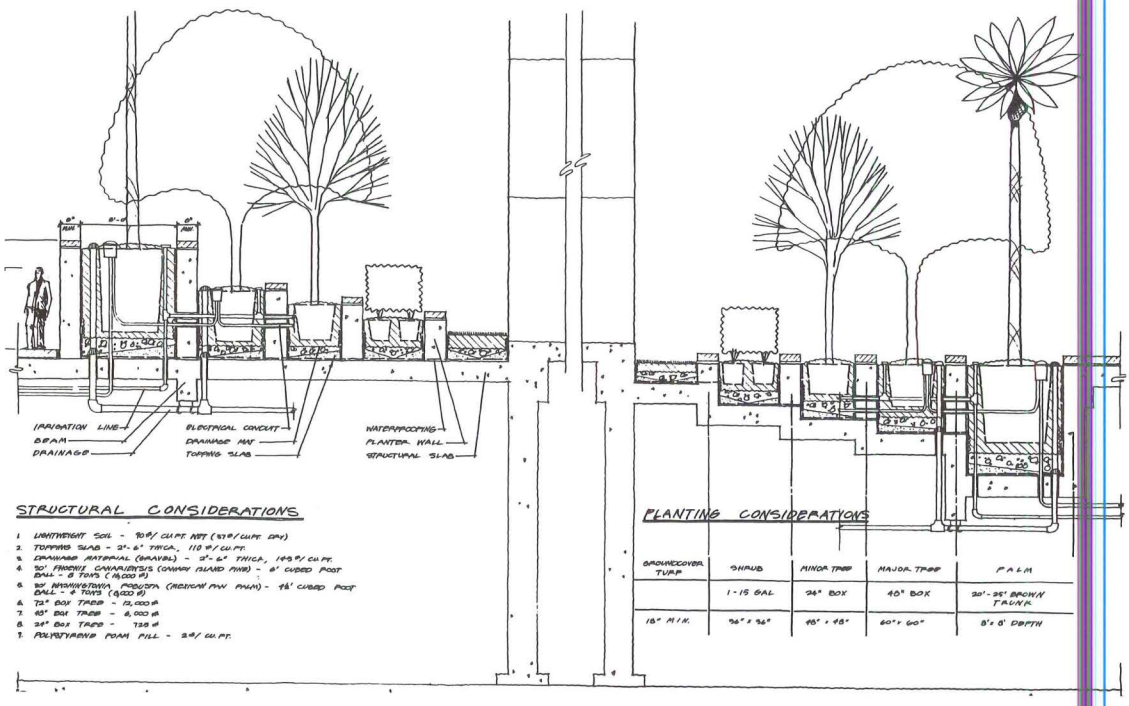
ASTM C-981, *Standard Guide for Design of Built-Up Bituminous Membrane Waterproofing Systems for Building Decks*, American Society for Testing and Materials, Philadelphia (215) 299-5585.

Building Foundation Design Handbook, K. Labs, J. Carmody, et al, University of Minnesota, Underground Space Center, Minneapolis (612) 624-0066.

Roofs, M.C. Baker, Polyscience Publications, Inc., Quebec (514) 226-5870.

NAVFAC DM 1.4, *Earth Sheltered Buildings*, SN 008-050-00230–1, Government Printing Office, Washington, D.C. (202) 783-3238.

"Roof and Deck Landscaping," T. Osmundson,



SCHEMATIC DESIGN GUIDELINES FROM THE OFFICE OF POD/SASAKI, LOS ANGELES

Section 610, *Time Saver Standards for Landscape Architecture*, McGraw-Hill (800) 2-MCGRAW, 1988.

"The Changing Technique of Roof Garden Design," T. Osmundson, *Landscape Architecture*, September 1979.

Roof Decks Design Guidelines, NHA 5220, Canada Mortgage and Housing Corporation, Ottawa (613) 748-2068, 1979.

"Roofscape," M. Paul Friedberg, *Architecture and Engineering News*, September 1969.

"Rooftop Development," R. Rogers, Chapter 14, *Handbook of Landscape Architectural Construction*, L.A. Bookstore/Cornell Univ. Press Services, Ithaca (607) 277-2211.

"Trapping Moisture for Roofscape," J. Frankhouser, *Landscape Architecture*, November, 1980.

Use of Aboveground Containers in Landscaping – Problems Associated with Winter Soil Temperatures, H. Pellet, Miscellaneous Report 111, The Landscape Arboretum, University of Minnesota Agricultural Experiment Station, Chaska, 1976.

"Waterproofing and the Design Professional," B. Anderson, *The Construction Specifier*, March 1986.

Acknowledgments

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Weights of planters and trees

Planter	Dimension (inches)	Approximate weight
24" box	24w x 23d x 18 base	725 pounds
30" box	30w x 29d x 21 base	1500 pounds
36" box	35d x 24 base	2500 pounds
42" box	35d x 32 base	4000 pounds
48" box	42d x 35 base	6000 pounds
54" box	42d x 45 base	7000 pounds
60" box	44d	8000 pounds
72" box	44d	12,000 pounds
84" box	44d	16,000 pounds

Tree type	Height (ft)	Ball	Weight
Phoenix canariensis	25	6x6′	8 tons
(Canary Island Palm)	30	7x7′	10 tons
	35	7x7′	11-12 tons
Washingtonia robusta	25	4x4′	1.5-2 tons
(Mexican Fan Palm)	30	4x4′	3-3.5 tons
	35	4x4′	4 tons
Cocos plumosa	25	4.5x4.5′	2.5-4 tons
(Queen palm)	30	5x5′	2.5-3 tons
	35	5.5x5.5′	3.5-4 tons
3" caliper*	14-16	32"	850 pounds
4" caliper*	16-18	40"	1610 pounds
5" caliper*	18+	48"	2570 pounds
6" caliper*	18+	54"	3920 pounds
7" caliper*	18+	63"	5960 pounds
8" caliper*	18+	72"	8100 pounds
9" caliper*	18+	81"	11,730 pounds

Source: POD/Sasaki, Los Angeles and Valley Crest Tree Company, Sylmar, California; * Rolland/Towers, Rye, New York.

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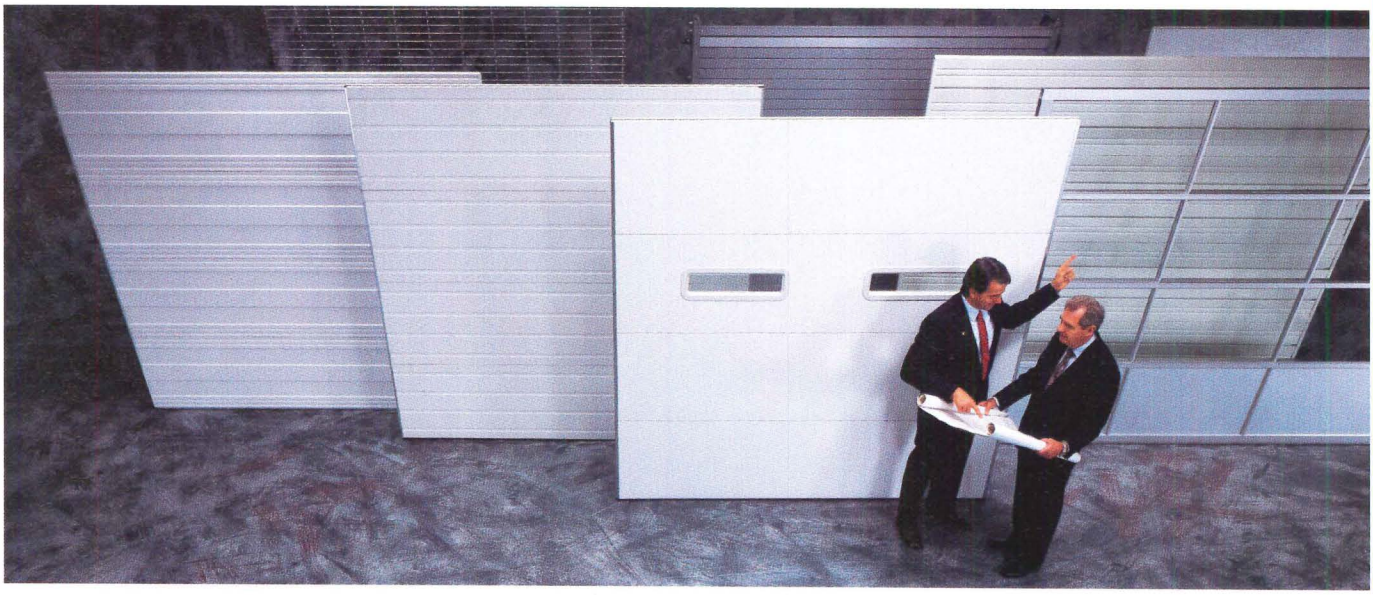

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Technics Topics

A study by the Institute for Technology Development – excerpted here – reveals what the disabled need for a truly barrier-free environment.

Designs for Living: An Empirical Approach

To most architects, satisfying handicapped access codes is an attempt to make plans with bulky proportions fit inside an inevitably tight spatial enclosure. At the Institute for Technology Development, one can see how helpful these codes actually are. The Institute recently executed a study of two apartment prototypes: a Standard Apartment that complied with the Uniform Federal Accessiblity Guidelines (UFAS), and an Experimental Apartment, with features beyond those federally mandated. Here they observed 71 handicapped people enact 25 common household tasks, from opening a door to getting from the bed to the bathroom, or cooking a meal. Through these empirical studies, the Institute found numerous ways to enhance the disabled person's home; they prepared a draft – Residential Access: Criteria for Designing Accessible Residential Environments. *We offer an excerpt from the chapter on bathrooms.*

The trends in upscale bathroom design could readily assimilate more accessible features without detracting from the ambience being sought. Rather than accessible bathrooms looking more mundane, the new styling for bathrooms should be seized upon to create accessible spas of beauty.

Floor Plan Examples

Figure 1 shows a bathroom layout illustrating several good ideas for bathroom design. The doorway is 36″ wide and enters into a clear floor space of 5' by 5' that is achieved because of open space under the vanity and a wall hung toilet.

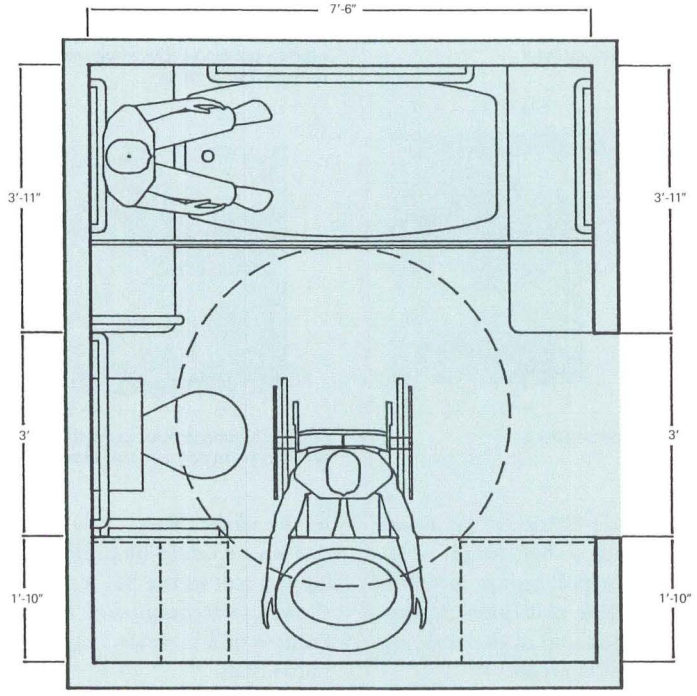


FIGURE 1, BATHROOM PLAN

Figures 2 and 3 display two layouts for small bathrooms with showers. Figure 2 shows a toilet with a right-side or front approach, a shower with a left-side or front approach and an open vanity with drawer based storage space on one end. Although a little cramped, this bathroom offers sufficient space for maneuverability.

Figure 3 puts the sink, toilet and shower on a straight line, providing efficient installation of plumbing on one wall and a continuous seat from the sink into the shower area. This configuration limits the approach to both the toilet and shower, but it affords an easy transfer from one fixture to the other. The shower door slides completely out of the way to provide a clear opening for entry.

Bathing Systems

Three bathing systems were evaluated in [our] study: a conventional bathtub with a seat placed at one end, a 36″ × 36″ shower, and a new product called the Comfort Bath marketed by Human Dynamics, Inc. The shower and Comfort Bath were in the Standard Apartment (Figure 4) and the tub was in the Experimental Apartment (Figure 5).

The Comfort Bath is a product that makes a lot of sense. It is a bathing system that has two primary parts, one that is stationary, called the tray or platform and one that rotates, called the tube (or tub).

Each subject was asked to enter and simulate using each of the bathing systems. This included entering; accessing the

(continued on page 46)

Tech Notes

***Air Barriers,* TEK-AID 07195 from Construction Specifications Canada, contains a 52 page Digest and separate guide specifications. It is a well-illustrated summary of the physics of envelope design and also discusses design review and air leakage testing. Produced with industry review, it is a state-of-the-art document. CSC, Toronto (416) 922-3159.**

***Water in Exterior Walls: Problems and Solutions,* a symposium sponsored by ASTM Committee E-6, will be held October 25–26 in Dearborn, Michigan. Vapor migration, rain leakage, flashing, sealants, freeze-thaw damage, and in-situ and mock-up testing will be discussed. ASTM (215) 299-2617.**

***Problem Buildings: Building-Associated Illness and the Sick Building Syndrome* is a volume edited by Drs. James Cone and Michael Hodgson in the Occupational Medicine series. Thirteen reviews cover building materials, ventilation, epidemiology, productivity and costs, regulation, and more. Hanley and Belfus, Philadelphia (215) 546-7293, 239 pp., $32.**

***The Seventh Symposium on Improving Building Systems in Hot and Humid Climates* will be held October 9–10 in Fort Worth. Organized by Texas A&M University, topics will include envelope design, air conditioning systems, lighting, humidity control, and government and utility programs. A&M Energy Systems Laboratory (409) 845-1500.**

(continued from page 45)

faucets, drain, soap, towel; and exiting. . . . Sixty percent of the "Wheelchair Users" and slightly more than 20 percent of the "Other Prostheses" group were unable to get into [a conventional bathtub. Many from the latter group, however, could use] the Comfort Bath. Slightly more than 50 percent of the "Wheelchair Users" still had difficulty entering this product.

The shower was the bathing system offering the greatest degree of independence to the subjects in this research study. More than 60 percent of the "Wheelchair Users", [and] more than 90 percent of the "Other Prostheses" group . . . were successful in entering the shower.

Bathtub

The bathtub, as it exists today, is not a universally designed product. While there are new product designs emerging, they still have limitations for individuals with varying abilities. Although many people enjoy the opportunity to soak in the tub, a shower has greater accessibility. If a bathtub is used it should have a 30″ × 60″ minimum clear floor space parallel to it. The tub should have a flat rim with a hand grip on the outside and a height of 16″ to 20″ that is continuous with a built-in seat at one end. The seat should be 18″ deep.

The tub should have a non-slip surface and a tub/shower enclosure without tracks on the rim. A shower curtain is not recommended because it will not support someone if they attempt to use it for support. Likewise, tempered glass doors should be avoided because of their inherent dangers.

The tub controls should be 15″ in front of the seat at a height 28″ above the floor. Controls that are reachable from both within and outside of the tub would be best, but this may only be accomplished through a dual set of controls, which could double the cost.

The grab bars should be located at two levels parallel with the rim of the tub, 5½″ above the rim and 40″ above the floor. A vertical grab bar, which is important for pulling up, should be located at the end closest to the seat position and at the end near the shower controls.

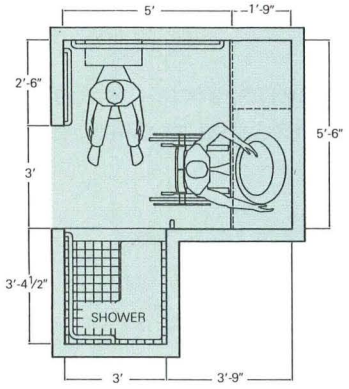


FIGURE 2, BATHROOM PLAN

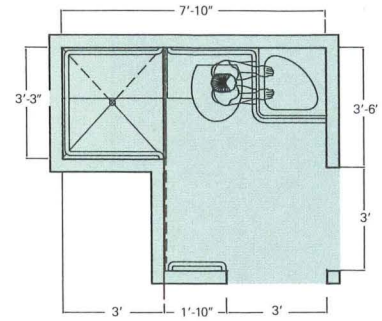


FIGURE 3, BATHROOM PLAN

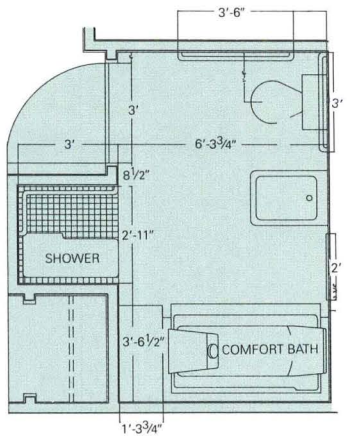


FIGURE 4, BATHROOM PLAN, STANDARD BATHROOM WITH COMFORT BATHTUB

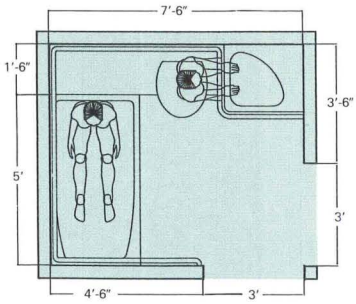


FIGURE 5, BATHROOM PLAN, EXPERIMENTAL BATHROOM WITH CONVENTIONAL BATHTUB

Shower

The ideal shower will not have a threshold and will have a base consistent with the floor of the room. Many European bathrooms are built on the "wet room" concept and incorporate a shower area into the bathroom that is continuous with the floor of the room. A drain is placed in the floor which is sloped slightly towards it. The shower curtain is mounted on a track that pulls around the shower area. The floor throughout the bathroom is generally made of carborundum or grit face tile to reduce the potential for slipping. A small gutter may separate the shower area from the rest of the room, but it should be less than ½″ in depth or width.

The traditional shower stall should be 36″ × 36″ or 30″ × 60″. The 36″ × 36″ shower evaluated in [our] study was well received by the participants. . . . A fold-down seat would be preferred to a fixed seat in the 36″ × 36″ shower to accommodate the preferences of a broader range of individuals.

A hand-held shower head should be mounted on the wall opposite the seat in the 36″ square shower and should be adjustable from a height of 42″ to 72″ above the floor. The controls should be mounted at a height of 42″ above the floor or within a range of 38″ to 48″. The controls should be mounted on the side wall in the 60″ shower. Again, it would be best if the controls were accessible from outside as well as inside the shower. ■

Residential Access: Criteria for Designing Accessible Residential Environments *by Margaret A. Wylde, Ph.D. and Adrian Baron-Robbins at the Institute for Technology Development, will soon be published. The Institute is in Oxford, Miss., (601) 234-0158.*

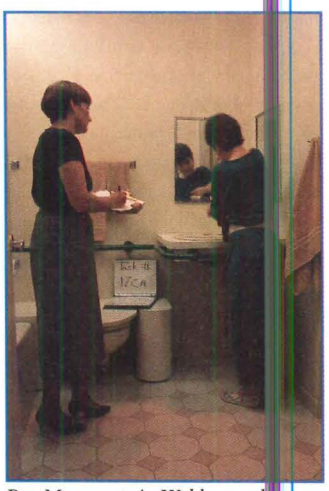
Toilets and Lavatories/Vanities: A Checklist

Toilet

- Should be wall-mounted.
- Best if neutrally handed.
- Located 18″ on center to a side wall or other fixture.
- Minimum floorspace of 30″ × 38″ available for approach.
- Seat height of 17″ to 19″.
- Flush controls on open or wide-side of toilet, 18″ to 44″ from floor.
- Grab bar at the back of the toilet, 6″ from wall, 36″ in length, at a height of 33″ to 36″.
- Grab bar on side of toilet maximum of 12″ from back wall extending minimum of 42″ in length.

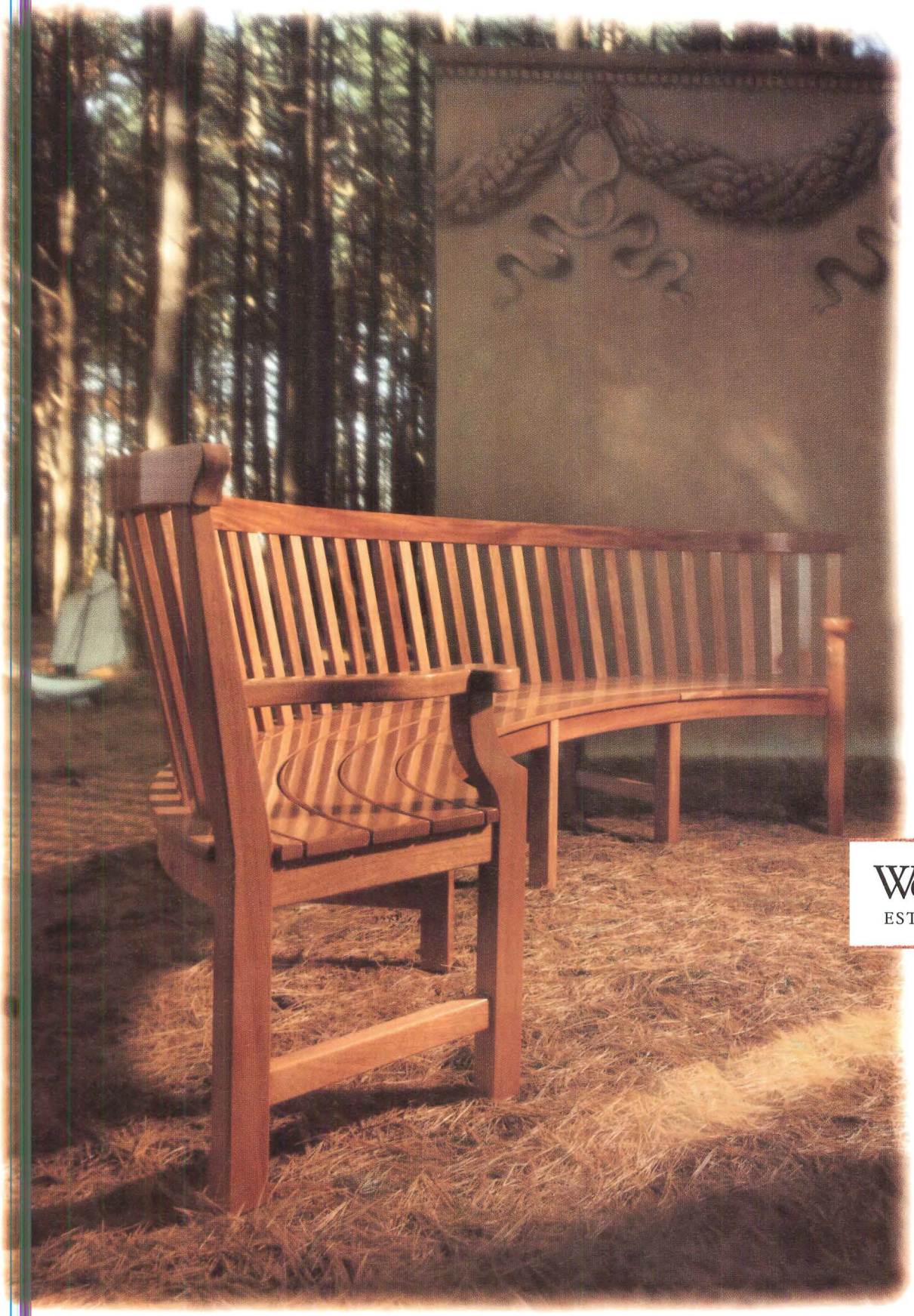
Lavatory/vanity

- Lavatory wall mounted at a height of 32″ to 34″.
- Depth of vanity between 17″ and 22″.
- Seating at vanity, with minimum knee space 27″ wide, best if more than 32″.
- Clear floor space should be 30″ x 48″, with not more than 19″ under the vanity.
- Floor finished to the wall.
- Sink depth of 4″, with drain at rear of bowl.
- A sink spigot 4″ clear of obstruction, 4″ above rim.



Dr. Margaret A. Wylde watches a study participant use a sink in one of Institute for Technology Development's prototypical bathrooms.

The Weatherend Story.



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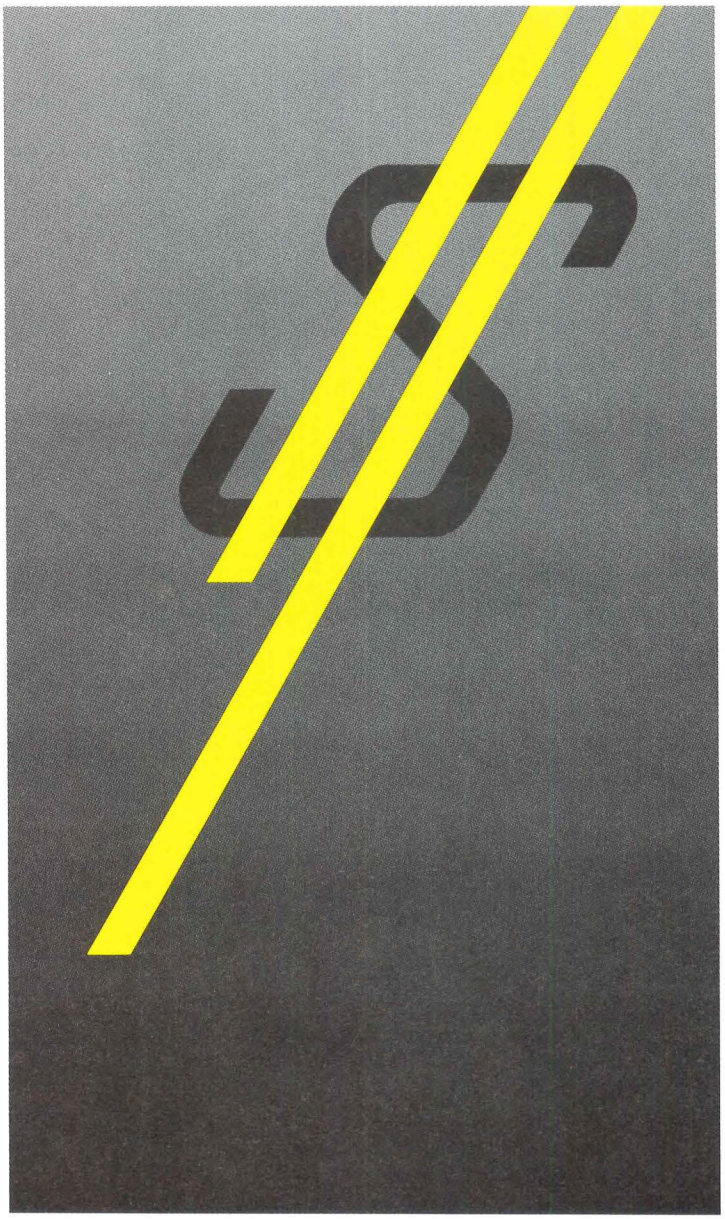

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Practice

Norman Coplan discusses a recent case in which an interior designer challenges architectural licensing.

Law: Licensing Interior Designers

In several states interior designers are seeking the status of a licensed or certified profession. Many architects believe that such a development will open the door to infringement upon their profession and result in the practice of certain aspects of architecture by unlicensed and incompetent persons. Complicating this issue is the fact that there is no clear or accepted definition as to what constitutes interior design, nor is there any clear demarcation between interior design and architecture.

In Oklahoma this conflict was reflected in the recent case of *Beco, Inc. v. the City of Tulsa and State of Oklahoma*. In that case the plaintiff was in the business of providing nonstructural remodeling services within commercial buildings. The design services provided by the plaintiff did not involve any structural remodeling but were confined to the rearrangement of space within a building. Neither the building's roof nor its foundation was to be altered, and the remodeling did not require the alteration or modification of any of the stairwells or elevater shafts of the building. It was the position of the City of Tulsa, however, that the plans for the work in question required an architect's seal.

The applicable building code provided "that all design for . . . alterations . . . involving professional architectural or engineering shall be prepared by professional architects or engineers." Under the prevailing law, the work designed by the plaintiff required a building permit based upon the submission of plans and specifications. The act governing the practice of architecture defined an architect as a person whose profession or occupation consists of rendering services or creative work that required architectural education, training, and experience, including the preparation of drawings, specifications, and related documents in connection with the construction of a building or alterations to one. The practice of architecture also is defined under the statute as rendering design services "in connection with the design and construction of items relating to building code requirements." Accordingly, it was the position of the City of Tulsa that the preparation of plans and specifications for alterations to a commercial building, even if the work did not involve structural change, constituted the practice of architecture under the prevailing law.

In seeking an injunction against the City of Tulsa and the Board of Governors of the Licensed Architects and Landscape Architects of Oklahoma, the plaintiff argued that, since its services only involved nonstructural remodeling, it did not engage in the practice of architecture within the meaning of the Act, that the word "alteration" as used in the applicable statute meant only structural alteration, and that the moving of partition walls does not constitute an alteration under that Act.

In response, the City of Tulsa contended that the practice of architecture constitutes the rendering of services in connection with design and construction of any item that involves building code requirements and that the preparation of drawings, specifications, and related documents in connection with the construction or alteration of buildings fell into the larger class of activities that make up the services and work of an architect.

The Oklahoma Trial Court concluded that where a practitioner of interior design and space planning merely relocates nonloadbearing walls to accommodate the needs of his patrons, such activity may not involve the practice of architecture, even though a building permit might be required by the building code. However, stated the Court, the project may involve conduct that does constitute the practice of architecture if certain articles of the code become involved. The Court concluded that it was necessary to develop the facts of the specific project fully determine whether the particular interior design involved the practice of architecture. Accordingly, it denied the request for an injunction.

It is obvious that if a design involves structural integrity, it falls within the area restricted to architects or engineers. However, there are many other aspects of design that may affect the health and safety of the public. To the extent that the sole province of architects or engineers to deal with these areas is diluted by the expansion of interior design practice, it would appear that the public's interest may be jeopardized. For the purpose of licensing, therefore, it is necessary that any definition of interior design be restricted to preclude the involvement of nonprofessionals in areas involving the public safety or health. **Norman Coplan** ■

The author is a New York attorney in the firm of Bernstein, Weiss, Coplan, Weinstein & Lake.

Practice Points

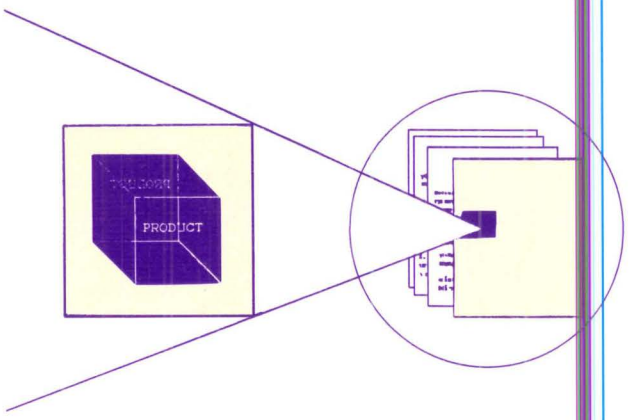
Housing starts – both single- and multi-family – were down by approximately 8 percent in 1989 according to the AAMA Industry Statistical Review and Forecast. The study projects that U.S. single-family starts will remain at their current level, while multi-family starts are expected to decline another 3.5 percent. For information call (708) 699-7310.

Good communication is key to reducing high turnover rates and employee dissatisfaction. Mark Zweig & Associates, consultants to the design profession in Natick, Massachusetts, found in a survey of firms that many employees could benefit from a formal process of one-on-one communication with the highest level of management, outside of the normal performance appraisal.

Raising fees is probably good for business. Architecture firms may find that even small increases in fees can head off the frustration of rushed work, errors, unfinished tasks, and low salaries. A study conducted by the Guidelines Letter found that higher fees are unlikely to hurt business, because few clients base their decisions on architects' fees. For more information call (800) 634-7779 or (415) 254-9393.

The AIA has recently released CAD Layer Guidelines: Recommended Designations for Architecture, Engineering, and Facility Management Computer-Aided Design. The book sets forth uniform layering protocols for architects, engineers, and facility managers. To order call (800) 242-4140.

Michael Chusid examines guide specifications published by building product manufacturers.



Products: Guide Specifications

One of the most useful pieces of product literature an architect can receive from a building product manufacturer is a well written guide specification for the product. Along with product data sheets and suggested details, guide specifications can simplify the process of evaluating a product and incorporating it into a project's construction documents.

Proprietary guide specifications fill a need not satisfied by commercially available master guide specifications such as *Spectext* or *Masterspec* or by an architectural firm's in-house master specification. While these standard references are sufficient for most projects, they do not always provide an adequate basis for specifying a particular manufacturer's product. Some master guide specifications try to generalize about products manufactured by several suppliers, requiring only the lowest common denominator of features and performance. In the process, they become "generications" instead of "specifications." Furthermore, there are far more products available than can be included in even the most comprehensive master guide specification, and new products are introduced faster than master guide specifications can be up-dated.

For example, use of preformed metal roofs is rapidly increasing. Yet there are few standards that apply to the diversity of metal roofing systems. *Masterspec's* Section 07410 – Preformed Roofing and Siding is so broadly written that it requires considerable effort to edit it for a particular product or product type. *Spectext,* perhaps realizing the complexity of the product category, does not include a section for preformed metal roofing. For specifiers who lack either the time or inclination to thoroughly research and write a metal roofing specification from scratch, a manufacturer's guide specification can serve as the basis for preparing a project manual, helping a specifier to save time and avoid errors. While the availability of a guide specification is not a reason an architect would select a product, the lack of one could be a reason for an architect to decide not to use a product. Yet despite the importance of guide specifications, an informal survey of them shows that about half are defective.

Product vs. Guide Specifications

Many manufacturers fail to recognize that "product specifications" is not the same as "guide specifications." The former is a manufacturer's description of a product he would like to sell and is written in the supplier's voice. A guide specification, on the other hand, does not describe a product so much as it does a set of requirements for the building into which the product is to be incorporated; it must be written in the architect's voice. In addition to product information, a guide specification must suggest specifications for the administration and execution of the work, related materials, and cross-references to other specification sections and the drawings.

If a guide specification is to be useful to an architect, it must be written in accordance with the Construction Specifications Institute's principles and formats. Yet many manufacturers display a lack of familiarity with CSI's precepts. For example, CSI recommends that the name of a manufacturer or brand be listed only once in a specification in order to avoid repetition. Yet some manufacturers attempt to insert their name and brand into every paragraph.

Guide specifications should be flexible and easy to edit so they can be used with a variety of building types and project constraints. The guide should also identify product options and other decisions that the specifier must make. By providing notes explaining product options and how to coordinate a product with related work, a guide specification can take a specifier step by step through the decision-making process appropriate to a product.

Liability

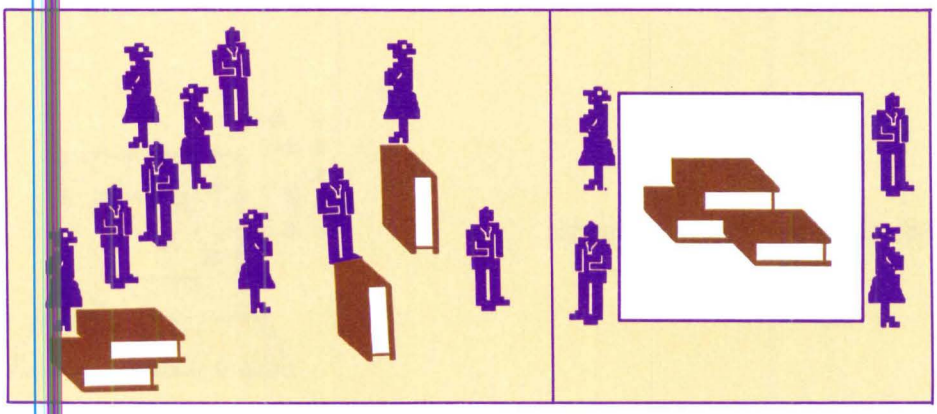
Guide specifications are usually written to reduce the manufacturer's product liability. But a good guide should also protect the manufacturer's customers from professional liability and construction claims by suggesting specifications that anticipate and avoid potential problems. For example, a guide specification for Fabtec's CURA Adjustable Spacer for Metal Reroofing provides a framework within which a specifier can assign responsibility for coordinating each aspect of the product with related work and the existing roof deck. While following a manufacturer's recommendations may somewhat reduce a design professional's liability, architects should remember that they must determine the suitability of a product and edit a guide specification to satisfy project requirements. And, as with all product literature, an architect should check to see if a guide specification is still current before using it.

By fully specifying the characteristics that distinguish a product from its competition, many manufacturers hope to make specifications for their product resistant to substitutions. But manufacturers should avoid specifying minor product features or performance requirements just for the purpose of blocking the competition. A better approach is demonstrated in a monumental window guide specification published by ModuLine Windows Inc. Its specification provides a fair basis for specifying monumental windows and even names two competitors as acceptable substiutions. ModuLine's strategy is that it is far better to compete against firms with similar quality and pricing than it is to compete against substandard substitutions.

Since most architects use word processing to prepare specifications, manufacturers are increasingly distributing guide specifications on computer diskettes. A few companies are even experimenting with "expert systems" that partially edit or assemble a guide specification based on the products selected for a project or a specifier's responses to a checklist of questions. CSI now distributes a diskette library with SpecData and proprietary Manu-Spec guide specifications. Eventually, computerized specification writing systems will include proprietary guide specification sections.

Michael T. Chusid ■

The author is a marketing and architectural consultant to building product manufacturers and a Certified Construction Specifier.



Peter Piven and **Gregory Shea** of the Coxe Group present a case study of how a firm regained its purpose.

Management: Redirecting a Firm

Sometimes a firm can lose direction or forget its underlying reason for being. In such a situation, the best strategic plan can be for every person in the firm to look into their own hearts, and the most powerful act of leadership can be to fully support such self-evaluation. This case study shows how one firm did that.

Background

Founded in the mid-1960s, this firm achieved its start and early success in the adaptive reuse of older buildings and gradually broadened its markets to include commercial, governmental and institutional buildings, and interior design. For most of its early history, the firm hovered at about 15 persons, although it grew to a high of 45 and dropped back to 25 in 1987. A loosely knit committee (with one principal as the full-time CEO) managed the firm for the owners; 75 percent of the firm was owned by the three founders.

The Issues

In October 1987, the CEO requested our assistance in developing a five-year plan for the firm. Initial investigation identified several important issues.

1. The firm was drifting. People at all levels spoke of disarray and lack of direction.
2. Senior partners had very low amounts of billable time, an average of 21 percent.
3. Market mix had changed dramatically toward developer-oriented commercial work, with the result that the previous strength of the firm (institutional work) amounted to less than 25 percent of the firm's fee volume.
4. People were very concerned about the future, their own and the firm's.
5. Energy levels were very low for nearly everyone, especially senior partners.
6. Intense competition existed among several of the "junior partners" to stake out future leadership positions.

Everyone agreed the firm needed a new direction, both in terms of the work and how the office would operate. The question was how to pick a direction. Before such a direction could be established, however, it became clear that more critical issues had to be addressed.

1. The senior partners were all approximately 50 years old, a time of personal adjustment and redirection for many.
2. The senior partners had each experienced some type of personal or professional loss in the preceding two years.
3. In embracing the razzle-dazzle commercial market, the firm had unwittingly disconnected from it own past. As one person said, "We lost the track." And another, "We are not sure of who we are."

Professionally and personally, the people in this firm had lost something — just as the partners had all lost something individually in their own lives. In a very real sense, the firm was in a condition of psychological depression and, just as often happens with individuals in this condition, a feeling of unexpressed anger came out in the form of a collective inability to take any action. Psychologists recognize that depression is a signal not only that something is out of line, but that something else is emerging.

Even as the firm seemed to be slipping away, losing itself, something positive was trying to spring forth. That something was linked to the past, to what was missing from the firm, and to what was depressing the people in the firm. Rebirth or finding a direction in this firm meant discovering what had been lost.

Actions Taken

The senior and junior partners agreed, in a retreat, to take stock of themselves. They described to each other when, individually and collectively, they had each last felt good about the firm. They discussed what had made it good and what had been lost. Most partners agreed as they discussed these points, and one could feel energy flow into the room. Some of the energy was anger over the loss, some relief to be grieving, much of it came from a strong desire to reconnect with the former firm, to bring it back to life. The flow continued as the discussion turned to what principles should guide the firm and then how to structure the firm. The participants agreed:

1. To return to historic markets.
2. To bring the senior principals back into a more intense involvement with their projects and project teams.

The rest amounted, relatively speaking, to details. The ranking members of the firm reconnected with each other and with their emotional bond to their work and their firm.

Subsequent Events

Two junior members withdrew from the firm and a third returned. The firm struggled with major leadership issues for the next several months. It changed to a more democratic, less hierarchical, board-governed organization with no CEO. Ownership expanded to nine people, all of whom serve on a board that meets regularly.

After an initial drop in revenues and staff, the firm climbed back up to its current level of 25. A reduction in commercial work has been offset by an increase in institutional work, the firm's historic strength.

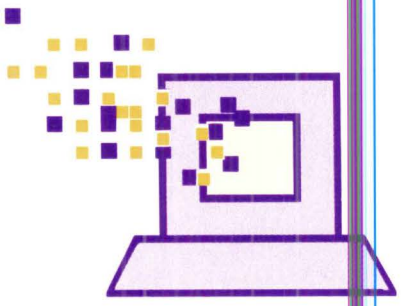
The principals are delighted with the results and their overall situation. The senior partners have fared particularly well. The former CEO has returned to managing projects actively and is enjoying the firm and himself. Another senior partner is also "back into the project harness" and says he has more energy and is having more fun. The third senior partner has assumed the responsibility of "chief" in the more democratic structure.

A real hazard in any firm is the forgetting of underlying reasons for being in practice. Experimentation with new market mixes and organizational forms, while providing the spirit of variety and growth, can disconnect heart and hand. As this case shows, the practitioner and the person do best when they feel most connected to each other and to their work.

Gregory Shea, Peter Piven ■

The authors are consultants with the Coxe Group in Philadelphia, the largest consulting organization specializing exclusively in the management of architectural, engineering, interior design, planning, and other professional design firms.

Cristina Del Sesto evaluates the various code-related databases now available.



Computers: Electronic Code Information

Lawyers use Lexus. Librarians use Nexus. But what do architects and builders use to research the information that is essential to their work? The new and expanding world of electronic building code services claim they have the answer.

Manually researching building codes is time consuming, expensive, and a bore. Understanding cryptic boiler-plate language, deciphering charts, and cross-referencing massive amounts of information are among the tasks involved in seeking out the code criteria for design. And such work must be done for each and every project.

Frustration with this process proved to be a catalyst for Dennis Brown, an architect in Washington, who has led the way in making former methods of building code research archaic. "It's highly repetitive for architects to continually be spending time researching building codes," Brown says, "and I thought to myself: 'There's got to be a better way.' " So he and a partner founded Codeworks.

Basically the goal is to have all information formerly found only in codebooks available on computer. Codeworks provides information for specific code requests — electronicaly (via modem) or in typed report format — on building codes and standards for the design and construction industry nationwide. To achieve this, it offers BOCA, ICBO, SBCCI jurisdictional-specific information for over 25 states.

Accessible from a personal computer, Codeworks' disadvantage is that it's not interactive. Clients pay a yearly subscriber fee of $195 plus additional charges for each specific code search request. Reports range from $35 to $475 to produce.

Architech, a Chillicothe, Illinois, firm that produces the Codebuster, has the same goal in mind. The major difference between Codeworks and Codebuster is that Codeworks is a database that resides on a mainframe computer in Washington, D.C., while Codebuster is mail-ordered software for PC computers.

"Code research is like cost estimating," says Henry Truitt, President of Architech, "An architect should do it but he doesn't have to. Frankly, there's no way, without the aid of a computer, that an architect can sit down and ensure that his or her project passes the 5000 potential violations in a single code."

Codebuster covers the BOCA, Standard Building Code, and Southern Building Code. It costs $495 for the Codebuster program, plus an additional $495 for each code database. It operates in a question mode in which the user indicates what is not involved in his or her project, rather than what is included. The computer then reports back whether or not the project complies with the code. The Codebuster database does not include actual code text. Instead the user deals with code issues.

Codebuster and Codeworks have increased architects' productivity and reduced the risk of liability. But Brown and Truitt are quick to point out that Codeworks and Codebuster do not relieve architects and builders of their responsibilities. "We're not a panacea for what a designer or builder must ultimately produce," Brown says. "We provide a roadmap for locating the information. The rest is up to them."

Three other building code mail-order programs are also on the market. The only drawback is they are somewhat more limited than Codeworks and Codebuster.

Just a year ago, Barry Isakson, founder of Architectronics in Redondo Beach, California, created Building Code Analyst. It analyzes buildings for compliance with the Uniform Building Code, which is predominantly used in the Western United States, but is the most commonly used model code throughout the world. Among its features are performing "what-if" scenarios during the design phases of a project to determine the impact of code requirements on design decisions. While Code Analyst software can have broad application, it is restricted to use on the Macintosh. The program costs $245.

The Building Code Advisor also offers a program with the Uniform Building Code for IBM or compatible computers. It is structured so that detailed analysis can be done with basic planning and design information so that decisions can be made regarding building code issues before commitment to a design. The program costs $395 and comes with a 60-day unconditional guarantee.

Then there's Intermedia's NY Code. Stephen Cotler, President, says NY Code can be used on IBM PC's or compatible computers but, at this point, it only offers New York State Uniform Fire Prevention and Building Code (excluding New York City). The program acts as a thorough code review, asking the user all appropriate questions. It costs $695 and includes a first-year update service.

It used to be, not so long ago, that architects or builders interested in researching building codes spent endless hours in a manual search process: flipping through pages of codebooks, documenting and finally analyzing their findings. "You could never be certain when you did a search that you were getting all the information pertinent to the subject," Truitt says. Electronic building code services have revolutionized the system.

Cristina Del Sesto ■

The author is a freelance writer living in Washington, D.C.

Addresses of electronic building code services:

1. Codeworks Corporation
   1225 Nineteenth Street, N.W.,
   Suite 750
   Washington, D.C. 20036
   202-778-6300
2. Codebuster
   Architech
   P.O. Drawer 152
   Chillicothe, Ill. 61523
   309-274-8187
3. Building Code Analyst
   Architectronics
   330 The Villog #109
   Redondo Beach, Calif. 90277
   213-376-7054
4. The Building Code Advisor
   A & E Expert Systems
   P.O. Box 31205
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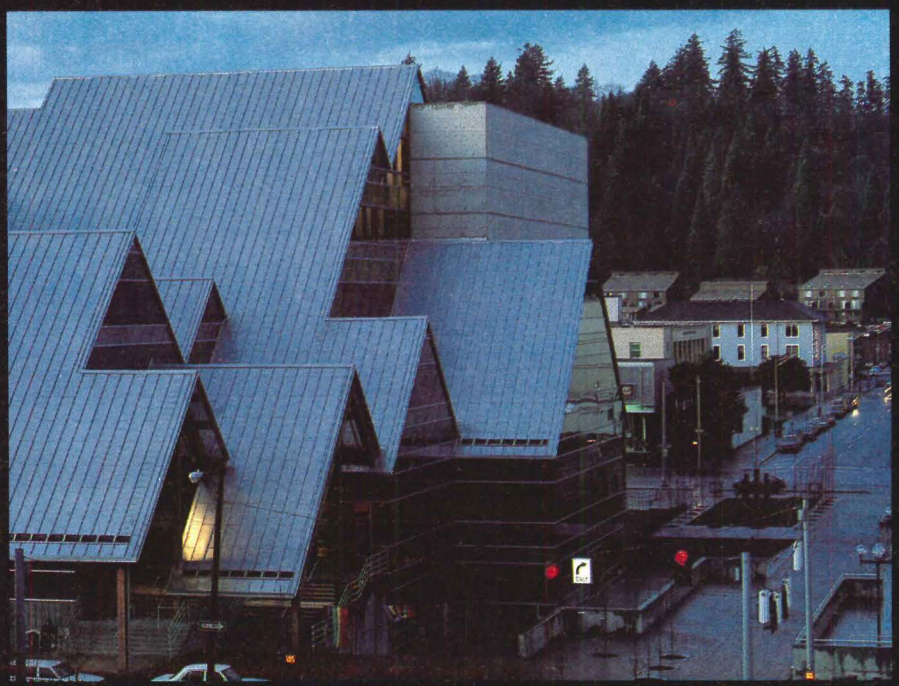

Hult Center for the Performing Arts, Eugene, Oregon.
Architects: Hardy, Holzman, Pfeiffer Associates, New York, NY.
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Circle No. 316

Young Architects

We were surprised – and very pleased – by the response to P/A's call for submissions to this, our second Young Architects issue. 495 portfolios came in, compared to approximately 350 submitted to the first issue of June 1987.

This year, P/A had opened the gates also to foreign architects and designers. And while the bulk of work we reviewed originated in the U.S., there were a good number of portfolios from Argentina, Belgium, Canada, Finland, Greece, Israel, Italy, Japan, Mexico, New Zealand, and Venezuela. As it happens, the representation of foreign works in the issue is proportionate to their overall ratio.

In another departure from the previous issue, this time unbuilt designs, albeit for verifiable clients, were eligible. Of these submissions, we mostly elected to feature designers with a substantial body of work, which was of consistent quality. On occasion, however, we made exceptions for architects with few projects whose design philosophies impressed us with their cogence and coherence. This we did with a view to the contribution such individuals made to the dialogue.

Our selection process was quite straightforward: Each portfolio was reviewed by at least three editors in the initial rounds; the 80 or so that made the final round were reviewed in depth by all the editors as a group. Out of these came our lineup of 23 firms in the design section and a dozen more in the category of alternative careers.

We were struck by the high quality of the presentations as a whole. And it wasn't just surface glitz. Many works stood up to scrutiny and revealed exhilarating artistic and intellectual vigor. (For further comments on the body of submissions, see Editors' Roundtable in Perspectives, p. 97.)

As the review process drew to a close, our frustration grew: Clearly there was more good work than we could possibly publish in one issue. We fully intend to show more of it in the months to come.

Ziva Freiman ■

Maryann Thompson, Charles Rose
Thompson & Rose Architects
Cambridge, Massachusetts

Maryann Thompson, Charles Rose

"We have to be responsible as architects, not just aesthetically, but environmentally."

Maryann Thompson
Age: *29.*
Education: *AB Architecture, Princeton, 1983; MArch, MLArch, Harvard, 1987.*

Charles Rose
Age: *30*
Education: *AB Architecture, Princeton, 1983; MArch, Harvard, 1987.*

Thompson & Rose
Experience: *consultants to Michael Van Valkenburgh Associates, formed own firm in 1987.*
Influences: *Le Corbusier, John Ruskin, Georgia O'Keefe, Gunnar Asplund, Zach Stewart.*

Project: *The Hartsbrook Waldorf School, Hadley, Massachusetts.*
Architects: *Thompson & Rose Architects, Cambridge, Massachusetts (Maryann Thompson, Charles Rose, principals in charge; Scott Rivers, Jeff Scofield, Thomas Rankin, Clark Thiel, Alessandra Dini, Robert White, Tim Barner, Laura Solano, production staff).*
Client: *The Hartsbrook Waldorf School (Arthur Zajonc, Ekkehard Piening, Sabina Johns, Candace Kelly, building committee).*
Consultants: *Frederick Dzialo, consulting engineer; Stephen Jablonski, Metcalf Thorne Inc., consulting architect.*
General Contractor: *Hoogstraten Builders, General Contractor/Hoogstraten Builders, Inc. (John Hoogstraten, principal in charge); Armand Rudy, volunteer coordinator for the building; Nick Dines, volunteer coordinator for the landscape.*

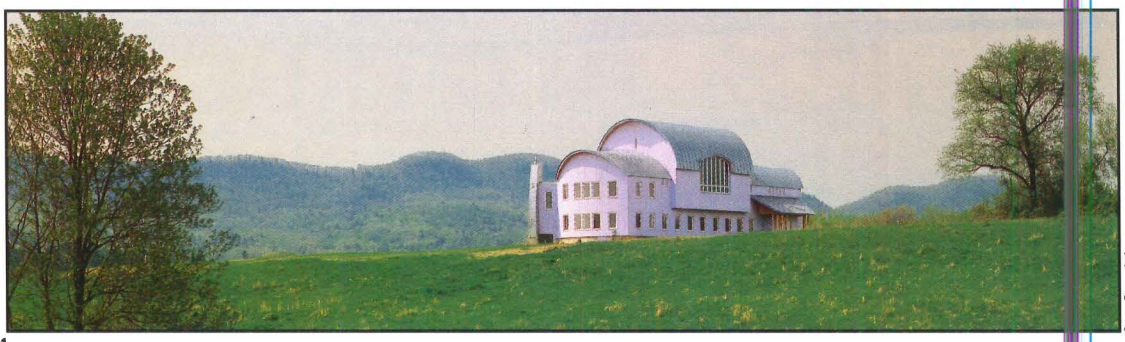
Thompson & Rose and the Hartsbrook Waldorf School, the firm's first commission, were meant for each other. Both the designers and their clients believe in anthroposophy, a philosophy based on the teachings of Rudolf Steiner, which claims that we can come to know the spiritual world through education and self-discipline. For Maryann Thompson and Charles Rose, it means buildings that are environmentally sensitive, contextually responsive, and intuitively expressive.

"We have to be responsible as architects," says Rose, "not just aesthetically, but environmentally." The school has passive solar features, uses nontoxic products such as citrus-based stains, employs local materials such as regionally quarried stone, and eschews elements that can cause larger environmental damage.

Thompson & Rose's sense of aesthetic responsibility emerges in their subtle adjustment of the school to its site. The several buildings planned for the school, of which this is the first, will be inflected toward each other, "as if in a dialogue," says Thompson, forming an informal court protected from the winds.

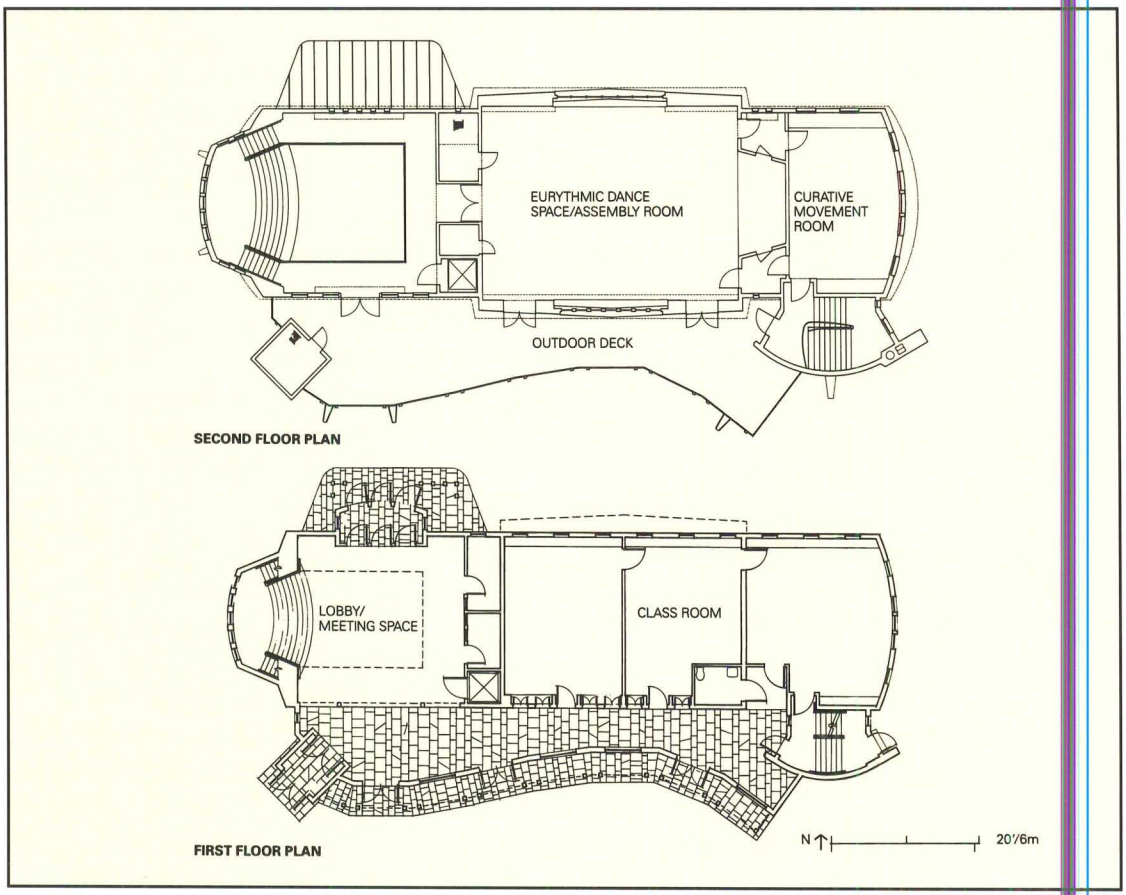
Such dialogue also occurs between the building's forms and its context. "The building is very sculptural," says Thompson, "but it also refers to the barns in the area and the site's rolling quality."

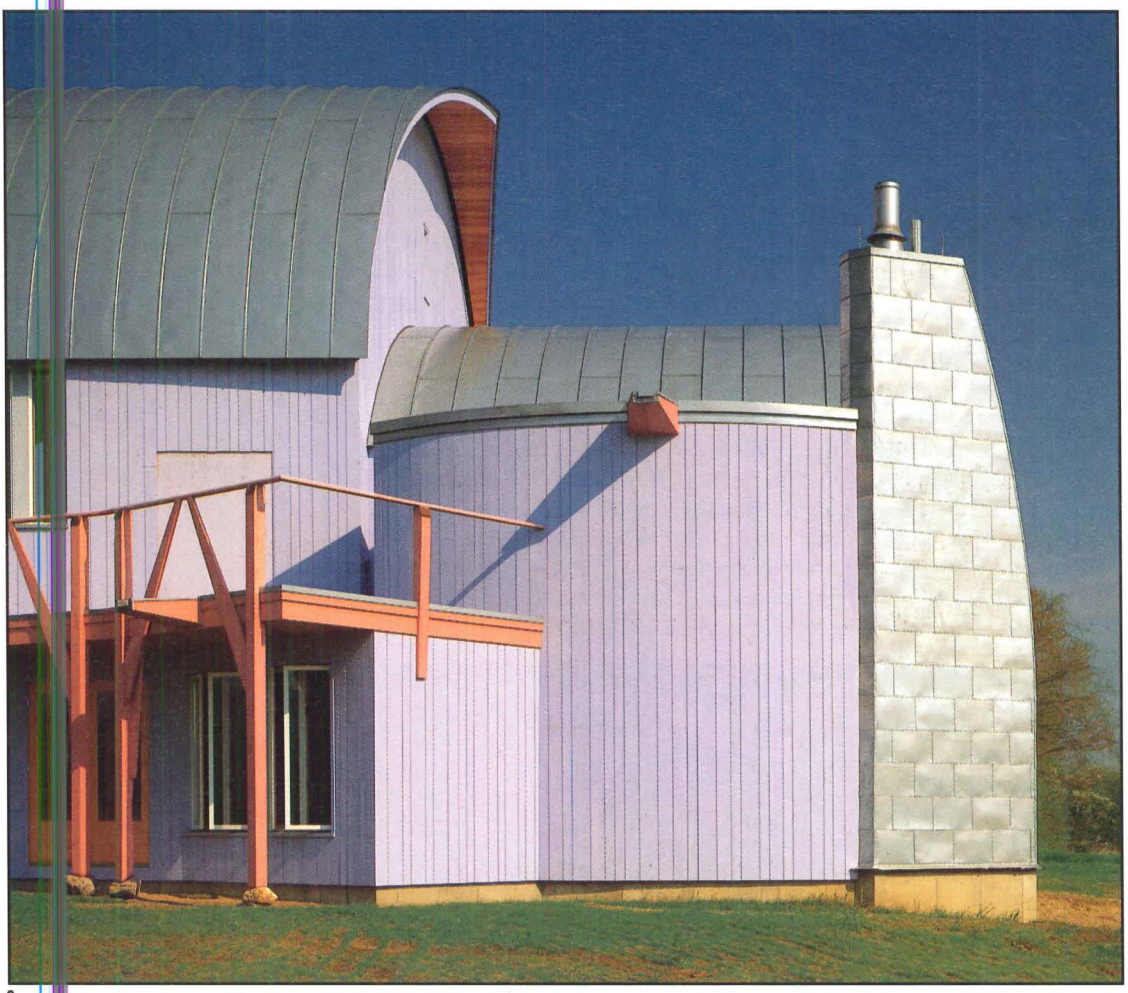
The first building on the Hartsbrook Waldorf School campus (1) stands at the brow of a hill on a former dairy farm. The curved roof of the building recalls the rolling forms of the land and the adjacent hills, as well as the farm buildings still on the site. The first floor has a lobby, sunspace, and classrooms. The second floor includes an assembly space.



Steve Rosenthal

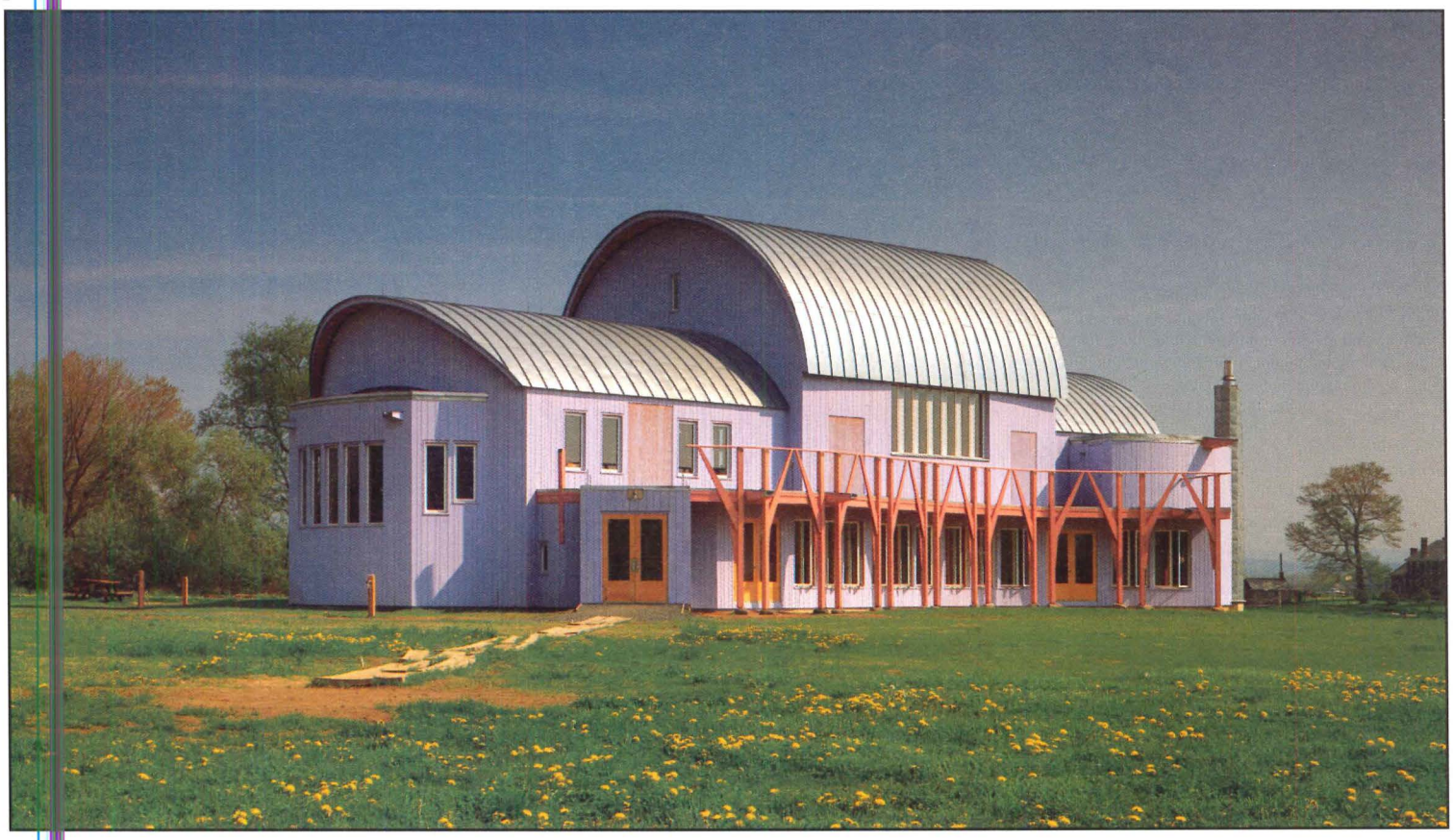
1





2

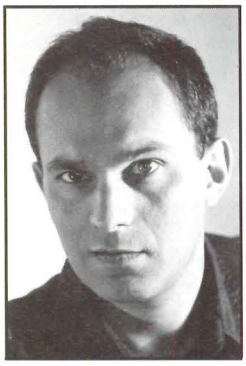
The school building has a colonnade that will eventually connect to other buildings planned for the complex, creating a courtyard sheltered from the wind and open to the views (3). Based upon ideas of anthroposophy, the building's sweeping curves and staccato rhythms attempt to express the functions and the activities of the students within. Response to the cycles of nature also plays an important role in this philosophy, prompting the designers to use, for example, passive solar techniques, local materials, and nontoxic stains. The lavendar exterior stain has an undercoat of green, which causes the wall to change color over the course of a day (2).



3

Photos: Steve Rosenthal

Lucas Rios
Lucas Rios, Architect
Los Angeles



Lucas Rios

"I felt free to concentrate on the search for an abstract expression dealing only with the qualities of the space and the properties of the materials I was working with."

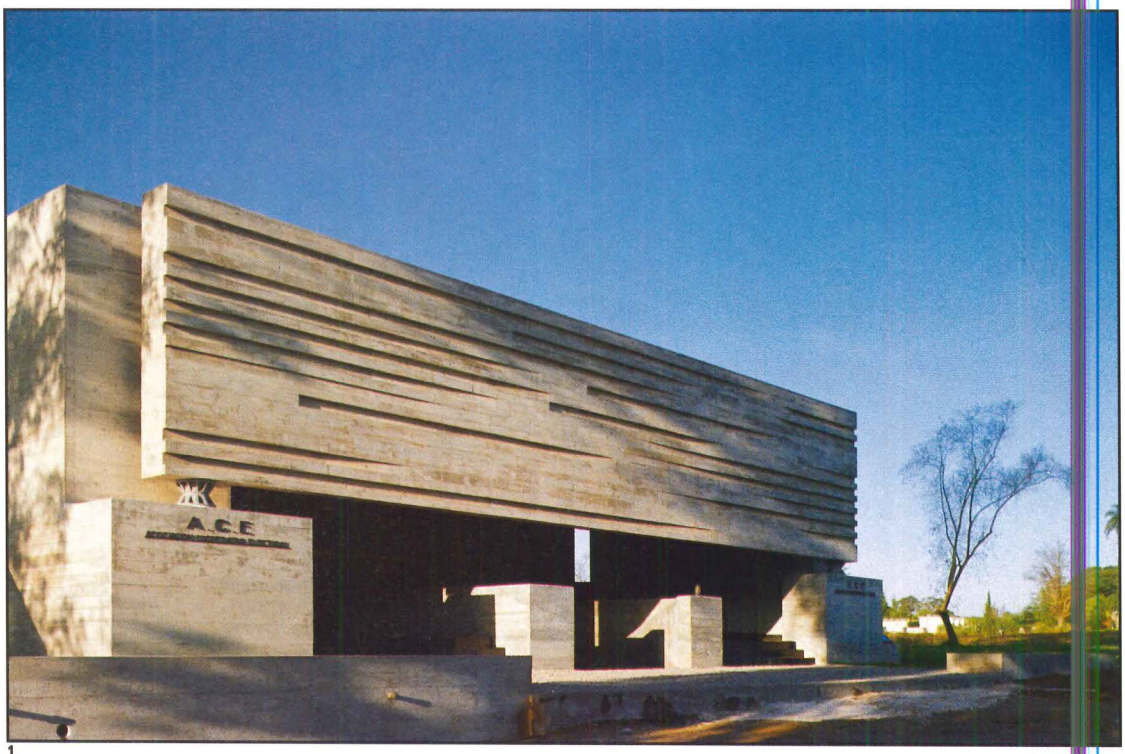
Age: *34*
Education: *University of Montevideo, Uruguay, Architect, 1980; New York University (film-making school), 1987.*
Experience: *independent practice and in partnership with Rios-Canale-Canale Architects (Uruguay); Eric Owen Moss, Architect.*
Influences: *Uruguayan architect Julio Villamajo, the writings of critic Reyner Banham.*

Project: *Mausoleum for the Employees of the Electoral Court.*
Architect: *Lucas Rios.*
Client: *A.C.E. (Electoral Court Cooperative).*
Consultants: *Daniel Rapetti & Scocoria, structural; Berger Engineers, mechanical.*

Lucas Rios feels that space, structure, and geometry – being the essentials of architecture – are capable of giving ample meaning to architecture. This in turn allows the architect to be responsible to both context and the public, "without the need of taking refuge in self-conscious allusions (historical or otherwise) or linguistic manipulations." Rios notes that since coming to Los Angeles, he has been "obsessed" with the differences, arising "not out of 'style' or 'language,' but out of the particular construction systems of the two countries." He describes it as "a shift from the heavy to the light, from the wet to the dry, and most important, from the relatively permanent to the transitory."

Of the mausoleum he designed in Montevideo, he says, "This structure provides a traditional burial space for the employees of a governmental agency. Since the workers do not share any particular religious or political belief, I felt free to concentrate [on] the search for an abstract expression dealing only with the qualities of the space and the properties of the materials I was working with (concrete, marble, and aluminum)." There is a strength and permanence to this structure that clearly derives from the types of materials commonly in use in Uruguay. Embodying at once a simple program and deeper meaning, it seems a fitting memorial.

The 9000-square-foot mausoleum is located in the North Cemetery in the city of Montevideo, Uruguay, surrounded by gardens and eucalyptus trees. At the entrance to the facility (1), visitors pass under a board-formed concrete screen wall to approach the columbaria lining the interior walls. Another level of vaults is found down the central stair, under the podium lined on three sides with pyramidal skylights (2).



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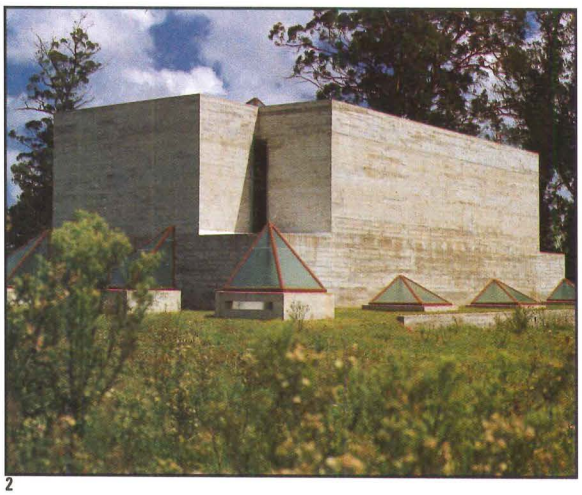

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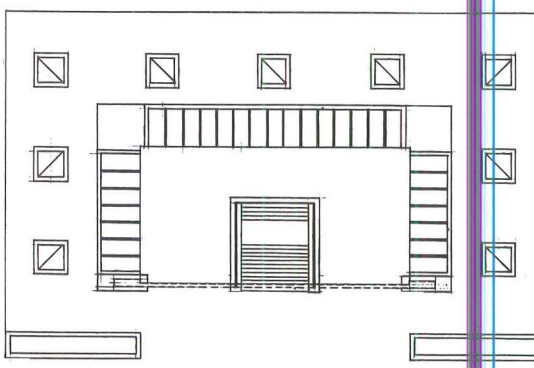
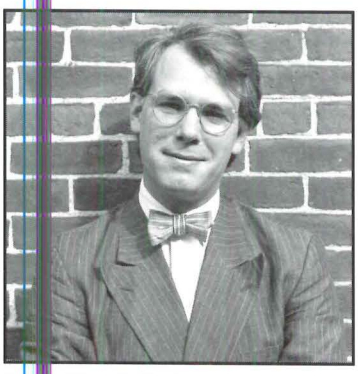


FIRST FLOOR PLAN

James Kimo Safford Griggs
KIMO
Somerville, Massachusetts



James Kimo Safford Griggs

"Ornament, craft, the arts and sculpture, more than building technology, define architecture."

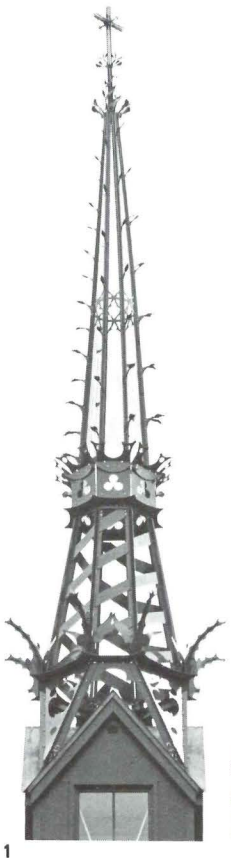
Age: *33.*
Education: *BA, Yale College, 1979; Architectural Association, London, England (attended 1981–1982); MArch, Yale, 1984.*
Experience: *worked for various architects including James Volney Righter, Boston, and Banwell, White & Arnold, Hanover, New Hampshire; started own firm in 1987; also teaches materials and methods at the Yale School of Architecture and has served as a visiting professor and invited critic at various architecture schools.*
Influences: *Kent Bloomer, Louis Sullivan, C.R. Ashbee, W.R. Lethaby, Jean Tijou, A.M. Calder.*

Project: *Studio for an artist.*
Architect: *KIMO.*
Client: *Louisa von Clemm.*
Consultants: *John Born & Associates, Structural.*

Kimo Griggs is crafting an architecture of optimism and delight in his office and workshop in Somerville. There he and his staff of four design buildings and craft the ornamentation and furniture at the same time. Working in a limited design-build capacity, he has a chance to keep his hands in the crafting of the finished project, and can assure that his ornament is included. Griggs suspects that working both on paper and in the shop on a daily basis is the dream of many architects. "It is a challenging but highly rewarding way to work."

Griggs was educated as a metalsmith and a sculptor before he went to the AA in London and the Yale School of Architecture. "I could imagine being very happy to be a metalsmith still, but I found the issues surrounding sculpture limiting." Griggs sees architecture as context or frame for art and ornament: "Ornament, craft, the arts and sculpture, more than building technology, define architecture." He is fascinated with Louis Sullivan's ability to build economically and then apply ornament to the building as a different agenda from the structure. Grigg's goal is to create an architecture that is accessible to people on the street without losing the elements that are important to architects.

Hand-forged and structural aluminum church spire with stainless steel hardware (1) built in collaboration with Kent Bloomer at the Church of Saint Therese, Wilson, N.C. The structure of the spire is reminiscent of the Gothic style, while the details are organic. A capital incorporating the geometry and image of a daffodil (2), crafted in the shop of KIMO, announces the entryway of a house in Guilford, Conn. A freestanding studio for an artist in Natick, Mass., is based on a New England barn. A tower facade is slightly anthropomorphic, and interior details (3, 4) represent a botanical theme.



James Kimo Griggs

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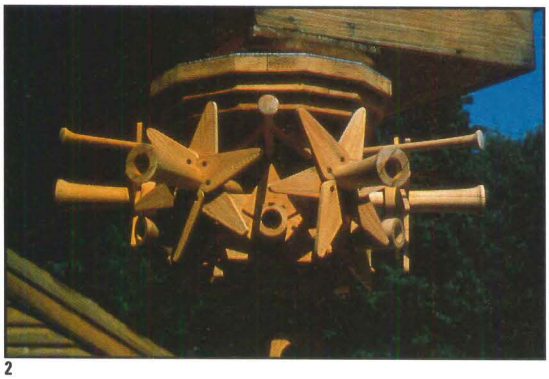

James Kimo Griggs

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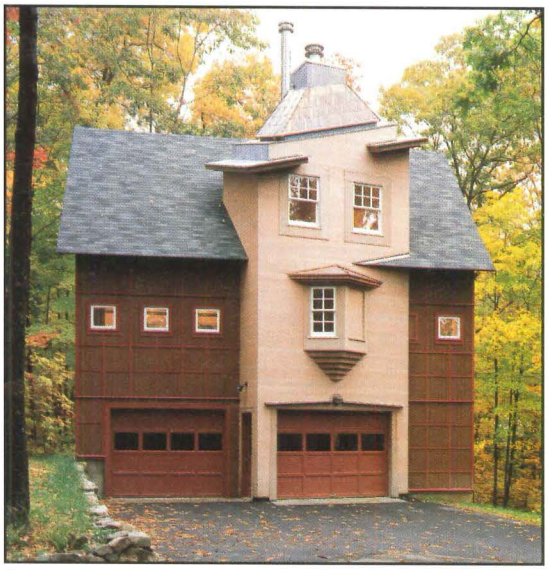
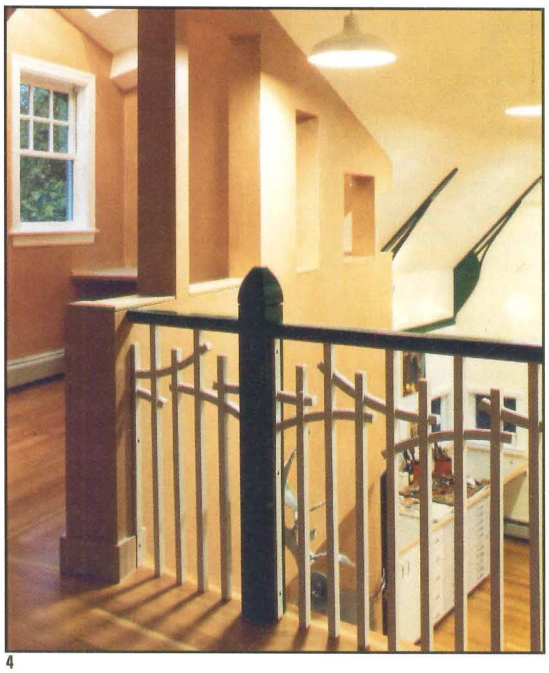


Clive Russ

3



Clive Russ

4

John Reagan
John Reagan Architect
Columbus, Ohio

John Reagan

"I got really frustrated with not seeing something through . . . In work like this, the details are what make or break the architecture."

Age: *32.*
Education: *BSArch., Ohio State, 1979; MArch., Columbia University, 1982.*
Experience: *Eisenman Robertson Architects, New York; Collins Uhl Hoisington Anderson Azmy, Princeton, New Jersey; Stephen Schwartz Architect, Columbus, Ohio; Assistant Professor (now Visiting Professor), Ohio State; opened own office in 1985.*
Influences: *1920s American garden suburbs, the Arts and Crafts tradition.*

Project: *Kensborough, Delaware County, Ohio.*
Architects: *John Reagan Architect, Columbus, Ohio (John Reagan, David Bullock, Jack Cleary, Scott Erdy, Robert Holland, Michael Suomi, Joseph Tanney, Mark Zabonik, project team).*
Client: *Ken Manning.*
Program: *60-unit residential community, with houses ranging from 2800 to 6000 sq ft, on 15 acres of a 1920s estate north of Columbus.*
Consultants: *Kinman Associates (landscape); Deka Engineering (structural); Roger Fields Associates (mechanical).*
General contractor: *Kensborough Master Builders.*

Most new architects, mired in working drawings and details, yearn for the chance to be at the head end of the design process. John Reagan found himself at the other end of the same problem as a young architect in New York: A talented designer, he was assigned to projects only through schematic designs. "I got really frustrated with not seeing something through. It was just like school." After leaving practice to teach at Ohio State University, he began to pick up commissions as a sole practitioner. His first major commission, planning the 60-unit Kensborough residential development, coincided with his interest in the small, planned garden suburbs of the 1920s. His firm, which varies from six to ten architects and designers, has done single-family houses and adaptive reuse projects, but his "primary interest" is planned residential communities; a 16-unit townhouse project on an urban site in Columbus is currently under construction.

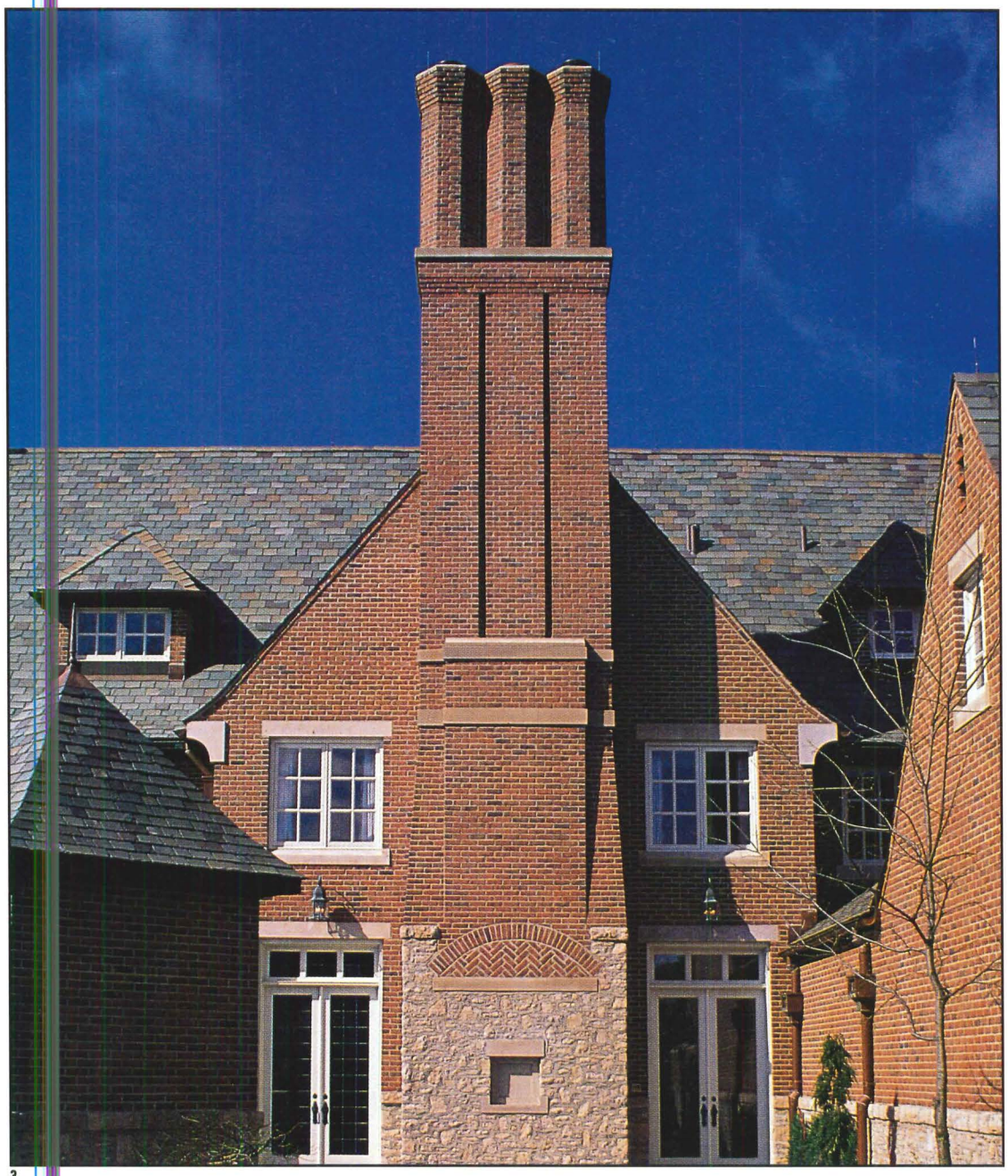
While Reagan does not necessarily see the traditional aesthetic of Kensborough as representative of his future direction, he found working with such forms and details to be educational: "We had to learn how to do these details from old issues of Graphic Standards and Pencil Points, and then we had to teach the contractors how to do the work."

The architectural language of the houses reflects that of the existing structures on the estate, although the house plans are aimed at more contemporary users. Each house is different in size and site placement, but they share common materials and building conventions. Materials such as brick, local limestone, and slate were employed using traditional construction methods. The 6000-square-foot House One sits beside the lake at the entrance (1). Its plan (5) includes private gardens at the front and rear (3) and a motor court at the street (2).

1

2

Reagan's firm planned the site and the first houses for Kensborough, a 60-unit luxury residential development on the grounds of an estate north of Columbus. The site plan (4) is intended to "fulfill the formal aspects of a community" that suburban houses do not often enough address, says Reagan. "We tried to concentrate on the gardens as figural spaces between buildings and address the problem of suburban houses that imagine themselves as being alone on estates." The community is entered through a gatehouse beside a lake (left in site plan). West of the central open space, the regularity of the plan breaks down against a hillside.



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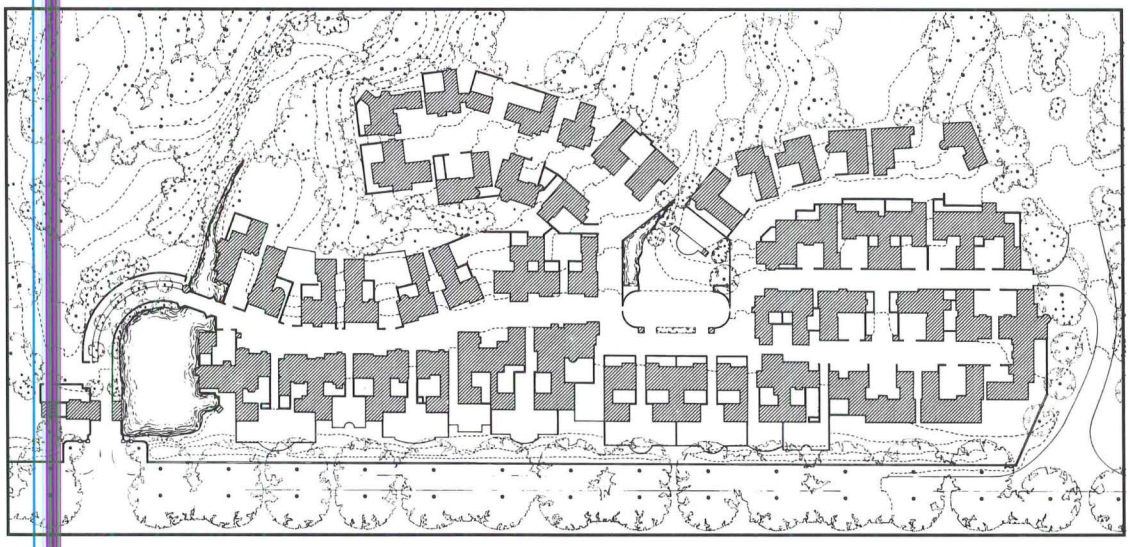
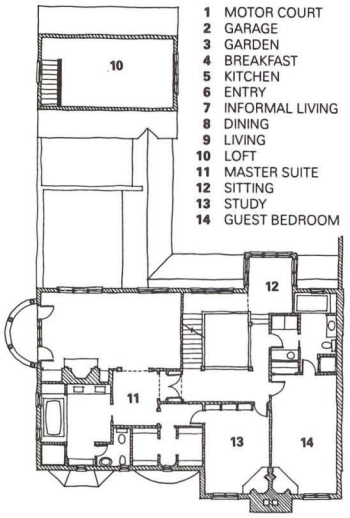


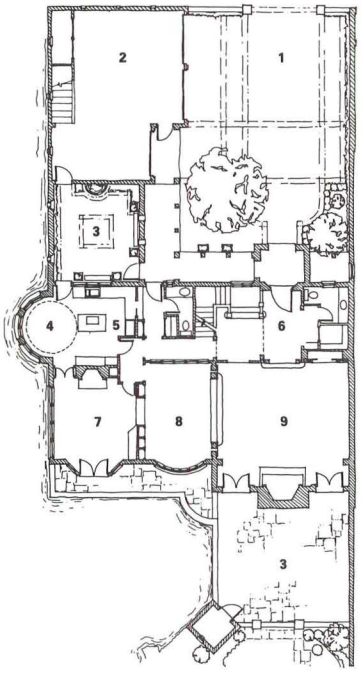
4 SITE PLAN, KENSBOROUGH

N → 300'/100m



1 MOTOR COURT
2 GARAGE
3 GARDEN
4 BREAKFAST
5 KITCHEN
6 ENTRY
7 INFORMAL LIVING
8 DINING
9 LIVING
10 LOFT
11 MASTER SUITE
12 SITTING
13 STUDY
14 GUEST BEDROOM

SECOND FLOOR PLAN



5 FIRST FLOOR PLAN, HOUSE ONE

N → 20'/6m

Gisue Hariri
Mojgan Hariri
Hariri & Hariri Design
New York

Steve Cohen

Gisue and Mojgan Hariri

"Our main concern is total involvement . . . from conception of an idea to the completion of its built form."

Gisue Hariri
Age: *34*
Education: *BArch, Cornell, 1980.*
Experience: *Jennings & Stout, San Francisco, Paul Segal Associates, New York.*

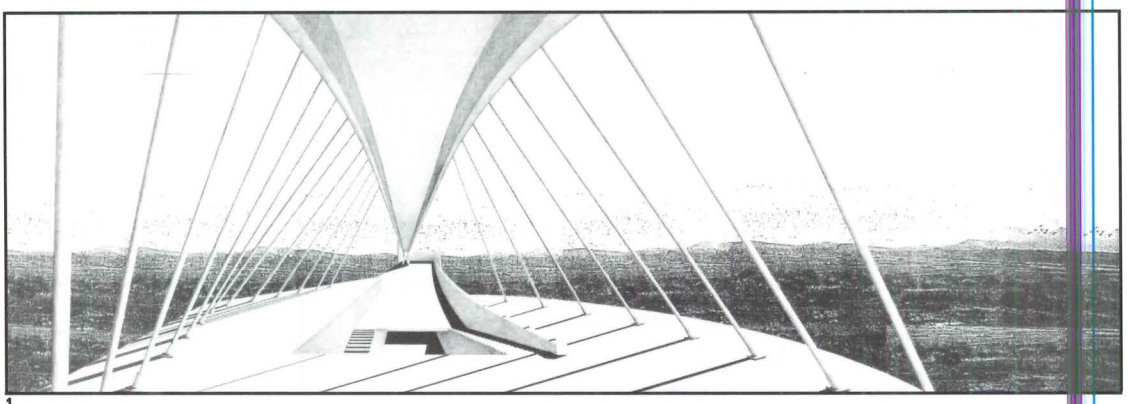
Mojgan Hariri
Age: *32.*
Education: *BArch, Cornell, 1981, MAUD, Cornell, 1983.*
Experience: *James Stewart Polshek & Partners, New York; opened practice together in 1985. The Hariris were winners in the 1990 Young Architects competition sponsored by the Architectural League of New York.*

Since opening their two-person office in 1985, Iranian-born sisters Gisue and Mojgan Hariri have entered the practice of design with great caution, approaching their small commissions with "total involvement from conception of an idea to the completion of its built form." Up to now, their built works have all been interiors, and Gisue Hariri says that this has been appropriate terrain for "stepping back from our education and starting again."

"Our earlier projects – interiors – were more planar, about walls and the layering of walls. The stair [in their Schneider apartment, next page] was a kind of turning point, because it's a volume defined by a plane," says Gisue. The firm's next step, an addition to a house in Connecticut, is underway.

The Hariris' collaboration began when they entered competitions together while students at Cornell. They found the early-1980s architectural scene "very depressing" because "everything seemed to be about drawing," says Gisue. In their own practice, materials and construction receive great attention, and they work with sculptors and craftspeople in their designs for furniture and fixtures. "They say you have to build your first project, but we've been through the second, third, and fourth and we're still building them," says Mojgan.

The Hariris try to maintain a balance between their "real" work and theoretical projects like DMZ, their contribution to a 1988 STOREFRONT for Art & Architecture exhibition that called for "intervention of aesthetic forces to initiate possible paths toward reunification" of North and South Korea. Their project, "a refuge [for] displaced souls in exile," called for a bridge structure (1–3) over the demilitarized zone punctuated by a series of volumes that would house flexible functions such as "living cells, meeting rooms, conference halls and a chapel for meditation and peace talks." Their intention was to metaphorically express, through a series of interdependent parts, the interdependence of humankind.



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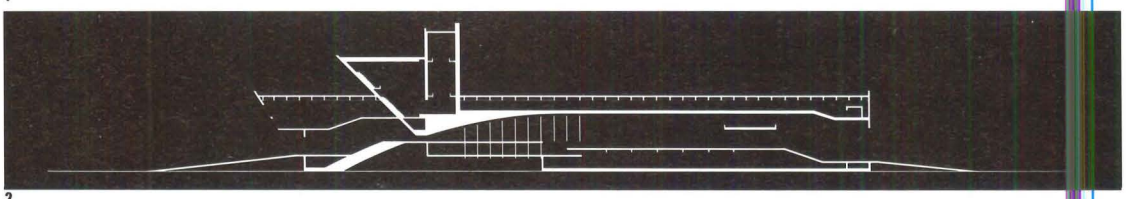

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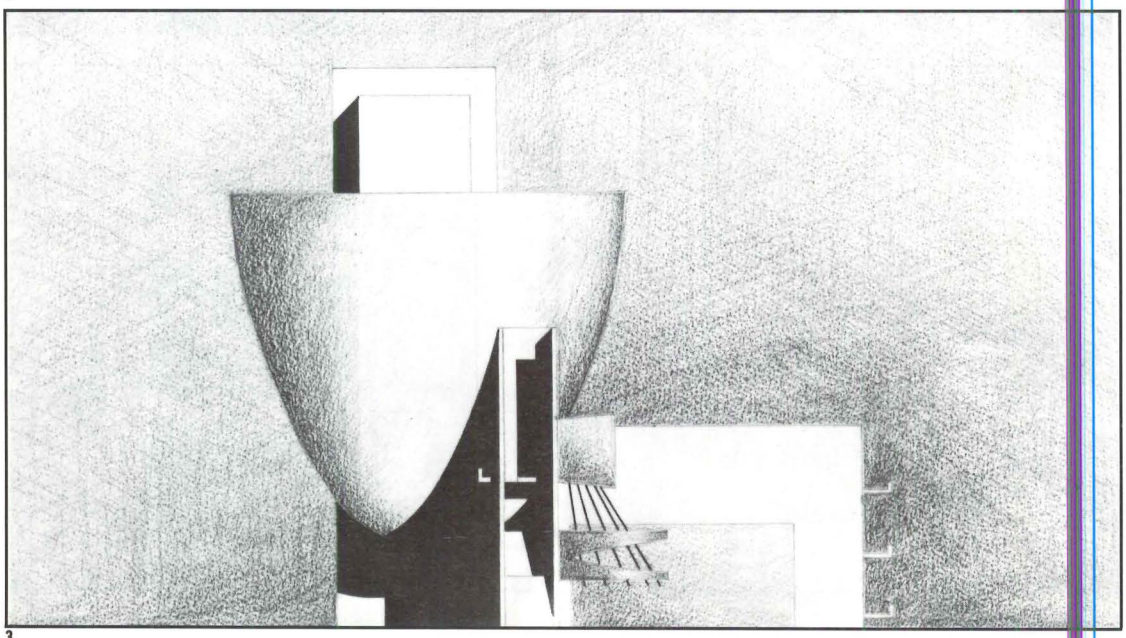

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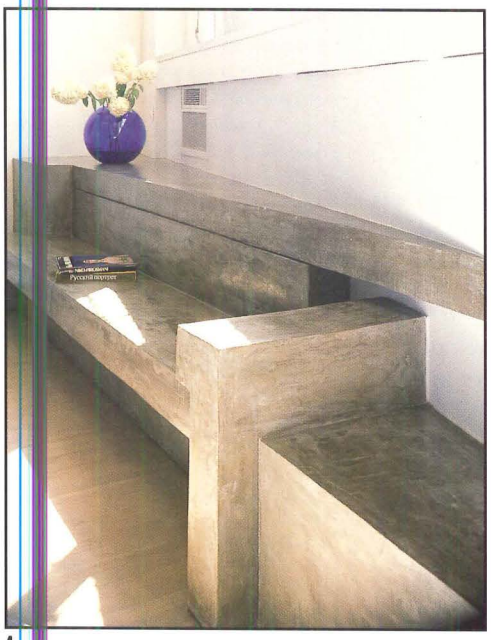

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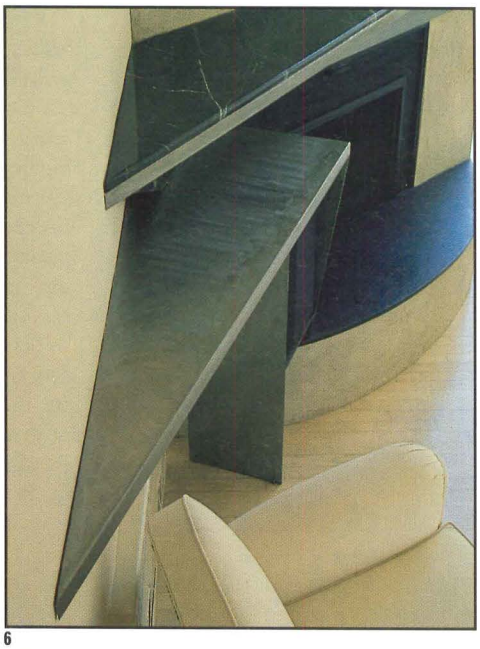


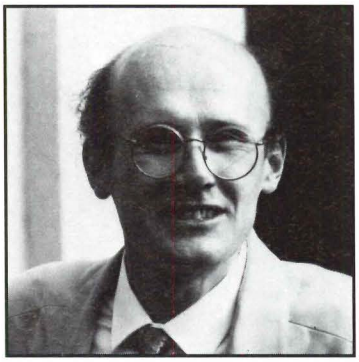
6

7

Much of the Hariris' built work has consisted of small-scale interventions in New York apartments. For example, a wood-framed, lightweight-concrete-clad window seat (4, 5) was placed in a loft in a former industrial building to square off the room's awkward angled street wall. The linear concrete form picks up the rhythm of reinforced concrete beams in the room. To help define another apartment's living room, the Hariris strengthened a corner fireplace (6) with triangular planes that serve as shelving. Materials are steel and marble for the shelves and slate for the hearth. In the Schneider Penthouse (7), a redesign of a duplex apartment, they used a hybrid dogleg/spiral stair of cold-rolled steel (P/A, April 1988, p. 207) as the central element. The bar stools and lighting were designed by the Hariris and fabricated by sculptor Scott Madison.

Photos: John M. Hall

Paolo Zermani
Parma, Italy



Paolo Zermani

Paolo Zermani's boldly scaled building forms are Modern in their severe geometries and exposure of construction, traditional in their masonry textures and expression of weight. For Zermani, it is essential to relate each building to its region and its specific location. He rejects the idea of a universal style and draws inspiration from those Italian architects of the 1950s who, in his view, designed buildings that were profoundly Italian. Among architects working today, he admires the works of Rossi, Portoghesi, and Ignazio Gardella. Although his work appears to have something in common with that of Botta and other architects of the Swiss Ticino region, he does not mention them as parallels.

To date, all of Zermani's built work has been in the area of Italy near Parma, where buildings of Medieval severity are prevalent in a pleasantly rolling landscape. Seeming at home in the unspoiled landscape and lending a note of authority to scruffy town settings, his buildings evoke a dreamlike past, "a world without watches."

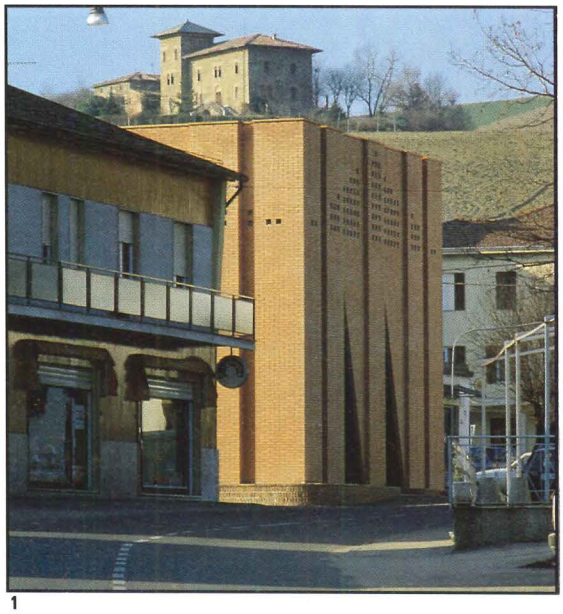
Zermani's contribution to the townscape of Felegara, near Parma, is a new front portion for an existing movie house (1), with a civic presence appropriate to its role as a community theater. Inside, this addition accommodates a lobby, stairs, office, and restrooms; outside, it presents an essay on the use of brick (2), long a dominant material in this region of Italy. Asymmetrical corbeled openings recall the area's medieval construction while suggesting the parting of theater curtains.

His buildings evoke a dreamlike past, "a world without watches."

Age: *31.*
Education: *architecture degree, University of Florence, 1983.*
Experience: *started own office 1983; on architecture faculty in Reggio Calabria and in Florence, and visiting professor at Syracuse University in Florence; three books and numerous articles published; selected for Andrea Palladio prize in 1988 and 1989.*
Influences: *Italian architects of the 1950s — Gardella, Albini, Scarpa, Ridolfi, and Rogers.*

Project: *Teatro di Felegara, Felegara (Parma), Italy.*
Architect: *Paolo Zermani.*
Client: *Comune di Medesano.*

Project: *Padiglione di Delizia (pavilion of delight), Varano Marchesi (Parma), Italy.*
Architect: *Paolo Zermani.*
Client: *Carlo Fagnoni.*



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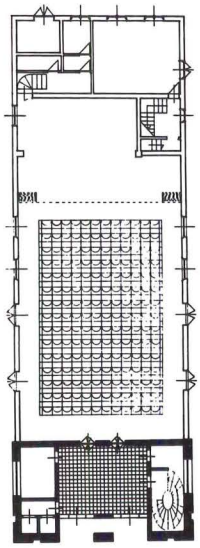
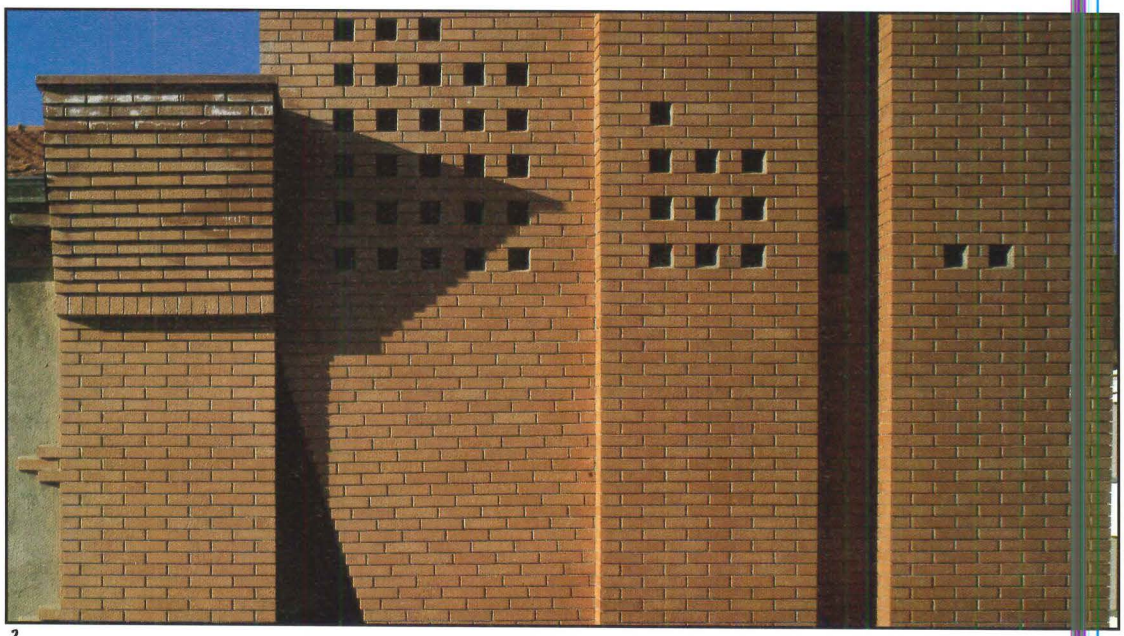


THEATER PLAN



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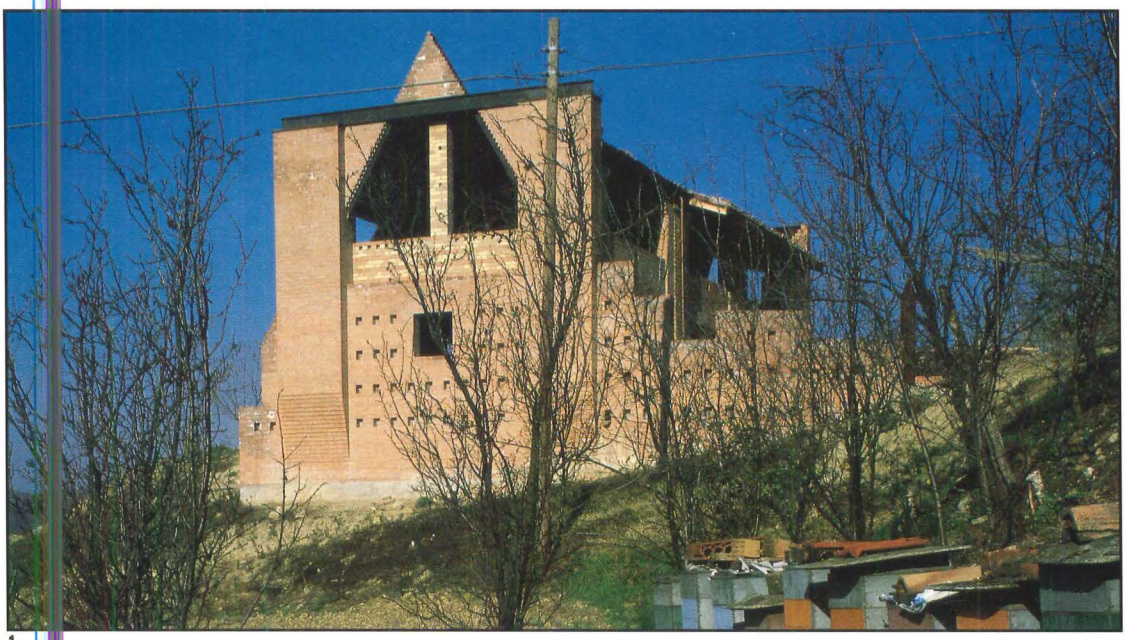

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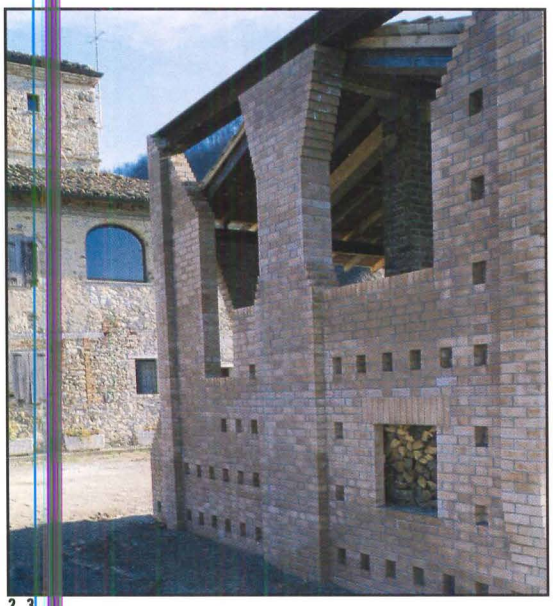
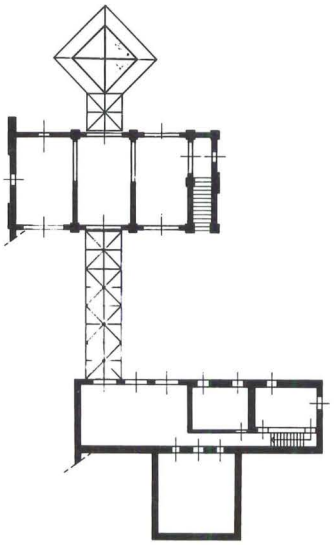
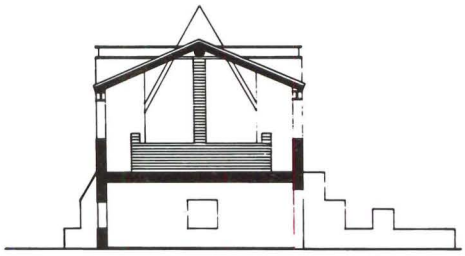


2, 3

In the countryside near Parma, Zermani has designed a temple-like structure (1) just for relaxing and enjoying a sweeping view toward a distant range of mountains. Attached to a handsome 16th-Century house (2, 3), the new pavilion is used for wood storage on its lower level, strictly for recreation above. As in all of Zermani's current work, the forms are based on the virtuoso use of brick; in this case, a brick false gable rises above the wood-framed roof to give the structure a strongly expressive silhouette.



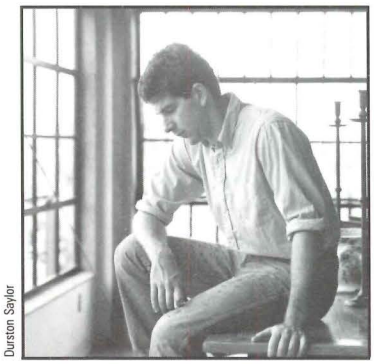
GROUND FLOOR PLAN N ↘ 10'/3m



SECTION LOOKING NORTHWEST 10'/3m

Photos: Luigi Ghirri, Maurizio Negri

Adam Kalkin
Morristown, New Jersey



Durston Saylor

Adam Kalkin

One might call Adam Kalkin a dilettante, but only in the positive sense of the word, that which is derived from *dilettare* – to delight – and which connotes broad and impassioned interest in the arts. For Kalkin is not, strictly speaking, an architect. Not only because he's not registered, but because he doesn't profess like one. Architecture, and more specifically construction, is a route Kalkin takes to other things; an expressive vehicle for "research," though he doesn't presume to "truths." "I don't think there are essences, I don't believe in a unified theory of the universe," he says. "I do believe in content. I'm only interested in architecture insofar as it's telling me things about myself or the world that I don't already know." Kalkin's own house at Gayhead, shown here, was erected in the course of a "brutal year" on the island, where, assisted in design and construction by Stephen De Long, Kalkin created a hybrid from two kits of parts — an 1820s Vermont barn and a warehouse. If the resulting structure is any indication, Kalkin possesses a maverick's singular "voice." And perhaps because the work is devoid of professional conceits, it seems all the more architectural. "There are times for being tectonically specific, times for being generic," Kalkin says.

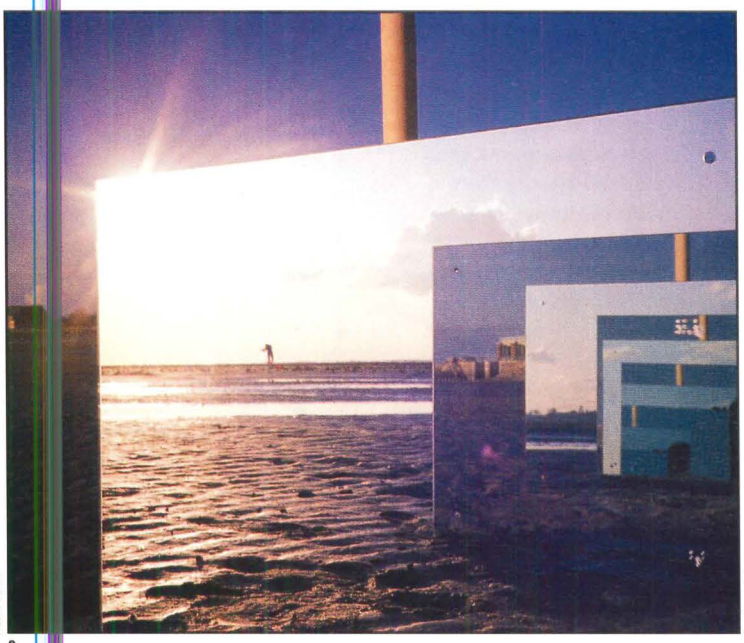
"I'm only interested in architecture insofar as it's telling me things about myself or the world that I don't already know."

Age: *27*
Education: *Vassar, 1981–84; Washington University, 1985–86; Architectural Association, 1987.*
Influences: *"The Nose," by N. Gogol;* Graphic Standards.

Project: *vacation house, Gayhead, Martha's Vineyard, Mass.*
Designer: *Adam Kalkin.*
Client: *Adam Kalkin*
Consultant: *Stephen De Long, associate.*

The 3000-square-foot vacation house (4) was designed and built without drawings. Instead, the disposition of its volumes (5) and the bizarre juxtapositions of its industrial and rustic elements (1) were arrived at in situ, *and attuned to every particularity of the site. The plywood-walled guest wing (6) is tar-coated and supported on telephone poles. At the far end of this oblong mass, a library is enclosed by a roll-up garage door (4, far left). The main mass of the structure, which incorporates the barn, is clad in steel. The glazed entrance facade exposes its timber innards (7). When Kalkin does draw, he favors the "anonymous"* Graphic Standards *style, taking a hard line against "the idiosyncracy of the drawings turned out by the academies in the name of pursuing a personal vision."*

1



2

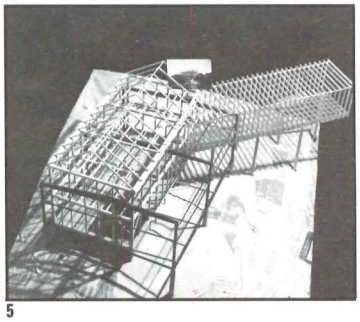
David Heald

3

"Architects have defined a very narrow role for themselves. There's room for inventing the character and obligation of the architect," Kalkin asserts. Currently working on a house expansion for a friend, Kalkin remains active in other areas. He is collaborating with photographer Durston Saylor on what he describes, deadpan, as "a coffee table book on Italian Fascism," and is designing various objects for a fall show at a New York gallery. Earlier work includes "Site Splice," (2), a 1987 installation with mirrors on a tidal flat at Le Crotoy, France, which explores the frames of reference that flat images impose. Among the furniture Kalkin has built is a plywood and canvas wardrobe (3). The front of the piece is open shelfwork. The back panel is an expanse of canvas stretched over a bowed frame. It was an image that came to the designer all of a piece, its construction inspired by the papier-mâché and steel-strut wing structure of vintage British war planes. An upholstered armchair and ottoman of Kalkin's design can be seen in the Gayhead house (1, bottom right).

Durston Saylor

4



Adam Kalkin

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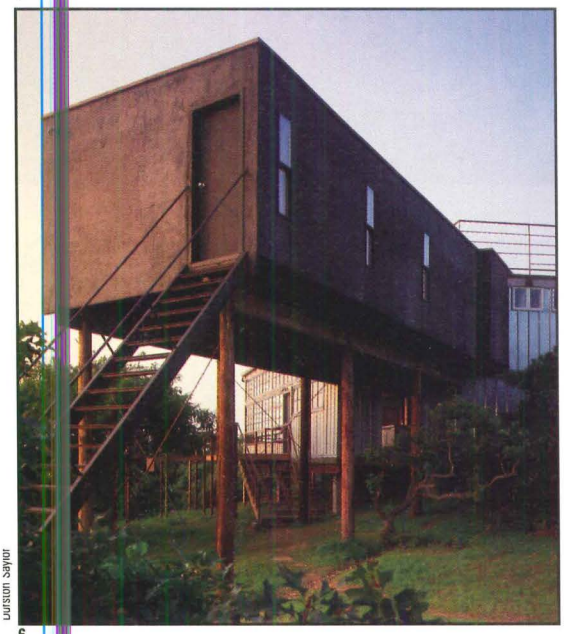


Durston Saylor

6

Durston Saylor

7

Wendell E. Burnette
Wendell E. Burnette Architect
Phoenix

Wendell E. Burnette

"Excess is cheap and simplicity is luxurious."

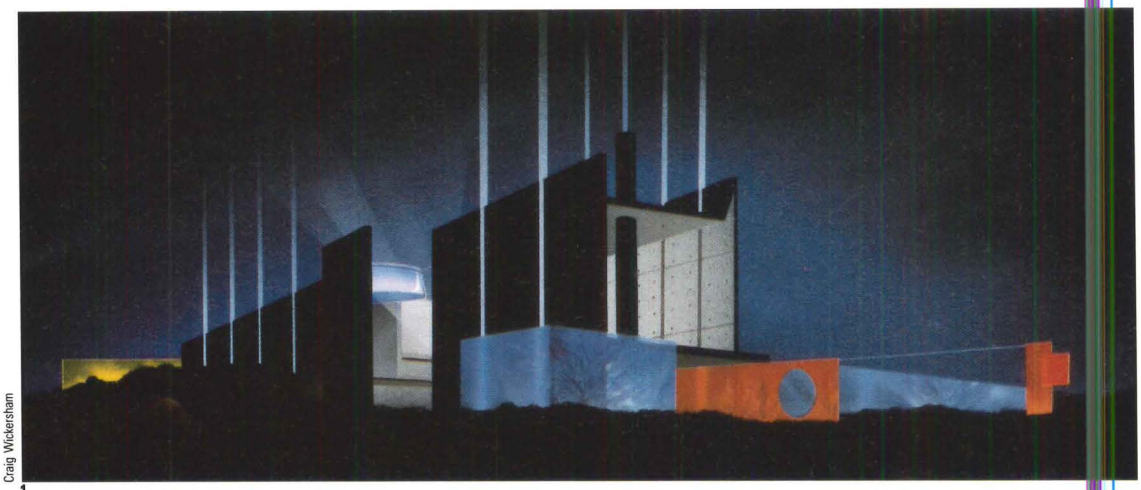
Age: *28*
Education: *Taliesin West, 1980–83.*
Experience: *has worked in engineering and architectural offices in Tennessee and Arizona since high school and in office of William P. Bruder, Architect, since 1985.*
Influences: *Frank Lloyd Wright, Norman Foster, Richard Rogers, Glenn Murcutt, William Bruder, the Arizona desert, New Mexico, and Mexico.*

Project: *single family residence/studio.*
Architect and contractor: *Wendell E. Burnette.*
Client: *Wendell E. Burnette.*

Like Frank Lloyd Wright, Wendell E. Burnette sees the home as an integral complement to the land; he absorbed Wright's concepts during his student years at Taliesin West, where he was a construction superintendent. Today Burnette is expanding Wrightian parameters with a concrete house that departs from the patterns typical of Taliesin. He is impressed by the desert; its dramatic, but harsh landscape calls for architecture that is forthright, but responsive to the site. The sloped house lot inspired a spatial sequence patterned on a climb in a desert canyon: At the lowest level of the house, light is indirect, and the spaces are compressed; they lead to an atrium, where one can look up to the sky. From here, stairs lead to the rooftop terrace, where a 360-degree vista encompasses both the city and a mountain preserve.

The house will be as austere and efficient as anything that survives the Arizona desert. Burnette will limit his materials to lightweight concrete partitions and glass, as well as 4′ × 8′ cast-in-place panels. The climatic and economic constraints of Burnette's project (it will be the first building of his solo practice) are likely to validate his personal philosophy: "Excess is cheap and simplicity is luxurious."

During the day, pylon-like concrete panels will give Burnette's house a neutral gray color. At night (1), it will be illuminated by colored floodlights directed at the glazed seams between the panels, window walls, glass entry court, and a rooftop acrylic plunge pool. After dark the house will look like a sculpture of primary colors. The garage is set beneath the double-height living space, whose eastern wall will face a distant mountain preserve (plan, 3). The bedrooms and studio on the west side will be cooled by an evaporating pool set next to the stairs in the atrium (section, 2). Corridors and bathrooms are placed along the concrete perimeter walls; partitions of plate glass or lightweight concrete run in the transverse direction.



Craig Wickersham

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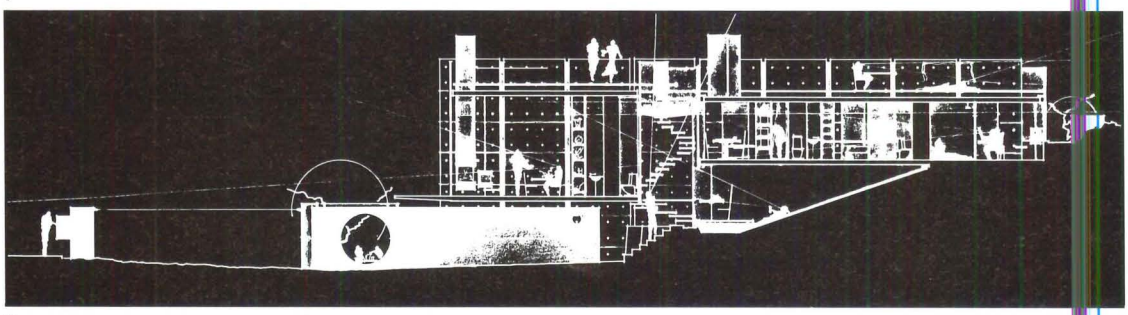
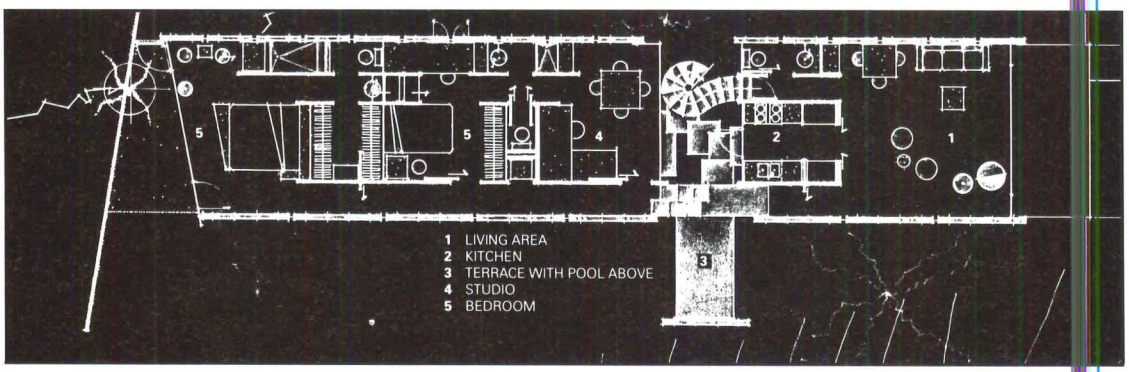


2 SECTION

10'/3m



3 MAIN LEVEL FLOOR PLAN

Whitney Powers, Sheri Horton
Studio A
Charleston, South Carolina

Sheri Horton, left, and Whitney Powers

"We just want to build!"

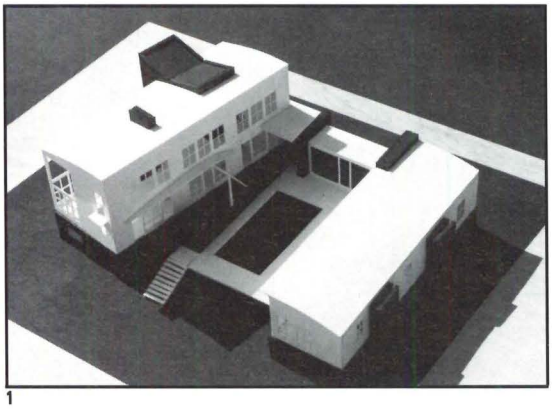
Whitney Powers
Age: 28.
Education: *BArch, Mississippi State, 1985; MSArch, Columbia, 1988.*
Experience: *worked for Ray Huff Architects Inc. in Charleston, ABS Architects Group in Washington, D.C., and Walk Jones & Francis Mah, Inc. in Memphis; teaching since 1988 at Clemson University College of Architecture, and taught at the University of Cincinnati.*

Sheri Horton
Age: 26.
Education: *Rhode Island School of Design, 1985–86; BArch, Tulane, 1987.*
Experience: *worked for LS3P Architects in Charleston, Stephen Limbrick Architects in London, and Lampert Architects in Minneapolis; worked as a graphic designer at* FLIP *magazine in New Orleans.*

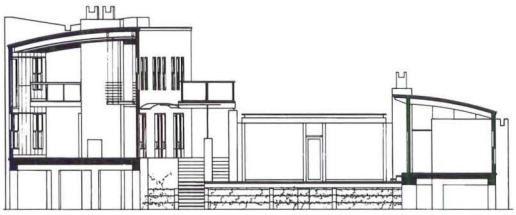
Project: *Massey Residence, Sullivan's Island, SC.*
Architects: *Studio A*
Clients: *Mackie and John Massey*

You could say that Hurricane Hugo put Whitney Powers and Sheri Horton in business. Following the devastation, architect Powers and designer Horton's "loose confederation" evolved into a studio for reconstruction of destroyed or damaged buildings. The Massey residence, for example, is to be built on the site of a beach house that was blown away. The clean sweep of the storm notwithstanding, Powers and Horton hardly consider themselves working on a *tabula rasa*. Regional lessons abound, providing examples of massing and structure capable of withstanding the harsh climate; many details are derived from local woodworking and metalworking, and the widespread use of stucco. These contextual responses are expressed with clarity in the Massey house, without resorting to coy vernacular. Its sensitive siting and deceptively simple plan and section distinguish this compound residence from merely formalistic exercises. "We are heavily influenced by other architects nearby," Powers says. These include Charleston practitioners W.G. Clark, John Menefee, and Bill Reisberg, and visiting mentors such as Merrill Elam of Atlanta's Scogin Elam and Bray, whom Powers invited to address her class at Clemson. For Studio A, the exposure to more experienced architects is part of an ongoing learning process. Now, says Horton, "we just want to build!"

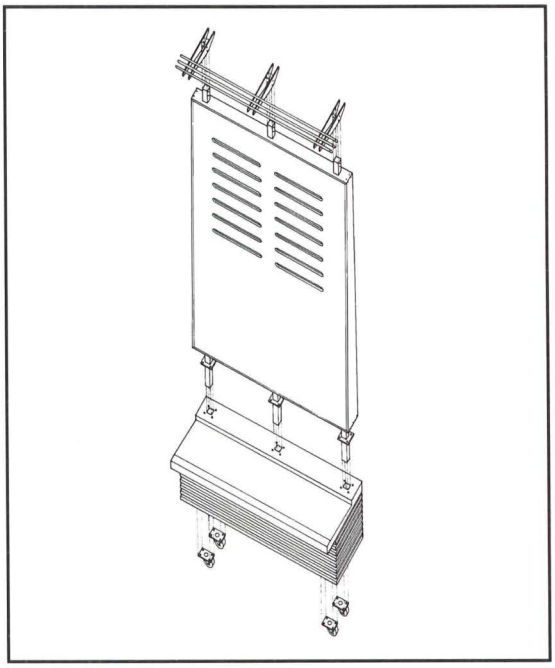
The Massey Residence (1), sited on a barrier island, consists of a 3500-square-foot house that embraces a 1000-square-foot terrace and pool on three sides. The entire compound is defined by an elevated concrete masonry plinth. Powers cites "Kahnian Modernity" – the core that houses service functions, which anchors the structure – as a starting point for the house's design parti. W.G. Clark's Middleton Inn, with its masonry armature and wood appendages, provided the inspiration for the lighter wood-sided framing fastened to the cores. The "Chair-Wall," part of the interior reconstruction of a church parish house, was devised as a movable element to divide an assembly hall into discrete rooms, or, alternatively, "disappear" against the walls as a piece of furniture. Each 6′ × 4′ module is built of steel and wood.



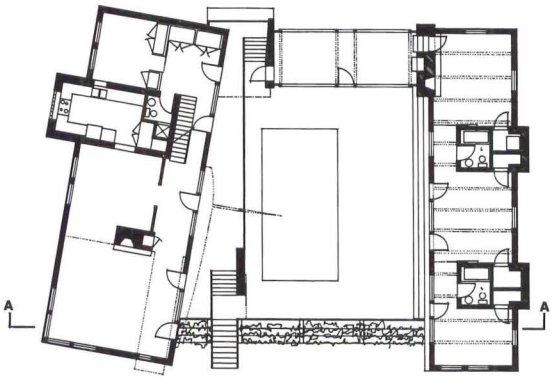
1 Johnny Tucker



SECTION A-A

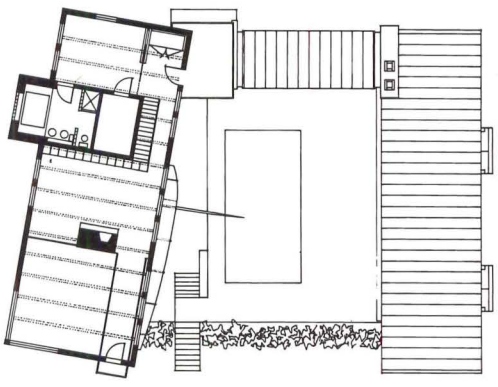


EXPLODED AXONOMETRIC OF CHAIR-WALL ELEMENT



GROUND FLOOR PLAN

N ↑ 10′/3m



SECOND FLOOR PLAN

Mark Ferguson
Ferguson Murray Architects
New York

Mark Ferguson, Oscar Shamamian, John B. Murray

"We are not committed to Classicism. We're more committed to context – to doing the right thing in the right place."

Age: *35.*
Education: *BArch, Carnegie-Mellon, 1978; MArch, Princeton, 1980.*
Experience: *Hugh Stubbins & Associates (1980), Scofidio & Diller (1982–1983), Parish-Hadley Associates (1984–1988); partnership with John B. Murray (age 36) and Oscar Shamamian (age 30).*
Influences: *Lutyens, Bottomley, Leon Krier, Colin Rowe, Albert Hadley, Sister Parish.*

Project: *Andrews Farm, Greenwich, Connecticut.*
Architects: *Ferguson Murray Architects, New York (Mark Ferguson and John B. Murray, partners in charge; Casey Cronin, Yolanda Daniels, Nasser Nakib, Donald Rattner, Carol Sullivan, assistants). Associate architect: John Cohen, Architect.*
Client: *Appleby Development Corp.*
Consultants: *Parish-Hadley Associates, design consultants (Harold Simmons, associate in charge; Mark Ferguson, John B. Murray, Paul Engel, project designers); Krog & Tegnell, landscape architects; Viggo Bonneson & Associates, structural; Regis Engineering, mechanical and structural.*

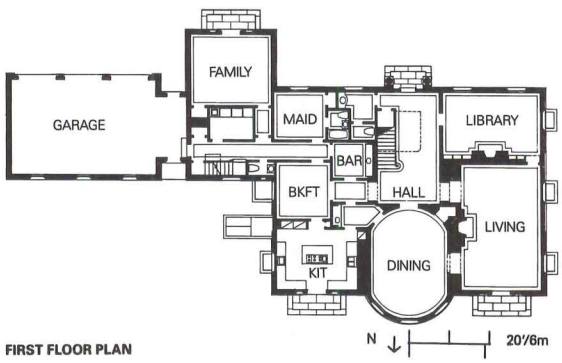
Three of the grandest speculative houses ever built stand on the rolling acreage of Andrews Farm in suburban Connecticut. Designed to sell for $4.8 million each, they are the first of 11 projected houses, each on four acres, around a generous common.

Remarkably rich in their interior layouts, with axially composed major rooms and conveniences tucked into the "poché," these houses have a formal restraint on the outside worthy of the Classical examples – English and American – that inspired them. Eschewing such flourishes as shutters or split pediments, the architects have concentrated on components such as fine molded bricks, limestone belt courses, and custom moldings. The architects learned about the residential patterns of the affluent with the eminent decorating firm, Parish-Hadley Associates, where all three worked. There they learned, as well, about making rooms congenial to furniture, art, and drapery. All of their numerous other residential commissions have been for private clients.

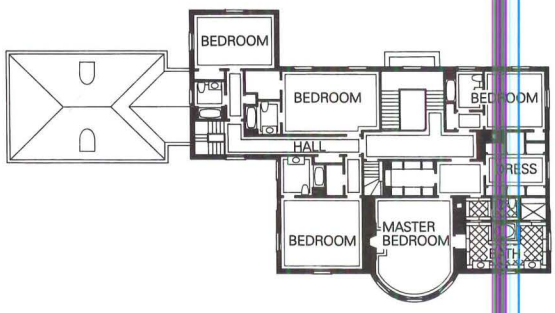
The firm is not doctrinaire with regard to style. "We are not committed to Classicism," says Ferguson. "We are more committed to context – to doing the right thing in the right place." Their emphasis on spatial sequences, light, views, and expression of construction may reflect their education as Modernists.

The house on lot 9 of Andrews Farm presents its garden front (1) to arriving visitors, who then loop around to the entrance from a secluded automobile court. A long view across the development's common acreage can be enjoyed from the curving bay of the dining room and master bedroom; the family room is meant to be linked by a porte-cochère to a poolhouse. Variegated slate roof and Flemish bond brick walls (dimensioned to whole bricks) are similar to those of the other two houses; limestone beltcourse and lintels are particular to this house.

1



FIRST FLOOR PLAN



SECOND FLOOR PLAN

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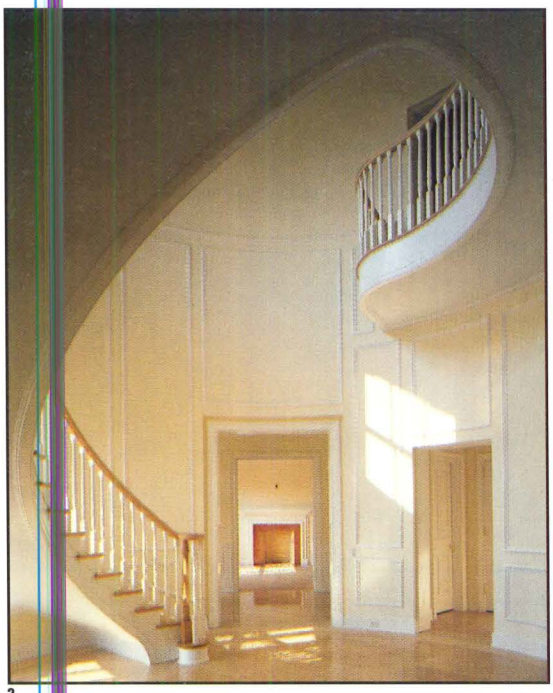
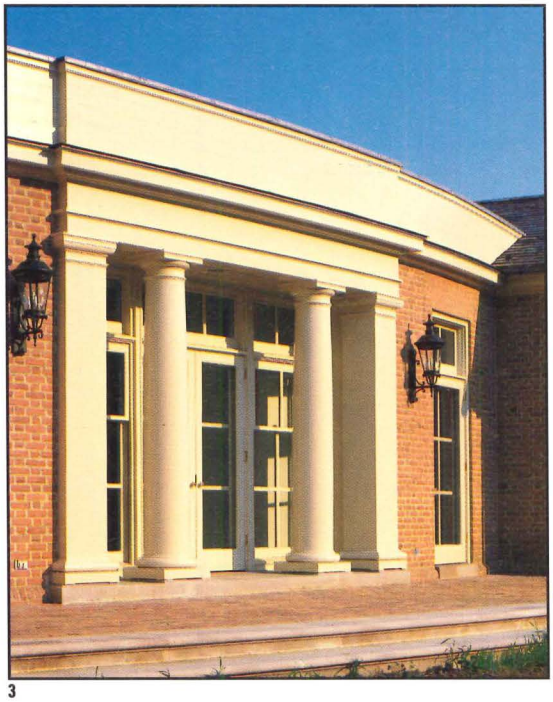


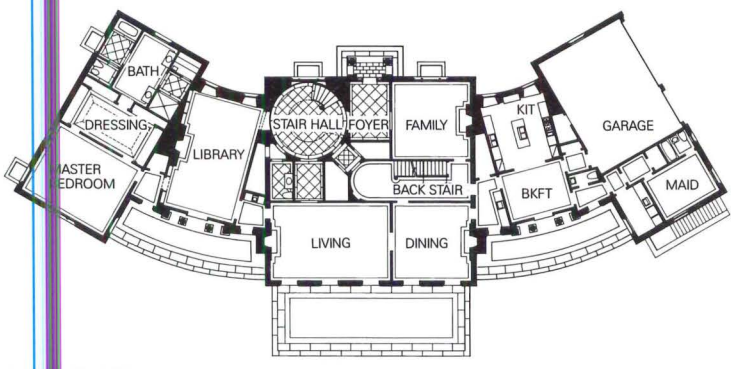
2

Photos: Chuck Choi



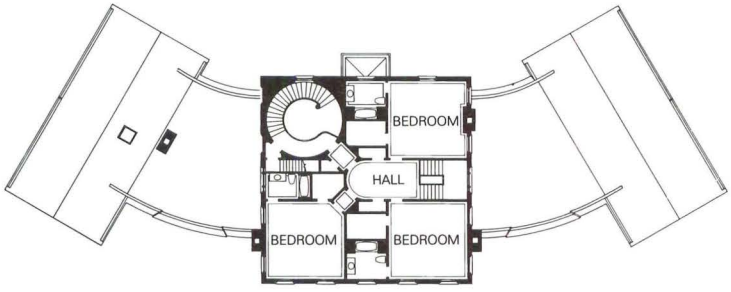
3

The 8000 square feet of the house on lot 3 are more dispersed than other houses; here the large master bedroom suite is in a one-story wing. The relatively small second story is reached, somewhat ironically, by two stairways, the "back" stair only slightly less grand than the more public spiral (2). In the back stair hall is one of the false doorways used occasionally in these houses to maintain symmetry (shallow niche on plan). The curving wings offer extensive glass areas for the library and breakfast room, behind Tuscan colonnades (3). The private garden side of this house (1) has a somewhat casual quality, with no emphatic central element; note large window lights and the broad cornice that rests on the second floor window heads.



FIRST FLOOR PLAN

N 20'/6m



SECOND FLOOR PLAN

Lorcan O'Herlihy, Richard Warner
O'Herlihy + Warner Architects
Venice, California

Lorcan O'Herlihy, left, and Richard Warner

There is a peace to buildings by Lorcan O'Herlihy and Richard Warner that flies in the face of today's cult of chaos. In significant ways, these architects represent an emerging generation of practitioners in search of a morality based more on instinct, accountability, and an affinity for construction than on values attached to any formal polemic. O'Herlihy invokes the spiritualism of Kahn. "Kahn's greatest impact on me had to do with the idea of order that can be sensed, that deals with the unspoken," he says. To Warner, resolving the "ineffable" aspect of architecture and its "mechanical determinism" is a source of constant fascination. A reductive vocabulary of basic elements allows them "a greater focus on materials, proportions, and a greater potential to respond to the surroundings," Warner says. O'Herlihy shares that conviction. "I have a problem with complexity for its own sake. . . Shifting a window, a wall, the impact lasts about three days." They design by building a lot of models, which encourage an intuitive approach. As it is, Warner says, "the rational process is not up to speed with the emotional process." The idealism evident in the buildings crops up in other ways, too. Both architects hope to have an impact beyond the houses and small office building currently on the boards, particularly in the area of low-income housing.

The houses depicted here demonstrate O'Herlihy and Warner's consideration for the landscape in which their buildings are sited. The O'Herlihy residence (1), completed in 1987, stands on a canyonside plateau with spectacular ocean and mountain views and is organized by two axes, one oriented toward the canyon, the other to the ocean. While the unembellished building was consciously made to contrast with its surroundings, the disposition of its volumes and diverse openings make it permeable to the outdoors. The Johnson house (4) is set on a 14-acre site in the Santa Monica Mountains. Its L-shaped plan faces a steep canyon and ocean views. The house and garage/guest wing define two sides of a courtyard; the mountains behind them complete the enclosure.

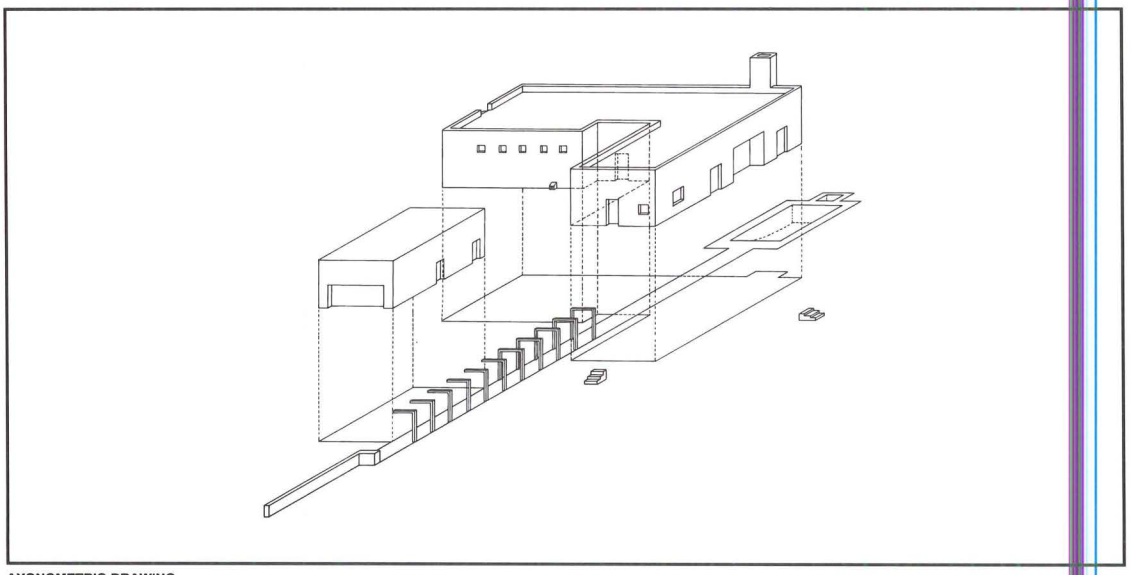
Lorcan O'Herlihy
Age: *30.*
Education: *BArch, California Polytechnic, 1981.*
Experience: *Kevin Roche & John Dinkeloo & Associates 1981–1984; I.M. Pei & Partners 1984–1986; Steven Holl Architects 1986–1988. Current firm established with Richard Warner in 1987.*
Influences: *"To be modern is not a fashion, it is a state. It is necessary to understand history, and he who understands history knows how to find continuity between that which was, that which is, and that which will be." Le Corbusier.*

Richard Warner
Age: *35.*
Education: *BArch, California Polytechnic, 1981.*
Experience: *Hellmuth, Obata & Kassabaum, 1981–87; consultant to Steven Holl Architects, and Peter Calthorpe.*
Influences: *program, structure, circulation, landscape.*

Project: *O'Herlihy Residence, Malibu.*
Architects: *Lorcan O'Herlihy, Richard Warner, principals.*
Clients: *Dan and Elsie O'Herlihy*
Consultants: *Brockmeier, structural.*

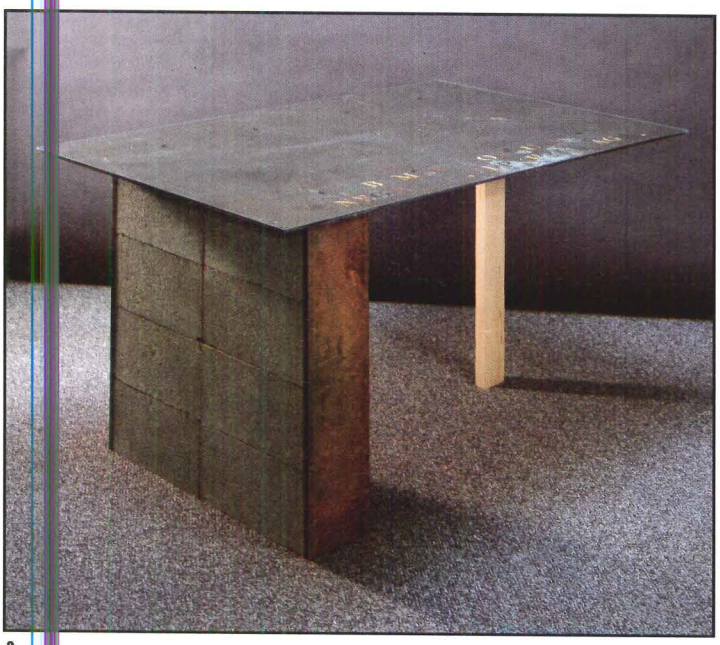
Project: *Johnson House, Malibu.*
Architects: *Lorcan O'Herlihy, Richard Warner, principals.*
Clients: *Michael and Mary Johnson.*

Project: *Lucey Vanous Residence, Venice.*
Architects: *Lorcan O'Herlihy and Richard Warner, principals; Jennifer Jardine, project assistant.*
Clients: *Robert Lucey and Francine Vanous.*



AXONOMETRIC DRAWING

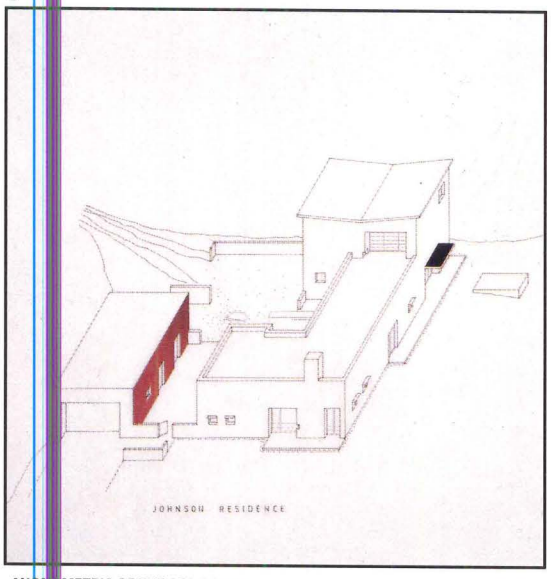
1



2

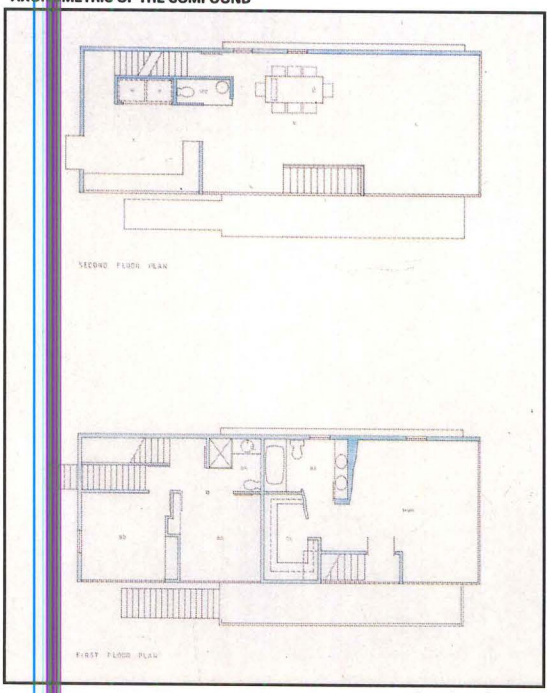
3

The Lucey residence (5) offers an alternative to the trend of shoehorning three-story houses into narrow sites. In what was once a humble neighborhood of California bungalows, the architects located a new residence atop an existing one, allowing for a swath of garden along the south side of the lot. The north and east walls of the building are virtually solid; the south and west walls, where ocean views prevail, are entirely of glass, which is translucent in the private areas. To keep the creative juices flowing, the partners design furniture, including the steel and concrete block conference table for their office (2). O'Herlihy is also an expressive painter. An oil on canvas (3), completed in 1988, is "based on a wedding gone awry."



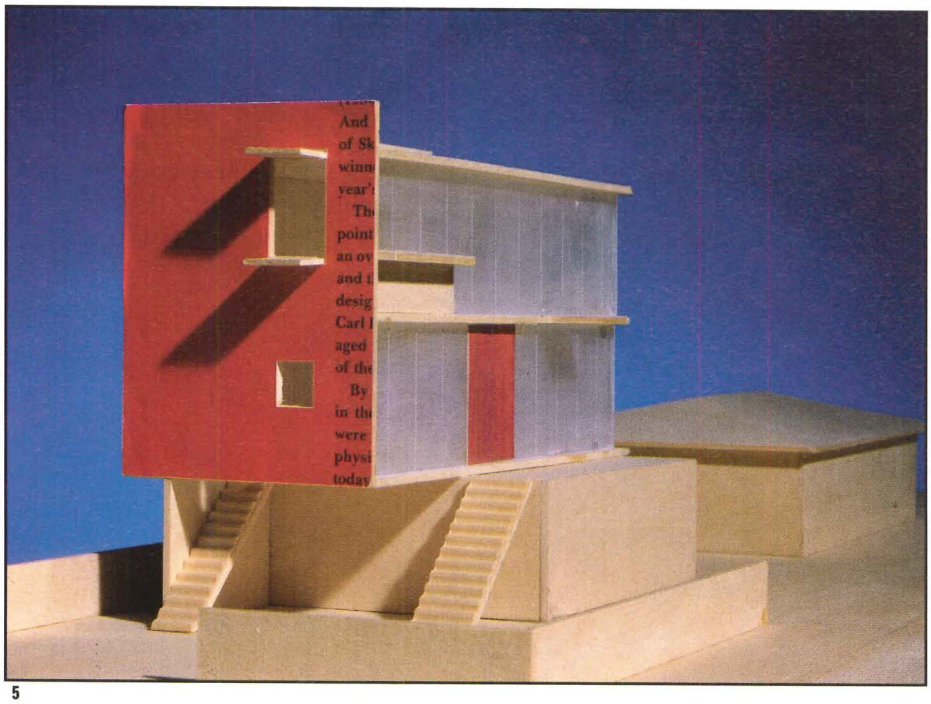
AXONOMETRIC OF THE COMPOUND

4



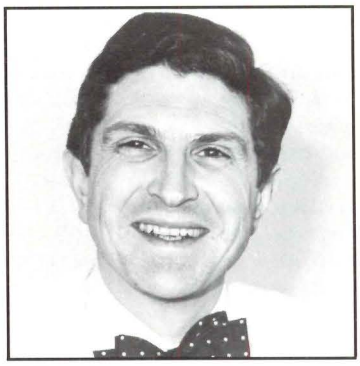
FIRST AND SECOND FLOOR PLANS

N → 10'/3m



5

Philippe Samyn
Samyn & Partners
Brussels, Belgium



Philippe Samyn

"Too many architects are prisoners of images."

Age: *41.*
Education: *Civil engineering degree, Brussels Free University, 1971; MS Civil Engineering, MIT, 1973; Architectural degree, Institut Superieur d'Architecture de l'Etat, La Cambre, 1985.*
Experience: *worked with Verdeyen & Moenaert as a structural engineer, 1972–1974; worked as an independent structural engineer, 1975–1980; began own architectural and engineering company, 1980.*
Influences: *architects: Le Corbusier, Kahn, Bunshaft, Foster, Behnisch, Krier; engineers: Torroja, Nervi, Morandi, Burnel, Fuller, le Ricollais, Arup.*

Project: *extension to Solvay & Company central laboratory, Brussels, Belgium.*
Architects: *Samyn & Partners, Brussels (Phillipe Samyn, partner in charge; Denis Melotte, Willy Azou, design team).*
Client: *Solvay & Company.*
Consultants: *SETESCO, structural.*

Project: *speculative office building, Brussels, Belgium. Architects: Samyn & Partners, Brussels (Phillipe Samyn, partner in charge).*
Client: *Eric Boulanger.*
Consultants: *SETESCO, structural; FTI, mechanical/electrical.*

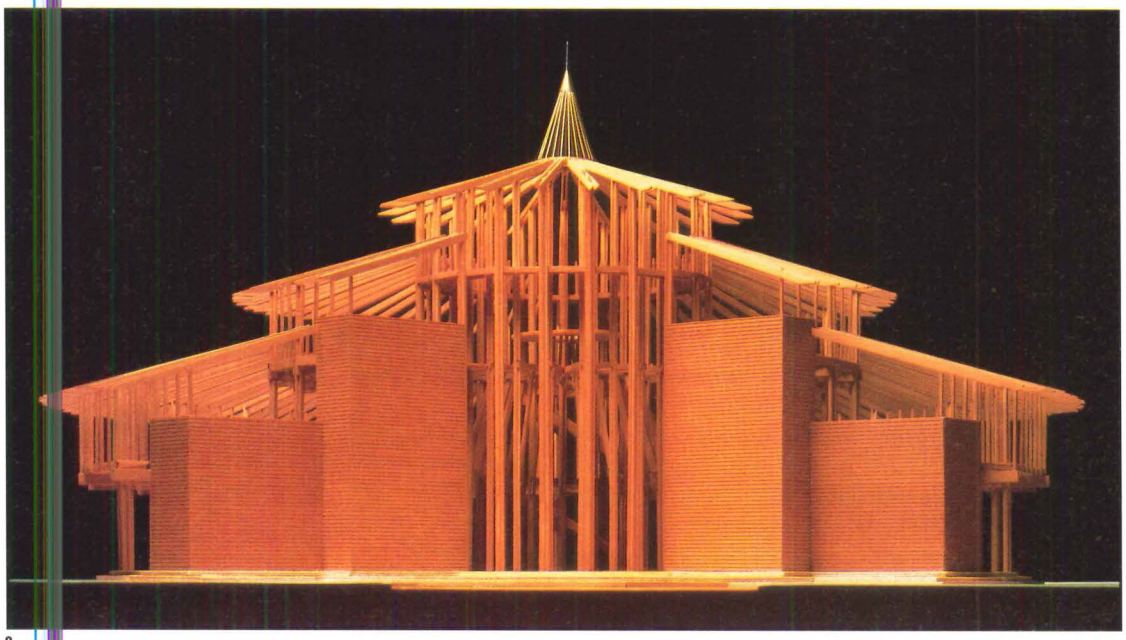
Having studied architecture after having run an engineering firm for years, Philippe Samyn sees the profession from an unusual vantage point. "The duty of the engineer is to find solutions to problems," he observes, "while the duty of the architect is to master space. Architects should carry a consistent approach, not a consistent image. Too many architects are prisoners of images."

His firm is very process oriented, with a preliminary design stage in which a wide range of ideas are explored and immediately questioned by the design team. "We love to mix things up," he says, "to have a mix of ideas just as we have a mix of cultures among the people who work for us."

Yet, out of this process emerges work that has a very strong architectural presence, guided by a clear structural logic and characterized by grand spatial gestures. This overlay of the rational and inspirational he calls "poetic engineering." His work also makes a powerful statement about the potential formgiving qualities of materials and structures. Samyn's interest in the work of architects such as Gordon Bunshaft and Norman Foster, who are superficially so different, has to do with their search for the formal qualities of engineering, and, says Samyn, "their absolute mania for perfection" – a goal he holds for himself.

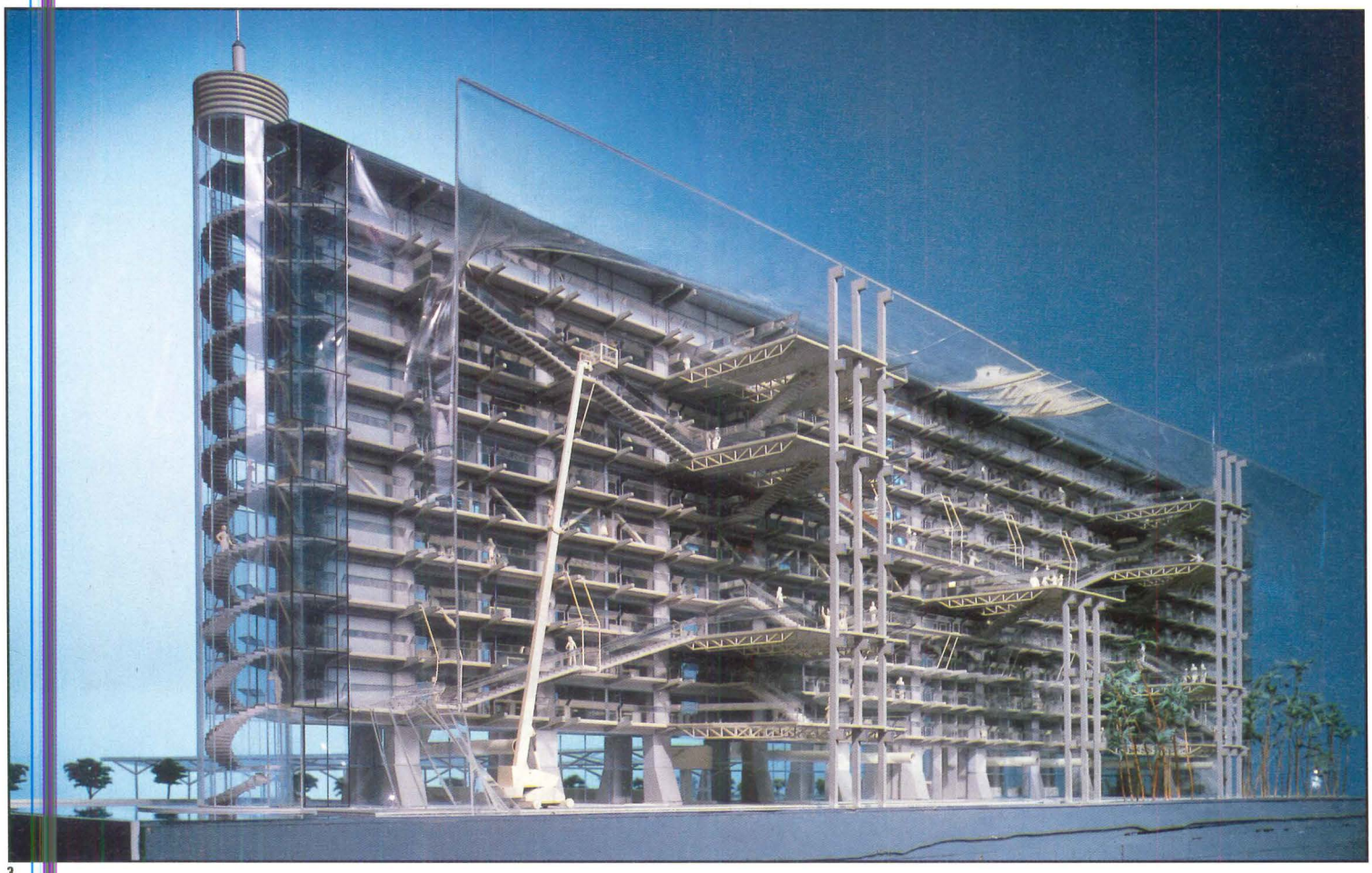
Solvay's research laboratory north of Brussels suffered from long distances between the labs and offices, so the company hired Samyn & Partners to solve the problem. The firm's solution calls for the construction of a thin office block adjacent to the labs, with an atrium containing several connecting bridges (1, 3). To enhance communication, corridors (which are cantilevered from the central concrete frame) run along the outside of the glass-partitioned offices. The exterior wall has a double-skin of glass and the atrium enclosure has cable-supported plastic glazing.

1



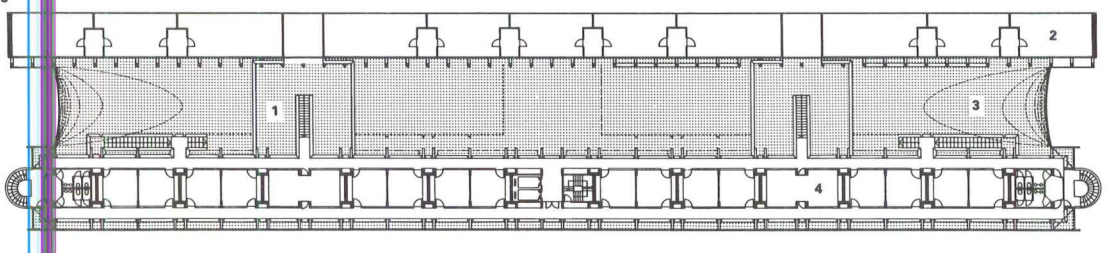
2

Located on a polygonal site in the southern residential suburbs of Brussels, this 10,000-square-foot office building has a round form to fit the property and sloped roofs in deference to the surrounding houses (2). The circular form is broken by stepped planes of brick to announce the building's entrance. The center of the building features a two-story volume with a central occulus and several stairs that spiral around the perimeter of the space.



3

Photos: Jacques Bauters.

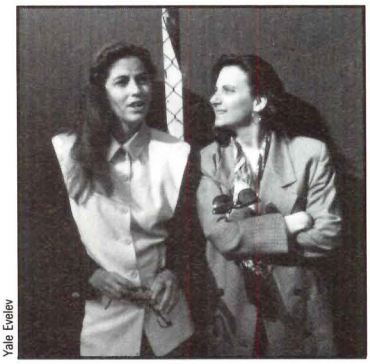


FLOOR PLAN

1 BRIDGE CONNECTOR
2 EXISTING LABORATORY
3 NEW ATRIUM
4 NEW OFFICE BLOCK

N ↑ 40'/12m

Karen Bausman/Leslie Gill
Bausman-Gill Associates
New York



Yale Evelev

Leslie Gill, Karen Bausman

Bausman and Gill work at several scales, ranging from art objects to interior spaces to entire buildings. One of the latter was published (P/A, Dec. 1988, p. 98), and illustrates the manner in which they extend their approach to larger projects. In each type of work they have paid close attention to detail and craftsmanship to complement their obvious artistic skills.

Regarding the large-scale work, they comment, "In accepting the challenge of a pragmatic program, we have chosen to create architecture that questions the traditional relationship between the inhabitant and the viewer. In our interior projects we have adapted the concept of shadow box or stage. We often incorporate screens or frames to delineate the transformation from voyeur to participant. . . these works take as their inspiration our collage constructions."

In the design for an optometric store, the architects responded to "the science and craft of optics." Using screens to selectively block the view into the room, they created openings fitted with lenses that magnify or reduce images of the interior. For an advertising/design agency, Bausman-Gill had been asked to preserve much of an existing interior; they juxtaposed the original plaster walls with new ones of patinaed steel panels.

Almost a living museum, the Optometric Arts store (1) is bounded by a series of screens and eyeglass display cabinets; within those perimeter elements are elegantly crafted mahogany display cases and consultation facilities. Typical of Bausman-Gill's work, the screens behind one of the displays (2) have incised openings, each of which allows viewers outside the room to see the space through a different type of lens. Antiques are on loan from a local source.

"We often incorporate screens or frames to delineate the transformation from voyeur to participant."

Karen Bausman
Age: *32.*
Education: *BArch, The Cooper Union, 1982.*
Experience: *I.M. Pei & Partners, private practice.*

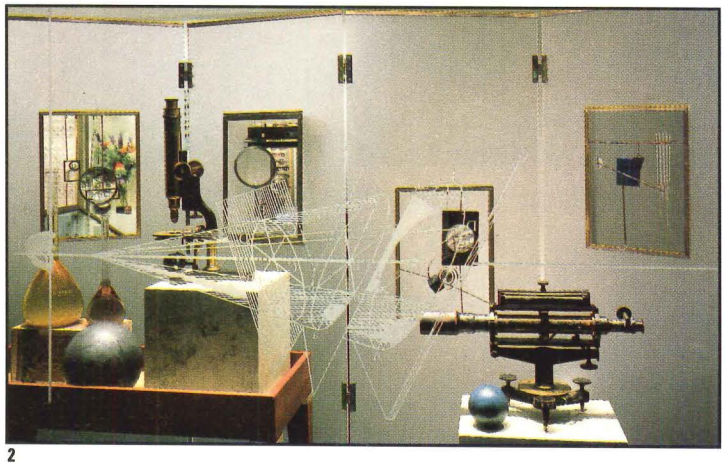
Leslie Gill
Age: *32.*
Education: *BArch, The Cooper Union, 1982.*
Experience: *Chermayeff and Geismar Associates, private practice.*

Bausman & Gill
Influences: *art, as opposed to architectural history; history as an atmosphere to be explored, rather than something from which to adopt influences; the mystical spaces in Medieval, Gothic, and Constructivist paintings; the education gained from the Cooper Union, and John Hejduk.*

Project: *Optometric Arts store*
Architects: *Bausman-Gill Associates (Karen Bausman and Leslie Gill, principals), Alison Berger with K. Bausman and L. Gill, screen.*
Client: *Dr. David Bierbriar*
Consultants: *Peter Galdi, structural; Andrew Collins, mechanical; E. Buk, antiques*

Project: *Advertising and Design Agency*
Architects: *Bausman-Gill Associates (Karen Bausman and Leslie Gill, principals), Scott Marble.*
Client: *Bill Drenttel/Drenttel-Doyle Partners*

1



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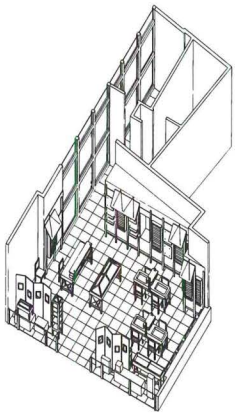


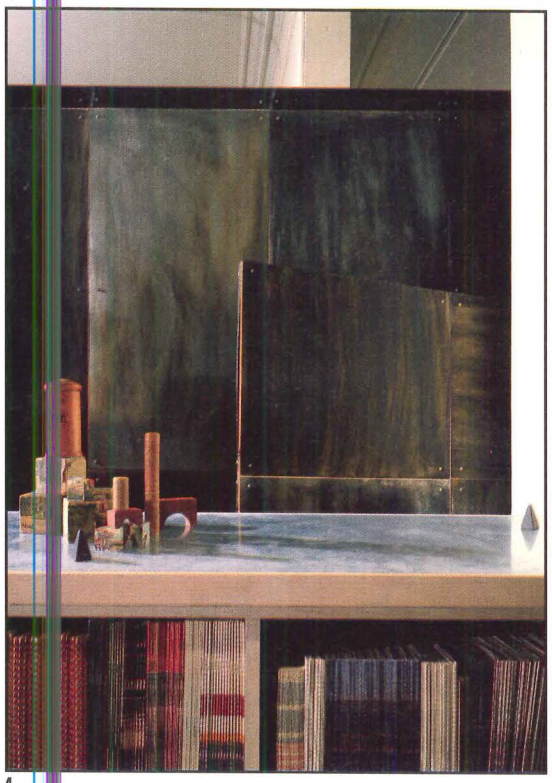
AXONOMETRIC, OPTOMETRIC ARTS

Photos: Peter Mauss/Esto

3

The offices for an advertising/design agency, Drenttel-Doyle Partners, occupy a 1900s manufacturing building in lower Manhattan. In reworking the spaces, the architects retained existing plaster interior partitions where they meet exterior walls, and "L" walls of acid-etched galvanized panels (3, 4). Elements or "events," like the shadow box effect incised into the wall near the reception desk are characteristic of the architects' work.

Installations, such as the one entitled "Scales" (5), at New York's John Nichols Gallery are another facet of their work. Bausman and Gill see these as fragments of more permanent environments, which "begin to capture space at the scale we inhabit," visions "to be assembled in the mind into a cognitive whole."



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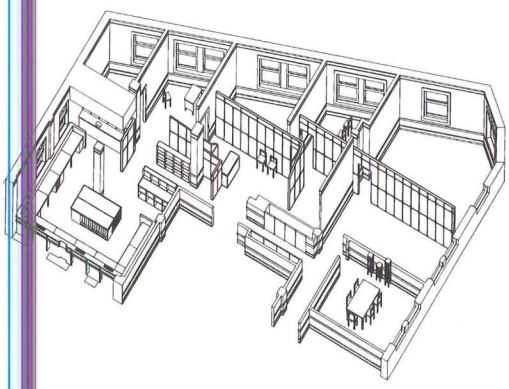
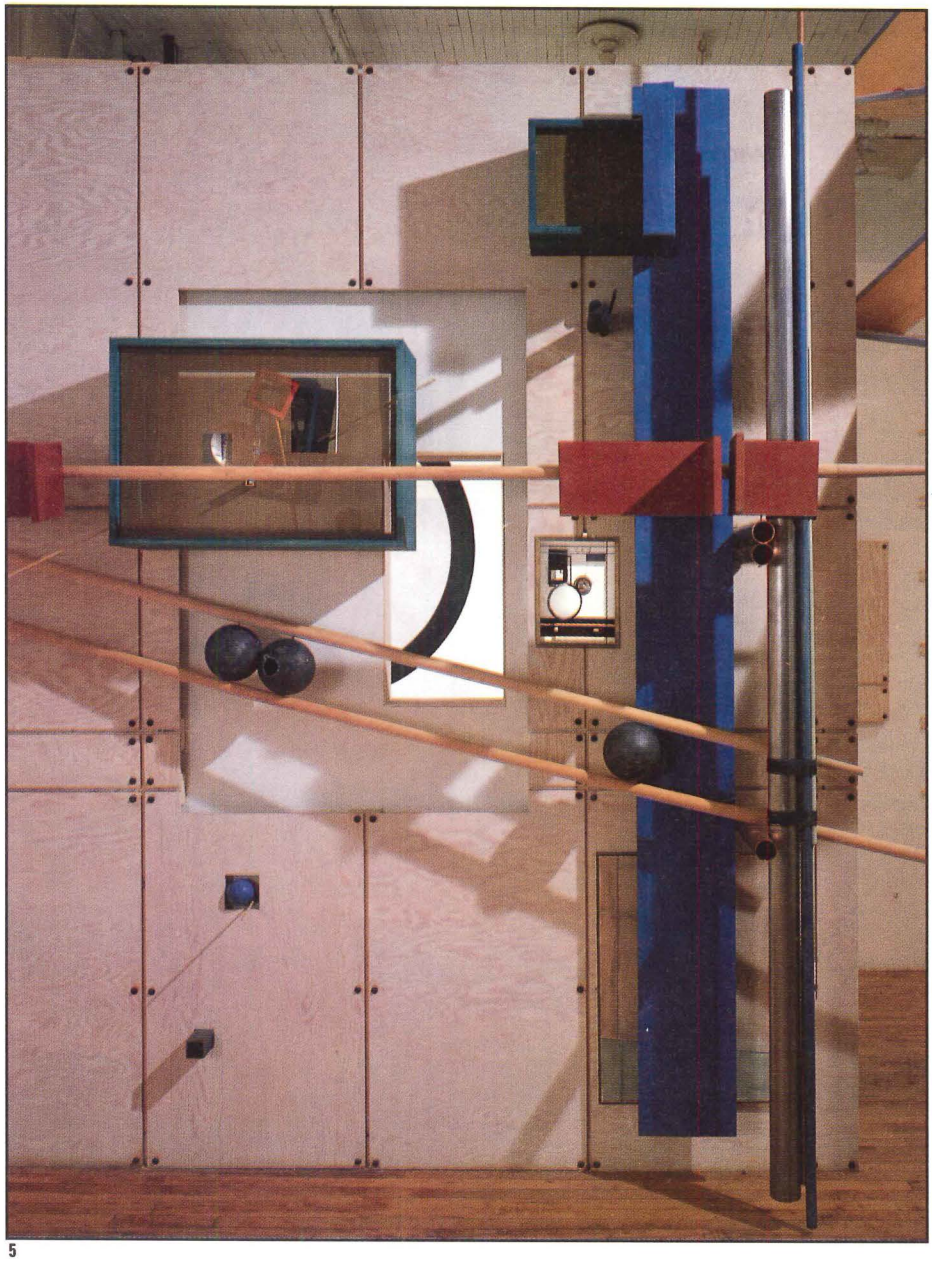
Photos: Elliott Kaufman



AXONOMETRIC, AD/DESIGN AGENCY



5

Michael Ryan Michael Ryan Architects
Loveladies, N.J.

Brian Healy Brian Healy Architects
Cambridge, Mass.

Michael Ryan

Brian Healy

"Loveladies is like a parking lot of interesting architecture, where clients . . . leave their stylistic baggage at home."

Michael Ryan
Age: *33.*
Education: *BS,Pennsylvania State, 1978; MArch, University of Pennsylvania, 1980.*
Experience: *architectural offices in Philadelphia and New Jersey; partner, Madden & Ryan Architects; now practicing independently.*
Influences: *Aldo van Eyck, Carlo Scarpa, Joseph Esherick, contemporary Japanese architecture.*

Brian Healy
Age: *33.*
Education: *BS, Pennsylvania State, 1978; MArch, Yale, 1981.*
Experience: *offices of Cesar Pelli and Richard Meier, Healy Crowley Architects; now practicing independently.*
Influences: *"Architecture is entirely synthetic with something to discover in buildings or paintings from every epoch."*

Project: *Residence in Loveladies, N.J.*
Architects: *Michael Ryan and Brian Healy.*
Client: *Robert and M.J. Hekemian.*

As every architecture student knows, the pressure of a charrette accelerates the design process, and a well-resolved building can emerge in a suprisingly short time. Such is the case for a seaside house that Michael Ryan and Brian Healy designed in three days; it is a distillation of the houses they are building in their independent practices. Their initial designs for the residence were quite complicated, but it progressively grew simpler and stronger.

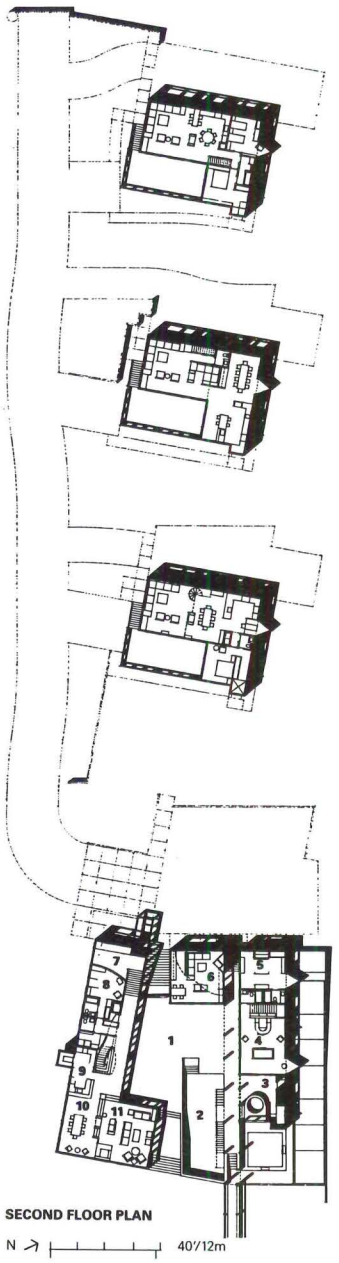
This is the 42nd house Ryan has designed on this barrier island; he settled here nine years ago because Loveladies' isolation makes it simpler to control projects. This is a community of vacation houses, with plenty of freedom: "It's like a parking lot of interesting architecture, where clients have few preconceptions about their houses. They leave their stylistic baggage at home."

Ryan suggested a courtyard to provide a private outdoor space, which few of Loveladies' seaside homes have. Healy is a careful site planner, as well. In the vacation homes he has designed, outdoor and indoor living areas form figural plans, collaged to give a spatial order to an entire site. For this project, he "looked at roadside motels of the 1950s. Their repetitive parts are clear, and their forms are simple, yet powerful – the way we'd like this complex of houses to be."

When a family of six wanted to build a multigenerational compound on the crowded shoreline of Loveladies, Ryan and Healy responded with a plan to divide a four-parcel lot into a series of similar houses (1). A courtyard that overlooks the ocean is the household's focus: It is set above a lower storage level and provides a common area in-between one house for the parents and another for the children, with a boardwalk and stairs leading to the swimming pool (2). Three similar houses can be built when the children become independent. While their forms are identical, these buildings can accommodate a variety of floor plans, so that adult sons and daughters, with or without children of their own, can return to their family vacation compound.

Kimberly Holcombe

1



2

Dirk Denison, Adrian Luchini
Schwetye Luchini Architects
St. Louis
Denison Luchini Design
Chicago

Todd Davis

Dirk Denison, Thomas Schwetye, and Adrian Luchini.

"Our firm practices in such a way that all the parameters with which architecture is presently produced in our society are questioned, modified, supported, or resisted."

Dirk Denison
Age: 34.
Education: *MArch, Harvard, 1985.*
Experience: *architectural practice with various firms; assistant dean, I.I.T..*
Influences: *painting, film, sculpture, philosophy, technology; D. Libeskind, P. Eisenman, and H. Cobb.*

Adrian Luchini
Age: 35.
Education: *MArch., Harvard, 1985.*
Experience: *assistant professor, Washington University, St. Louis.*
Influences: *painting, film, sculpture, philosophy, technology; D. Libeskind, P. Eisenman, and F. Gehry.*

Thomas Schwetye
Although Thomas Schwetye would otherwise qualify, his degree was not in architecture, but in Environmental Design. The firm of Denison Luchini Design was established in 1983, Schwetye Luchini Architects in 1989. Denison Luchini Design and Schwetye Luchini Architects have a joint venture agreement on current projects.

Projects: *Cooper Bauer Residence, Boston (Dirk Denison and Adrian Luchini, with Mark Koeninger, Hunter Fleming, and Michael Moran, assistants), and the Piku Residence, Bloomfield Hills, Michigan (Dirk Denison and Adrian Luchini).*
Clients: *Michael Cooper and Nancy Bauer; Mr. and Mrs. Frank Piku.*

An apartment renovation in a loft building in Boston, the Cooper Bauer project comprises the fourth, fifth, and sixth floors. The architects sought to "establish a very clear distinction as to what was there, what the 'edges' of the 'site' were, as against the ones we were going to introduce in order to accommodate the program. That developed into two gestures."

One of these was a curved copper wall on the fifth level which became a metaphor for a tympanum or other copper musical instrument. The second element, according to the architects, is another wall that "gets broken," half of it appearing on the fifth floor, and half on the fourth floor. This schism addresses the break in the space, the wall becoming part of a skylighted three-story atrium at the stairway.

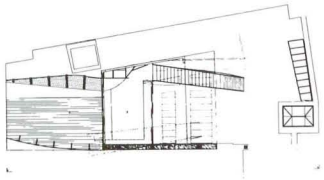
The Piku Residence questions the premise that the frame controls the perception of the object; the indoor and outdoor aspects of the house are one and the same. The architects comment, "our firm practices in such a way that all parameters with which architecture is presently produced in our society are questioned, modified, supported, or resisted." Their work represents a clear element in the current debate about architectural conventions.

Existing and new coexist in the Cooper Bauer apartment (1, 2, and plans), which centers around the stair/atrium interconnecting the three levels. According to the architects, the design process took them back and forth between the programmatic requirements and the "syntax" of the project, "to do something that was very intense, formally speaking, but also very functional."

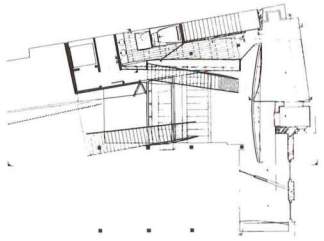
In the Piku Residence, near Detroit, (3), the intent is to allow two simultaneous experiences of the houses "both an inside space, as well as an exterior object." The landscape is seen as more than a spectacle, but as yet another boundary. The house is scheduled for construction later this summer.

Photos: Metropolitan Home Magazine

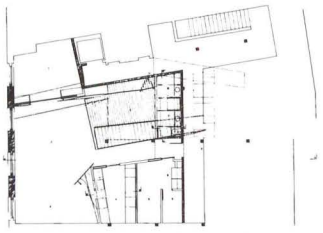
1



THIRD FLOOR PLAN

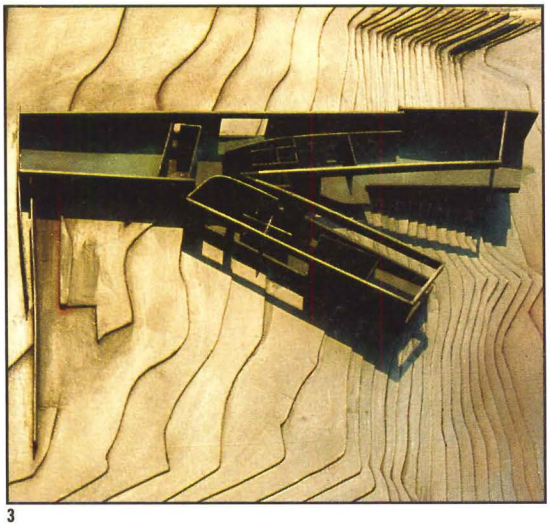


SECOND FLOOR PLAN



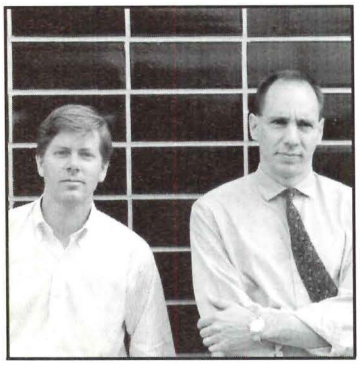
FIRST FLOOR PLAN N 20'/6m

2



3

Albert Pope
William Sherman
Albert Pope and William Sherman, Architects
Houston



William Sherman (left), Albert Pope

In Houston, unlikely juxtapositions are the norm. Like many Texas cities, it is a collage of two archetypes: the traditional, pedestrian-scaled city, and the automotive city, a realm of disparate buildings and amorphous urban spaces. Where there were once downtown blocks of contiguous buildings, today one finds a patchwork of parking lots and isolated buildings.

Albert Pope and William Sherman recognize that Houston calls for architecture that is tough and blunt; they respond with understated buildings that respect the original gridiron, while accommodating the automobile. Both architects partake in the theoretical debates that cross from coast to coast, but their buildings need few words to be understood. Sherman observes: "We are the generation educated during the heyday of *Oppositions;* it set the framework in which we think. At the same time, we have to move ahead, and consolidate theories with buildings." Pope agrees: "Houston is a place that's brutally honest. It's no place to try to revive the way we built cities before 1945, nor is it a place to make utopian speculations; one has to deal with the city that we have."

"[Houston] is no place to try . . . make utopian speculations; here one has to deal with the city that we have."

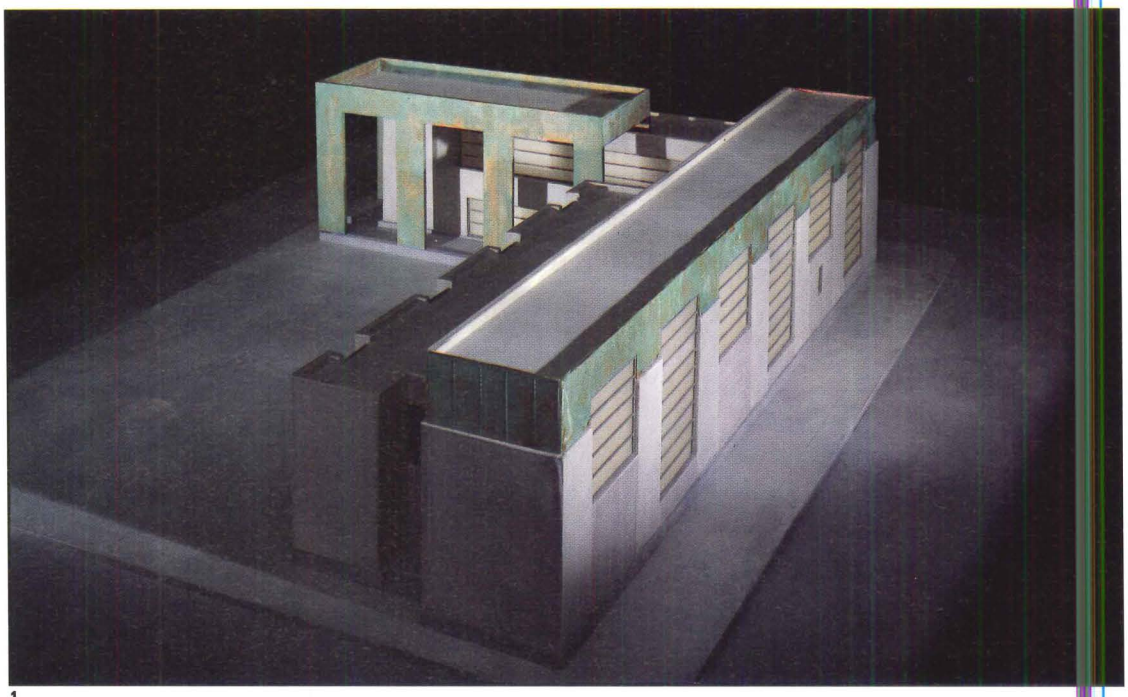
Albert Pope
Age: *35.*
Education: *University of North Carolina, 1972–75; BArch, SCI-Arc, 1978; MArch, Princeton, 1986.*
Experience: *Taught at SCI-Arc, California Polytechnic Institute, and now at Rice. Worked for Frank Gehry, Morphosis, and Frederick Fisher.*

William Sherman
Age: *34.*
Education: *AB, Princeton, 1977; MArch, Yale, 1982.*
Experience: *Taught at the Boston Architectural Center, the University of Miami, Florida, and now at Rice. Worked as a carpenter, and for Peter Waldman, Fox & Fowle, Cesar Pelli, Roth & Moore, and Graham Gund. Pope Sherman Partnership began in 1987.*

Project: *office building, Beaumont, Tex.*
Architects: *Albert Pope and William Sherman, Architects, and The Wittenberg Partnership, Houston (Albert Pope, William Sherman, Gordon Wittenberg, principals; Richard Gowe, Mark Burgess, Steve Klimas, Alex Malinin, Susan Wittenberg, project team).*
Client: *Bush, Lewis and Ramsey, Attorneys at Law.*

Project: *row houses, Houston.*
Architects: *Albert Pope and William Sherman, Architects.*
Client: *Weswin, Inc.*

A law office under construction in Beaumont, Texas (designed with the Wittenberg Partnership) is sited on the edge of its corner lot (2). The understated street façade, shown in model (1), fills a gap in the urban fabric. Because most people will enter the building from the parking lot to the rear (plans, 3), the courtyard elevations are, in practice, the front of the building. Here, a copper canopy covers a walkway to the double-height reception hall, which has a view of the county courthouse to the north. The shorter wing of the law offices comprises one large space on each level lined with ribbon windows; the other wing, on the primary street, is divided into three layers of office suites.



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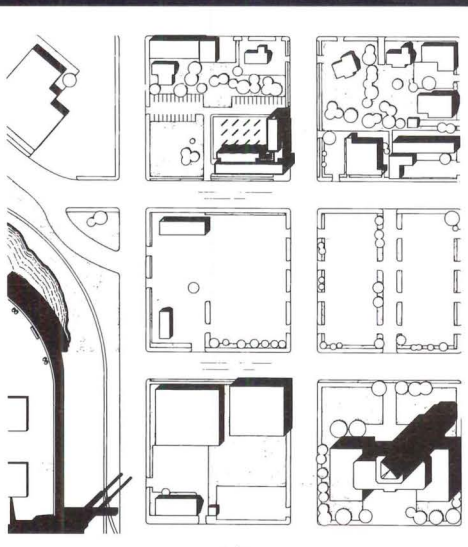
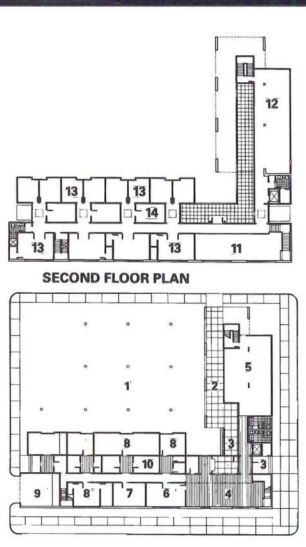


2 SITE PLAN N ↘ 300'/100m



SECOND FLOOR PLAN

1 PLANTED COURTYARD
2 ENTRY ARCADE
3 ENTRANCE
4 RECEPTION HALL
5 ASSOCIATES OFFICE
6 CONFERENCE ROOM
7 LIBRARY
8 ADMINISTRATION
9 GARAGE/LOADING
10 STORAGE
11 OPEN TO RECEPTION HALL BELOW
12 LOUNGE/LIBRARY
13 OFFICE
14 WORKROOM

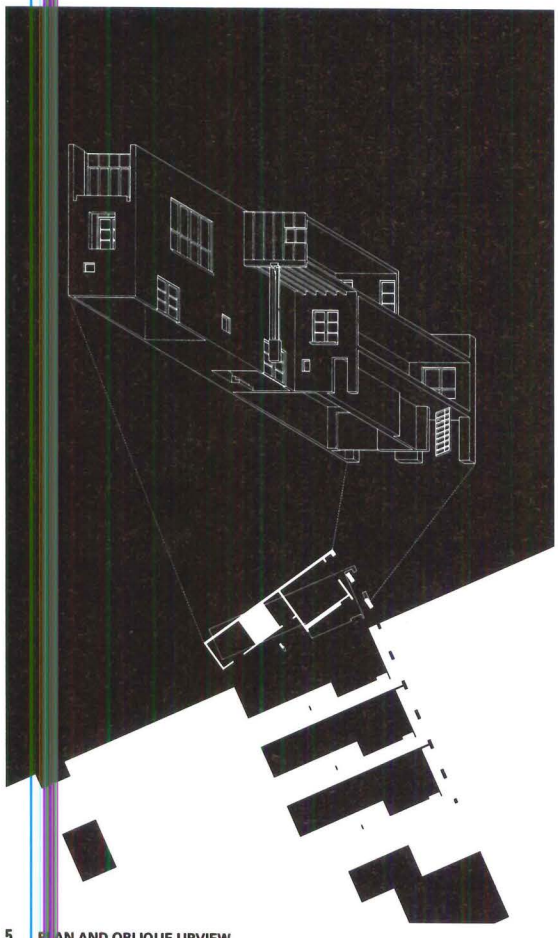
3 FIRST FLOOR PLAN N ↘ 100'/30m

Paul Hester

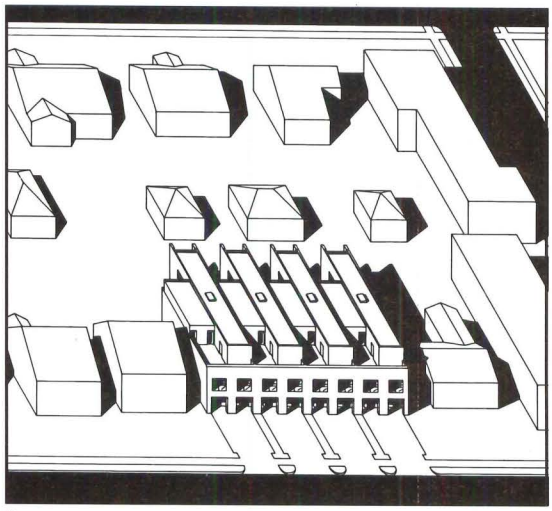
4

Commissioned by a developer, these Houston rowhouses will be built between a block of light industrial buildings and a deed-restricted suburban neighborhood (6). Such juxtapositions are typical of Houston, which Pope and Sherman see as a richly layered city, with pockets of private outdoor space woven into a diverse urban fabric. While the rowhouses are residential in program, they will occupy a building whose scale and proportions match those of a commercial structure; Pope and Sherman saw no reason to disguise their building's large size, and set the four rowhouses behind a two-story brick wall (4), whose repetitious openings evoke the anonymity of large cities like Houston. In the traditional city, such a neutral façade could have lined a street or square that was a collective public space. Here in Houston, where the street is primarily an automotive route, the façade is a threshold to walled gardens, each an outdoor space for private use (5).

One approaches each rowhouse through a 2-story loggia set behind the garage (7); the first floor can be used as a bedroom or office space, and the main living areas are upstairs. A living room (like the loggia, it is two stories tall, as public spaces in urban buildings once were) overlooks the garden. Here, the architects suggest that the public realm has been atomized into the domains of Houston's private households. The floor plan is divided into simple, generously sized rooms to accommodate a broad range of future occupants (8).



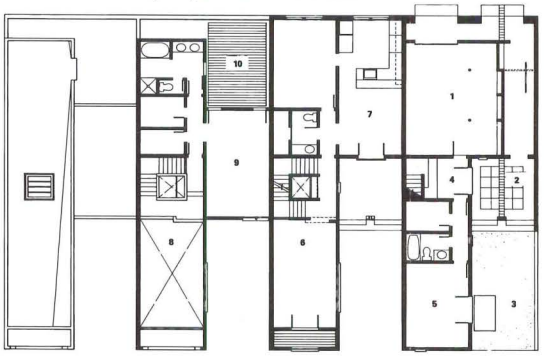
5 PLAN AND OBLIQUE UPVIEW



6 ELEVATION OBLIQUE

7 REAR ELEVATION (LEFT), SUCCESSIVE SECTIONS

20'/6m

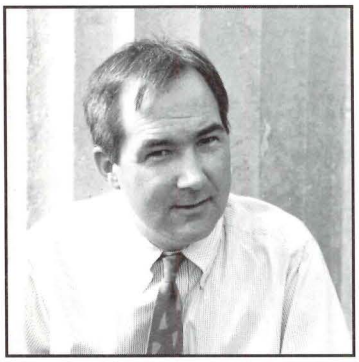


8 ROOF PLAN (LEFT), WITH FLOOR PLANS IN DESCENDING ORDER

N ↑

1 GARAGE
2 LOGGIA
3 GARDEN
4 ENTRANCE
5 BEDROOM/OFFICE
6 LIVING AREA
7 KITCHEN
8 OPEN TO LIVING AREA BELOW
9 MASTER BEDROOM
10 ROOF DECK

Charles Davock Warren
Charles Warren, Architect
New York



Charles Davock Warren

Charles Davock Warren has a predilection for history and a passion for traditional Anglo-American building techniques, aesthetic virtues and values. In his work, structure and space are cleverly, understatedly manipulated, and lessons of history are amalgamated with modern programs. Rather than "avoid or ignore sources," says Warren, "one needs to transcend them."

In the shingle style Levine/Szekeres House in New Canaan, Connecticut, completed in 1988, Warren used a slightly skewed H plan: East and west wings maintain a traditional configuration while the central volume acts as moderator between rooms, spaces, interior and exterior. A second-story child's bedroom is designed with a window at floor level for a view of the outdoor room/back porch below. In the yet-to-be-realized Harvey House, in Bath, Ohio, a nonregional farmhouse vernacular is employed to establish the interior/exterior relationship. Here, the plan is "ad hoc." Both employ traditional architecture with a keen awareness of time and place. "We're really not very different from Pliny," says Warren, explaining his emphasis on spatial relationships and dialogue between surrounding landscape and residents. "Classical architecture isn't really just columns, orders, and entablatures; it's [also] responsive to the natural environment."

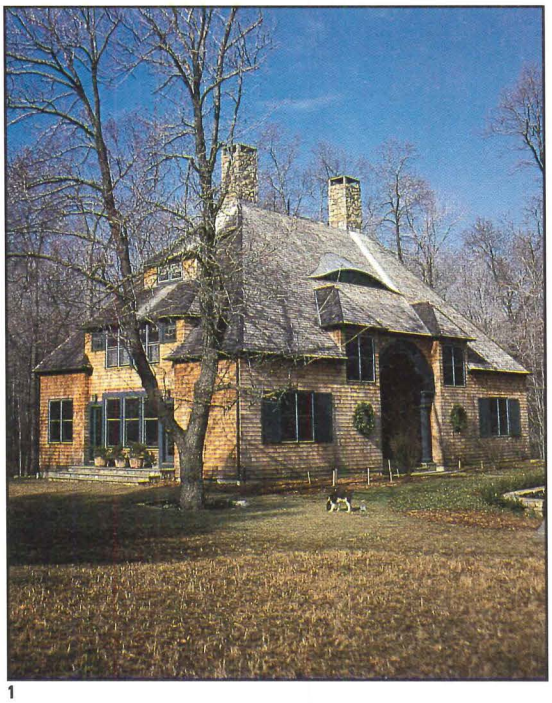
The wood-framed, cedar shingle-clad Levine/Sekeres House is sited on a two-acre plot bordered on three sides by a town land trust. A one and one-half-story outdoor room (2) acts as both an intermediary space between indoor and outdoor activity and an integral element in the creation of "eccentric visual connections" within the house. Room proportions vary as stairs meander from floor to floor. With Lutyens as his inspiration, Warren played on the warmth of the New England sun to meet the "expectations of how people really live." The kitchen faces east (1) for morning sunlight and the outdoor room (2) faces west for sunset-watching or other afternoon and evening activities.

"Classical architecture isn't really just columns, orders, and entablatures; it's [also] responsive to the natural environment."

Age: *36.*
Education: *BS, Skidmore College, 1976; MArch., Columbia University, 1980.*
Experience: *Renee Kahn Associates, Stamford, Connecticut; Peter L. Gluck & Associates, New York; Robert A.M. Stern Architects, New York; started own firm in 1986. Visiting Assistant Professor, University of Michigan, College of Architecture and Urban Planning, 1987-1989.*
Influences: *Soane, Lutyens, Richardson, Whistler, Saint Gaudens, McKim, Aalto, Claude Bragdon, Harvey Ellis, and Fletcher Steele.*

Project: *Levine/Szekeres House, New Canaan, Connecticut.*
Architect: *Charles Warren, Architect.*
Client: *Robert Levine and Eva Szekeres.*
Consultants: *Superstructures, New York.*
Photos: *Charles Warren.*
Drawings: *Greg Barnell*

Project: *Harvey House, Bath, OH.*
Architects: *Charles Warren, Architect; Jon Lee, Assistant.*
Client: *A. Mosby Harvey.*
Renderings: *Charles Warren and Jon Lee.*



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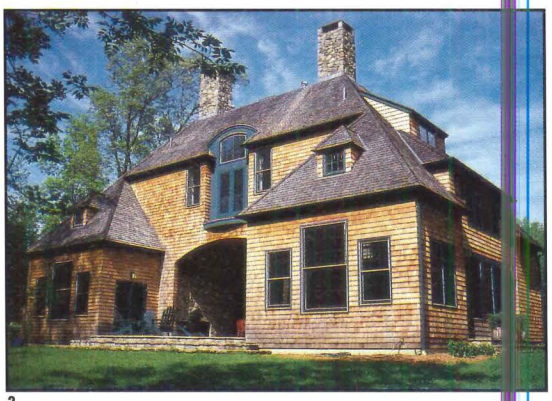

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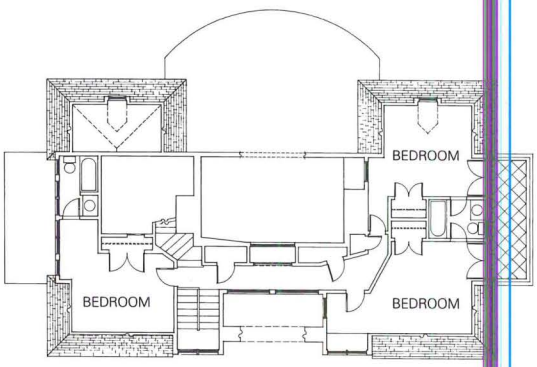
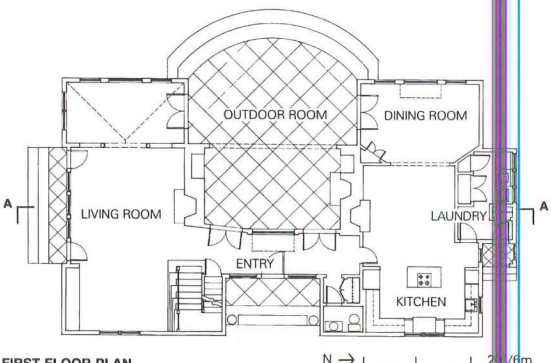


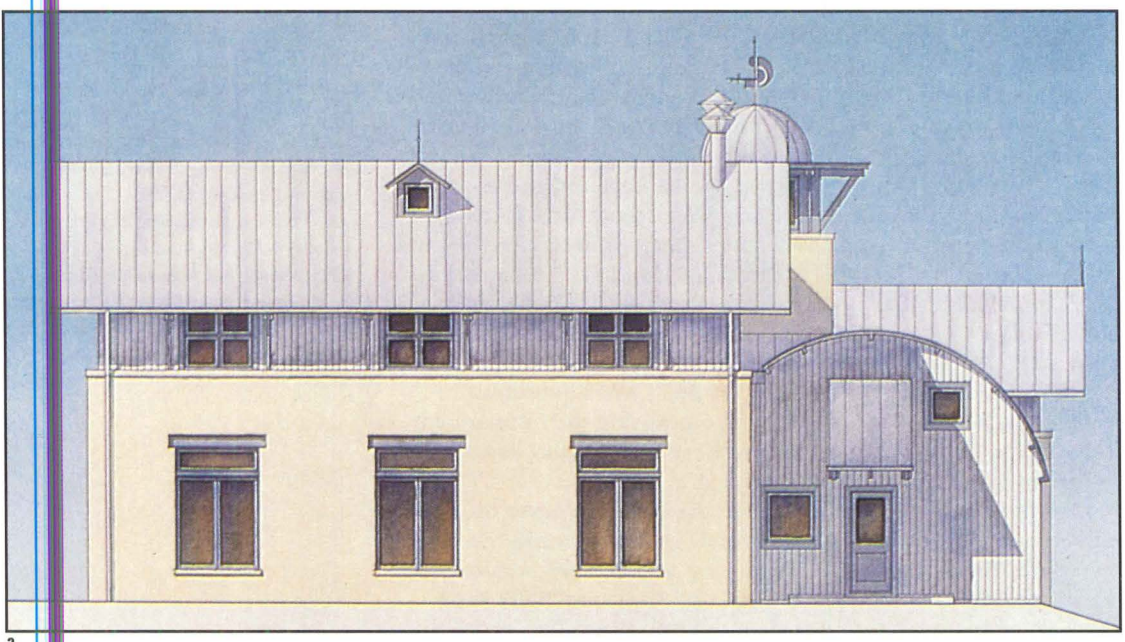
SECOND FLOOR PLAN

SECTION AA



FIRST FLOOR PLAN

A westward sloping, five-acre meadow is the site for the Harvey House in Bath, Ohio. The house's components are carefully positioned around a sunken "barnyard garden" in pursuit of a metaphor: Barn structures are often constructed on naturally sloped or built-up land to allow vehicular access at two levels. Thus, residents are invited to develop a multifaceted relationship with the landscape. Watercolor renderings of eastern (3) and southern (4) elevations yield seductively simple qualities: A masonry base is exaggerated for "a solidity and permanence that farm buildings often lack," and a standing seam tin roof, silo roof, lighting rods, and weather vane are "not used for nostalgic reasons, but rather for their appropriateness to the landscape. . . " and the "cultural continuity that they engender."



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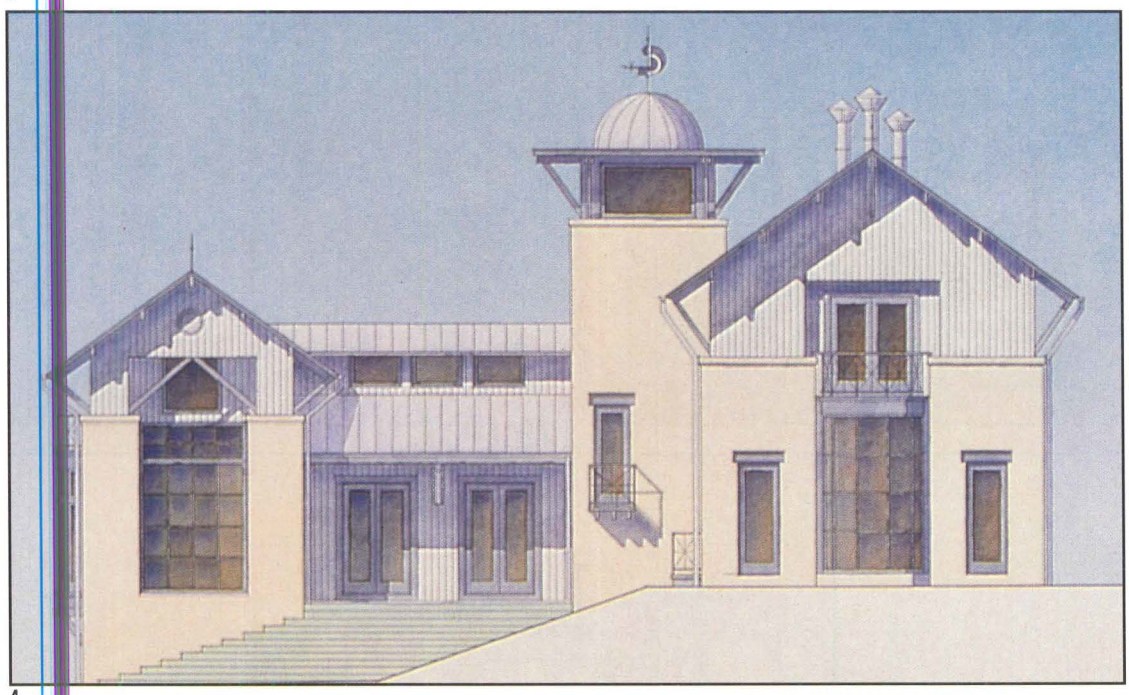

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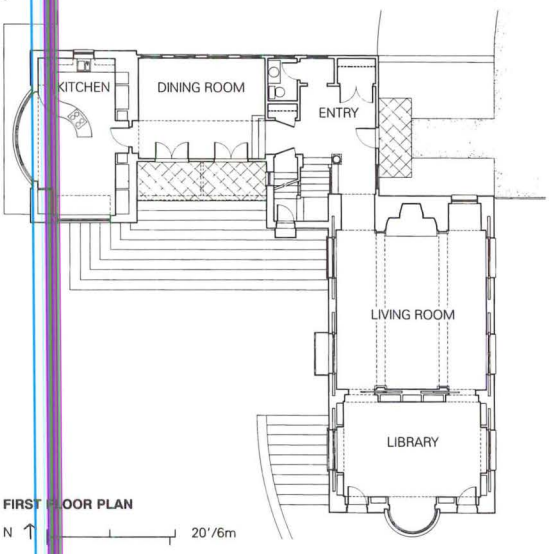
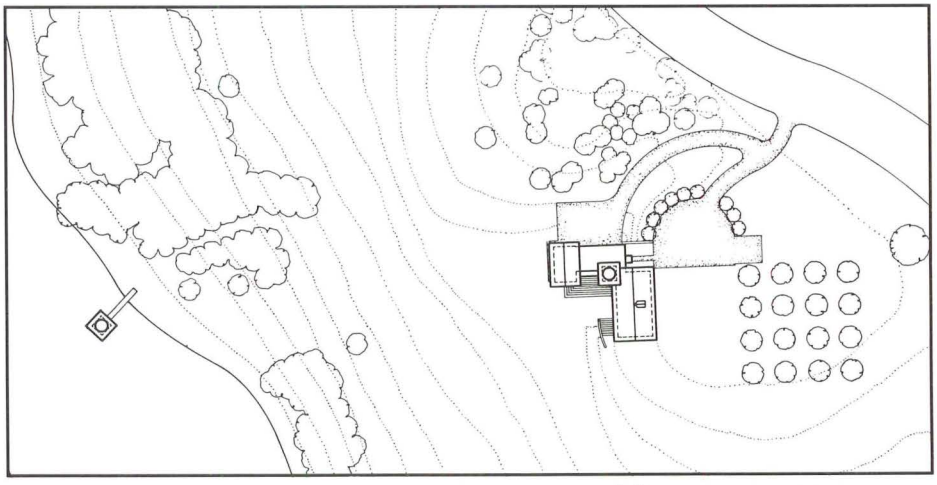
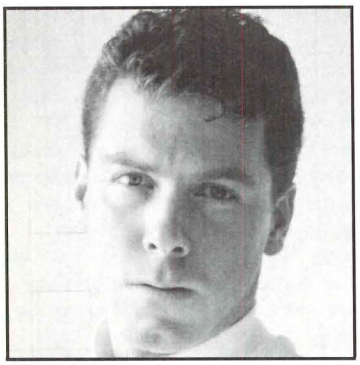


FIRST FLOOR PLAN



SITE PLAN

Michael Bell
Michael Bell Architecture
Berkeley, California



Michael Bell

"I'm interested in the idea of turning space inside out and the place of the body in such a space."

Age: *29.*
Education: *BS Architecture, The Catholic University of America, 1983; MArch, University of California at Berkeley, 1987.*
Experience: *Lecturer in architectural theory, design studio critic, UC Berkeley. Worked for Stanley Saitowitz, among other architects. Has done several collaborative projects with Lars Larup and Antonio Lao. Own firm founded in 1989.*
Influences: *Robert Slutzky and Joan Ockman article "Color/Structure/Painting" on the possibility of turning space inside out; Frank Stella's comments on Mondrian's "Broadway Boogie Woogie" in the book* Working Space; *DeChirico's essay "Vittorio Plastici" on the difference between the sign quality and the plastic quality of the figure within painting.*

Project: *Blue House, St. Mary's County, Virginia.*
Designer: *Michael Bell, Berkeley, California.*
Client: *William Bell.*

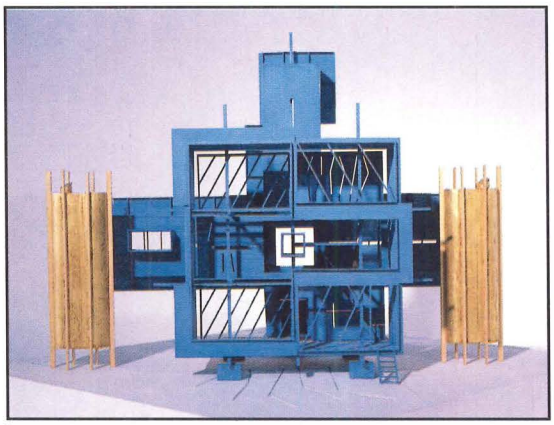
Michael Bell uses architecture to explore a set of formal and spatial ideas derived from Modern art and largely ignored by Modern architects. "I'm interested in the idea of turning space inside out," says Bell, "and the place of the body in such a space."

There are direct links here to the thinking of Modern painters such as Piet Mondrian, who turned the background negative space of painting into a foreground figurative element, and Josef Albers, whose paintings, says Bell, "often had a center with the same color as that of the periphery, creating a depth in the flatness."

Turning space inside out displaces the human figure, the traditional "subject" of architecture in Western culture. Most Post-Structural critics have questioned whether architecture should represent or be about the human figure; Bell's work questions whether architecture should even accommodate the human body. Referring to De Chirico's empty landscapes, Bell talks about architecture in terms of a "subjectless space."

One might ask whether Bell's investigations, however interesting, are architectural. How far can one go in displacing the human body, for example? Still, exploring the limits of architecture is a worthwhile pursuit and one that raises Michael Bell's work above so many projects that seek an image rather than an idea.

The Blue House (1, 2) that Michael Bell designed for his parents on a flat riverfront site contains two tall, shallow blocks. The one block has a square face and is three stories in height, with a central projecting window. The other block has a cross-shaped facade with a tall central section and elliptical structures at each end. The house contains a living/dining room and a kitchen on the first floor and bedroom and bath on the second.



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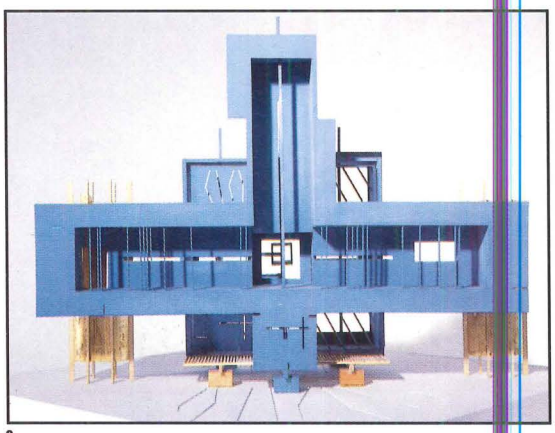

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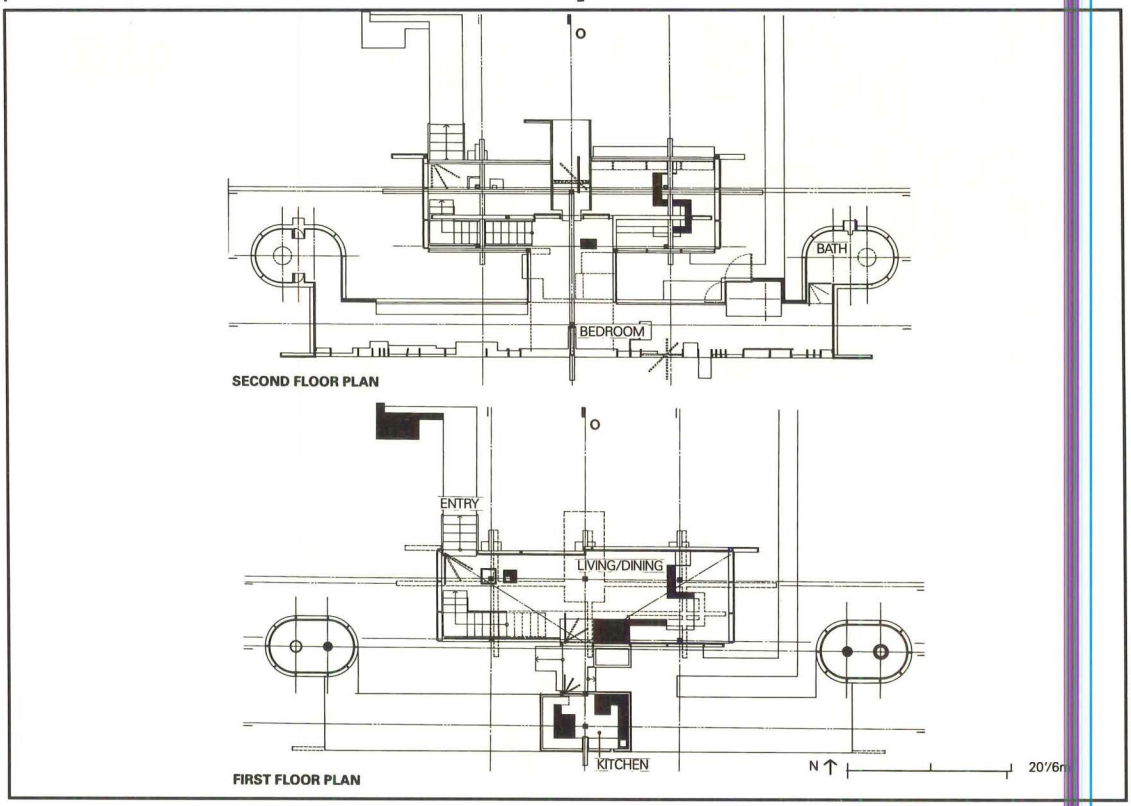
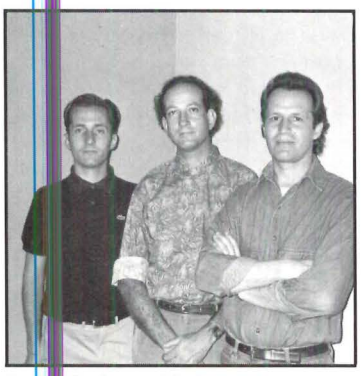


Enrique Norten
TEN (Taller de Enrique Norten y Asociados)
Mexico City



Bernardo Gomez Pimienta, Enrique Norten, Jorge Luis Perez

"I would say my situation is not much different from my friends in New York and Los Angeles."

Age: 36.
Education: *studied architecture at Universidad Nacional Autonoma de Mexico and Universidad Iberoamericana in Mexico City, 1972–1977; MArch, Cornell, 1980.*
Experience: *worked in office of Boris Albin, Engineer, and Abraham Zabludovsky, Architect; partner in Albin & Norten, Architects (1981–1985); formed TEN in 1986. Has taught architecture in Mexico City, at Pratt and Parsons in New York, and at UCLA.*
Influences: *Malevich, Kandinsky, Picasso; Marinetti, Baudelaire; Cherinikov, Saint-Elia, Mies, LeCorbusier, Juan O'Gorman, O.M. Ungers, Abraham Zabludovsky. Also cited are Zaha Hadid, Steven Holl, Peter Cook, Morphosis, Coop Himmelblau, Rem Koolhaas, Javier Bellosillo, Alberto Kalach, Luis F. Flores, and "very especially," Lebbeus Woods.*

Project: *House N, Valle de Bravo, Mexico.*
Architect: *TEN (Taller de Enrique Norten: Enrique Norten, partner in charge; Bernardo Gomez Pimienta and Jorge Luis Perez, partners; Juan Carlos Tello, Antonio Cangas, Javier Macias, and Axel Arano, design team).*
Client: *private owner.*
Consultants: *Alfredo Aguillar, structural, Javier Aguerrebere, mechanical.*

The formal clarity of House N, by the firm TEN, has been forged in a conflict between Modernist convictions of the architects and local regulations aimed at prohibiting Modernism. Despite its traditional surface treatments, the house exhibits a design rigor in keeping with the numerous architects that the partners admire. Its qualities have not been obvious to other owners in this picturesque weekend resort town, whose protests interrupted construction three times; each time, it was shown that the house met all requirements for roof slopes, exterior materials, etc.

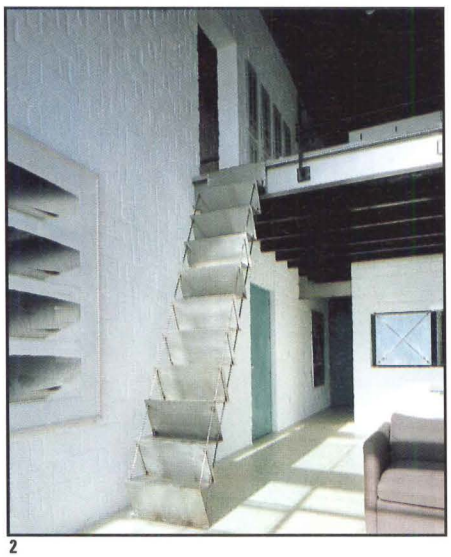
This is the firm's fifth house in Valle de Bravo, but the first one on a highly visible site, a hilltop in view from the plaza. On an adjoining site, the firm's House R is now under construction. Commissioned by a friend of the House N client, this house will share extended garden terraces with the first one.

With several houses and small commercial projects behind them, the TEN partners are now taking on more varied jobs, including a park in Mexico City and a commercial center in Acapulco. At this stage in his small firm, says Norten, "I would say my situation is not much different from my friends in New York and Los Angeles."

Very restrictive codes dictate the design of houses in Valle de Bravo, a hilltown so picturesque that it has been named a National Monument. TEN's House N meets these rules to the letter, with its tile roof and whitewashed masonry walls, but its structural frame, including exposed steel bracing, aroused local ire (1). Within the long, gabled volume, living room and kitchen are on the middle level, bedrooms above and below. Each level opens to a distinctive outdoor space on the terraced site; on the lowest level, privacy is provided by a room-height wall with one big opening toward the view of the town and lake. Leading up to the bedroom loft from the living room (2) is a steel stair like those in several earlier TEN houses.

1

Photos: Luis Gordoa



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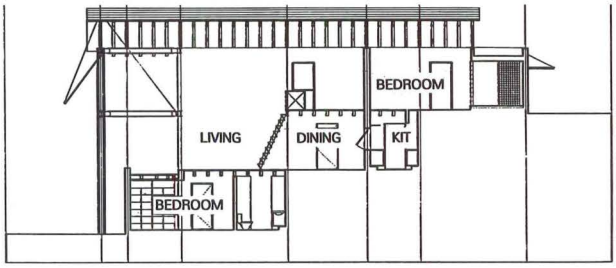
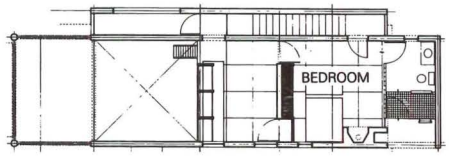


SECTION LOOKING WEST



TOP FLOOR PLAN

N → 10'/3m

Mehrdad Yazdani
Ellerbe Becket
Los Angeles

Scott Schulman

Mehrdad Yazdani

"Paintings and sketches lend great freedom; when . . . a design progresses to working drawings, I lose that freedom, but the process doesn't suffer. Instead, it acquires a new level of maturity."

Age: *30*
Education: *BArch, University of Texas at Austin, 1984; MArch, Harvard, 1987.*
Experience: *designer, Michael Graves, Architect, 1983, 1985, 1987; project designer, Ellerbe Becket, since 1987.*
Influences: *paintings of the Expressionists, Surrealists, and Cubists; contemporary Los Angeles art and architecture; Yazdani's own paintings and drawings.*

Project: *Administration and Warehouse Building, Central Distribution Headquarters, Department of Water & Power, Los Angeles.*
Architects: *Ellerbe Becket, Los Angeles (Louis M. Naidorf, design principal; Samuel Burnett, project director; Mehrdad Yazdani, project designer; Art Dungo, job captain; Fred Javier, Heidi Hefferlin, Noel Matsamura, Brit Billeaud, Alicja Hrabia, Anne Laurie Pritchard, Ed Crayne, Vicki Desch, Hernan Bejarano, project team).*
Client: *Department of Water & Power, City of Los Angeles.*

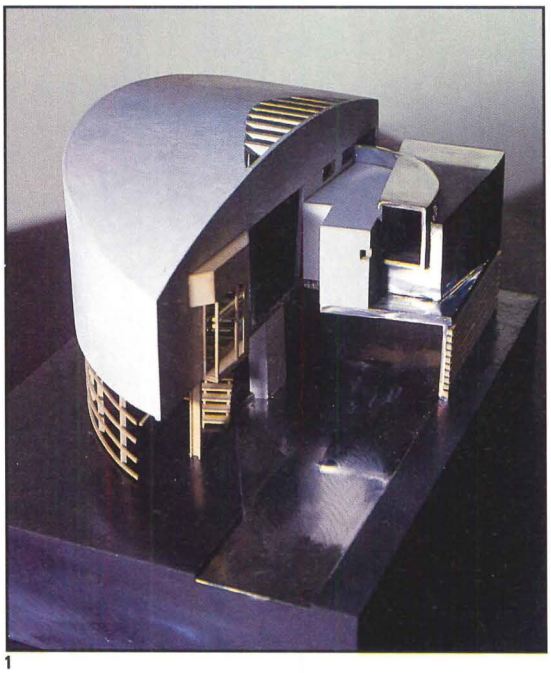
Project: *Overland Street House/Studio, Los Angeles.*
Designer: *Mehrdad Yazdani, in collaboration with Hoda Meysami-Yazdani.*
Client: *Asghar Gitibeen.*

Sometimes, the most opportune avenue for an architectural designer is not the most obvious one; Mehrdad Yazdani's experience is a case in point. He came to Ellerbe Becket with interests that typically lead one to smaller firms with an established, and perhaps well-publicized identity. Instead, Yazdani opted for Ellerbe Becket because the office does not conform to a single stylistic model and provides room for experimentation. Here he has learned how to invest buildings for the Los Angeles Department of Water & Power with architectural integrity, while getting construction bids that come in under budget.

On his own time, Yazdani draws and paints to build a bank of design concepts. "Paintings and sketches lend great freedom when I'm exploring ideas for buildings; once a design progresses to working drawings, I lose that freedom, but the process doesn't suffer. Instead, it acquires a new level of maturity."

Only a portion of Yazdani's investigations take root in his work at Ellerbe Becket; the house in which he will live is influenced by the Expressionistic architecture of his Los Angeles colleagues. In both projects, Yazdani follows a consistent design approach: The building envelopes are composite, yet highly disciplined forms, governed by the diverse spaces inside.

Yazdani's design for his house (to be built around a suburban garage) initially featured canopies and faceted walls (1). The final model (2) is more controlled: a large elliptical volume contains the living, dining, and kitchen areas (which can be used as a studio) on the first floor, with a study above. The broad, smooth curve of the west side contrasts with the projecting and recessed bays that overlook the carport (plan, 3). On the first floor, the exterior walls are built of concrete block; the upper walls are stuccoed and the roof is clad in lead-coated copper.



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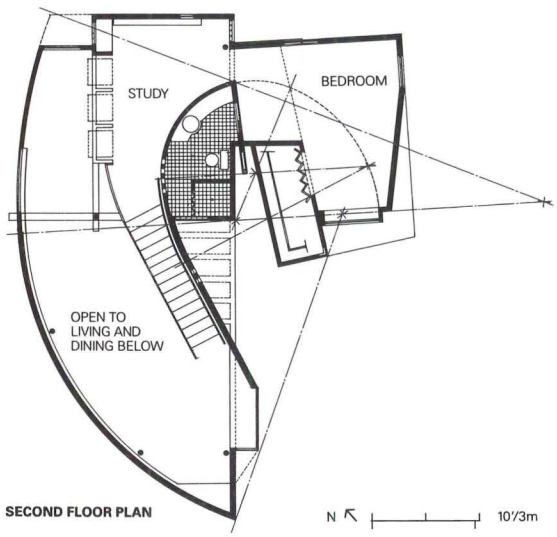
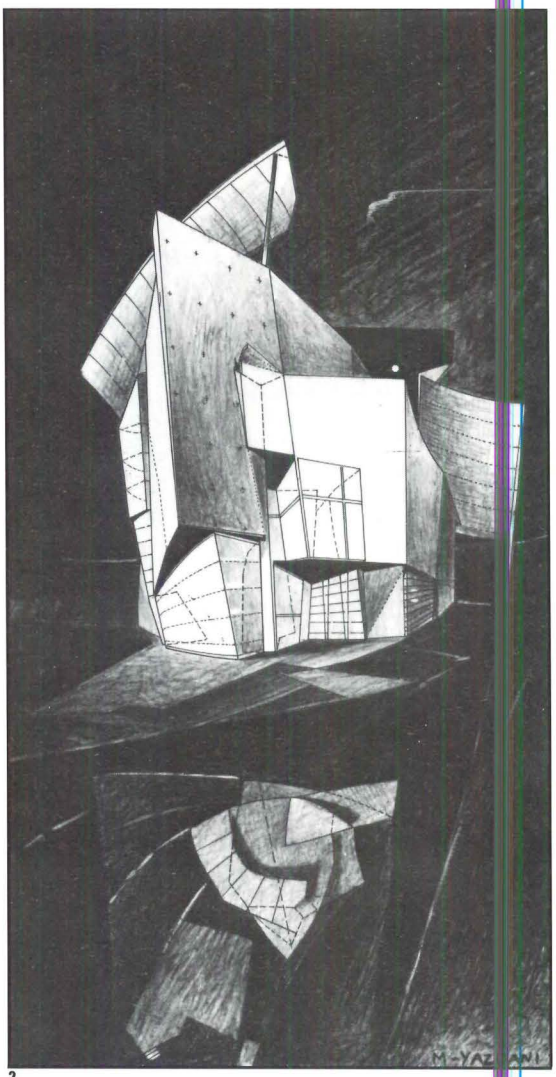


SECOND FLOOR PLAN



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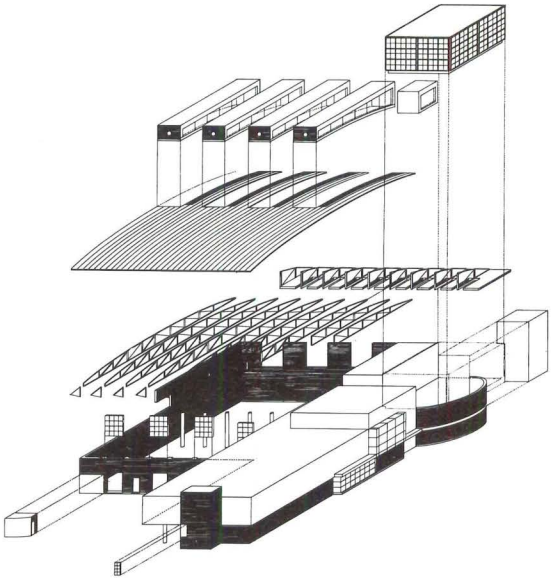
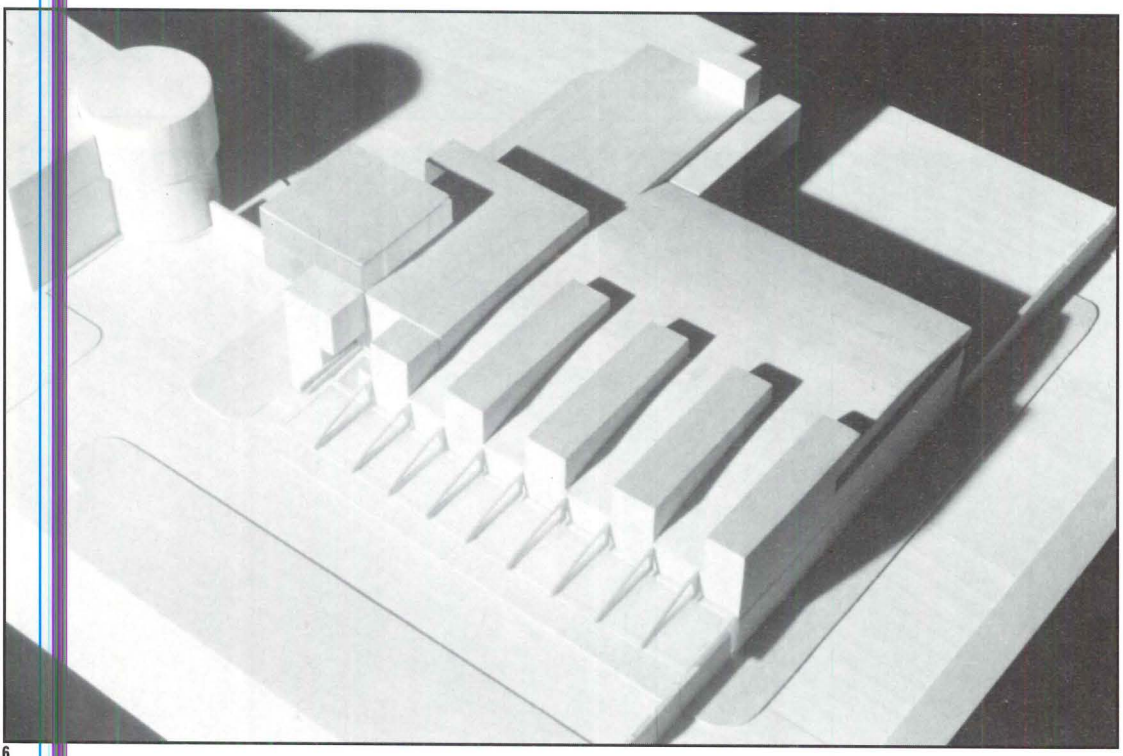


4 AXONOMETRIC

At Ellerbe Becket, Yazdani is designing several structures for Los Angeles's Department of Water and Power; the Administration and Warehouse Building and Distribution Headquarters shown here will comprise two distinct parts, joined by a double height lobby. The study sketch of the corner entrance (3) and exploded axonometric (4) indicate the variety of materials that will enclose the cylindrical and cubic forms. The two-story warehouse will be spanned by arched trusses and lighted by four clerestory monitors; the third-floor assembly room will be enclosed in glass block and set on a base of concrete block that encloses the adminstration wing.

By dividing this mass into a series of distinct volumes (5), Yazdani will give the DWP employees a workplace with a specific identity. The articulation of the sculptural forms has a site planning rationale, too: Another service building (shown in the wooden model) can be sited opposite the administration building, and frame a vehicular entry to an expanded service compound (6).

5



6

Thomas Hanrahan/Victoria Meyers
Thomas Hanrahan and Victoria Meyers, Associates
New York

Thomas Hanrahan

Victoria Meyers

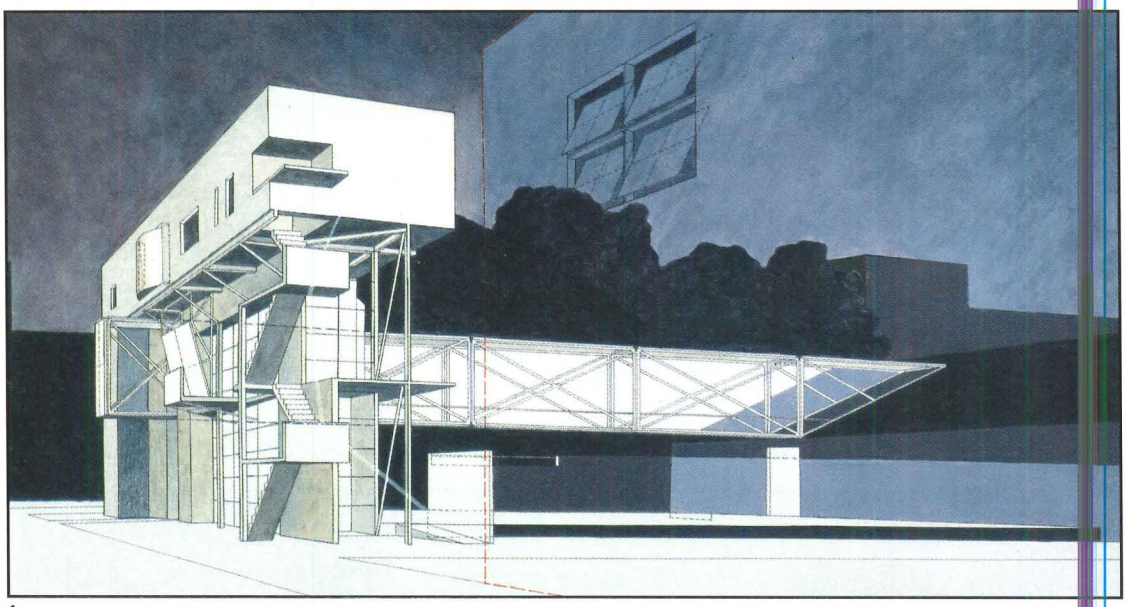
Thomas Hanrahan
Age: *34.*
Education: *BSArch., University of Illinois, 1978; MArch., Harvard, 1982.*
Experience: *SOM/Chicago, Adjunct Professor at Columbia, private practice.*

Victoria Meyers
Age: *37.*
Education: *AB Art History/Civil Engineering, Lafayette College, 1975; MArch., Harvard, 1982.*
Experience: *Richard Rogers & Partners, private practice.*
Influences: *LeCorbusier, 20th-Century building technology (industrial and vernacular buildings), American landscape/literature, Harry Cobb at Harvard (Hanrahan); F. L. Wright, American landscape/literature, modern British architecture (technological innovations), modern nonfigurative painting/sculpture (Meyers).*

Project: *Crafts Exhibition and Production Center, New Orleans.*
Architects: *Thomas Hanrahan & Victoria Meyers, Associates (Matthew Baird, Eric Cobb, Eric Anderson, and Yuval Briskar, Helpers).*
Client: *Thomas Mann.*

Designed for a prominent New Orleans craftsperson specializing in jewelry and small art objects, the center is to consolidate diverse operations and provide a base for more experimental work. It also provides for the display, sale, design, and fabrication of a range of handicrafts. Located in an area intended for renewal/rehabilitation by the city, the center will include a renovated existing warehouse, linked to a new "wall" building by an open-air elevated bridge.

As the designers describe it, "The new building is intended as a transformation of the urban wall as a space-defining boundary." Regarding their approach to this and each of their projects, Hanrahan and Meyers comment, "We begin a project by outlining concepts that transform the program and site. These concepts, as opposed to a pre-formulated set of spatial and technological kit of parts, form the basis of our critical intervention, and, in fact, constitute the content of our architecture. This conceptual approach legitimizes an architecture that challenges the conventions of material, structure, and enclosure, as opposed to an architecture that simply extends current knowledge." The project is a clear expression of the architects' intentions and should play a strong role in strengthening a neighborhood making a comeback.



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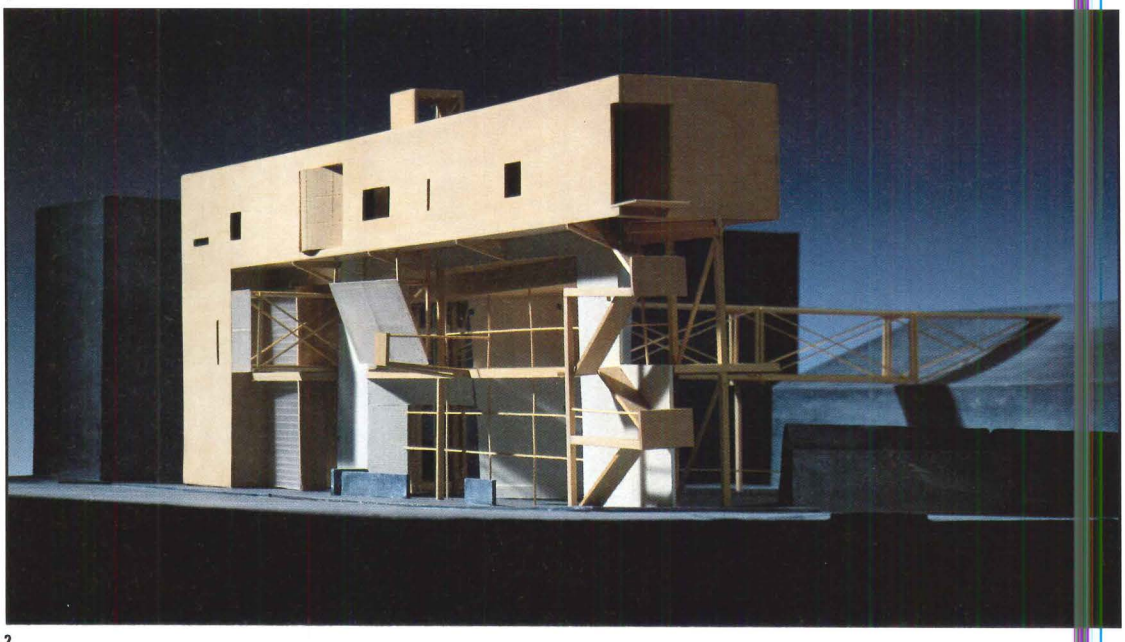
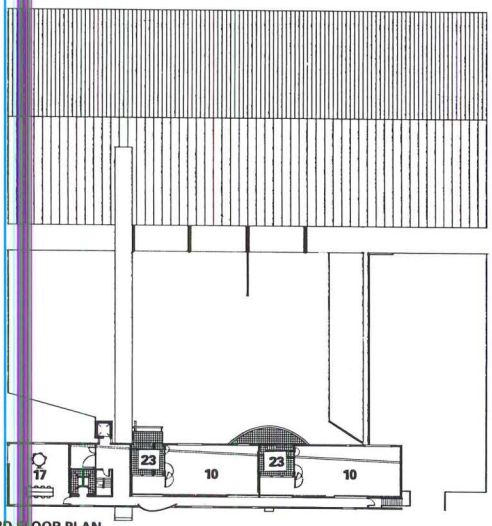


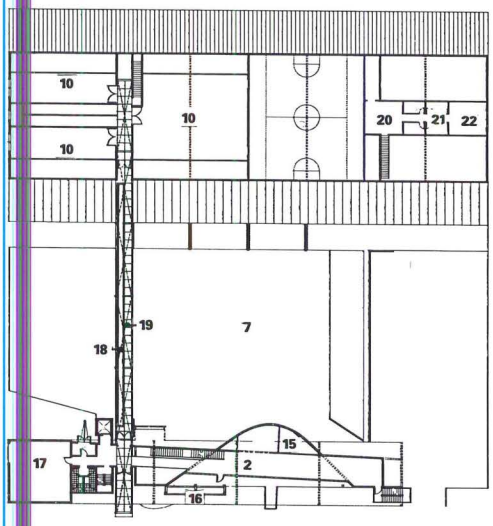
2

Rendering of the new part of the facility, seen from the east (1) illustrates the two-story gallery segment under the Thomas Mann Designs/workshop element on the third floor. Also shown is the connecting bridge and open conveyor leading to the renovated existing warehouse block. The courtyard inscribed by the three elements will occasionally be used for sales, but the parked market will be the normal area for this function. The model, seen from further around to the southeast (2), indicates the massive leg and arm that seems to hover protectively over the lighter gallery areas, anchored by the stair on the east end.

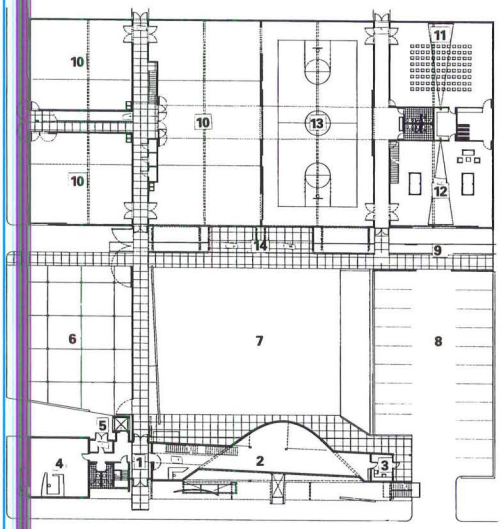
Jock Pottle/Esto



THIRD FLOOR PLAN



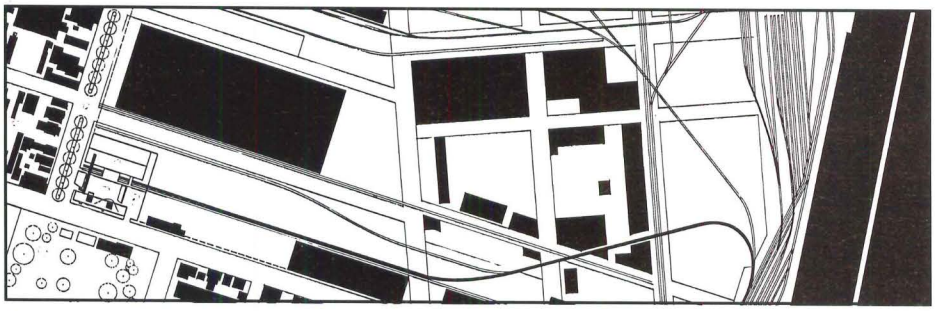
SECOND FLOOR PLAN



FIRST FLOOR PLAN

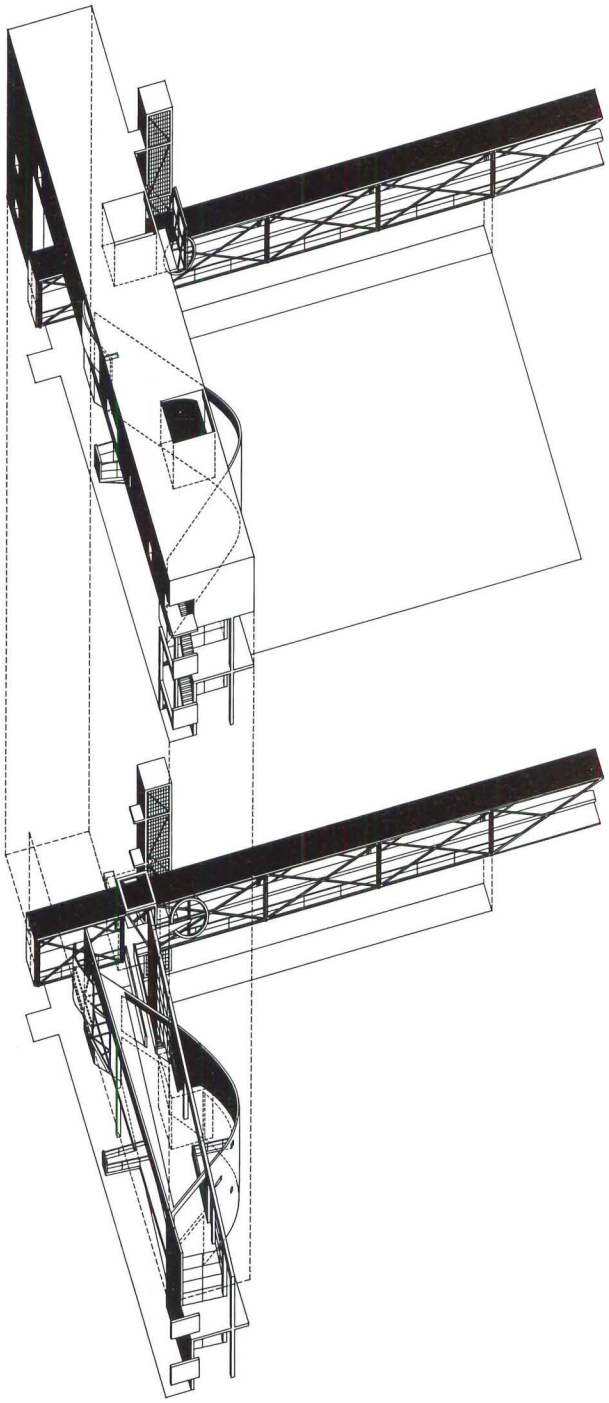
N 40'/12m

1 ENTRY
2 GALLERY
3 OFFICE
4 RETAIL
5 LOADING
6 PAVED OUTDOOR MARKET
7 COURTYARD
8 PARKING
9 EXISTING RAILROAD TRACKS
10 WORKSHOP
11 MEETING ROOM
12 RECREATION
13 GYMNASIUM
14 TERRACE
15 OPEN TO BELOW
16 DISPLAY SCREEN
17 THOMAS MANN DESIGNS
18 CONVEYOR
19 BRIDGE TO WORKSHOP
20 TEEN DROP-IN
21 COUNSELING
22 DAY CARE
23 ATRIUM WORKSPACE



SITE PLAN

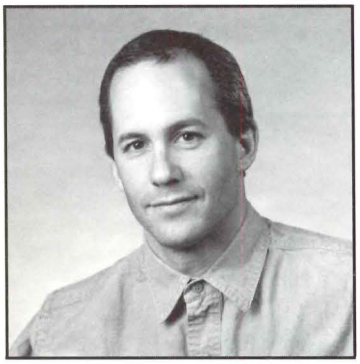
N 300'/100m



AXONOMETRIC

Mike Cadwell
Columbus, Ohio

Occupation: *Architect, carpenter, assistant professor of architecture, Ohio State.*



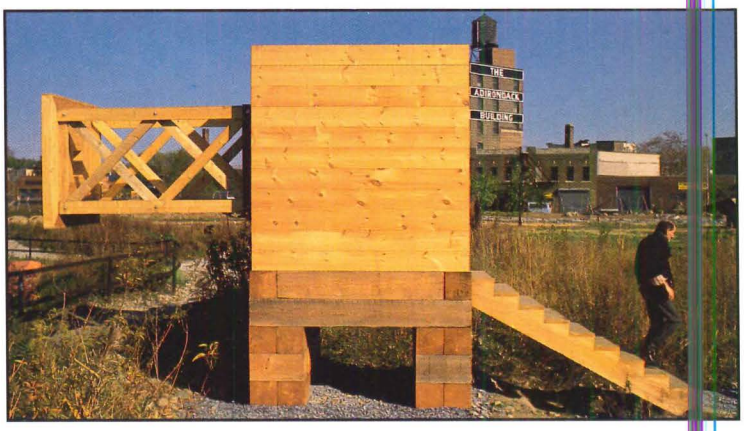
Mike Cadwell, Columbus, Ohio

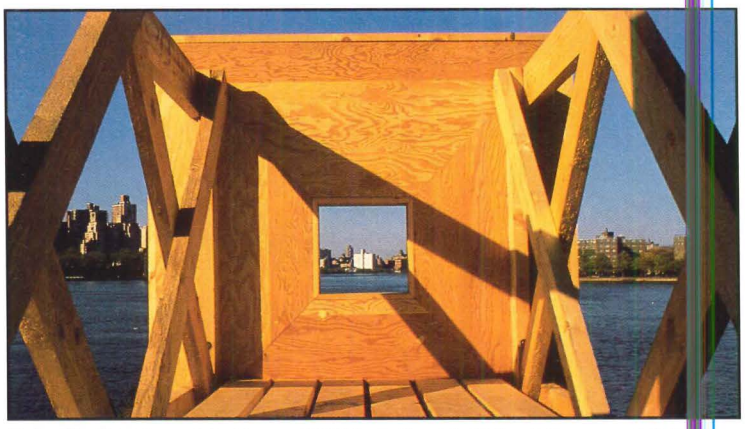
Age: *38.*
Education: *BA, Williams, 1974; MArch, Yale, 1981.*
Experience: *archaeologist's assistant in Turkey; furniture maker; apprentice to architect Turner Brooks; worked in Cesar Pelli's office, where Siah Armajani and Scott Burton consulted.*

"I longed for the physical connection with materials that I enjoyed as a carpenter. . . . An architect designs buildings; I decided I would also build buildings (small ones)."

Those who find Mike Cadwell's "small buildings" can enjoy architecture that is as strong and understated as his prose. A carpenter who studied English literature, Cadwell was impressed by the craftsmanship of pastoral poetry. Later, in Turner Brooks's studio, he decided to become an architect.

Cadwell studied American building archetypes and returned to Vermont, where he and Richard Brown built four small buildings inspired by silos, covered bridges, towers, and sheds. Recent work sustains the small buildings' dream-like quality in an urban context. The "Gatehouse," for example, juxtaposes dissimilar forms and brings us into contact with the elemental conditions of construction, the land, and our being.

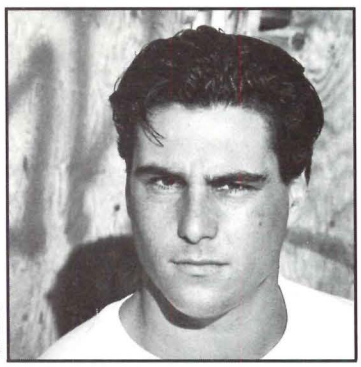




Cadwell's "Gatehouse" in Queens (1988), built with Richard Brown and John Baker, offered two views of New York – a framed focus on a highrise and a lateral sweep of the East River.

David Hertz
Syndesis
Santa Monica, California

Occupation: *building and furniture designer, developer of Syndecrete™, a lightweight concrete material.*



Tom Bonner

David Hertz

Age: *29.*
Education: *combined studies at UCLA and Santa Monica College of Fine Arts; BArch, Southern California Institute of Architecture (SCI-ARC), 1983.*
Experience: *construction work; John Lautner, Hollywood, California; Frank O. Gehry & Associates, Santa Monica, California; started own firm in 1983.*

What David Hertz calls a "by-product" of his experiments in furniture design and fabrication has become the unifying element in his career. The product is Syndecrete™, a concrete Hertz has developed over the last ten years that uses plastic fibers in place of steel to provide integral, lightweight, three-dimensional reinforcement, and employs fine volcanic aggregate instead of gravel. The result is a refined, lightweight material with tensile strength. While his firm, Syndesis, currently employs over 20 people in the fabrication of such Syndecrete products as furniture, countertops, floor tiles, and bathroom fixtures, the material is not just a cash cow. "We're not only offering a material, but also a service," Hertz says. He likens his firm's work to that of Arts and Crafts architects or the Eames studio (though, unlike Eames, he eschews mass production).

Hertz has completed a few architectural projects (including the Venable Studio in Venice, California, P/A, Dec. 1989, p. 101), and would like to design buildings where "the whole architecture becomes a kit of parts" that his firm would design, fabricate, and erect.

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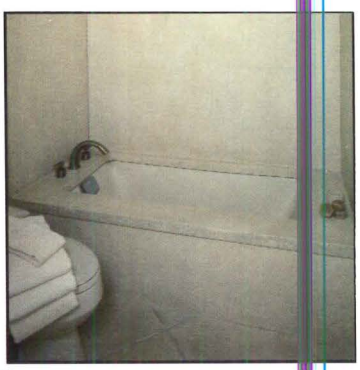


3

Syndecrete baptistry (1), staircase (2), and bathtub enclosure (3) designed by Hertz.

Kevin C. Lippert
Princeton Architectural Press
New York

Occupation: *publisher of books on architecture, landscape architecture, and design.*

Maria Millair

Kevin C. Lippert

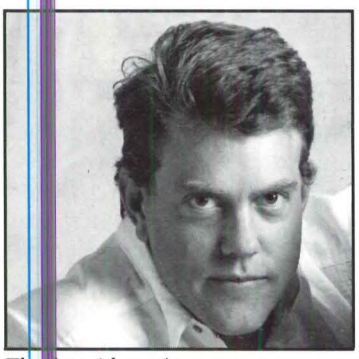
Age: *31.*
Education: *BA, Princeton, 1980; MArch, Princeton, 1983.*
Experience: *founder and president of PAP's sister firm Design Systems, consulting on computer systems integration for CAD, electronic publishing, and networking; taught a course on computers and architectural representation at Princeton. Founded press in 1982.*

In the early 1980s Post-Modernism was in its heyday, and architecture students like Kevin Lippert regularly consulted historical sources. Many of these were dusty oversize tomes, accessible only during library hours. Lippert decided to reproduce one such "bible," Letarouilly's *Edifices de Rome Moderne,* in a reduced format for his own use, and found a printer through the yellow pages. There followed a "one-afternoon intro to the beauty of making books," he recalls. "I got hooked." The limited edition of Letarouilly was a hit among fellow students. By the time Lippert graduated, he had republished two more classics – by Ledoux and Durand – and was working on a third by Alphand. Not wanting to settle in as merely a "reprint press," PAP has since branched out to include monographs on contemporary architects, history, theory, and journals. The 1990 catalog lists 100 titles, with an emphasis on young architects and architectural writers. In tune with the times, many of the books have a Modernist, urbanist bent. Lippert now works with a staff of seven, and publishes about 20 new titles a year. "PAP has grown beyond my wildest expectations," he says. Part of the press's success lies in the uncompromised quality of the graphic design, binding, reproduction, and acid-free paper. Durable books, says the publisher, "have in a real sense replaced the buildings I was trained to design."

A color plate from Monuments of Egypt, *which reproduces 419 plates from folios published by members of the 1798 Napoleonic expedition.*

Theodore Adamstein,
Olvia Demetriou
Chrome Photographic Services;
A&D Design
Washington, DC

Occupation: *owners of a photographic services business and joint design practice.*

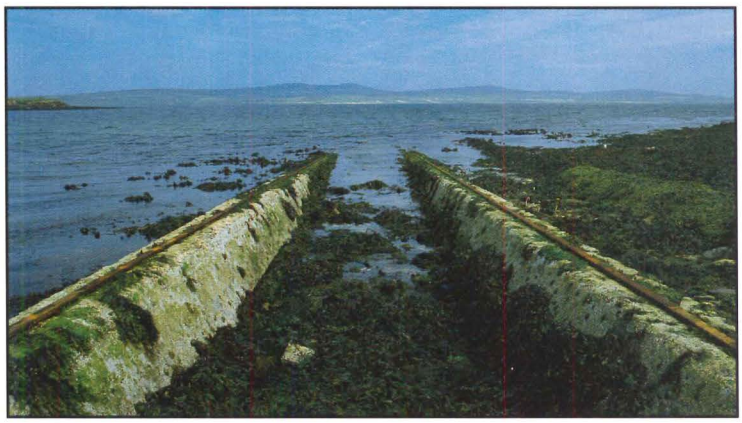


Theodore Adamstein

Olvia C Demetriou

Theodore Adamstein
Age: *36.*
Education: *Michaelis School of Fine Arts, University of Capetown 1972–73; University of Cape Town School of Architecture 1973–1976; BArch, Cooper Union, 1980.*
Experience: *founded professional color lab in Capetown; worked for SITE, designing exhibition installations.*

Olvia C. Demetriou
Age: *32.*
Education: *Corcoran School of Art 1972–73; Catholic University School of Architecture, 1974–76; BArch, Cooper Union, 1980.*
Experience: *James Stewart Polshek, 1980–81; Angelos Demetriou & Associates as project architect and designer, 1981–87.*



© T. Adamstein

One of a series of boat ramp photographs by Adamstein.

Early on, Theodore Adamstein and Olvia Demetriou recognized that a successful photographic business would provide the financial basis and a valuable resource for a "creative" (and selective) design studio. Chrome, founded five years ago, has since expanded from a one-room operation to occupy 8000 square feet in an 11,000-square-foot commercial building that the partners completely overhauled and which also houses their design firm. Demetriou runs the practice, while Adamstein divides his time between both concerns. A dedicated photographer, he has two one-man shows to his credit and another at Washington's Tartt Gallery in the works. Once a year the pair take off on a photographic expedition on which Adamstein shoots mostly water landscapes. Two trips to Scotland have yielded a haunting series on centuries-old boat ramps. "The ideas in the photography inform the architecture," he says. "It's all fused together," adds Demetriou. "Everything feeds back."

Kathleen Kupper

Vitruvius Program
Santa Monica, California

Occupation: *co-founder and director of an education in architecture program for children ages 4–16.*

Kathleen Kupper

Age: *35.*
Education: *BFA, California Institute of the Arts, 1976; MArch, UCLA, 1982.*
Experience: *founded and directed a series of workshops for ages 4–12, Pasadena, 1976–1988.*

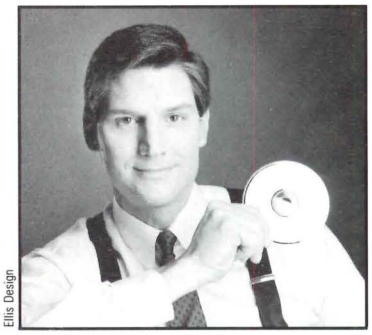
Ostensibly, Kathleen Kupper teaches small children architectural precepts. Actually, the Vitruvius Program, which she founded with her husband Eugene in 1988, imparts much more than that. Under the auspices of SCI-Arc, and funded by grants, Kupper has developed programs that teach children to perceive and understand real places, conceive imaginary ones, and be capable of communicating those private visions to others, both visually and verbally. With projects for preschoolers like a monument to hold the moon, a floating city, or a building that flies, "we're allowing children to explore the world," Kupper says, "and discover a sense of wonder." Besides spatial literacy, Kupper's pedagogical objectives include building self-esteem, the ability to use a descriptive language of form, and the encouragement of "mythic thought in an age of materialism and skepticism." Her program seems enticing to older architects, too, so much so that several SCI-Arc students regularly attend classes.

Alongside her teaching work, Kupper is an active artist. Above, a production sketch for an opera based on Seneca's discourse on natural phenomena. Kupper hopes to find a composer to set the piece to music.

Joseph B. Thompson

Architectural Synthesis
Nashville, Tennessee

Occupation: *founder and president, Architectural Synthesis Incorporated, developing software for construction applications.*



Ellis Design

Joseph B. Thompson

Age: *37.*
Education: *BArch, University of Tennessee, 1985.*
Experience: *Architectural firms in New Orleans and Nashville.*

As early as 1984–1985, Joseph Thompson was meeting once or twice a month with a group to discuss ways of translating software concepts into specific product applications. Originally, they thought about programs marketable to architects but decided that they were chronically "lean on cash." So they decided to approach manufacturers who had the revenues and the most to gain.

Thompson had taken all of the available courses at the University of Tennessee dealing with computers, and he had seen that computers were "where things would be heading," although not much was started in 1980. After several years of working in architectural offices, he had had enough. "I was ill prepared to start a business, but that's what really made me do it," Thompson states.

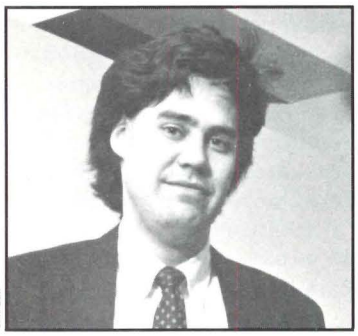
It took eight months to make his first business agreement, in the second quarter of 1987, with a window and door manufacturer to produce software for use by architects in selecting products; this, admittedly, was the result of a similar program introduced by a competitor. Completing work on that contract in early 1988, Thompson faced another gap until late 1988, when they got two other contracts.

Having now established the firm as a viable market option, Thompson now has 13 people working for him, including some "remote programmers." The firm has to be flexible enough to tailor programs to the architects and computer systems. Joseph Thompson has identified a gap in the chain of information needed by architects, and he has created a company whose products fill it.

Glenn Weiss

King County Arts Commission
Seattle

Occupation: *director of public art programs in county facilities; exhibition designer/curator.*



Jim Ball

Glenn Weiss

Age: *33.*
Education: *BA, Bucknell University, 1979; MArch, Columbia University, 1986.*
Experience: *HLW Architects, New York; Alfred Wen/Kim Wang Associates, New York; co-director, Storefront for Art & Architecture, New York; adjunct curator for architecture, PS1 Museum, New York; director, 911 Contemporary Arts Center, Seattle; public art coordinator, King County Arts Commission, Seattle.*

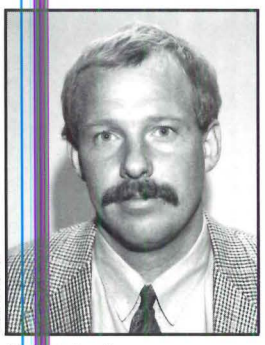
Glenn Weiss has devoted his career to organizing exhibitions and events that challenge political, artistic, and architectural conventions, first in New York, where he and YA alumnus Kyong Park (P/A, June 1987, p. 94) operated STOREFRONT for Art and Architecture, and, since 1986, in Seattle. Weiss's projects include "Homeless at Home" (P/A, May 1986, p. 27), an exhibition/"street action" in which artists spray-painted messages on New York streets and sidewalks; and a 1987 competition for a billboard commenting on a proposed nuclear waste site to be located in Hanford, Washington.

His more recent projects have been less confrontational, if no less political: Competition Diomede (P/A, July 1989, p. 19) sought ideas to bridge two islands – one American, one Soviet – in the Bering Strait. Now, after years of "yelling at bureaucrats," Weiss is co-ordinating the percent-for-art program of the King County Arts Commission. This experience has been an awakening, he says, since he now encounters the public not as faceless nay-sayers to the avant-garde, but "nice people standing in front of you talking sincerely."

The constant in Weiss's work is a concern with the built environment, but he sees his mission in larger terms: "What I am trying to do is suggest that the environment, the visual arts, and political activity is valuable human activity that can make our lives full."

Robert Lemke
First Wisconsin Bank
Milwaukee

Occupation: *real estate project manager, First Wisconsin Community Investment Corporation, Milwaukee.*



Mark F. Heffron

Robert Lemke

Age: *35.*
Education: *BS Architecture, University of Wisconsin-Milwaukee, 1984.*
Experience: *construction apprentice for five years prior to school.*

Robert Lemke helps direct private funds for the public good. "I am directly responsible for all the real estate development efforts of the First Wisconsin Community Investment Corporation," he says, which "concentrates on neighborhood rehabilitation efforts in Milwaukee's central city."

The work may not be glamorous, but it is important and clearly needed. Projects he has managed since 1984 include the conversion of a warehouse into apartments, the rehabilitation of a mixed-use building for use by a community-based organization, and the revitalization of a former department store in a key neighborhood.

"When the bank started the investment corporation in 1982," says Lemke, "there were only about 15 banks in the whole country doing this work. Now there are more, since regulators rate banks according to their community response."

There is no typical day in his job. "I do everything from financial analyses and project presentations to hiring contractors and supervising construction." The investment corporation uses many local Milwaukee architects, who frequently accept lower fees "to make these projects work," says Lemke.

While the skills needed for his position may seem far removed from those of most architecturally trained people, Lemke sees it otherwise. "Architecture school taught me how to make proper presentations, which is very important in this business. It also taught me how to evaluate projects," he adds. But the greatest benefit of all "was learning to deal with the unrealistic deadlines of school," says Lemke. "The deadlines are as tight here."

Madeline Schwartzman
New York

Occupation: *sculptor and teacher of undergraduate architecture majors at Columbia.*

Madeline Schwartzman

Age: *28.*
Education: *BA, Barnard College, Columbia, 1983; MArch, Yale, 1986.*
Experience: *designer for several architectural firms; as production designer at Yale School of Drama.*

For Madeline Schwartzman, sculpture came first. At the age of 12, at an art camp, she got hooked on welding. By the time she went to college, she had her own welding equipment. "I [had] a vision of future work in sculpture being so large that I would need an architect's license," she says. And so, before and after graduating from Yale, Schwartzman acquired hands-on experience at several architectural firms.

These days architecture is on the back burner again, while she sculpts. Schwartzman uses mainly glass, wire, and wood, with mundane household or garden objects often sandwiched between sheets of glass. Teaching creative and analytical drawing to Columbia undergrads pays the bills but is also a source of considerable satisfaction. Inspired by the likes of architect-film director Sergei Eisenstein and architect-artist Gordon Matta-Clark, Schwartzman doesn't feel she has to choose between disciplines. "I feel they will come together in something huge," she says.

Untitled. Glass, wood, steel. 1989.

Janet Marie Smith
Baltimore Orioles
Baltimore

Occupation: *vice president, Stadium Planning & Development, Baltimore Orioles, Baltimore.*

Janis Rettalata

Janet Marie Smith

Age: *32.*
Education: *BArch, Mississippi State University, 1981; MA, urban planning, City College of the City University of New York, 1984.*
Experience: *Coordinator of Architecture and Design, Battery Park City Authority, New York, 1982-1984; Executive Director and President, Pershing Square Management Association, Los Angeles, 1985-1988.*

Janet Smith sees the traditional confines of architectural practice as too limiting. "The built environment is controlled by government policy, legal decisions, and the restrictions of developers and financiers. "Architects don't get involved in many of the significant decisions" because, unfortunately, "architecture is taught as beginning with the programming and ending with the completion of the punch list." Since graduating from architecture school, Smith has sought to expand that definition, working for clients empowered to make the up-front decisions.

Smith currently represents the interests of the Baltimore Orioles during the design and construction of their new center-city stadium.

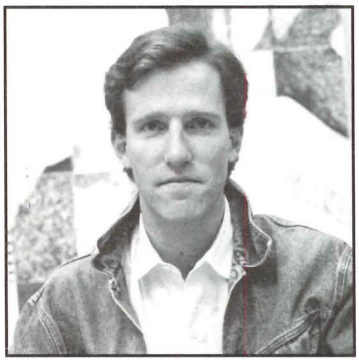
She is, in essence, a design manager, a role that she admits is not well established in the minds of architects or owners. "In all three jobs," she says, "I was either the first person to hold the job or a position was created for me."

She also admits that an architecturally trained person on the side of a client is not always welcomed by outside firms. "I have made their job harder, but I think everyone is prouder of the design."

What comes through in her conversation is a belief that such work, "in its own small way, can make our cities better." And she communicates an infectious enthusiasm for what she does. "If there is anything I can say about jobs I've had," she says, "it is that I have had a lot of fun."

Wellington Reiter
Newtonville, Massachusetts

Occupation: *Environmental artist and faculty member, MIT Dept. of Architecture.*

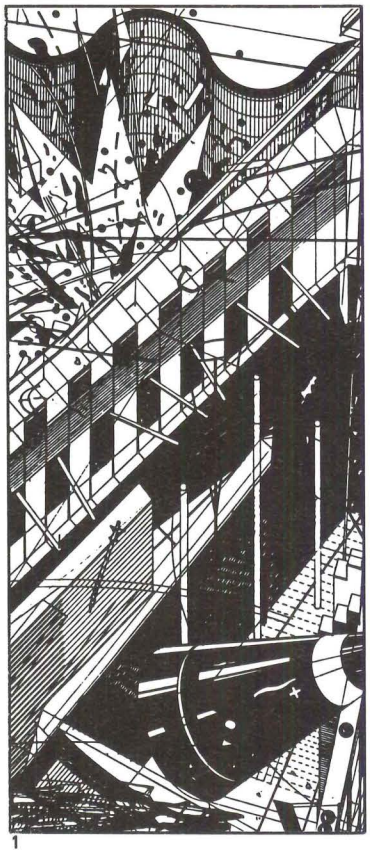


Wellington Reiter

Age: *33.*
Education: *BArch, Tulane, 1981; North London Polytechnic, Architectural Association, 1978–79; MArch, Harvard, 1986.*
Experience: *has had numerous exhibitions of drawings and built installations, and has maintained a conventional architectural practice with Patricia Reiter.*

A 24-mile bridge, 19th-Century fortifications, and a massive levee – these are the features of New Orleans that most impressed Wellington Reiter during the ten years he spent there. These vast works of civil engineering inspired 'Bridging History,' a 1987 installation Reiter designed and built at Boston's Institute of Contemporary Art; they are also the subject of a remarkable series of drawings that he has created over the past six years.

To Reiter, the beauty of these New Orleans landmarks is as impressive as the way they give form to the city. Today he is exploring modern alternatives to city walls and gateways; forthcoming drawings will show how contemporary structures can delineate zones of space and heighten our sense of the urban totality. Reiter uses drawings and installations to develop a critical position on architecture and the city; he hopes to build upon them when a promising architectural commission emerges.



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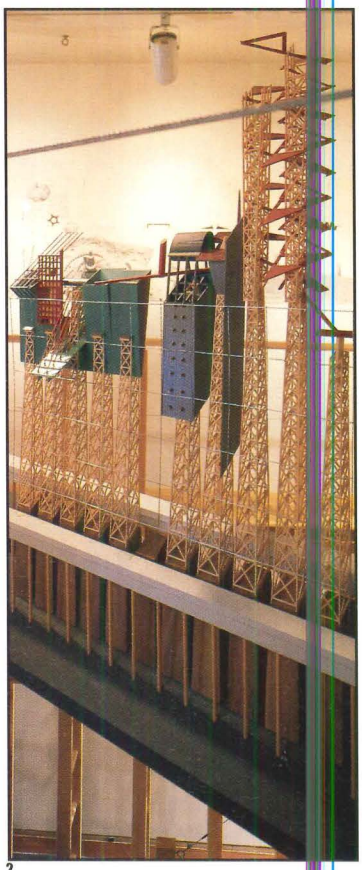

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Charles Mayer, Hansen/Mayer

For "Bridging History," Reiter displayed a 40-ft.-long drawing (excerpted above), "The Twelve Defenses of New Orleans" (1), and used 50 ladders to support three bridges inspired by New Orleans' 24-mile bridge (2).

Bill Cahan
Cahan & Associates
San Francisco

Occupation: *President and creative director of Cahan & Associates, a graphic design/advertising firm.*

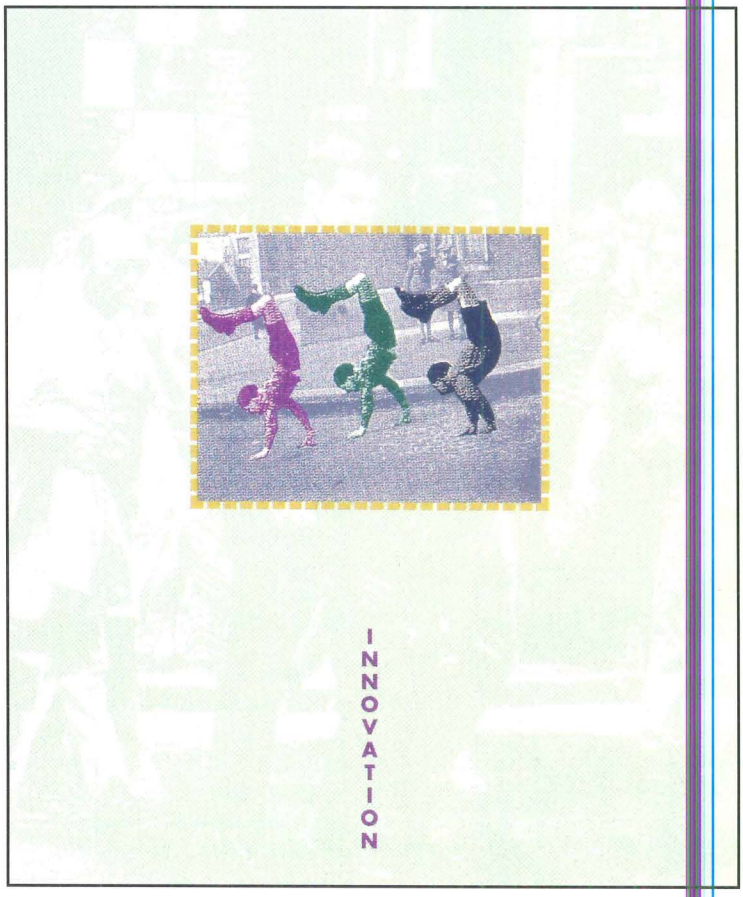
Bill Cahan

Age: *35*
Education: *Washington University, St. Louis, 1973–1976; BA in architecture, University of California, Berkeley, 1980.*
Experience: *designer, Anshen & Allen, Architects, 1980–85; founded Cahan & Associates in 1985.*

"I went from 3D to 2D," says Bill Cahan of his career change. Stymied by the cumbersome pace of architectural practice, he started his own graphic design firm. Today, five years later, he is creative director of a six-person office whose clients include nationwide developers and Fortune 500 corporations.

Cahan considers the architectural and graphic design processes identical: "We develop a program (our marketing strategy), and go through schematics, design development, and then mechanicals, our equivalent of working drawings." His background gives him a competitive edge; developers rely on him to interpret the best features of their buildings and then develop their marketing strategies.

While Cahan enjoys his career, he realizes that his products are short-lived: "My office does not make buildings – in five years, I won't be able to drive past a brochure I made and point it out to my kids."



Volpe, Covington & Welty, an investment firm, asked Cahan & Associates for a brochure that would convey expertise and dispel a stodgy image. Cahan's office responded with substantive copy and humorous illustrations; together they create an image of capability and creativity.

Perspectives

Editors comment on the works submitted for the Young Architects issue.

Editors' Roundtable

While there was no way to synthesize 495 portfolios into a single picture, patterns did surface, outlining some concerns of an emerging generation of architects. Editors Ziva Freiman, Thomas Fisher, and Philip Arcidi, who reviewed all the submissions, discussed the work.

PA: There's been a fast turnaround of architectural ideas in recent years, a plurality of investigations that themselves never become conclusive; now we're seeing mediocre Deconstructivist knockoffs, even before much Decon has been built.

TF: A lot of this has to do with the intellectual promiscuity that the media generates. One of the things I noted in some of this work was a resistance to the media. Now there seems to be an alternative attitude, opposed to Post-Modernism and Deconstructivism – which were catapulted into fame by the media – that is a response to the phenomenon of place, the *genius loci* described by Norberg-Schulz.

ZF: People are losing patience with stylistic polemics and are looking for other issues, artistic or otherwise . . . there is a search for a kind of architectural morality.

TF: There also are a number of people exploring the outer limits of architecture before it becomes something else, like literary theory or sculpture or painting. Post-Modernism was a very conservative movement, and part of the reaction to it has been to look at what people don't normally think of as architecture.

ZF: If Post-Modernism was a codifying of architecture for the public, then what is happening now is a decodifying of what can constitute architecture.

PA: Explorations like these are innate to our education system. It seems every architecture school develops its own vanguard.

TF: Many people who submitted projects, being young and relatively fresh out of school, perceived a need to give their architecture some kind of intellectual baggage that led to the heavy overlay of verbiage we found in so many of the submissions.

ZF: It would be unfair to accuse only the young architects of making these elaborate verbal overlays. They may take this example from a lot of established practitioners.

PA: Half a century ago architects themselves, more than the press, were the medium for broadcasting exceptionally bold work; in fact, it took American magazines a while to assimilate the Modern Movement. I think today the press appears mightier than it is because things are so diverse, and there is no single clearing house.

ZF: I think the pattern of the whole planet is against cultural consensus or consolidation.

TF: The debate is whether architecture should be a refuge from this lack of consensus or the reflection of it. If nothing else, I think that's what divides historicists and people in the avant-garde Modernist and Deconstructivist camps. I don't think there's an easy answer; Modern culture wants it both ways.

ZF: Deconstructivism and the phenomena that fueled it are always discussed in ominous, negative terms of chaos and fragmentation. Actually, it is fine to have an architecture of diversity that still reflects civic or moral values.

PA: I wonder if part of the motive for this re-valuation arises from the process everyone goes through after architecture school; there are few professions where there is such a radical transition between what you do in school and what you do afterward.

TF: On the one hand you are influenced by your professors, but on the other hand you're anxious to overturn their work. Some of the best architectural designers we saw here had struck out on their own. We also had a lot of work here that looked like trickle-down, derived from someone else.

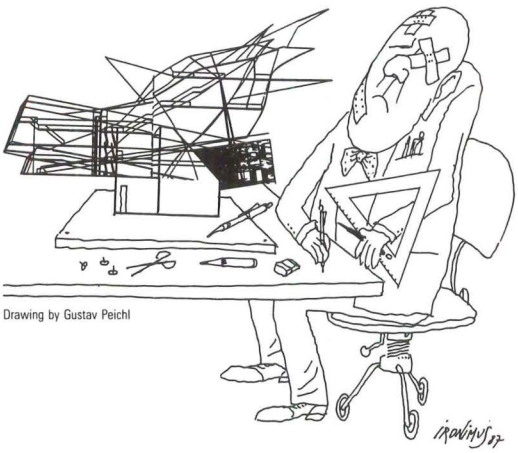
ZF: Most people would agree that much in architecture is inherently derivative, part of a culture. You don't reinvent the wheel all the time. Yet one can discern when architecture, original or not, lacks conviction. I recall looking at some of those extremely polished portfolios and feeling that they were facile.

TF: But one thing that we most admired in some of the historicist work was its incredible conviction. It wasn't cartoon historicism but solid stuff.

TF: The media and many juries still assume that an individual somehow has to make a fresh statement. In that regard we still are all Modernists in the larger, post-Renaissance sense; we consider the true artist somebody who makes an original statement.

ZF: There are other things that a magazine can stress – for example, technique or service to society. But this is limited by the expectations of the audience. People who look through this Young Architects issue don't want to see a book full of not very interesting, albeit quite competent work. They would be disappointed. ■

"The media and many juries still assume that an individual somehow has to make a fresh statement. In that regard, we still are all Modernists in the larger, post-Renaissance sense."



Drawing by Gustav Peichl

"Most people would agree that much in architecture is inherently derivative. . . . You don't reinvent the wheel all the time. Yet one can discern when architecture, original or not, lacks conviction."

Warren James traces Rowe's impact on architecture, urbanism, and education.

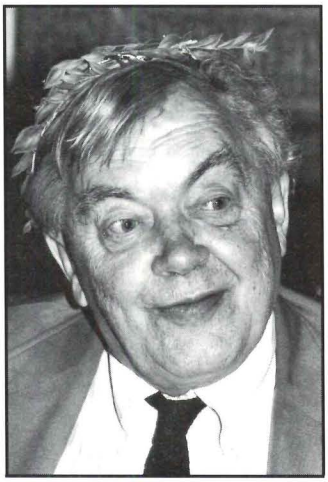
Essay: Colin Rowe and the Butterfly Effect

In order to understand the chaotic behavior of the weather, physicists have formulated the *Butterfly Effect*. It is the notion that a butterfly stirring the air in say, Ithaca, today, can cause thunderstorms in say, Rome, next month. Seemingly small influences can cascade upward and get magnified, multiplied, like a chain reaction. All of this unbeknownst to the butterfly, naturally. A parallel can be drawn in the current climate of architecture as well.

The influence of Colin Rowe's career – written, taught, spoken, and drawn over more than 40 years – can be seen now on architecture, urbanism, and education in America and in Europe. It is unprecedented or, to say the least, phenomenal. This impact can be appreciated by first looking at three of his essays and how they affected the work of architects, secondly by understanding the implications of his main book and how it made contextualism possible, and third how his own background and training altered architecture education. Colin Rowe has fluttered quite a bit and changed the weather.

In his first essay, "The Mathematics of the Ideal Villa," published when he was only 27 years old, Colin Rowe paired, dissected, and analyzed Palladio and Le Corbusier. He proposed convincingly that not only were Villa Rotonda and Villa Savoye related in conception, but that Villa Malcontenta and Villa Stein shared the same structural, and hence mathematical, principles. Elementary as that may seem today, it certainly was not in 1947, when Le Corbusier was still in practice and Palladio was not in vogue. Historical, revealing, and lucid analysis became Rowe's trademark. Even Le Corbusier agreed. In an unconfirmed but widely circulated story, the architect wrote a letter to P. Morton Shand, the editor of *Architectural Review,* where the essay was published, in which Le Corbusier said that Rowe's analysis was extremely important to understanding his architecture. Today most students of architecture are required to read it.

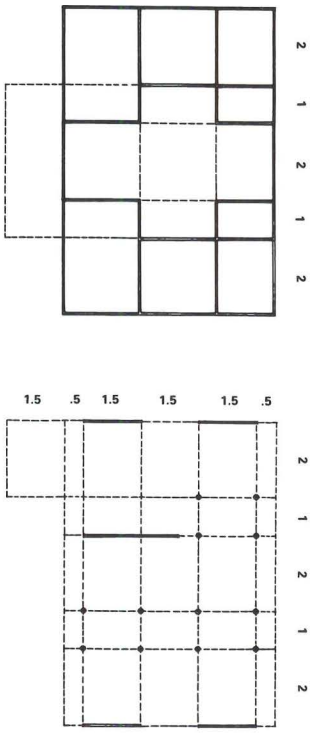
Rowe continued over the years to offer insights into Modern architecture's underlying intentions and ambiguities, drawing historical links between the Modern present and the Classical past, as well as artistic links between contemporary architecture and art. In 1950, when "Mannerism and Modern Architecture" was published, he proposed – quite radically then – that 16th-Century Mannerism



Dorothy Alexander

Colin Rowe, New York, 1990.

"Mies van der Rohe and Vignola, Le Corbusier and Michelangelo were distant cousins . . . and Rowe traced their family trees."



Rowe's analytical diagrams of villas Malcontenta, top, and Stein, above.

shared similar traits with 20th-Century Modernism. Mies van der Rohe and Vignola, Le Corbusier and Michelangelo were distant cousins. The Modernists were Classical Mannerists in disguise, and Rowe traced their family trees. The artistic links he found had to do with the ambiguities of Cubism. In "Transparency: Literal and Phenomenal" of 1963 (a second part was published in 1971, both written with Robert Slutzky) Rowe proposed that Modern Architecture's glassy, literal transparency possessed, like Cubist paintings, a phenomenal transparency as well. Now it was Gropius and Leger, Le Corbusier and Picasso. The Moderns were artists, not functionalists, and certainly not technocrats.

Denise Scott Brown argues, in "A Worm's-Eye View of Recent Architectural History," that the International Style came twice to America, once in 1932 – and again with Colin Rowe in 1962. His influence on the New York Five is easy to detect; he even wrote the introductory essay to their book. For Richard Meier it was Villa Savoye and Le Corbusier's villas of the 1920s, for Michael Graves Cubism and transparency, all over again. They had read Rowe's essays, and were applying his ideas.

In Europe some years later, James Stirling was to develop a collagist approach to his work as evidenced in the schemes for a Berlin office complex and a performing arts center in Ithaca: Buildings as miniature urbanism in plan, or as compressed Renaissance paintings in elevation. But that came from something else. . . .

Urbanism, in fact, is undisputably the realm where Rowe has contributed the most. Robert Venturi fanned the changing breezes of architecture with *Complexity and Contradiction* and Rowe had the same effect on urban design with *Collage City* (co-authored by Fred Koetter) 12 years later. While a comparative analysis of the two books has yet to be made, it is not hard to see what one did and the other did not. Venturi justified a hybrid American architecture, while Rowe offered complex urbanism in opposition to simplistic urban design. Rowe's book makes a case against the horrors of Modern urbanism with its vast undifferentiated open spaces and proposes that in order to correct them one could collage ideal, denser urban fragments from history. With fragments from different times and different cultures, this collaged city could accommodate a whole range of utopias in miniature. In the project *Roma Interrotta* of 1978, for example, amidst a densified, corrected Rome, a fragment of

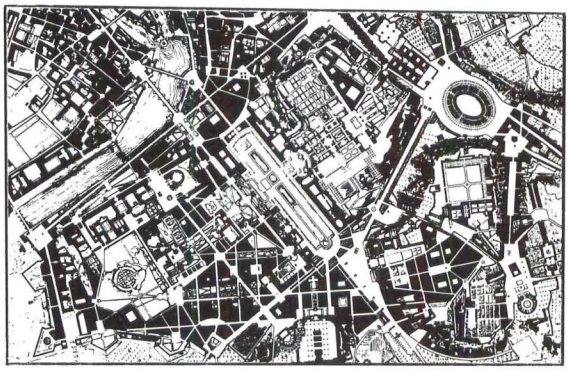
"Rowe has professed the Humanist aspects of Modern architecture . . . while exposing the poor results of the Modern city."

Rockefeller Center is woven into the urban fabric.

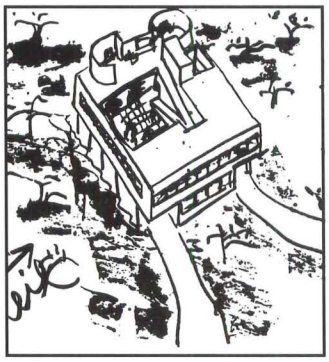
In a single book, we find not only the problems, but the solutions as well. For some the book was too complicated, hard to understand. As Donald Appleyard said in a review, it was at times exasperating for its grammatical acrobatics. That may be true. Rowe does not write for the public, but the graphic ideas proposed – with those high-contrast, black-and-white figure/ground studies as veritable x-rays of cities – found their way, eventually, to built urban schemes.

Battery Park City in New York and Seaside in Florida, although not planned by Rowe or by direct students of his, were made possible by the unanimous denouncement of the Modern city brought about since the book. Elizabeth Plater-Zyberk, when asked about his influence on Seaside, says "we would not know about urban *poché* in the United States if it were not for Rowe." In Battery Park City, the extension and continuation of the Manhattan grid, a contextual strategy in itself, defined by continuous street walls, public squares, and a memorable river esplanade, can be seen as a direct lesson learned from Rowe. Perhaps the individual buildings are too tall, too fat, or not as tightly knit as they could be, but the whole represents the triumph of the denser collaged fragment over the Modern, clean-slate plan.

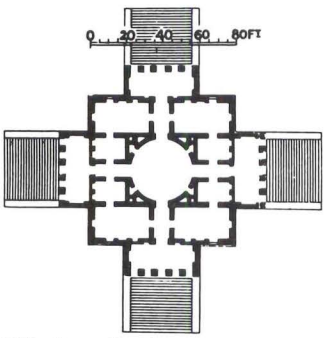
If biography is destiny, then Colin Rowe was destined to influence. After studying architecture in Liverpool in the late 1940s, where Stirling was a classmate, he went on to the Warburg Institute in London where he was a student of Rudolph Wittkower, the author of *Architectural Principles in the Age of Humanism* and an influence on Rowe's early essays. He went back to teach at Liverpool before crossing the Atlantic to attend courses at Yale. He arrived at the University of Texas at Austin in 1953, where Hamilton Harwell Harris, the noted California architect, was dean. A group serendipitously coalesced around Rowe, the so-called "Texas Rangers." Among them were Bernard Hoesli, a Swiss architect who had worked with Le Corbusier; John Hejduk; Robert Slutzky, who studied under Josef Albers; and Lee Hogden, who had worked with Alvar Aalto. They launched a two-pronged attack, as Hogden says, "an anti-Bauhaus agenda in opposition to the excesses of Gropius [at Harvard] and a Modern challenge to the pragmatics of the Beaux-Arts [at Austin]." They taught not only the ideas of Le Corbusier and Alvar Aalto – architects still in practice – but also Palladio and the Renaissance. "Architecture as an idea," Hogden says, a theory. For them Modern was a formal construct with Classical meanings and artistic intentions, with a formal vocabulary that could be analyzed (as Rowe had done in his essays), and which had nothing to do with the pragmatics of function.



Roma Interrotta project, after Nolli's sector eight. Peter Carl, Judith Di Maio, Steven Petersen, Colin Rowe.



Villa Savoye, bird's eye view.



Villa Rotonda, plan.

The group quickly acquired a radical cachet, for it seems that it was too much, too soon. It disbanded in three years, but Rowe's ideas caught on. As Denise Scott Brown has said, "for architectural thought to receive approval in America, it must come from, or at least proceed via Europe, and preferably Great Britain." It did.

Rowe crossed the ocean again to Cambridge, until 1962, when he returned to the United States to teach at Cornell. There he started the graduate urban design studio, the first in this country. For almost 30 years in Ithaca, Rowe has professed the Humanist aspects of Modern architecture as analyzed in his essays, while exposing the poor results of the Modern city as evident in his book. He liked the architecture but hated the urbanism – he taught about the middle ground. But how? Thomas Schumacher calls Rowe's method of teaching "the Socratic method in reverse: The student asks a question, receives an enigmatic answer, researches that, comes back, asks another question and so on."

By now, architecture schools between Boston and Washington are filled with an entire generation of professors and deans who have studied from, or under, Rowe. And architecture education has not been the same since.

Henry James once said, "live all you can, it's a mistake not to." For Rowe it would be "*teach* all you can, it's a mistake not to." Perhaps the highest compliment (though he would dismiss it self-effacingly) is to say that Rowe is like the eloquent, snobbish English character in a grand Jamesian novel. He is the one with the insouciant memory, sardonic voice, curled lower lip; a small participant, a brilliant and amused observer of a great story. And a story, as James put it, is good until a better one is told.

Warren James ■

The author, a frequent contributor to P/A, is the principal of James & Associates in New York.

Drawing on conversations with architects around the country,
Alex Cohen reports on the complexities of launching a practice.

Survey: The Road to Independence

For many young architects, particularly design associates in large firms hankering for more control over their work, the attraction of establishing an independent practice is obvious. The opportunities to express oneself beyond "gasket details at ½-inch scale," and to work directly with clients from project conception through construction, lure more assured practitioners to strike out on their own. While the struggle to land quality projects is a challenge most recognize, few appreciate from the start the complexity and potential traps of managing a service business, while correctly allotting the time and resources necessary to attract diverse commissions.

There is an expectation among those who work in big firms that they might get a start from clients already familiar with their work on projects executed in the large office. In reality, however, exposure to the client pool is minimal. Hierarchical project teams are the norm in corporate practices, and client contact is by and large limited to principals or project captains. Even if an individual's contribution is recognized, most corporate or institutional clients are unwilling to take a risk on an upstart.

Thus, the first work new firms take on usually consists of small-scale commissions from friends or relatives, though some aspiring independents may establish their clientele by capitalizing on mutual interests outside of architecture. Peter Wheelwright, for instance, a 40-year-old architect and artist, launched his practice eight years ago as an extension of his acceptance in the downtown Manhattan milieu. "All my initial work after leaving Tod Williams's office was for artist friends," he says.

Competitions continue to be a rewarding, albeit time-consuming way for young architects to get a foot in the door. Sometimes, a competition entry will also generate other commissions. While still at KMW in Boston, Cary Tamarkin, 32, and Timothy Techler, 33, collaborated on several competitions. As newly-named finalists in the 1985 Escondido Civic Center competition, they were invited by a Southern patron to design a conservatory on a 10,000-acre estate.

But focusing on only one major job or relying on a circle of acquaintances has serious limitations. "We built our firm from that [conservatory] job," explains Tamarkin. "But once that project went into construction, our overhead caught up with us – we realized we had no back-up work." Scott Koniecko, 40, a veteran of I.M. Pei's Manhattan office, reports that "after three years on my own, all my current projects are repeat work for friends."

"Small firm size [may] constitute a stiff barrier to bigger commissions . . . but CAD's labor-reductive capabilities are making a dent in that perception."

"Some people aren't managers. Unfortunately they don't know it until they try."

A critical reality confronts those who pursue small design assignments: Many potential clients, planning to renovate for example, are more likely to retain a builder than an architect. "A lot of people want builders to clone what they've seen in a magazine," says Jim Langford, 34, of Dallas. "I've had clients walk in with floor plans they did themselves." For Marsha Hart, a 31-year-old who has been practicing on her own for a year in Exeter, New Hampshire, the struggle is in "educating potential clients to acknowledge that design can improve their projects." Hart attributes her success in quickly attracting residential, commercial, and institutional renovations in part to her "affinity for the naïve questions" that she must answer for clients.

Attracting such a broad range of work usually requires a combination of promotional strategies. Hart designed a marketing kit highlighting her experience; Langford began teaching outside Dallas, and the school has referred to him several jobs from people interested in an architect with teaching credentials. Lecturing on Palladio to lay, as well as professional, audiences has further increased his exposure. Networking is another tack. Dan Rothschild, 31, recently featured as one of "Twenty People to Watch in 1990" by the *Pittsburgh Post Gazette*, credits his success to ties he cultivated with other architects (as mentors), engineers, developers, and potential institutional clients.

Publication for some designers is the primary means of marketing. Exposure in the journals is gratifying professionally, and while it may not bring in clients immediately, it enhances the architect's credibility. "When I'm trying to hook a client, I can whip out a P/A article, and it reinforces a good feeling about my work," explains Walter Chatham, 38, of New York. Others remain skeptical about the benefits of magazine publicity, especially via the "shelter" consumer publications. Barry Goralnick, 34, of New York, says he got a lot of calls and letters "requesting plans for a published house – most people offered a hundred dollars or less."

Many young designers, particularly in the larger cities, often find themselves trapped in a narrow area of activity, such as residential renovation. Goralnick, formerly with Robert Stern, has managed to branch out to designing and marketing home furnishings like pillows and draperies – a design niche that barely ex-

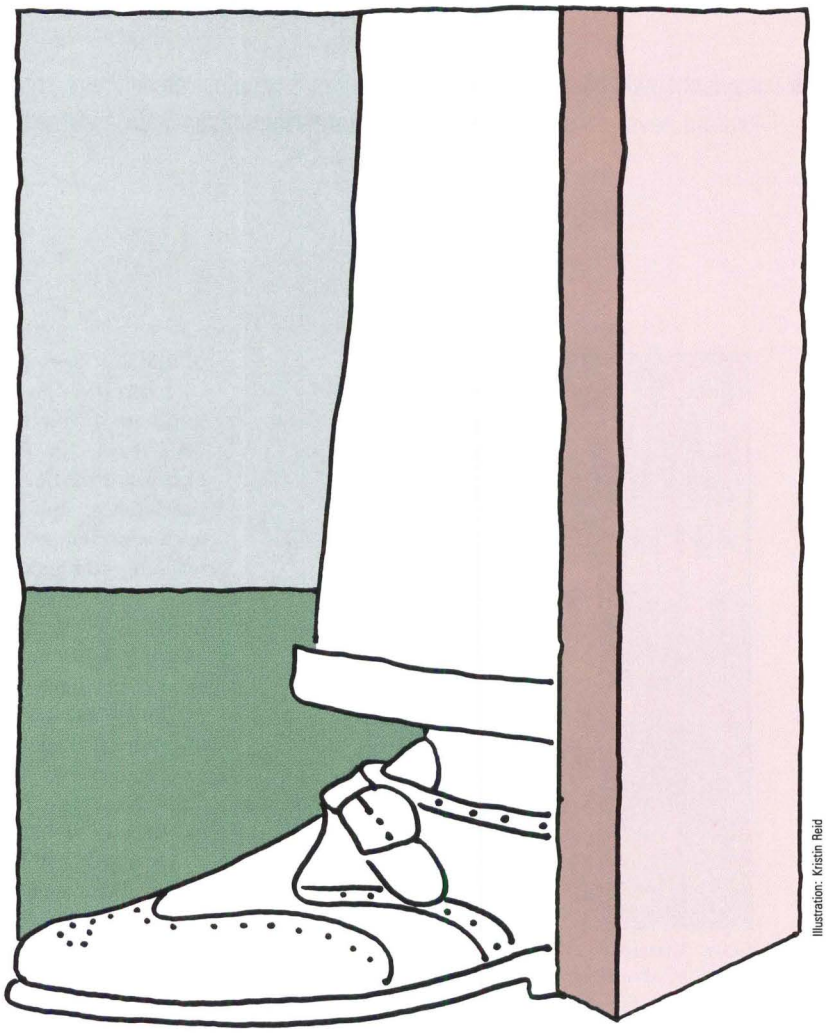


Illustration: Kristin Reid

isted for architects ten years ago. Building on the base of custom furnishings he'd designed, Goralnick recently engaged a marketing firm to locate a furniture manufacturer. "Accessories and furniture along with interior design are a great way to supplement a firm's income," he says.

Other practitioners, from the outset, resolve not to compromise on the scale or focus of their work. Berkeley architect Laura Hartman and her partner Richard Fernau turn down additions or minor renovation work. Consequently, firms like theirs have to weather sharp fluctuations in workload and must sacrifice good employees in lean times.

Building a reputation for small residential work presents another hazard: It becomes difficult to "jump scales" to larger projects. "It's a great leap of faith for a client with a $10 million project to chance it with someone who hasn't done that size job before," says Tamarkin. Small firm size, too, may constitute a stiff barrier to bigger commissions, even for practitioners who enjoy significant recognition in the profession. But CAD's labor-reductive capabilities are making a dent in that perception. According to Chatham, with a computerized practice "it's much easier now to convince people that even architects who stress high design are capable of producing work on schedule."

Florian Wierzbowski Architects in Chicago managed the leap in scale by focusing first on a lot of small but visible jobs. "We enjoy designing exhibition installations, and the nearest things to exhibit work are retail stores. [They are] quick exercises in space, form, light, and materials, and a lot of people see them," explains Stephen Wierzbowski, 37. The firm has completed over 40 retail spaces, some in less than a month. Most recently, Wierzbowski and partners Paul Florian, 40, and Bill Warren, 40, have begun to work on designs for an expanding chain of skincare stores and have been called in by a large Chicago firm, with extensive apartment building experience, to design the envelope of a residential tower. Indeed, small practices are increasingly being hired as design consultants to larger firms. Chatham maintains that such associations are "ideal for getting involved in large projects because you don't have to downsize after the project."

Many young practitioners in the bigger cities perceive that their local AIA chapters are not looking out for their interests. Others, however, report significant peer support for their endeavors. "We have to be collegial to survive," Hart says. In San Francisco, Bruce Tomb and John Randolph, both 33, recently solicited funds from architects and artists to supplement a grant for an exhibition installation they were building at a nonprofit gallery. They were surprised by the number of firms that contributed to their cause, given "the absence of a guild atmosphere" in the Bay area.

"Many young practitioners in the bigger cities perceive that their local AIA chapters are not looking out for their interests."

What independent architects cannot ignore is that running a firm, no matter how small, is managing a business. Learning to allocate resources, time, and staff for a young firm is a do-or-die challenge. "Some people aren't managers," Hartman says. "Unfortunately they don't know it until they try." To handle a practice's diverse demands, many practitioners setting out on their own select partners with a mind to compatible strengths in key areas. An individual with considerable design talent and experience might hook up with someone who has technical and structural expertise, or with a business- and marketing-oriented strategist.

A final concern, though perhaps the primary question for young architects still enmeshed in larger organizations, is deciding when to make the break. There are no formulas, no established "thresholds." The move depends as much on temperament – confidence, determination, and stamina — as on rational considerations of capital, personal reputation, and number of committed projects.

Alex Cohen ■

The author is a freelance writer currently employed as community planner for Manhattan borough president Ruth Messinger.

Books

Leonard K. Eaton considers Lewis Mumford one of this century's greatest architecture critics. Mumford never enrolled in an architectural design studio – an asset, according to Eaton.

Books of Note

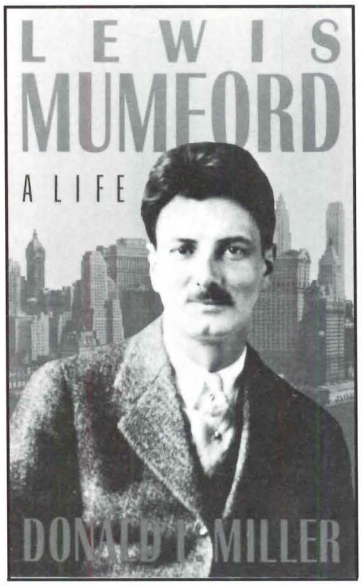
The Art Museums of Louis I. Kahn **by Patricia Cummings Loud, Duke University Press, Durham, N. Carolina, 1989, 303 pp., illus., $60.00 cloth, $30.00 paper.**
This scholarly catalogue to a traveling exhibition shows Kahn's contributions to the building type, with numerous sketches of built and unbuilt musems.

Tadao Ando: Sketches/Zeichnungen **(bilingual) edited by Werner Blaser, Birkhäuser, Boston, 1989, 176 pp., illus., $65.00.**
Buildings and projects from the past 18 years are amply illustrated; Mario Botta comments on Ando, and Blaser describes the continued relevance of traditional Japanese architecture.

Morphosis: Buildings and Projects **, essays by Peter Cook and George Rand, Rizzoli, New York, 1990, 240 pp., illus., $50.00 cloth, $35.00 paper.**
This handsome book documents Morphosis's exploration of space and structure, with essays that analyze the impact of the Los Angeles milieu.

9 Commentaries on Frank Lloyd Wright **by Edgar Kaufmann, jr., Architectural History Foundation and MIT Press, Cambridge, Mass., 1989, 158 pp., illus., $30.00.**
Kaufmann lived at Fallingwater and studied at Taliesin West; he wrote these enlightening essays as both an acquaintance and scholar of Wright.

See Tech Notes (p. 45) for listings of other publications of interest.



Lewis Mumford: A Life *by Donald L. Miller, Weidenfeld & Nicolson, New York, 1989, 629 pp., illus., $29.95.*

Mumford's Curb-Side Vantage Point

Simply by virtue of their breadth, Lewis Mumford's books and articles are an amazing accomplishment. He studied practically every aspect of the built environment – his topics ranged from the impact of the machine to daily life in the Middle Ages to the social and physical order of ancient cities. His 27 books and countless articles are the legacy of a half-century of exploration; each of his works analyzed the links between the places we inhabit and the values that identify a culture.

For decades, architects, whose work likewise spans technology and art, have found Mumford a great teacher. Ironically, he never studied architecture, and reviewed buildings and consulted on urban design without any professional credentials. Are these grounds to question the validity of his writing? Not at all. On the contrary, his perspective as an observer made him all the more valuable to architects. He was a conscience for the city at large, a proponent of standards that would ensure the public welfare.

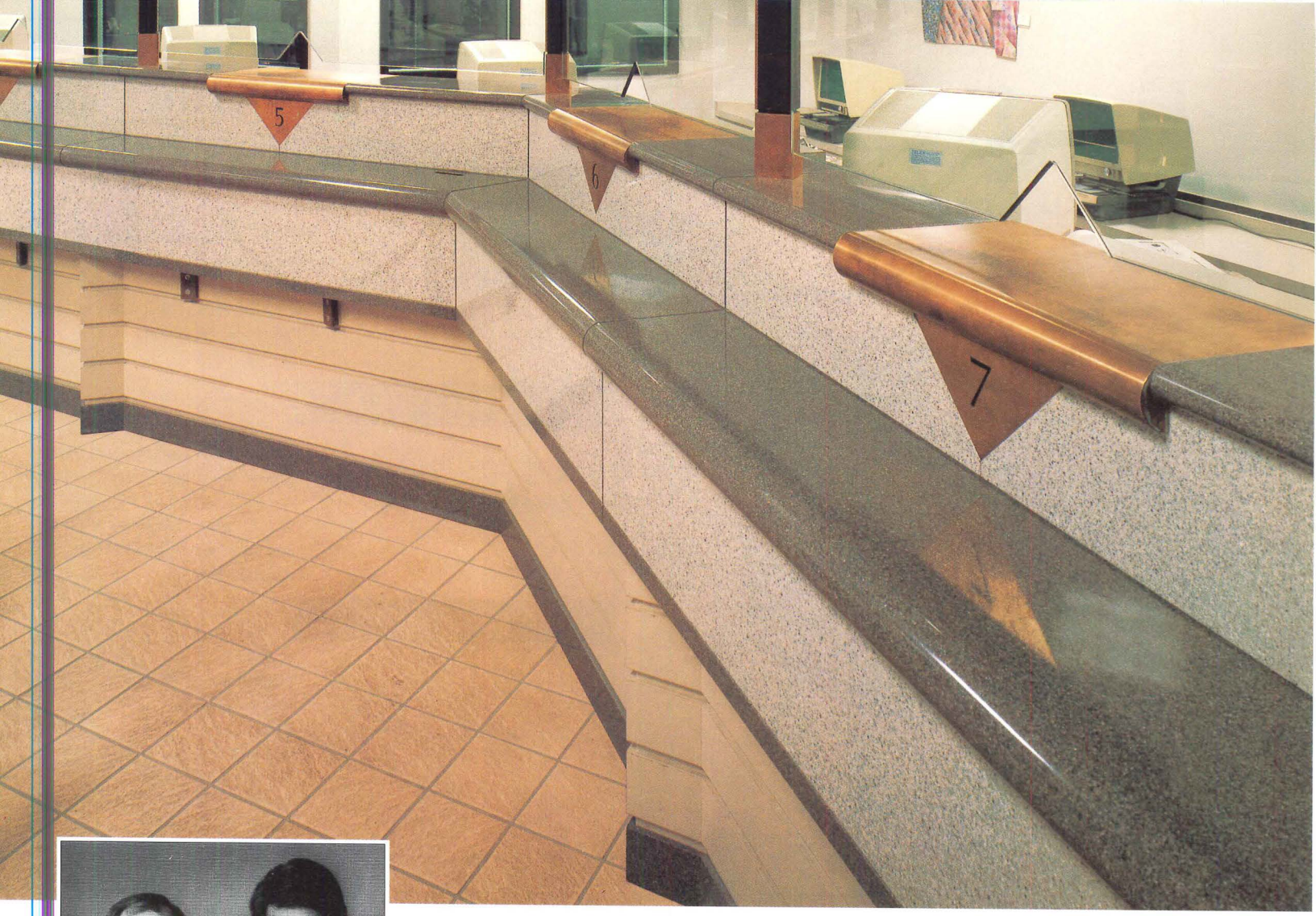
Now that Donald Miller's biography, *Lewis Mumford: A Life* has been published and Mumford himself has been eulogized, I'd like to offer my recollections of him, and speculate on the wellsprings of his vision.

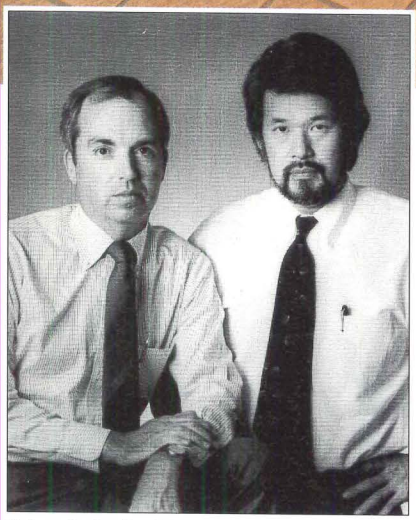
I first met Lewis Mumford when I was an undergraduate during the early years of World War II. In 1944 I was in Italy, where Mumford's only son, Geddes, had been killed. I wrote him a letter of condolence, and it initiated the most remarkable correspondence I have ever had. After 1950 I was teaching architectural history, a field in which Mumford had already become famous for his contributions. Over the next thirty years, I continued to read Mumford's work, and had an occasional personal encounter; I found him kindly, courteous, and also extremely disciplined in the grand tradition of a man of letters. He seemed to me, as he still does, to be a man who knew everything. I believe that this tremendous range of learning gave his architectural criticism its remarkable breadth.

How did Mumford become an architectural critic? Miller tells us that he was self taught. He matriculated at (but did not receive a degree from) the City College of New York, but his real classroom was the city itself, and the New York Public Library was his reading room. In both his childhood and adult years he tramped the streets of New York and recorded his reactions to its buildings in his notebook and sketch pad. In 1918, when a tour in the Navy stationed Mumford in Cambridge, Massachusetts, he discovered the achievements of H.H. Richardson. (Mumford took classes in Austin Hall on the Harvard campus, so he could hardly miss the sensitivity of Richardson's architecture.)

At this time of his life, Mumford knew that he wanted to be a writer, but was not at all clear about the sort of writer he should be. He tried his hand at fiction and drama, but fortunately his talent for architectural writing caught the eye of Charles Harris Whittaker, editor of the *Journal of the American Institute of Architects*. From 1919 onward Mumford was a regular contributor; he also wrote essays on architecture for *The Freeman* and *The New Republic*. Before the Second World War, he practically had no peer in the field of architectural criticism. (Montgomery Schuyler, who had written for *Architectural Record*, and ranks as one of this century's great critics, had died in 1914.) In the interwar years, no first class American writer had taken architecture as his other theme, and Mumford was therefore free to establish his own path. He was helped by many knowledgeable people, and by his own voracious reading habits.

(continued on page 127)





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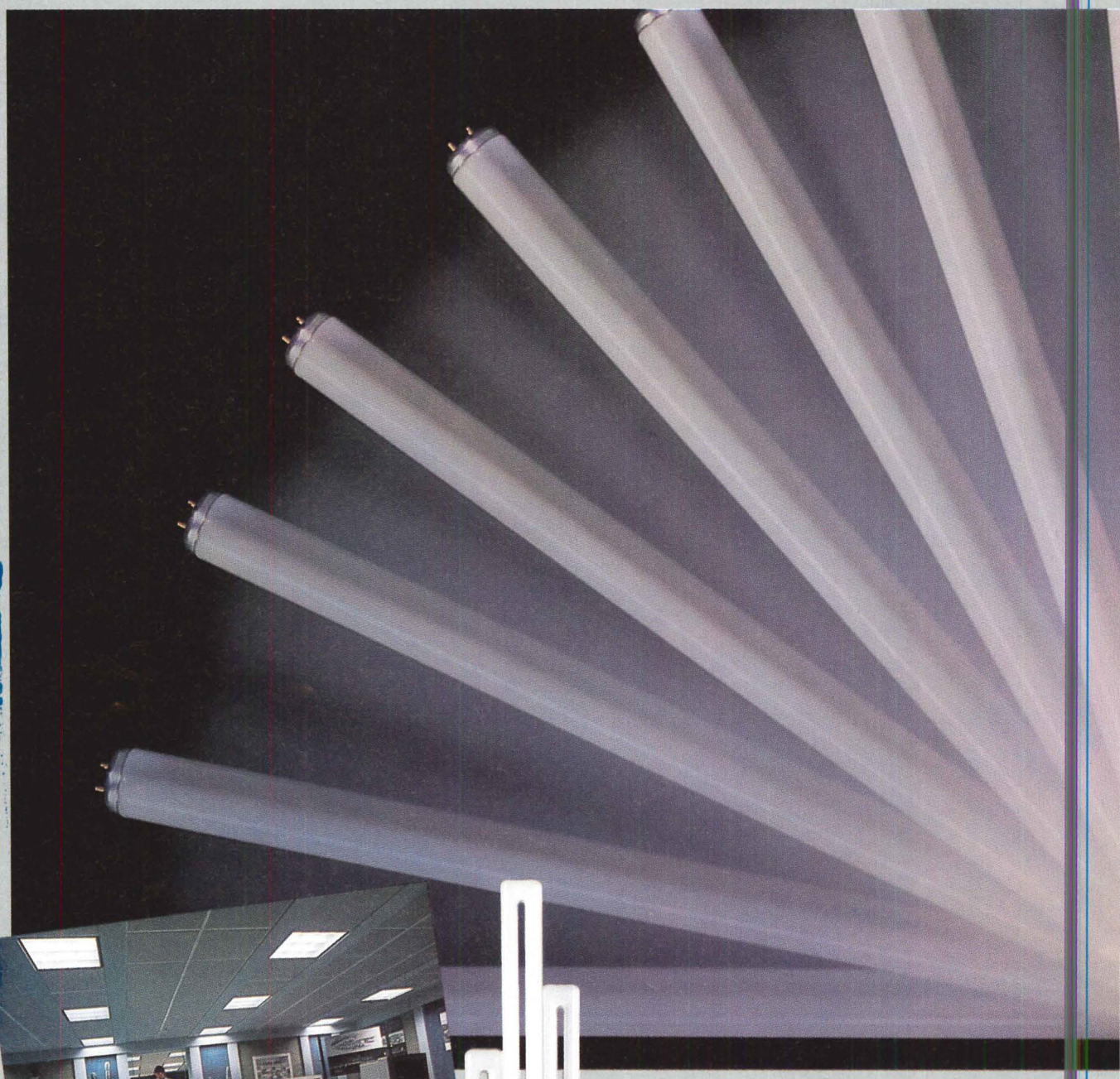

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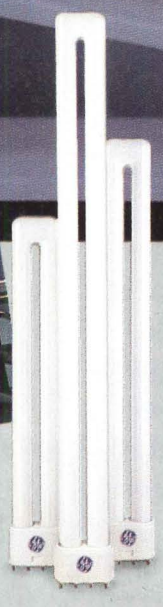

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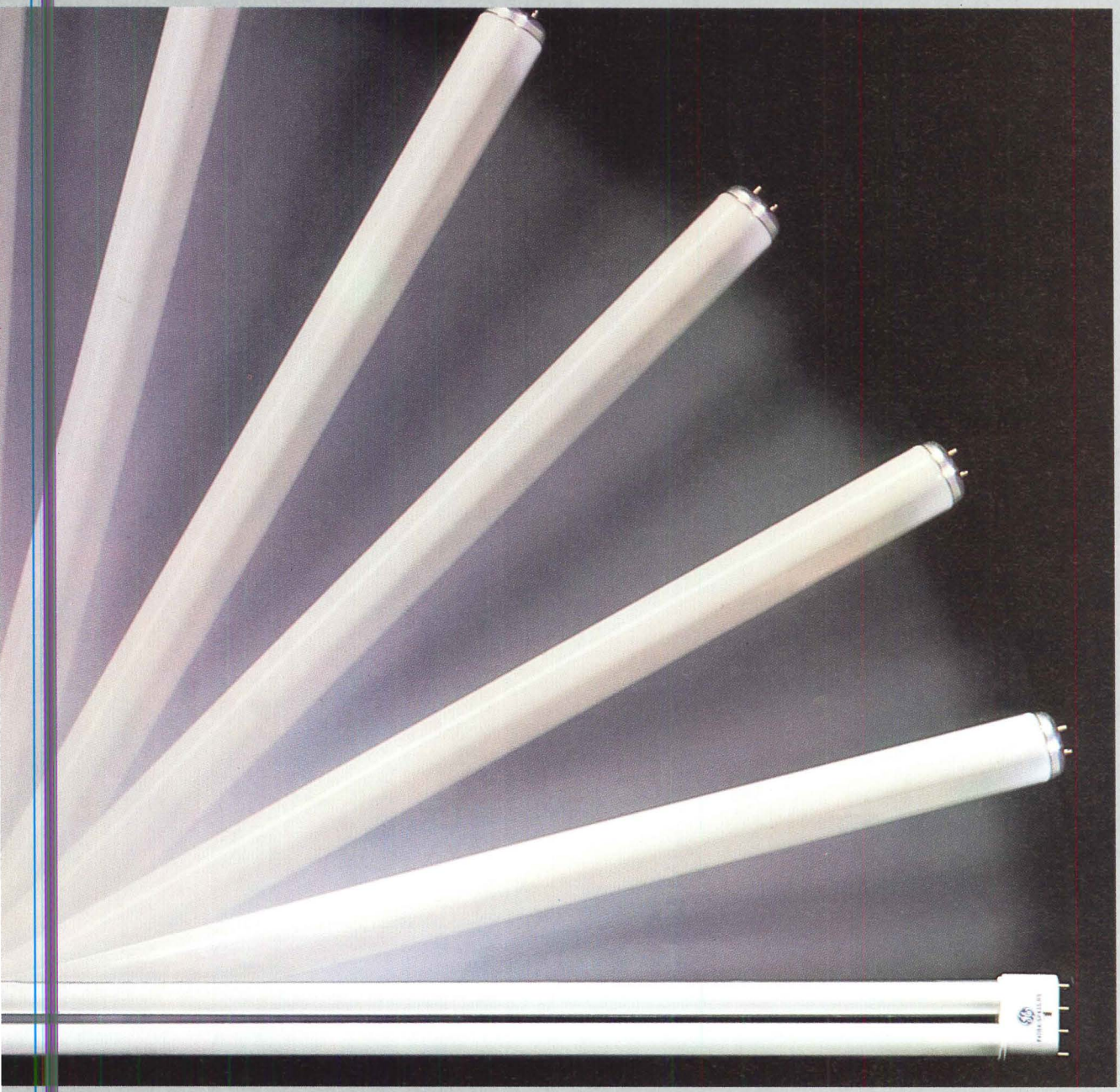

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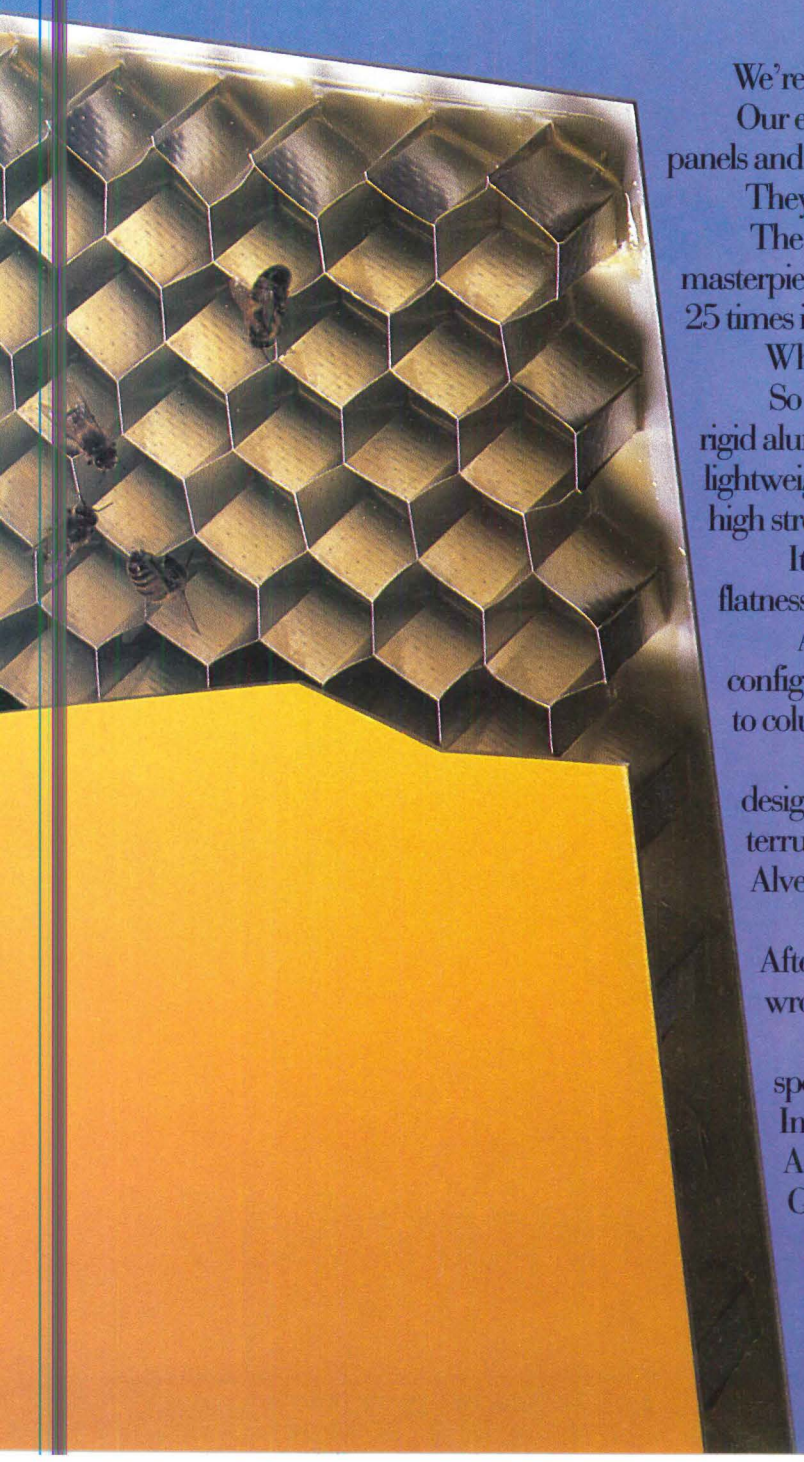

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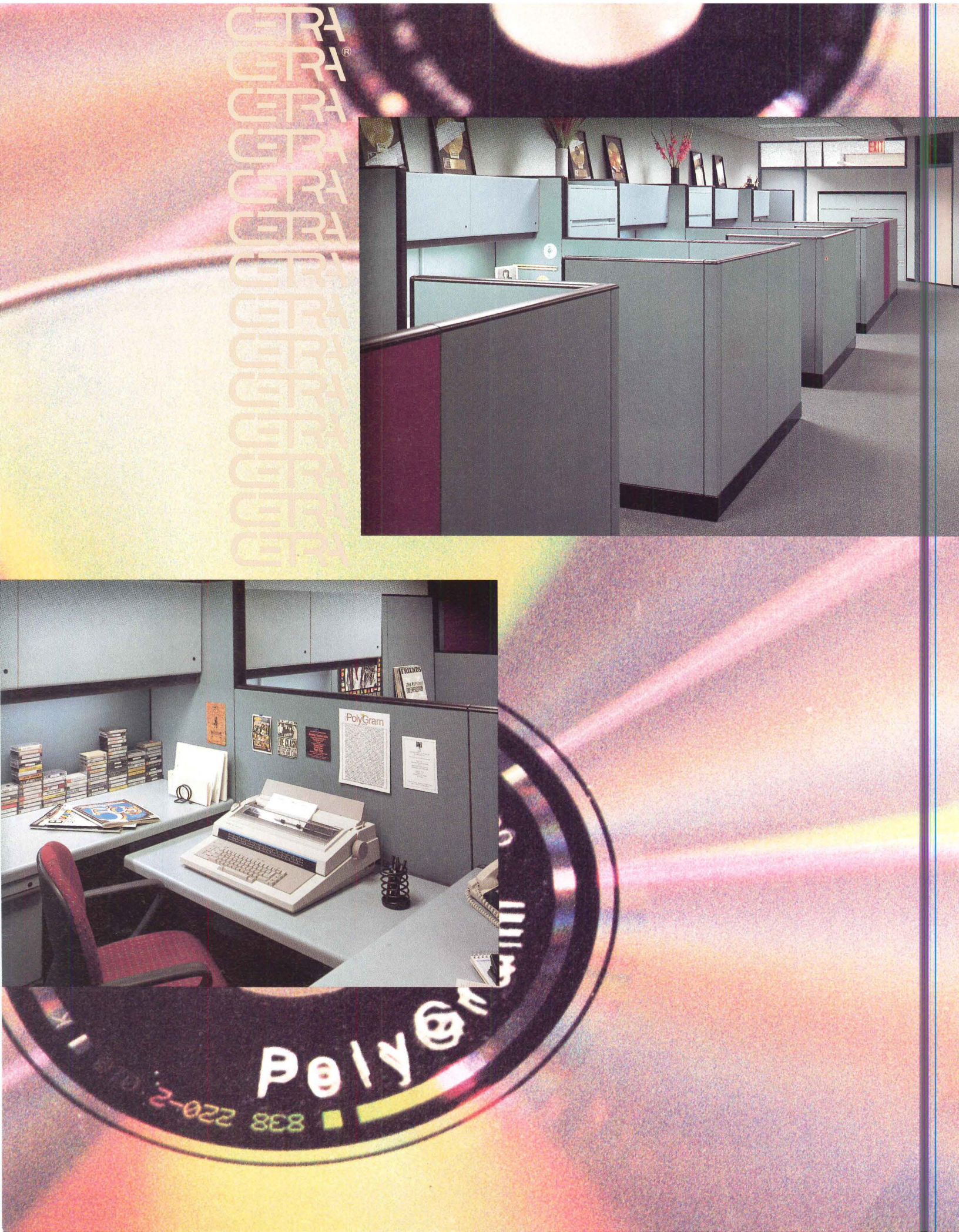
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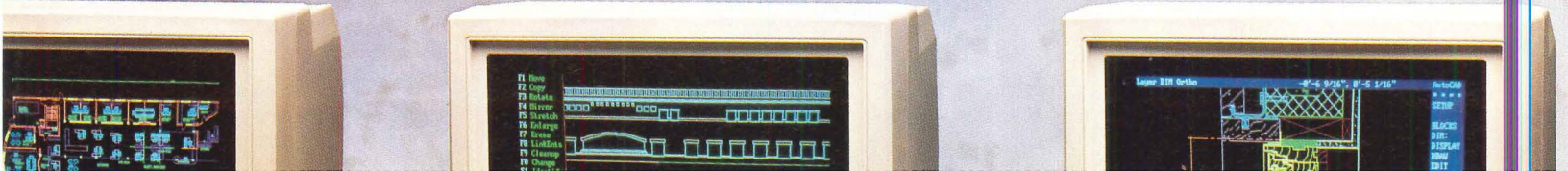

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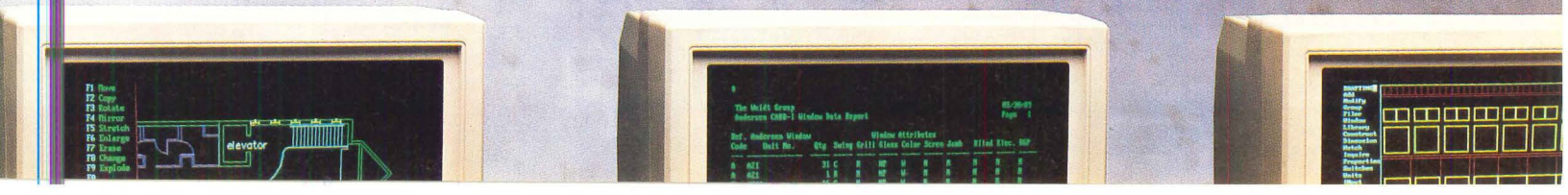

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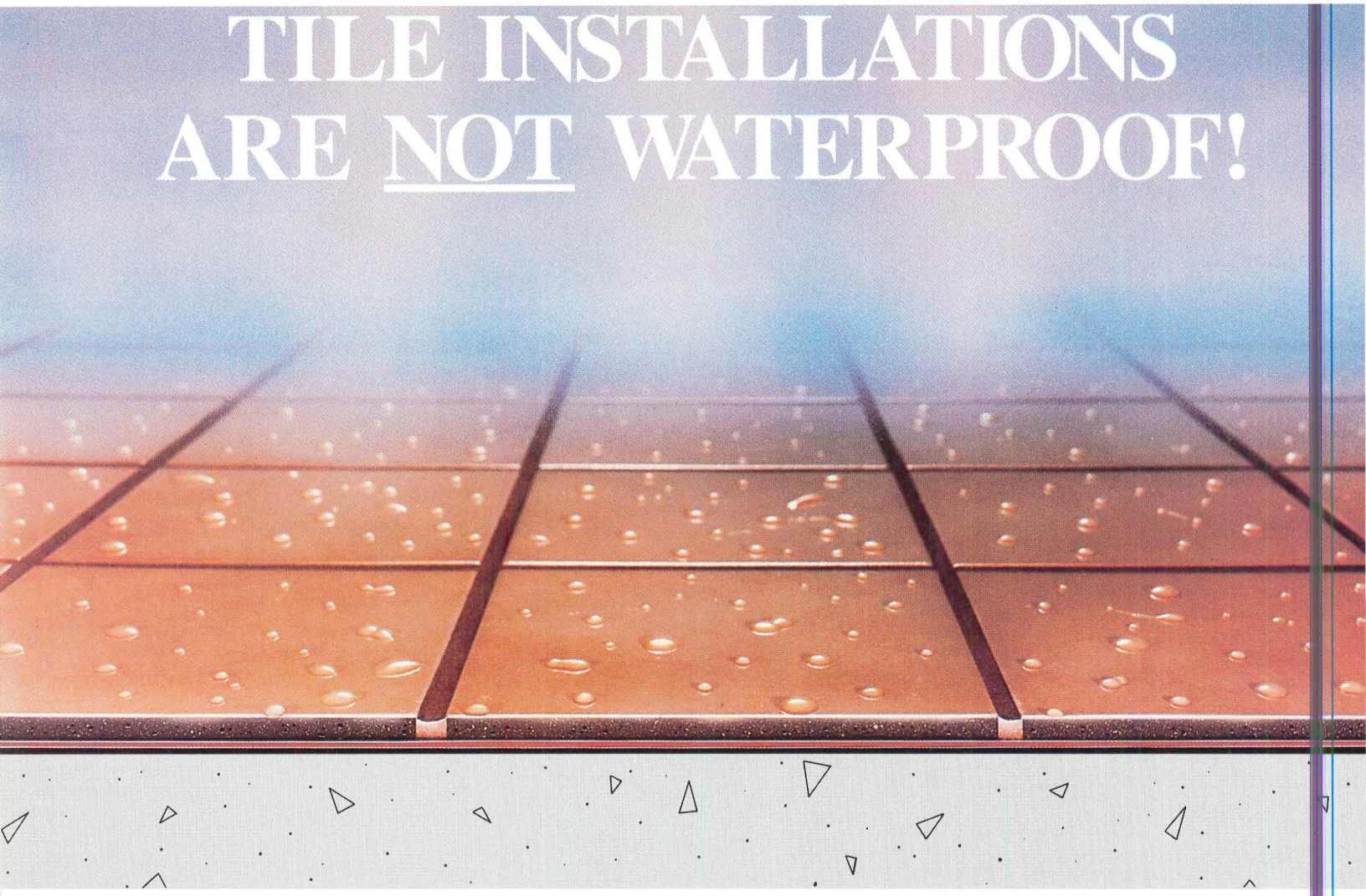

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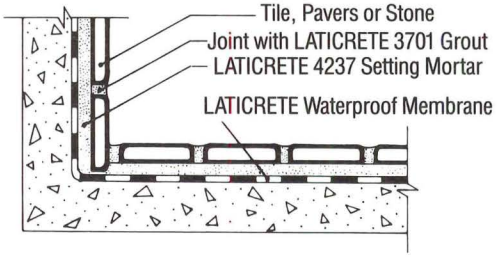

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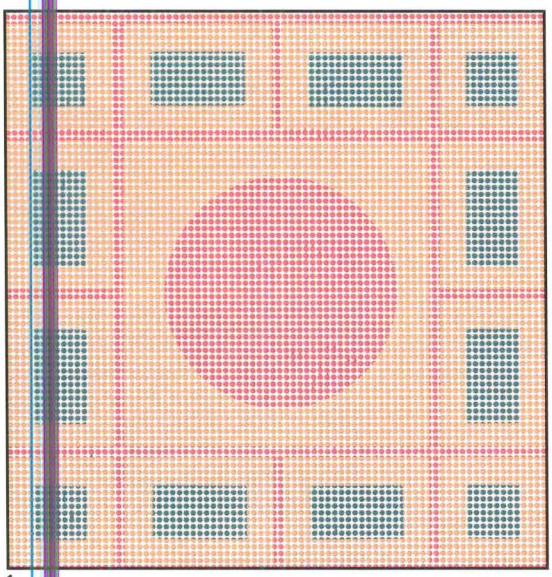
New Products and Literature



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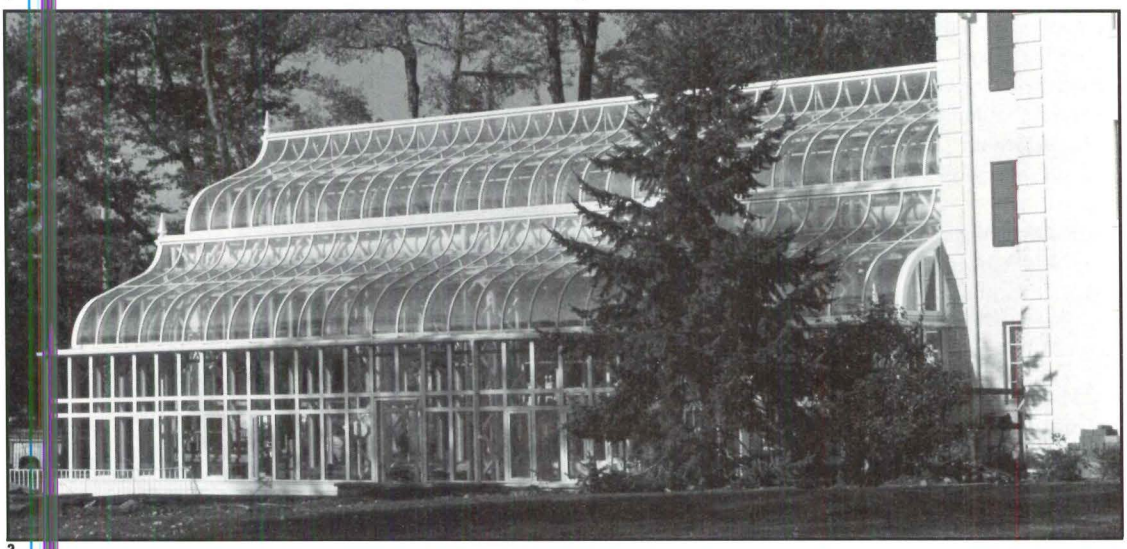

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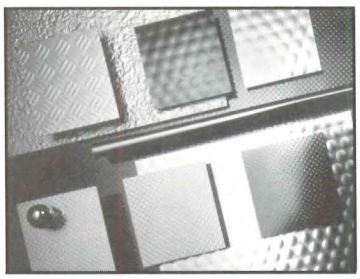
2. Colored Plywood
Birch plywood from Finland is the base material for Fin Color Ply, a colored plywood for use in cabinets, countertops, wall panels, furniture, doors, and architectural details. Colors include yellow, green, black, and light and dark brown. Thicknesses are ¼″ (5-ply) to 1⅛″ (21-ply); panel sizes are 4′ × 8′ to 5′ × 10′. Finland Color Plywood.
Circle 101 on reader service card

3. Glazing With UV Protection
HYZOD® Solar Shield SR Sheet glazing material is produced in a proprietary process in which UV-stabilized polycarbonate sheet is fused with an acrylic-based polymer to form a composite sheet. Skylights, covered walkways, and conservatories are among the possible commercial or residential applications. Sheffield Plastics.
Circle 102 on reader service card

Wood Side Chair
The Ricchio Chair, designed by Ricchio Design Associates, can be used for conference, general workstation, or dining areas. It can be finished in pear, medium red mahogany, or black; the seat pad can be specified with KnollTextiles fabrics or Spinneybeck leather. Knoll International.
Circle 103 on reader service card

Emergency Escape Lighting
Lifeline emergency escape path marking system is illuminated with electroluminescent lamps and installed within eight inches of floor level. Fiberglass encapsulated EL-illuminated exit signs are also available. Loctite Luminescent Systems.
Circle 104 on reader service card

Security Systems Catalog
Alarm systems for residential, commercial, and government applications are described in a new catalog. Installation and product selection information from no-wire home alarms to computer-based systems are included. Vantage Point Technologies.
Circle 200 on reader service card



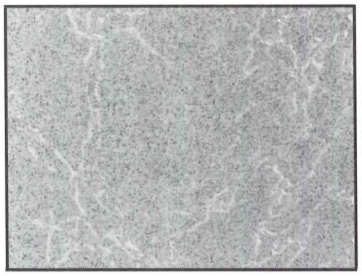
Metal Laminates
Embossed Aluminum is one of five design series in the International Collection of metal laminates. Mirror Finishes, Brushed Aluminums, Embossed Coppers, and Two-tone Finishes complete the collection. Formica.
Circle 105 on reader service card

Flexible Tables
Duo conference tables, by Chicago-based designer Jeff Barnes, have movable legs to provide added leg room. A polished or unpolished table-edge butts the laminated tabletop without a seam. Johnson.
Circle 106 on reader service card

Flexible Mouldings
Superflex™ are polyester mouldings that can be nailed, drilled, cut, glued, painted, or stained. Flex Moulding.
Circle 107 on reader service card

Glulam Headers
The Series 1650 Glulam Header is a straight, non-cambered beam available in 3½- and 5½-inch widths. Headers are made with kiln-dried, machine stress-rated lumber. Weyerhaeuser.
Circle 108 on reader service card

Roofing Systems Catalog
A new catalog on Modified Bitumen Roofing Systems includes a product information chart, slope requirement chart, and a variety of related information. Siplast.
Circle 201 on reader service card



Granite-finish Ceramic Tile
Under high pressure and heat, raw materials of tile are fused to create a single homogeneous unit called Top, a porcelain ceramic tile. It can be specified for interior or exterior, commercial or residential use. Cooperative Ceramica D'Imolda.
Circle 109 on reader service card

Louver Brochure
The High Performance Louver is illustrated and described in a new brochure. Round, octagon, half-round, and round-top louvers come in several sizes. Webb.
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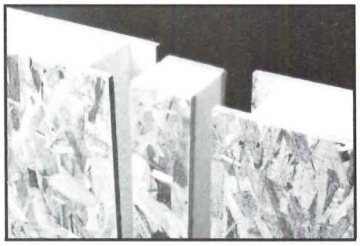

Panel Building System
Advantage Panel™ Building System is composed of insulated structural panels and one piece, full-panel-length insulating panel-joining spline. Atlas Industries.
Circle 110 on reader service card

Roofing Insulation Brochure
Rigid, high-density extruded-polystyrene roofing-insulation products – AMOFOAM®, AMOCOR®, and AMOCOR® PLYGOOD® – for new commercial or reroofing applications are described in a new brochure. Amoco.
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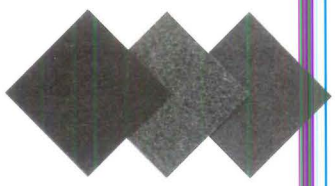

Carpet Tile Collection
Phi, Beta, and Kappa interchangeable patterns make up a collection of cut-pile, space-dyed carpet tiles; 36 colors are available. Kymera.
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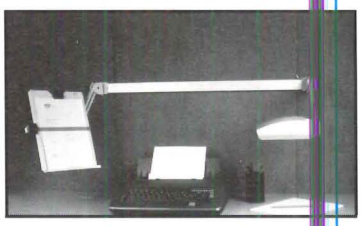
Sound Retardant Products
The 1990 edition of the Monograph for Sound Retardant Doors and Windows includes product information, charts, and specification instructions. Overly.
Circle 112 on reader service card



Rail Mount System
The company's task lamps and document holder can now be wall mounted with the LSS rail system; universal mounting brackets fit most furniture systems. Custom sizes and brackets are available. Luxo.
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Handles and Handrails Brochure
A new brochure includes technical information, illustrations, and design suggestions for custom handles and handrails. Hewi.
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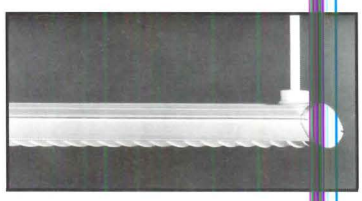

Direct/Indirect Lighting
Spheros, by German designer Hartmut S. Engel, accommodates T8 or compact fluorescent lamps. Several louver and sidepanel color options are available. Zumtobel.
Circle 114 on reader service card
(continued on page 118)

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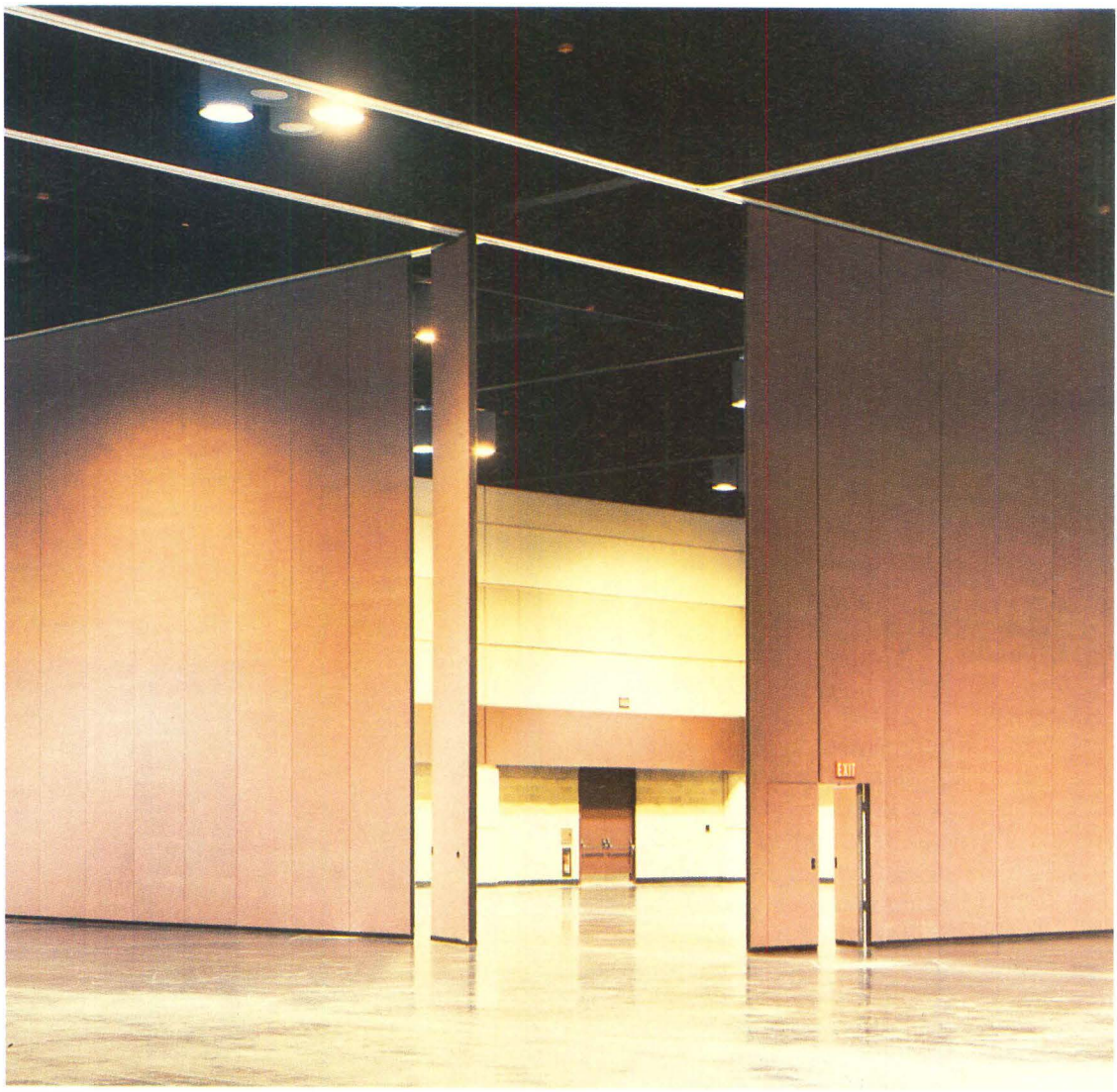

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Circle **No. 352**

(continued from page 116)

Faucets and Accessories

The Italian-designed Sottini Collection includes the Azimuth cross-handle lavatory and bath/shower faucets available in brass or chrome. American Standard.

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Solution Dyed Fiber Carpets

Antron® Lumena™ is a nylon solution-dyed fiber for carpets. "Most stains" can be removed without use of bleach; the carpet is applicable in commercial and institutional environments. Du Pont.

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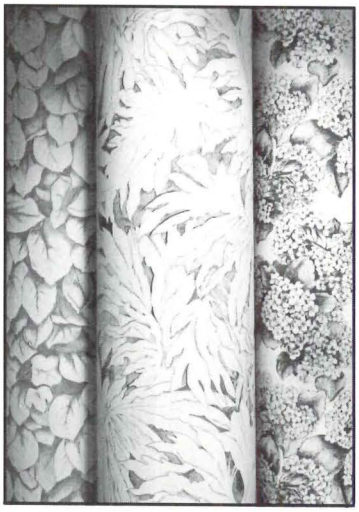

Botanical Wallcoverings

Wallcoverings can be ordered in monochromatic colorways of blue, moss, parchment, and bisque, among others, and are 27-inches wide. Donghia Textiles.

Circle 117 on reader service card

Fire Rated Ornament

CLASSACAST™ is a fire rated ornamental cast material for commercial applications. Products can be installed on interior surfaces such as drywall or sheetrock. Focal Point Architectural Products.

Circle 118 on reader service card

Plastic "Glass Blocks"

Lexan® plastic blocks are snapped together, use RTV or other thermally expandable grout/bonding material, and are sealed with an adhesive sealant. Outwater Plastic Industries.

Circle 119 on reader service card

Skylight Flashing Brochure

Gang flashings, which space skylights 2½- or 4-inches apart for side-by-side or over and under installation, are described in a new brochure. Velux-America.

Circle 205 on reader service card

R-Wall Panel Manual

A new R-Wall Information Manual is available. Technical data bulletins, application information, specifications, drawings, and test and code information on the exterior insulation and finish system are included. Sto®.

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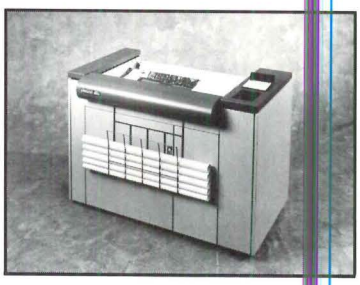

Electrostatic Color Plotters

The 8900 series cuts, rolls, and labels drawings unattended. Plotters can draw on six types of media in 24-, 36-, or 44-inch widths. Versatec.

Circle 120 on reader service card

(continued on page 120)

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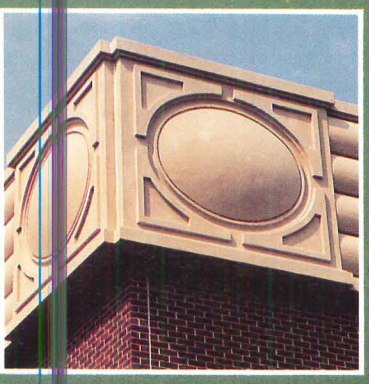

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(continued from page 118)

Curved Glass Bath Enclosure
Contours bath enclosure now has an interior bath area of 48" × 36". The tempered-glass panel has a 90 degree arc; the fiberglass base comes in four colors. Basco.
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Wall Waterproofing
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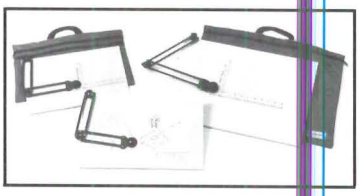

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(continued on page 122)

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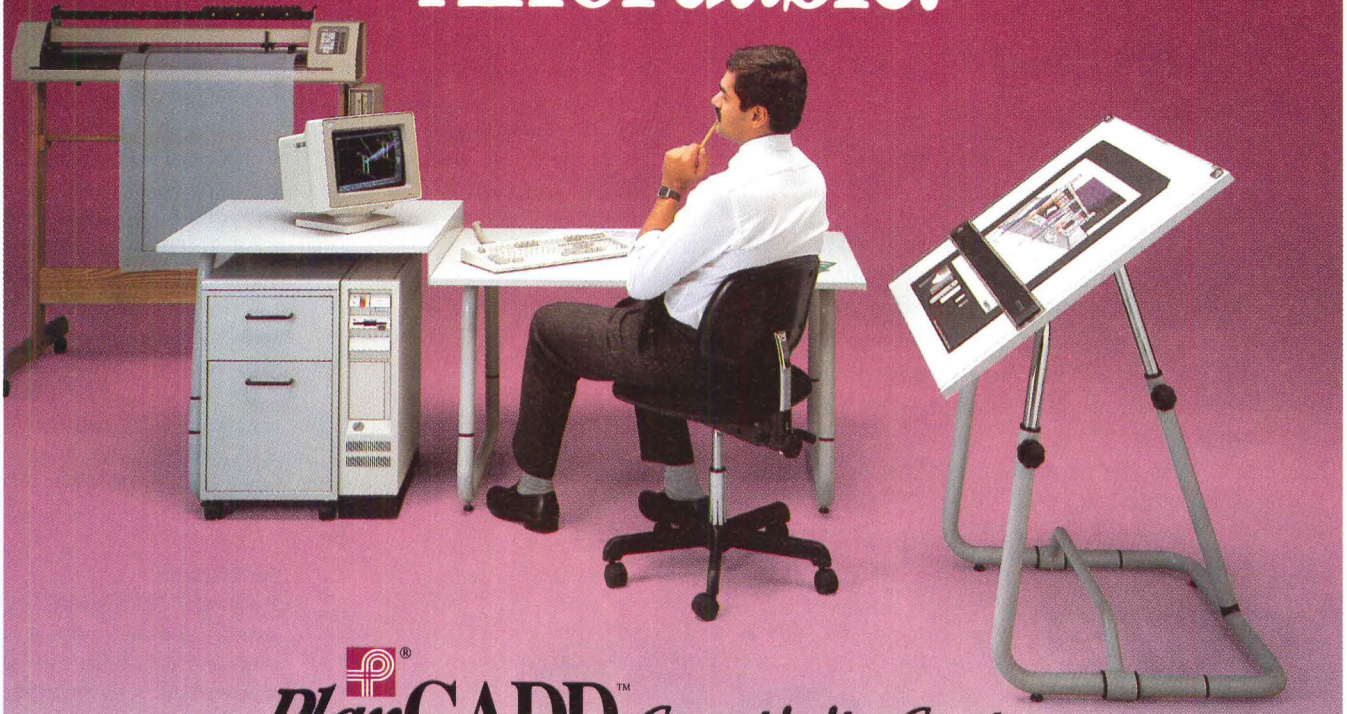

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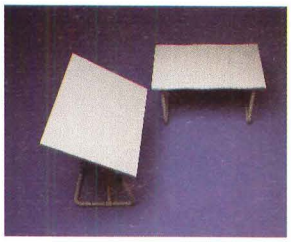

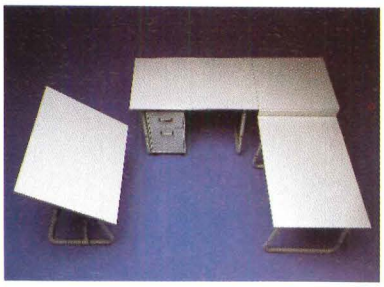

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(continued from page 120)

Computer Products: New Releases

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GEOCAD upgrade

GEOCAD version 3.5, which is a third-party architectural application, runs with AutoCAD® R9, R10, 386, and the Macintosh® version of AutoCAD®. GEOCAD.

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3D Release

FastCAD® 3D provides hidden suface removal, on-screen animation, and the ability to create geometrical solids or extrude surfaces into 3D. FastCAD® 3D is compatible with Pixar's Renderman and runs on IBM or compatible PCs. Evolution Computing.

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AutoCAD® Partner

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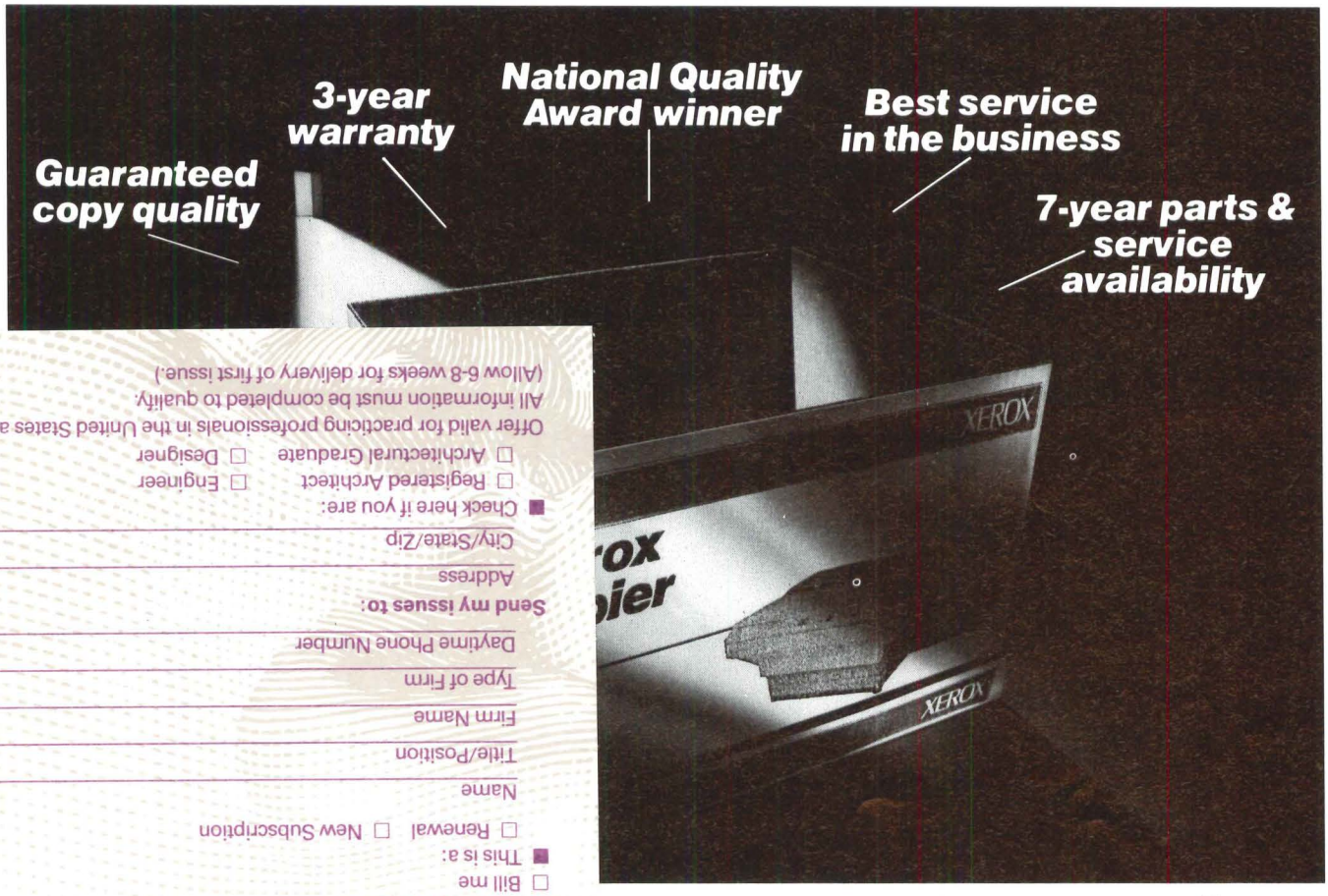
(continued on page 125)



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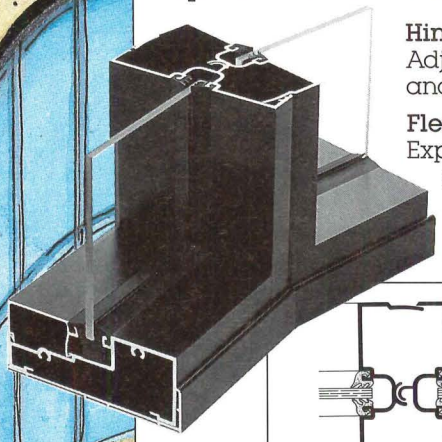

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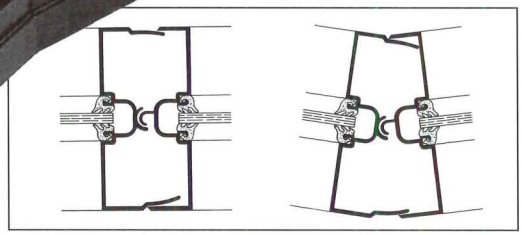

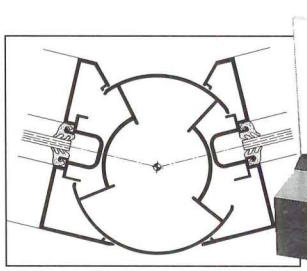

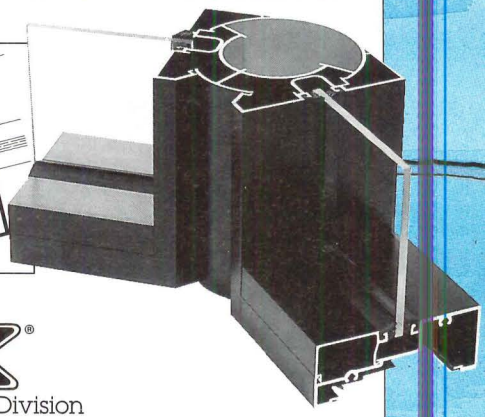

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(continued from page 122)

New Macintosh® Release
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Architrion Upgrade
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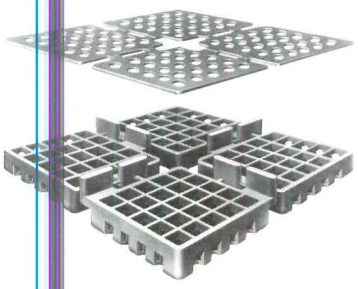

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Concrete Pavers
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Tile Guide
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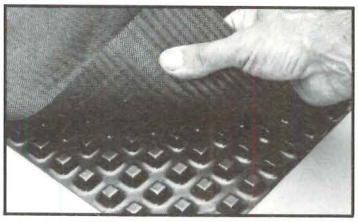

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Books *(continued from page 102)*

In 1923 Alvin Johnson, director of the New School for Social Research, invited Mumford (who was then less than 30 years old) to give a course on the history of architecture. His lectures became the basis of *Sticks and Stones* (1924), a landmark in American architectural history, both for its substance and its approach. Mumford himself considered his greatest contribution in this book was ". . . to relate individual structures to their urban site or their setting in the rural landscape: thus I turned my back upon the habit of treating the building as a self-sufficient entity, an aesthetic abstraction. . . " (p. ix, preface to the 1954 Dover edition). For the rest of his life, Mumford adhered to this analysis; it made his criticism illuminating reading for architects.

An important moment in Mumford's career occurred in 1931, when Harold Ross asked him to write the "Sky Line" column for *The New Yorker*. Over the next 33 years he broadcast his views on architecture and planning to a large and intelligent nonprofessional audience. "Sky Line" provided a forum for his attacks on Robert Moses and others who wanted to encircle our cities with highways. The Moses-Mumford feud, as Miller notes, was one of the most significant theoretical disputes of the twentieth century. It contrasted two different visions of urban life: Moses represented the technocrats and highway builders, while Mumford was a humanist who advocated alternatives to the motor car.

Miller's writing is elegant, and he is generally on the mark when he characterizes Mumford's thoughts on architectural and planning issues. He understands the importance of Mumford's early appreciation of the International Style, and his skepticism about the later directions of the Modern Movement. Miller also recounts Mumford's criticism of urban renewal projects of the 1960's, and his long and complicated relationship with Frank Lloyd Wright. A few factual errors need correction: Mumford was not the first American critic to appreciate the importance of Wright; that honor goes to Schuyler. If Mies van der Rohe were alive today, he would probably rumble Teutonic imprecations about his characterization as "the disciple of Gropius" (p.488). Minor errors are troublesome. Siegfried Giedion was Swiss, not French (and very German in his thinking). One wonders about Miller's remark that Mumford cared more about literature than architecture. True, he was perhaps the greatest generalist of our time, with outstanding strength in a phenomenal member of disciplines, but architecture was always very close to his heart.

Miller's biography helps us trace the way Mumford matured as a critic, and shows that he gave primacy to buildings as part of a broader ensemble; the value of any single structure depended on its contribution to the whole. Simply by upholding this criterion, Mumford implied an important standard for architects: He showed that they are foremost servants of society, regardless of their stylistic or political position.

Mumford's career also shows that an architectural degree is not a prerequisite for good architectural criticism. In fact, the breadth of Mumford's education gave him resources that few architects can employ: As a student of the humanities, he reminded architects that their buildings must transcend their spatial, technical, and aesthetic qualities. He was capable of discussing buildings in the terms of a practitioner, but he also spoke for the lay person whose appreciation of design may be less focused, but is no less important.

If we turn from this biography to Mumford's work, we're likely to conclude that his vision emerged from resources too diffuse to categorize. But ultimately, the specifics of his training don't matter. His success depended on his tireless study of how things are connected. It's no coincidence that architects think in the same way.

Leonard K. Eaton ■

The author's Gateway Cities and Other Essays *(1989) is his most recent book on architecture.*

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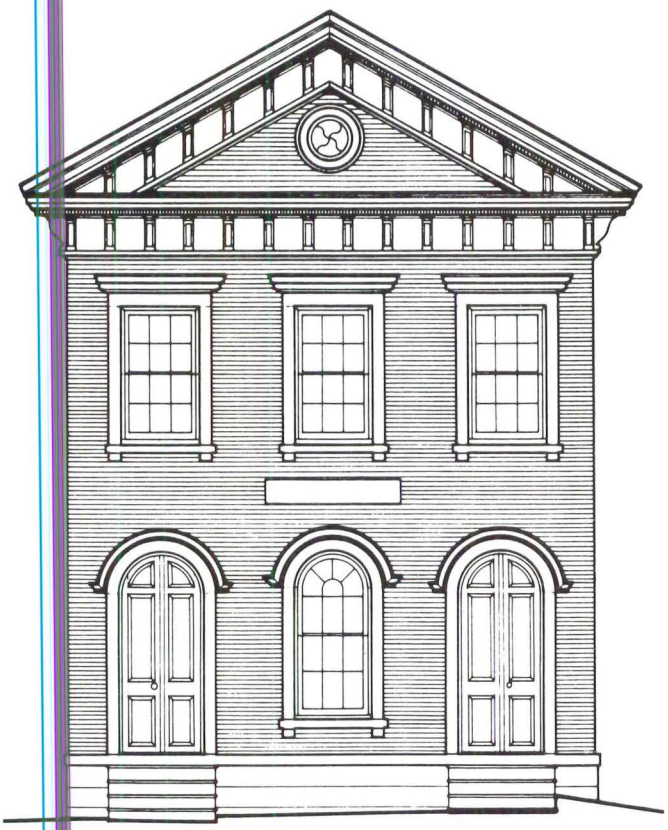

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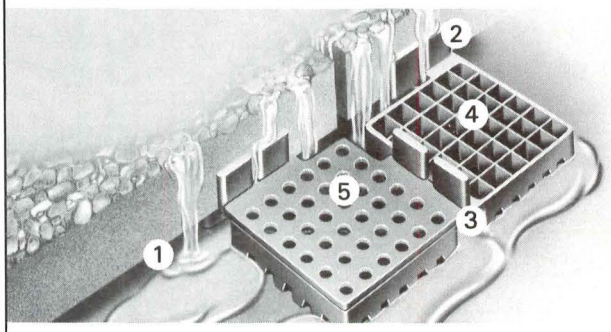

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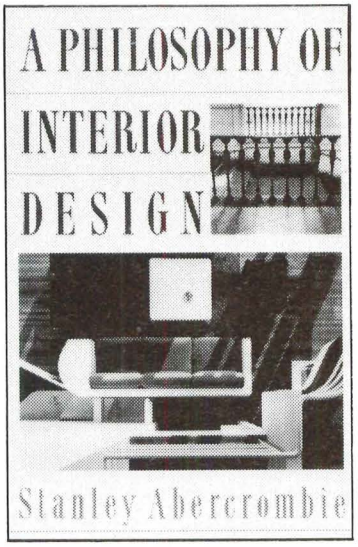

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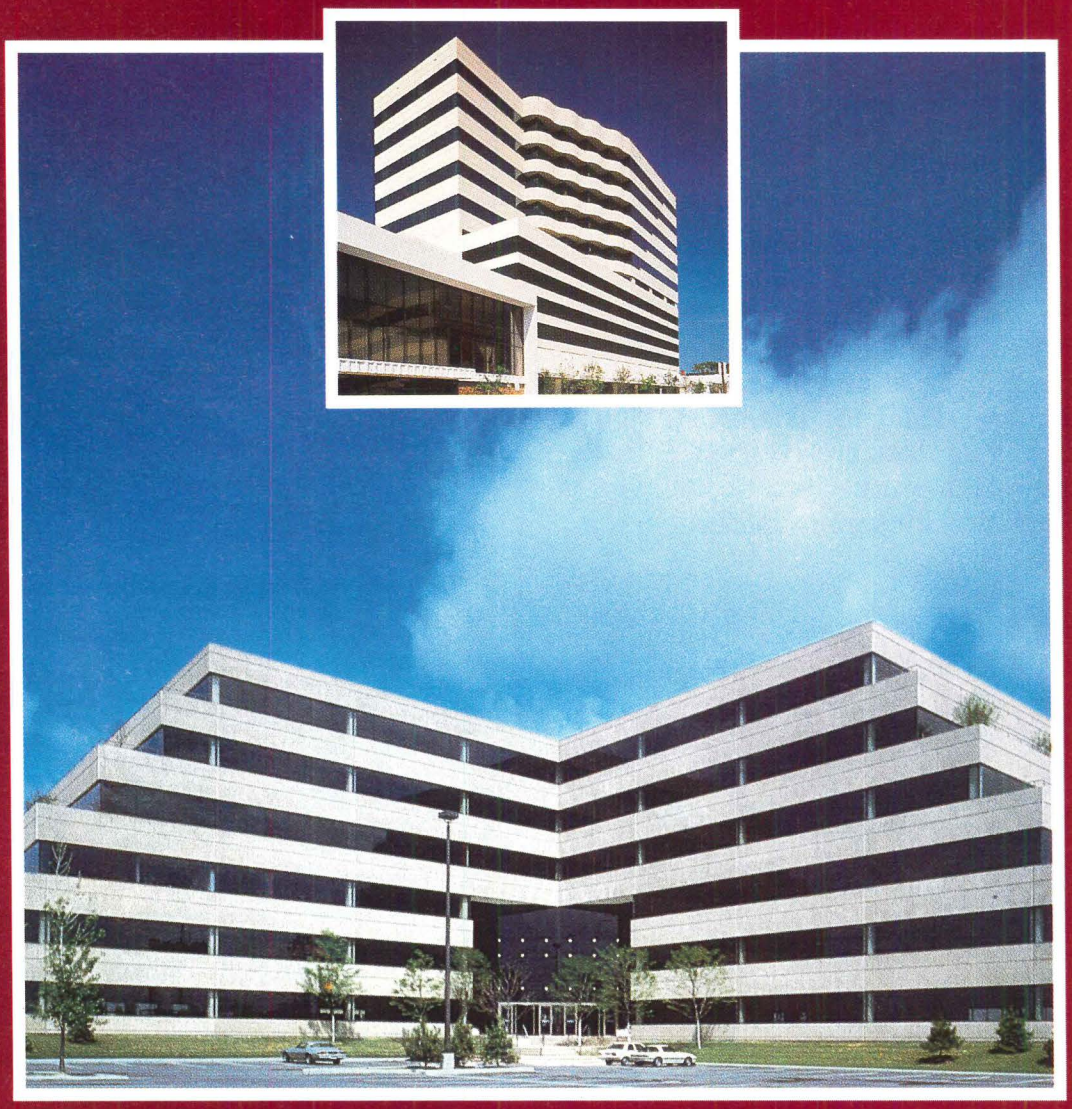

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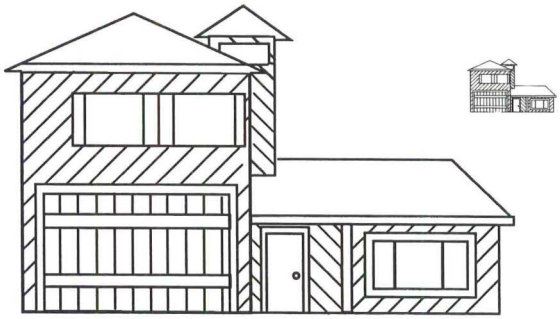


Who needs architects? "Modern" elevation from design-it-yourself software package.

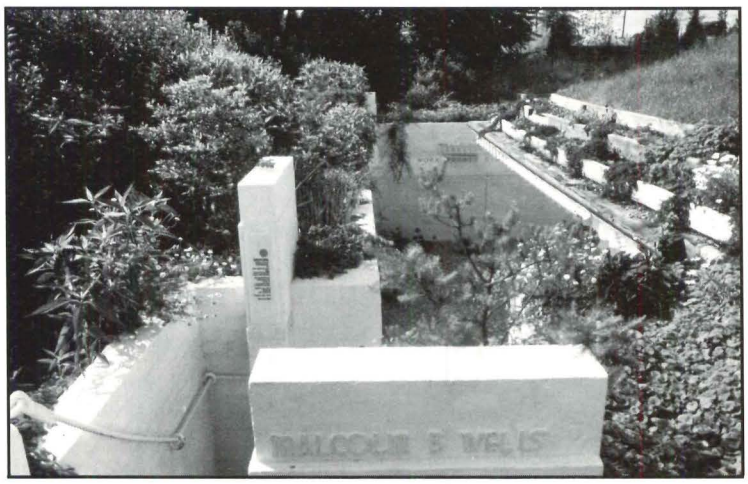
As we prepare an article on architectural photography for our August issue, we have found some of the "old masters" of the trade remarkably spry and full of stories.

Julius Shulman, at age 79, reports being "busier than ever" responding to requests for archival photographs of the Southern California Modernism he so ably documented. And Ezra Stoller, at 75, moves around the offices of Esto, talking about his photographs lining the walls, with the energy of a man half his age. They have, as Stoller puts it, entered their "anecdotage," punctuating their conversation with tales of Wright, when in New York, operating out of the editor's desk at *Architectural Forum*; of Neutra flooding the roofs of his buildings to get a lot of reflections in the photographs; and of *Arts & Architecture* editor John Entenza insisting that, when publishing a building, the photos were his to crop as he wanted. Photographs can freeze architecture at a moment in time, and so, it seems, can the memory of photographers.

. . .

A recent pass through the Southwest revealed to us some of the ways architects are dealing with that region's economic doldrums. In San Antonio and Houston, we were told that architects had seen a silver lining in designing signage and graphics packages for newly purchased or reorganized Texas banks. Many firms have turned their focus to national and international work, and Tulsa'sBSW Architects, who we will profile in a Practice article in August, has managed to grow tremendously by targeting high-volume retail clients such as Wal-Mart and Marriott. And finally, in the "alternative careers" category, there's Tulsa architect Stephen Turner. When the hair-styling salon next to his office (on the ground floor of a local high rise) announced it was closing, Turner decided to buy it. "I didn't want an empty space next to my office," Turner says, "so I thought about it and decided 'Well, it's just another design field.'" While Turner oversees the operation and has redesigned the salon's interior, he leaves the hair styling – both design and implementation – to the experts.

As the home computer becomes more pervasive, software offers services to the general public that were previously provided by professionals. Personal computers now act as dietitians, accountants, bank tellers, proofreaders, and even lawyers. (One software package allows the user to prepare a perfectly legal will.) Now, enter the days of do-it-yourself-in-the-den architecture. One new software package gives nonarchitects the power to design and draft plans for their completely furnished dream home. While the program provides the drawing tools an architect might use to design a building from scratch, as an aid to the uninitiated it offers a set of standard plans – the Tudor, the Colonial, the ranch, the Cape Cod, the Spanish, and the Modern (rendered in the manual with diagonal siding), that can be brought up on the screen and altered. (One finds no Post-Modernism and certainly no Deconstructivist urges in these perfectly orthogonal, conservative tract homes.) The manual mentions nothing about actually building houses designed on the PC, but it doesn't say anything about consulting a "real" architect before attempting it either.



Kenneth Labs

Malcolm Wells's underground office, Cherry Hills, New Jersey.

Furthermore . . .

Luckily, experience has shown that the advent of computers has not replaced jobs (like wordprocessing) that early proponents suggested it would. Although computers can perform straightforward professional tasks, like calculating taxes, it is doubtful that anyone would entrust an electronic servant with any job as significant as designing a house. But then again. . .maybe architects should get into the business of writing software for the eager do-it-yourselfers before we find ourselves in a sea of homemade Tudors, Colonials, and Moderns.

. . .

It happened just by coincidence that we heard from architect and conservationist Malcolm Wells while we were putting together our Technics article on roofscaping (p. 36). It was 25 years ago that P/A published Wells's underground building manifesto, "Nowhere to Go but Down" (Feb. 1965, p. 175), followed in June 1974 by a three-page guest editorial titled "Environmental Impact." Wells has just published a beautifully illustrated 26-year retrospective of his work; it is available from him for $14.95 at 679 Satucket Road, Brewster, Massachusetts 02631. In this period of re-emerging environmentalism, it seems fitting that we pass that news along and tip our hats with a view of one of his early roofscapes, (photographed by our Technics editor on a 1975 visit to Wells's underground office in Cherry Hills, New Jersey). There, the following inscription – borrowed from Thoreau – can be found in a wall: "All work passes directly out of the hands of the architect into the hands of Nature." **Amen.**

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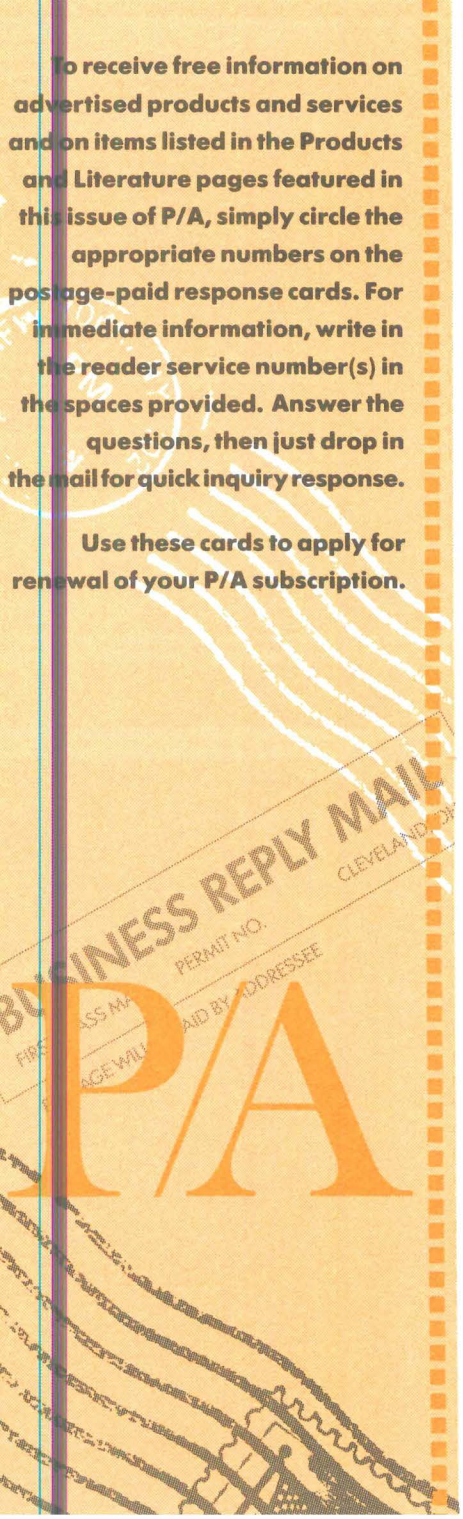

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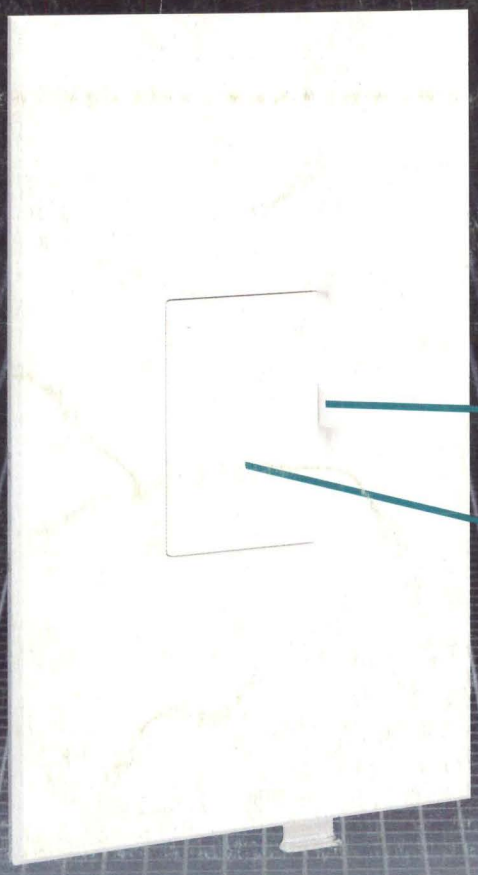

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