

Progressive Architecture

February 1983



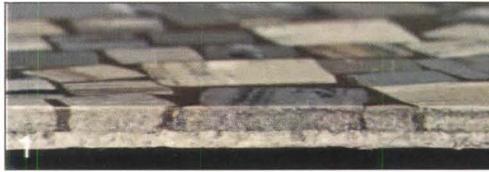
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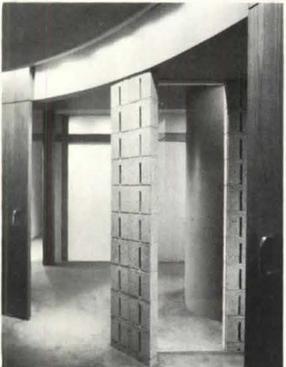
Firehouse #2, District of Columbia Architects: Keyes, Condon, & Florence



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Progressive Architecture (ISSN 0033-0752) is published monthly by Reinhold Publishing, A Division of Penton/IPC: Philip H. Hubbard, Jr., President; Harry I. Martin, James J. Hoverman, Vice-Presidents; Penton/IPC: Thomas L. Dempsey, Chairman; Sal F. Marino, President; N.N. Goodman, Jr., Benjamin L. Hummel, Paul Rolnick, Executive Vice-Presidents.

Executive and editorial offices, 600 Summer St., P.O. Box 1361, Stamford, CT 06904 (203-348-7531).

Subscription information:

Send all subscription orders, payments, and changes of address to Progressive Architecture, P.O. Box 95759, Cleveland, OH 44101 (216-696-7000). When filing change of address, give former as well as new address and zip codes, and include recent address label if possible. Allow two months for change. Publisher reserves right to refuse unqualified subscriptions. Professionals include architectural and architectural-engineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields.

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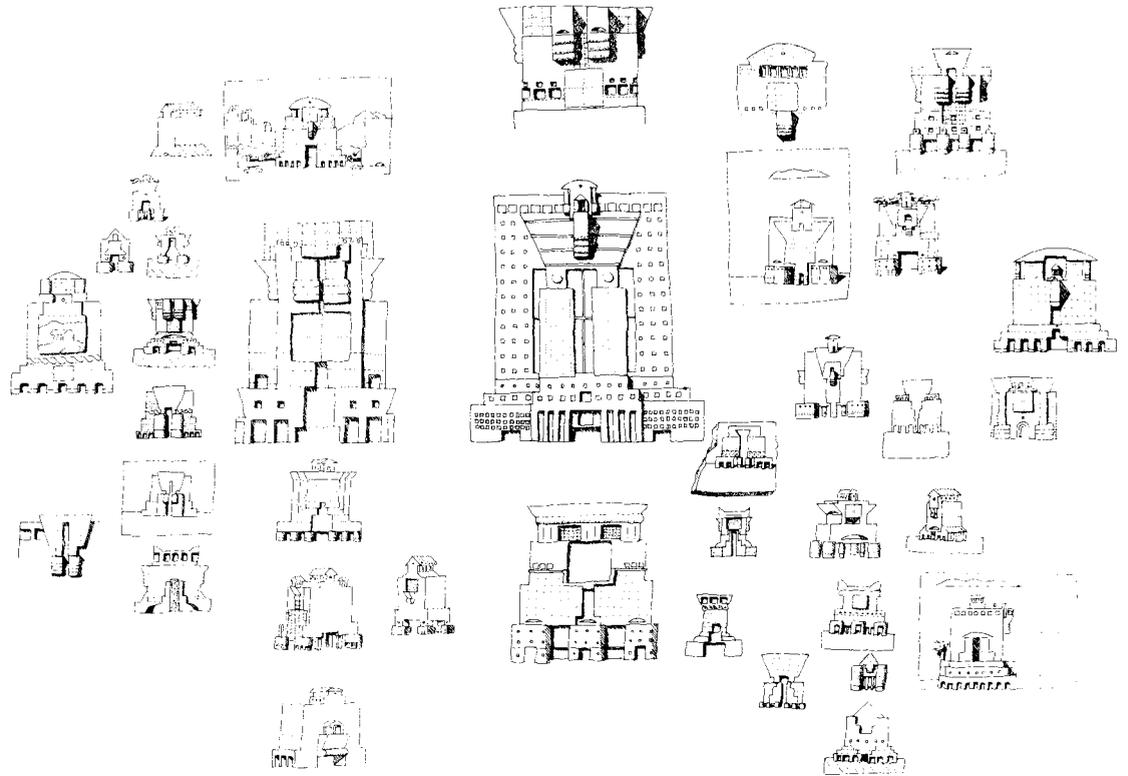
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Last word on Portland?

Notorious since the moment its design was unveiled, Michael Graves's Portland Building set off another round of printed debate upon its completion in October. P/A's measured response (pp. 108-115) will not be the last article you see about it.



"Why is Graves's building getting so much attention in the press?" asks an architect, bringing up the subject himself. "Has he got a high-powered PR agent?" When architects hear that Portland will be the site of the summer meeting of the AIA Design Committee (of which I am chairman this year), they immediately mention the chance to see Graves's building firsthand.

The profession's interest in Graves's Portland Building needs no encouragement from the press—nor does Graves need a PR agent. When the design was unveiled, the professional magazines performed their role by recognizing it as a precedent-shattering application of Post-Modern Classical motifs in a large-scale urban building. It has, after all, a keystone as big as Unity Temple. Simultaneously, reactions in Portland itself confirmed the building as an architectural *cause célèbre*, which the media were responding to, not creating.

As the structure approached completion, we at P/A identified it as a building we wanted to cover, whether or not we were first in the architectural press to do so. We wanted to make it the subject of an editors' round table, which would benefit rather than suffer from readers' previous exposure to the subject (pp. 108-115). The process required four of our editors to visit Portland last fall, to read up on the building and attend the panel discussions held in New York, then to meet with Graves. Their observations and questions are grounded in real experience, and Graves's responses reflect his survival of two public "roasts."

Press reaction to the building to date has generally been moderately critical or guardedly sympathetic. Wolf Von Eckardt, how-

ever, writing in *Time*, denounced the building as "ugly" and even "dangerous."

Though Graves's building has been the lightning rod for a lot of indignation, it is modest in some respects compared to other buildings going up concurrently. Johnson/Burgee's AT&T Building in New York and PPG in Pittsburgh are much bigger and in many ways more provocative, but professional reaction is muted by the elegance evident in their construction and by Johnson's Gold Medal stature. And neither of these buildings shows the scars of struggles with budgets or committees. And more is on the way: historical allusions will rise over our cities in other buildings by Johnson/Burgee, in towers by Murphy/Jahn and Kohn, Pedersen, Fox, and in the Humana Building by Graves himself as it takes shape in Louisville. Overseas, the Bofill atelier's housing at Marne-la-Vallée (P/A, Oct. 1982, pp. 74-79) displays Post-Modern Classicism with a bravado that makes Portland look almost tame.

At any rate, the Portland Building will definitely occupy a niche in history. (Three-dimensional or *trompe-l'oeil*, one is tempted to ask.) P/A's round table will, we hope, help determine the contours of the icon in that niche.

Do I have any opinions about the building? Yes, quite a number, but they need testing against actual experience. I won't have opinions I can trust until July, when I visit the building. I think I will let others have the last word.

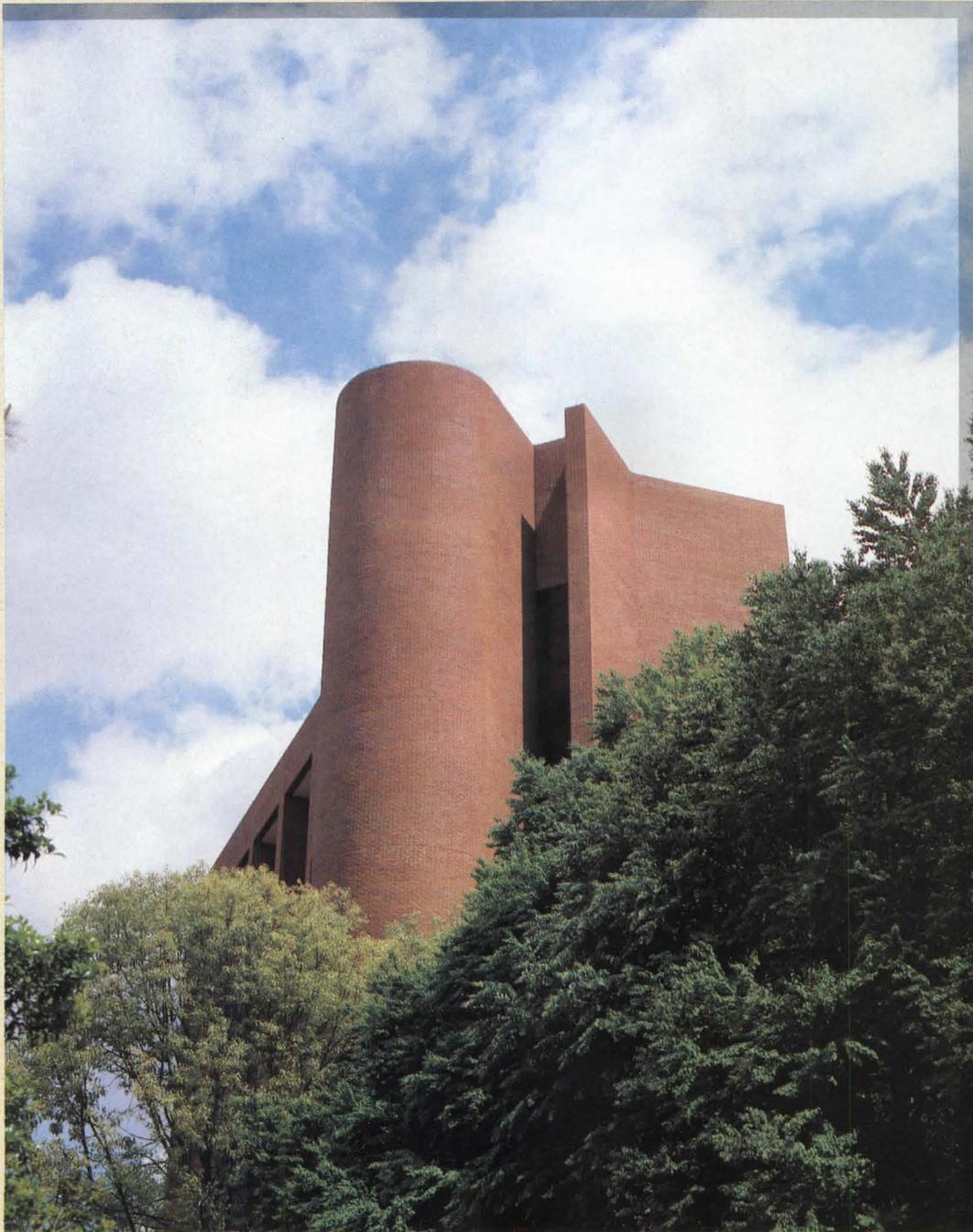
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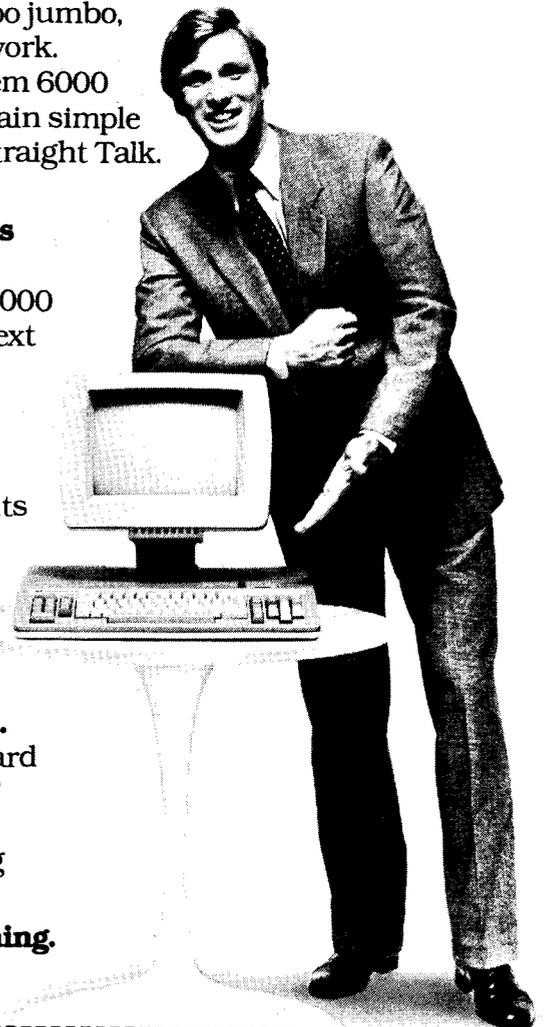
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WPA-23

Views

Jahn's drawings: another viewpoint

In the December 1982 issue of your magazine, there is a review of an exhibition of architectural work of Helmut Jahn of the firm Murphy/Jahn. As curator of the show and of the School of Architecture Gallery there are some comments I feel compelled to make.

The exhibition of Mr. Jahn's work at the school was presented for a number of reasons. As Mr. Jahn is this year's Davenport Professor it was a way of introducing him and his work to the school. Mr. Jahn has also produced a volume of work pursuing a particular position in architecture which the drawings and models express quite clearly. Mr. Betsky's review does not acknowledge the seriousness of Mr. Jahn's position but rather treats his work in a pretentious, flip and sarcastic way. This is not in keeping with the intentions in Mr. Jahn's work nor in the intention for our having the exhibition. Throughout the review there are caustic references comparing Mr. Jahn's work to various stylistic periods. This is not developed into any serious discourse but rather remains at the level of slick use of language revealing the lack of thought and

sensitivity in the review. Mr. Betsky's criticism never develops into an ideological debate connecting Mr. Jahn's work to either an economical or political condition. Nor is it the criticism of one maker of architecture criticizing another. It seems more that Mr. Betsky is interested in jargonistic journalism which in the end is superficial.

Mr. Jahn's exhibition is not a show of architectural drawing but rather through drawings and models is an attempt to reveal his process of thought in the production of his architecture. The thrust of the show is intended to be didactic for students since it is exhibited in the School of Architecture Gallery. It is work which is produced seriously and as curator I think it should be reviewed the same way.

Mr. Betsky's review is symptomatic of sloppy criticism current in journalism today. It does not qualify itself academically or professionally, therefore its main emphasis seems unclear. It appears to be just slanderous. Mr. Jahn is a mature, serious architect and I feel your magazine owes both Mr. Jahn and the University a serious and mature review.
George Ranalli
Associate Professor of Architectural Design
Yale University
New Haven, Ct

[Reading and rereading our news item on this exhibit, we find no "sarcasm" and nothing "slanderous" whatsoever.]

We had no obligation to respond to this exhibition of architectural drawings with "serious discourse" or "ideological debate." Let readers decide for themselves whether there has been any injury to George Ranalli, Helmut Jahn, or Yale.—Editors]

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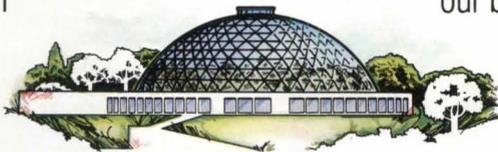
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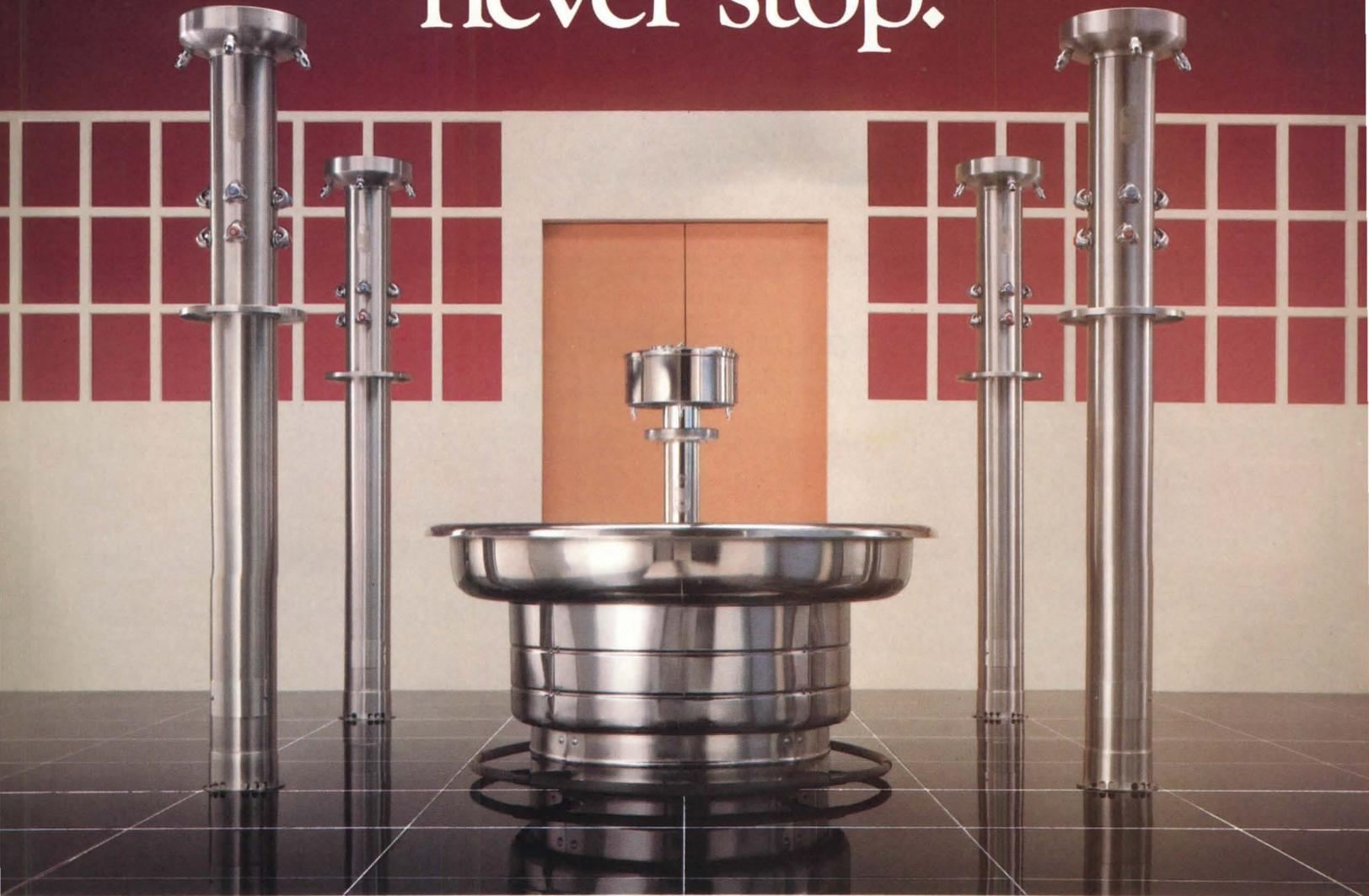
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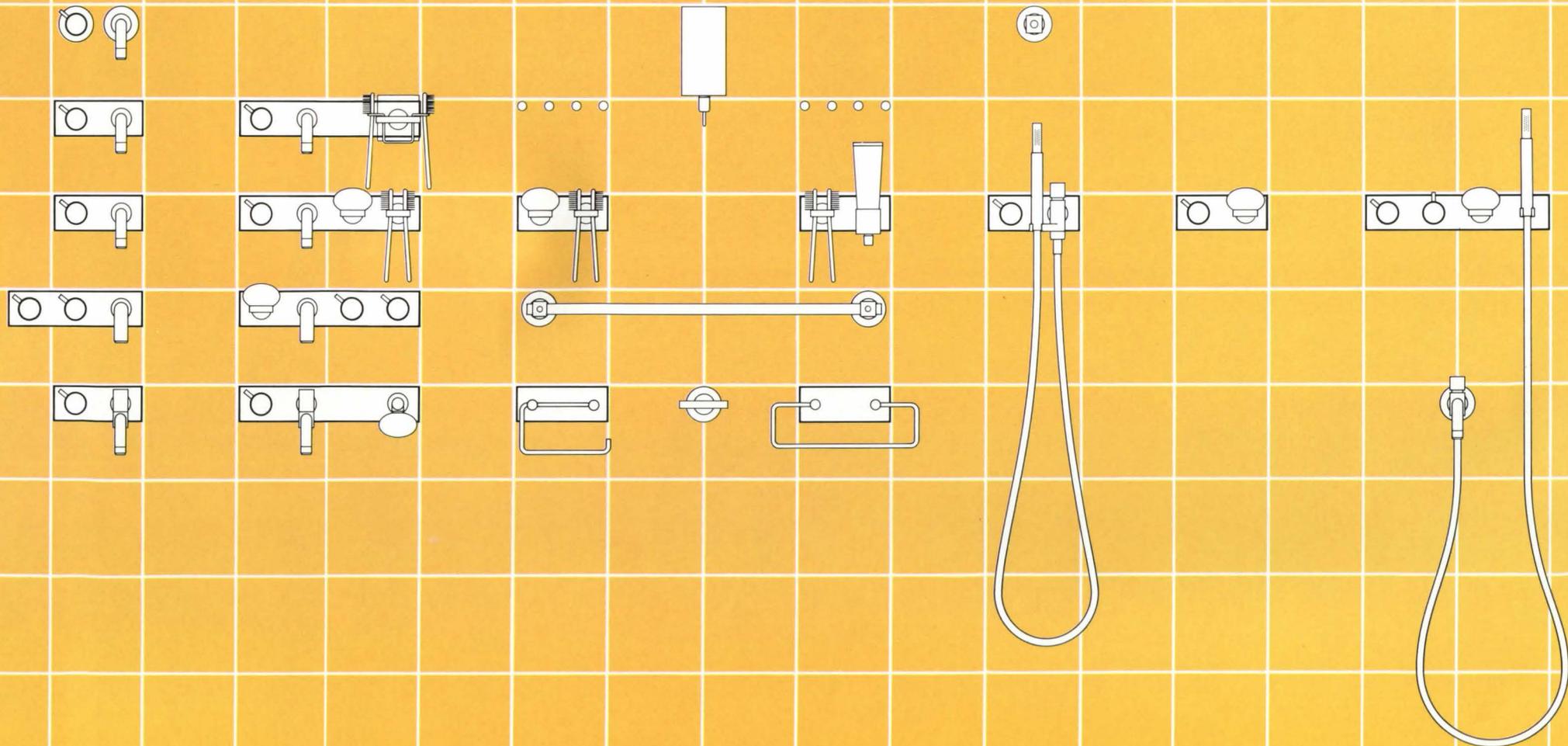
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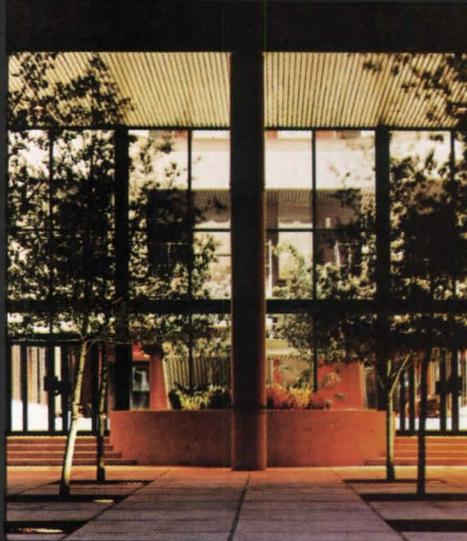
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RenCen defaults

Detroit's Renaissance Center, expected to be the anchor for renewal in that city's downtown when it opened in 1977, defaulted on its \$200 million mortgage in January.

¶ RenCen's difficulties have been attributed to its location (somewhat isolated from the old downtown), its layout, and suburban shopping habits, as well as to a delay in its sale last April.

¶ It is unlikely that the insurance companies holding the mortgage will foreclose and take control of the five-tower hotel, office, and retail complex designed by John Portman, but new arrangements must be worked out.

Watt, more?

Re the Vietnam Memorial in Washington: the compromise worked out for the addition of a statue and flagpole at relatively undistracting locations is running into obstacles. It seems that the Department of the Interior did not submit the revised plan by Cooper-Lecky Partnership to the Fine Arts Commission, as expected.

Foster to build BBC

British architect Norman Foster has been selected (from a short list that included Terry Farrell and Arup Associates) to design a new building in London for the British Broadcasting Corporation.

¶ The site, across from Nash's All Souls Church between Upper Regent Street and Portland Place, now holds the former Langham Hotel, which was converted several years ago into BBC studios. That building will be demolished to make way for the new one.

Anchorage away

Of the 11 firms that originally entered the competition to design a new state office building in Anchorage, Ak (adviser, Vincent Scully), four firms—Kohn Pedersen Fox, Arthur Erickson, Mitchell/Giurgola, and Venturi Rauch & Scott Brown—have been chosen to prepare more detailed designs.

¶ So detailed are the requirements, in fact, that the four firms must almost prepare partial working drawings.

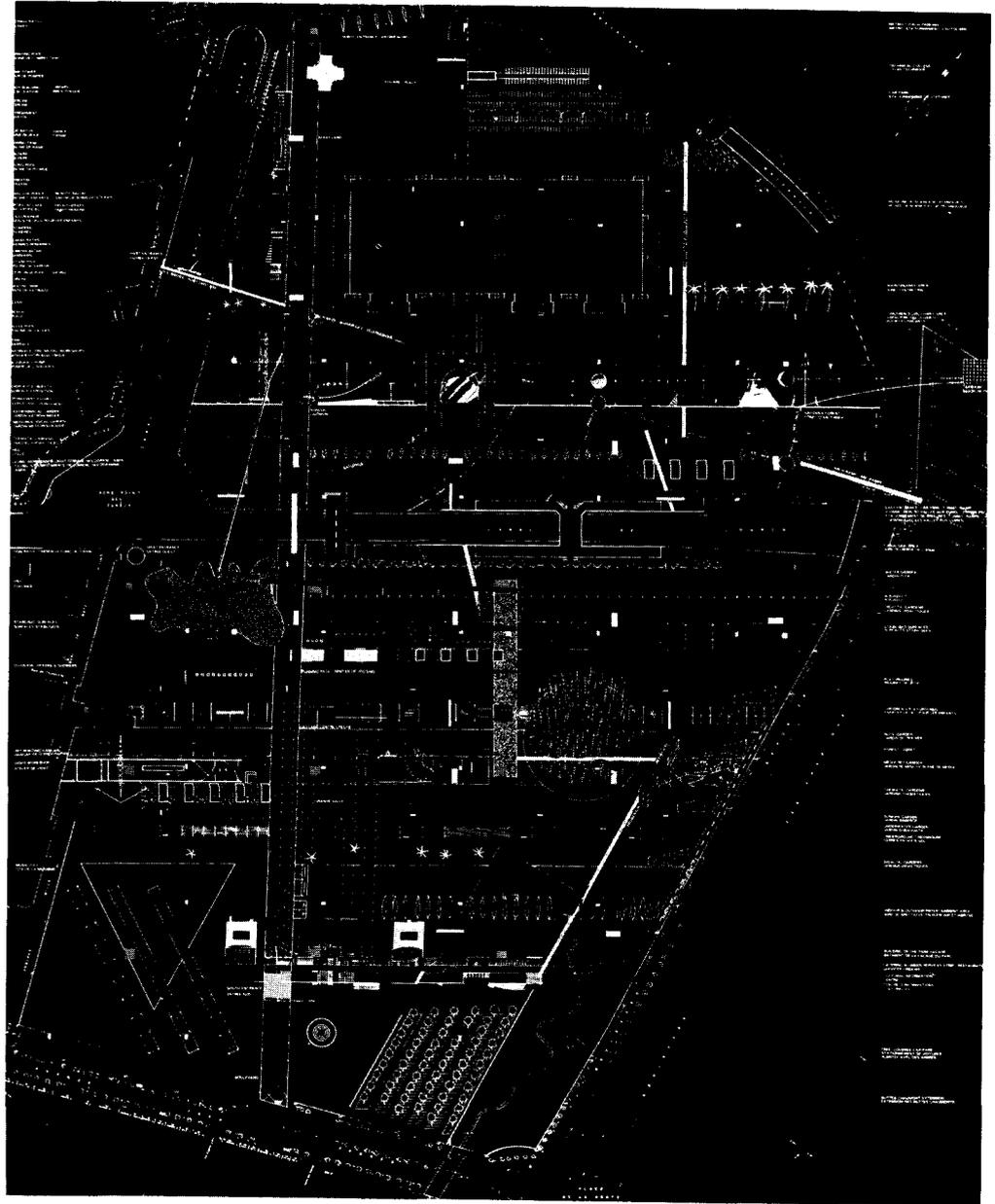
¶ The competition submission, prepared by a design/build team, must include complete cost estimates.

Confidential competition

An unlimited number of letter-size sheets were sent into Ottawa, Canada, in January by an undisclosed number of undisclosed architects chosen to compete for two prestigious commissions in Canada's National Capital.

¶ The new quarters for the National Gallery (350,000 square feet) in Ottawa and the Museum of Man (525,000 square feet) across the river in Hull, Quebec, will have a combined budget of \$185 million.

¶ The exact sites of the projects, however, and the names of the competing architects [Pencil points continued on page 40]



Indecision over Parc de la Villette

Rem Koolhaas's la Villette scheme.

The international competition to convert the former Parisian slaughterhouses into a 75-acre urban park was meant to end ten years of indecision. The judgment of the largely foreign jury in the open, one-step, anonymous competition for Parc de la Villette was, like the fabled Beaubourg contest, to be final, binding, and put immediately into operation.

It was and will be nothing of the sort. Leaks, well publicized by confident con-

testants and impatient journalists, preceded the jury's decision to award not one but nine first prizes to the winners who will—shades of the Ecole des Beaux-Arts—resubmit more detailed drawings that must conform to their initial sketch plan. The jury's indecision stems, it is rumored, not so much from the variety and imprecision of the plans, as was stated, but from the conflict between architects (including Arata Isozaki, Vittorio Gregotti, Renzo Piano,

and Joseph Rykwert) and landscape architects (including Paul Friedberg and Roberto Burle-Marx) over the character of the largest park to be created in Paris since Haussmann. All 301 projects will be exhibited at the Pompidou Center in March, before the jury, under attack in the press and subject to political pressure, meets again.

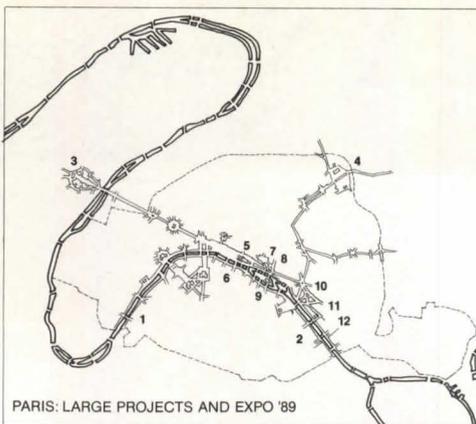
In an earlier competition for la Villette in 1976, Leon Krier's City within a City was a clear favorite. This year's champion (at least among the critics) is another England-based foreigner, Rem Koolhaas, whose delirious drawing—a plan, elevation, and isometric all in one—for a Luna Park entranced those who took the brief's request for a park of the 20th Century seriously. Political realists, however, predict victory for the well-connected landscape architect, Alexandre Chemetoff, and his combination of field, meandering stream, and roomlike functional areas. His plan equilibrates the massive givens of the program: the 235,690-square-foot cast iron market hall and the future Museum of Science and Technology, which is a conversion of the 516,730-square-foot carcass of an unfinished meat market, awarded to A. Fainsilber in the second Villette competition (1980). Gilles Vexlard's gridded formal forest, like Chemetoff's English garden, successfully knits the canal landscape to these two hulks, and could also appease the architecture/landscape conflict. American Bernard Tschumi's sophisticated abstraction, quite different from his prize-winning project of 1976, will, however, need more meat on its graphic bones before the jury is convinced. The other foreign entrants, Jacques Gourvenec, Sven Ingvar Andersson, Michael Van-Gessel, and Andrew Arriola, and the Frenchman Bernard Lassus are not thought by this observer to be serious contenders.

The exhibition, by providing an explanation for the jury's indecision, will help calm the angry competitors and the critical public, perhaps, but will not assuage the concern of professionals that, whoever the winner, the real loser was the competition system itself.

[Hélène Lipstadt]

Competitions and Expo '89: Foreign means Fair

By opening several competitions to foreigners, both as jury members and competitors, the Socialist government of France has called international attention to its way of distributing commissions for major national buildings. The forthcoming Worlds Fair, or Exposition Universelle, of 1989 promises even more competitions, and the initial acts of Robert Bordaz, who masterminded the creation of the Pompidou Center and is now at work on preliminary plans for the "Expo," are being carefully watched. The complicated programs for the three permanent projects open to foreign



PARIS: LARGE PROJECTS AND EXPO '89
 1 World's Fair, SW Site 2 World's Fair SE Site 3 Tête de la Défense Communication Center 4 La Villette Park, Science Museum, Music Center 5 Le Grand Louvre 6 Gare D'Orsay Museum of the 20th Century 7 Les Halles 8 Beaubourg 9 Arab Institute 10 Opera, Place de la Bastille 11 Finance Ministry 12 Sports Palace, Bercy

competitors—Parc de la Villette (above), Opéra de la Bastille, and Tête de la Défense (P/A, Nov. 1982, p. 60)—all require public meeting places, exhibition areas, or museums which will house attractions at the Expo. Given the current financial crisis, these adaptive uses provide the only budgetary hope that the monumental ambitions will be realized. The exhibition sites are scattered along the Seine on former industrial sites, some borrowed from the City of Paris whose mayor, Jacques Chirac, is the potential presidential candidate of the Right in elections to be held one year before the Expo. The Seine is thus not the only tie between the western and eastern exhibition sites and the projected monuments; the current French competitions reveal how "tout s'enchaîne": Everything, including politics, is linked together.

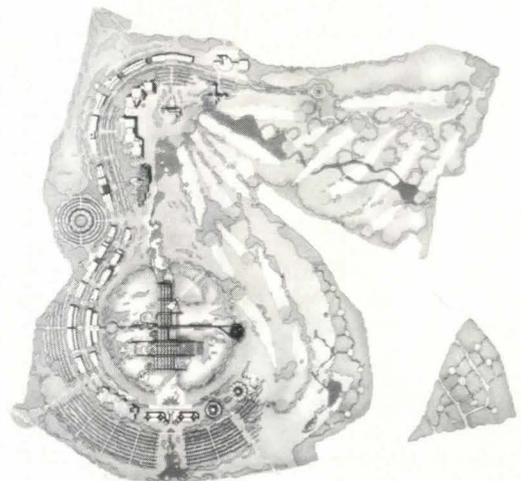
The Parc de la Villette jury included four foreign architects; the Tête de la Défense, three, including Ada Louise Huxtable; the Opéra de la Bastille, seven; and the Expo's visiting committee, ten. The government firmly believes that "Foreign means Fair," but overlaps among jury members are frequent enough to allow the inevitable power groups to form. Thus, all four foreign la Villette jury members reappear in different contexts at the Expo: Vittorio Gregotti and Renzo Piano are designated as planners for the Fair, and Joseph Rykwert and Arata Isozaki are members of the committee. Tête de la Défense jury member Antoine Grumbach heads the Atelier d'Urbanisme et de Plastique for the Expo (where figure, along with Gregotti and Piano, Pontus Hultén, the former head of Pompidou's Musée d'Art Moderne, Martial Raysse, an artist, and architect Ionel Schein) and his fellow jurors, Richard Meier and Oriol Bohigas, who are his Expo advisors, as are Opéra jury members Mathias Ungers and Bernard Huet. The committee, which does not have jury status and thus can be tapped for commissions at the Expo, has attracted not only architects already active in Paris (Rem Koolhaas, a finalist at la Villette,

Gae Aulenti, designing the interiors of the Musée du Dix-neuvième siècle, and Paul Chemetov, winner of the Ministère des Finances competition), but Joseph Paul Kleihues, from the International Building Exhibition in Berlin, and I.M. Pei as well.

The date of the last Exposition Universelle in France, 1937, is not a year that generally inspires nostalgia. Yet 746 architects, including August Perret, Robert Mallet-Stevens, and Le Corbusier, then built more than 350 Fair buildings. Jury duty, that often unwelcome privilege, may have its attractions, even for foreign architects.

[Hélène Lipstadt]

Hélène Lipstadt, a Cambridge, Ma, social historian and architectural writer, has been conducting architectural research for the Ministère de l'Urbanisme and du Logement in Paris.



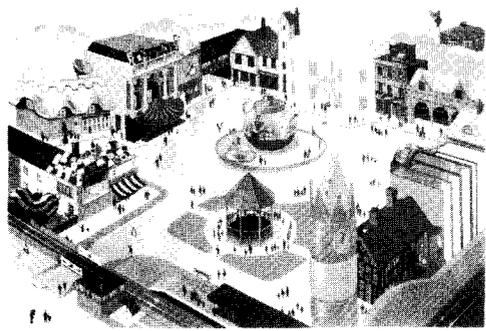
WonderWorld.

Disney British style

WonderWorld is the United Kingdom's projected version of Disneyland, but with a difference. It is to be dedicated to Britain and based on new technology and the idea of educational fun. It was dreamed up by a group of young people calling themselves Group 5, who have gained impressive industrial support. The scheme was then given form and content by a development design team headed by Derek Walker, erstwhile architectural supremo of Milton Keynes. The program was launched in Sept. 1982 with an exhibition at London's Design Centre, accompanied by a run-off from AD magazine 9/10 1982 as its catalog. Work is scheduled to start on site in 1983, and the first phase will open in summer 1985.

The location for WonderWorld is 85 miles north of London, in Corby, a town formerly dependent on the steel industry but now grappling with unemployment and change. Corby's civic leaders welcome the prospect of the work the new project will create.

The site is divided into three main areas: a large theme-park building, which is the main focus; a hospitality zone encircling it to west and south; and an international golf course to the east.



Crazy cruise through the Body (top) and Rhyme Village Square (above).

The theme-park building is a long, suspended structure divided into six interlinked bays. Starting from the southern end, the theme of the first bay, "The lost village," sets the scene of Britain, with nursery-rhyme characters and traditional crafts. The second bay contains "Land" and "Sea," with a section on Safety in between. "Land" offers a safari through the British landscape, a junior computer park, and scenes from literary favorites, while in "Sea," visitors take a submarine journey or walk under an aquarium or direct the Battle of Trafalgar by computer.

In the third bay one can take a tour through a giant human "body" and see a film hosted by Jonathan Miller.

The fourth bay shows important events in aerospace and includes flight simulators, a time machine, and other such stimulants. There is also a version of Buckminster Fuller's World Game projected onto a huge suspended globe.

The fifth bay features music, with an open-air auditorium next to the Jeff Wayne Concert Hall—a beetlelike construction designed to reflect visually the "War of the Worlds" hit album.

The northernmost bay contains the Resort area, with sand-fringed wave-pool and health club connected by monorail to the hotel and hospitality zone. To the east of the Theme building is an Energy Pavilion, and a circular stadium is planned west of the hospitality belt.

As the promoters say: "The planned British park acknowledges Disney but is dedicated to Britain with a stress on the future, and with the special plus of participation"—participation in learning, in technology, and in fun.

[Monica Pidgeon]

Louisiana exposition: urban concerns

Due to open in May 1984, the Louisiana World Exposition in New Orleans offers the usual fare of exhibition pavilions, hotels, theme structures, and monorail, but has been planned with concern for the city's future. Designed by Perez Associates/Studio Two, the Expo aims to catalyze long-awaited rehabilitation of the historic warehouse district and Mississippi riverfront which border its 82-acre site. In addition, the fair will establish many permanent urban improvements after it closes in November 1984.

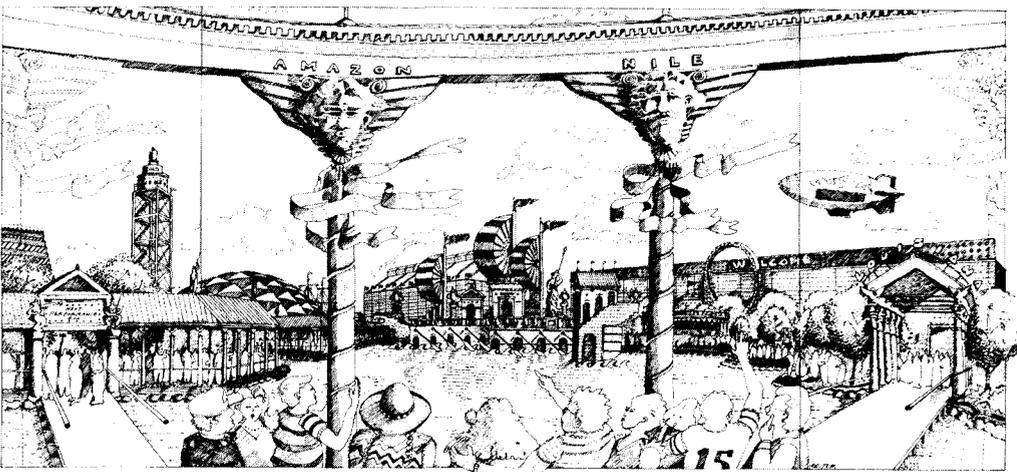
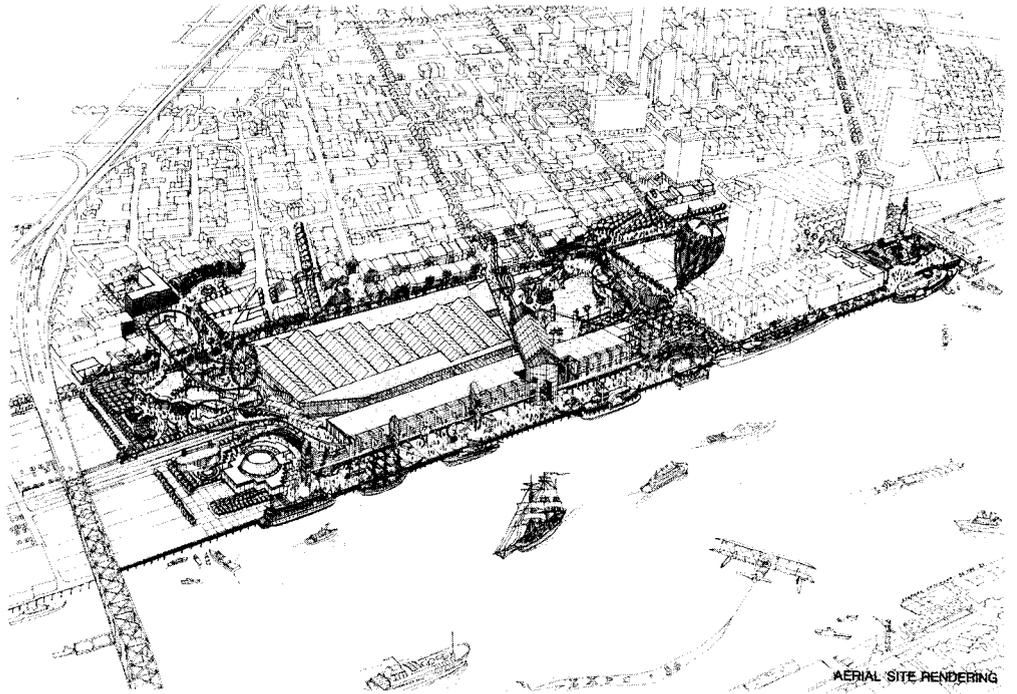
Dominating the central portion of the informally organized fairgrounds, an 800,000-square-foot exhibition hall will remain to serve as the city's new convention center. The two-story modular International Pavilion with waterfront promenade will house future commercial development along the river. These activities will be linked by a system of pedestrian malls and street improvements radiating from the riverfront to the central business district and French Quarter. At the western edge of the site, the renovation of several blocks of 19th-Century warehouses for corpo-

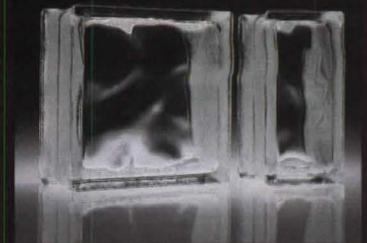
rate and government exhibits has already spurred private development in this historic district (see below).

While designed with high contextual aspirations, the Expo conspicuously lacks a powerful symbol with which to draw crowds. Instead, a collage of imagery, inspired from past fairs, is packed onto a 2300-foot-long "Wonderwall," a 3-D median strip on South Front Street. Designed in conjunction with Charles Moore/MLTW Architects, whose nearby Piazza d'Italia pales beside this fanciful stageset, the Wonderwall is planned to incorporate concessions and performance and viewing areas on several levels. An entry portal at its Canal Street terminus, resplendent with mammoth mermaids and alligators, will be inscribed with the Expo's slogan: "Fresh Water as a Source of Life." This theme will be formally represented by an undulating watercourse of pools and fountains that runs along the Wonderwall and weaves through the major exhibition hall. Other contributors include Frank Gehry, architect of the riverside amphitheater, and Metaform, a firm responsible for the design of many exhibit hall interiors.

[News report continued on page 32]

Expo '84 (top) and sketch of the "Lagoon."





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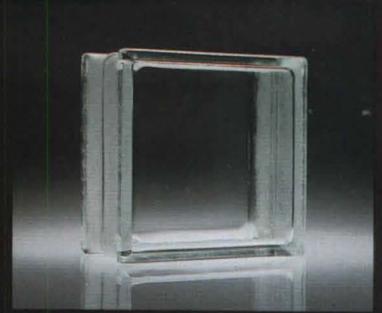
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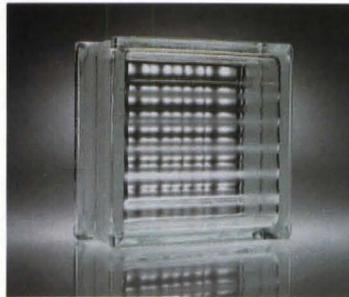


VUE™ Glass Block

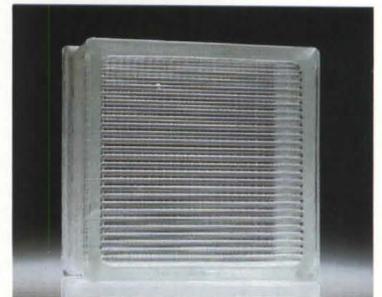
(Right)
Knoll International, Boston, MA
Architect: Gwathmey Siegel

(Left)
Lane Processing Center,
Grannis, Arkansas
Architect: The Oglesby
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Perspectives

Princeton plan update

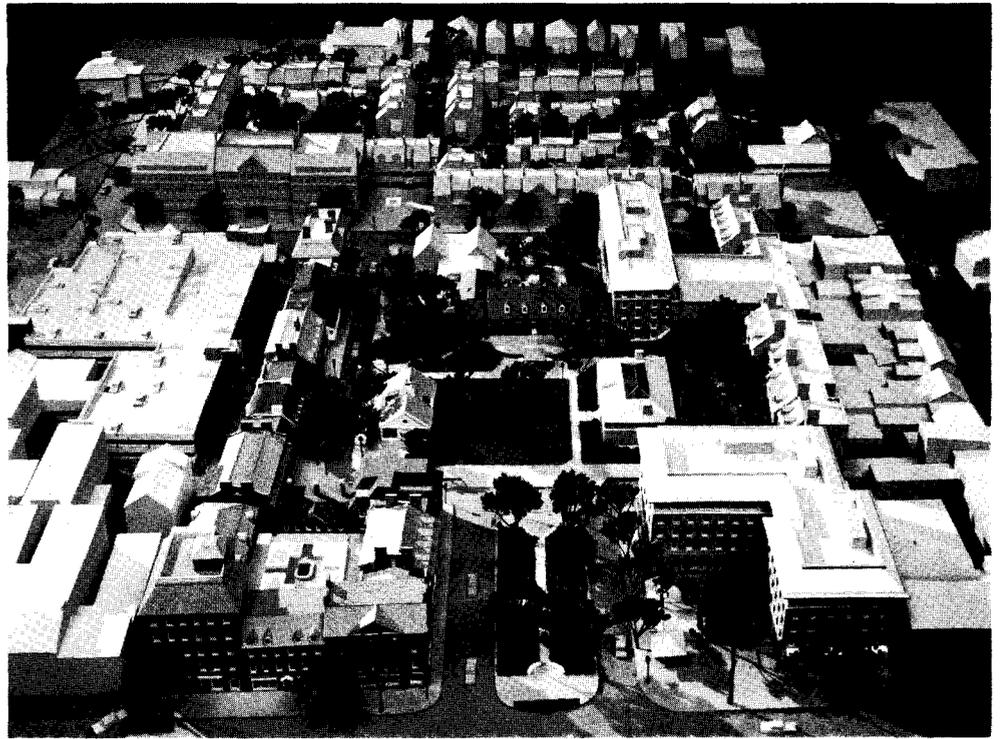
The relationship between urban design studies and subsequent development is sometimes hard to trace. So it is with the central district of Princeton, NJ, the university town that was the subject of a P/A-citation-winning study by Venturi, Rauch & Scott Brown (P/A, Jan. 1982, pp. 186-189). Although adopted by local government as a guide for development, their study has had little apparent effect on plans for the core of the area drawn up for Collins Development Corp. by Yankee Planning/Do H. Chung, Architect, of Stamford, Conn.

The nine-acre Collins parcel, just across Nassau Street from the Princeton University campus, includes the four-acre mixed-use Palmer Square development, built in the 1930s to look like spontaneous construction around a central square. The new scheme approximately doubles the amount of commercial space, apartments, and hotel rooms already on the site, and triples the parking.

It differs from the VR&SB concept in ways that reflect not so much differences in professional judgment as what developers, government, and citizen groups will accept in reality. The VR&SB scheme would have converted one block of existing street to pedestrian mall and added several hundred feet of new street through a rather large existing block; the current scheme leaves the street pattern as is, with no increase in public right-of-way and no loss of buildable private land. Required additional parking was accommodated in the VR&SB scheme in three dispersed multistory garages; in the present scheme, only one of those garages remains, reduced in height to two stories. Most of the 1000 new parking spaces are concentrated in an extensive one-level garage that forms a podium for mixed commercial and residential development. (The town accepted a slight reduction in total parking, acknowledging that some spaces can double for residential and commercial needs.) Edges of this podium will be largely concealed by buildings fronting the streets; a small new plaza at the center of the project will provide on-grade garage access.

The Yankee Planning scheme, with its greater separation of pedestrians and cars and its acceptance of a superblock that happened to exist, is more pragmatic and more Modernist than the finer grained VR&SB plan. One virtue is that it sharply reduces the volume of visible parking structures that the earlier plan would have imposed on the townscape.

Both plans maintain the fortunate mix of uses already in the area and extend it over a block now given over al-



most entirely to parking lots. And both address the classic problem of American towns—reinforcing the center with added commercial and parking facilities as a defense against peripheral shopping sprawl—without turning the town center itself into an introverted, single-use shopping center. [JMD]

Credits

Master Planners and architects: Yankee Planning/Do H. Chung (Principal, Do H. Chung; Associate in charge, Stephan R. Frenkel). Landscape consultants: Morgan Wheelock. Traffic consultants: PRC Voorhees. Model builders: Stephan R. Frenkel, Carter Quina, Charles Reda III, John Landers Downs, Gregory Chere. Model photos: Robert Damora.

[Perspectives continued on page 27]

1 Original Nassau Inn - 1930s 1A Existing inn annex 1B Proposed inn additions 2 Existing post office, proposed commercial reuse 2A New commercial pavilion 3 Parking garage 4 New commercial block, planned to include post office 5 Residential units, above and around large, single-level garage 6 Plaza access to garage

Aerial view of model from university side (top) centers on existing Palmer Square—c. 1930—which provides intimate vista from Nassau Street (foreground); tallest structures, to right of axis, are late existing buildings, and current plan permits nothing of such scale.

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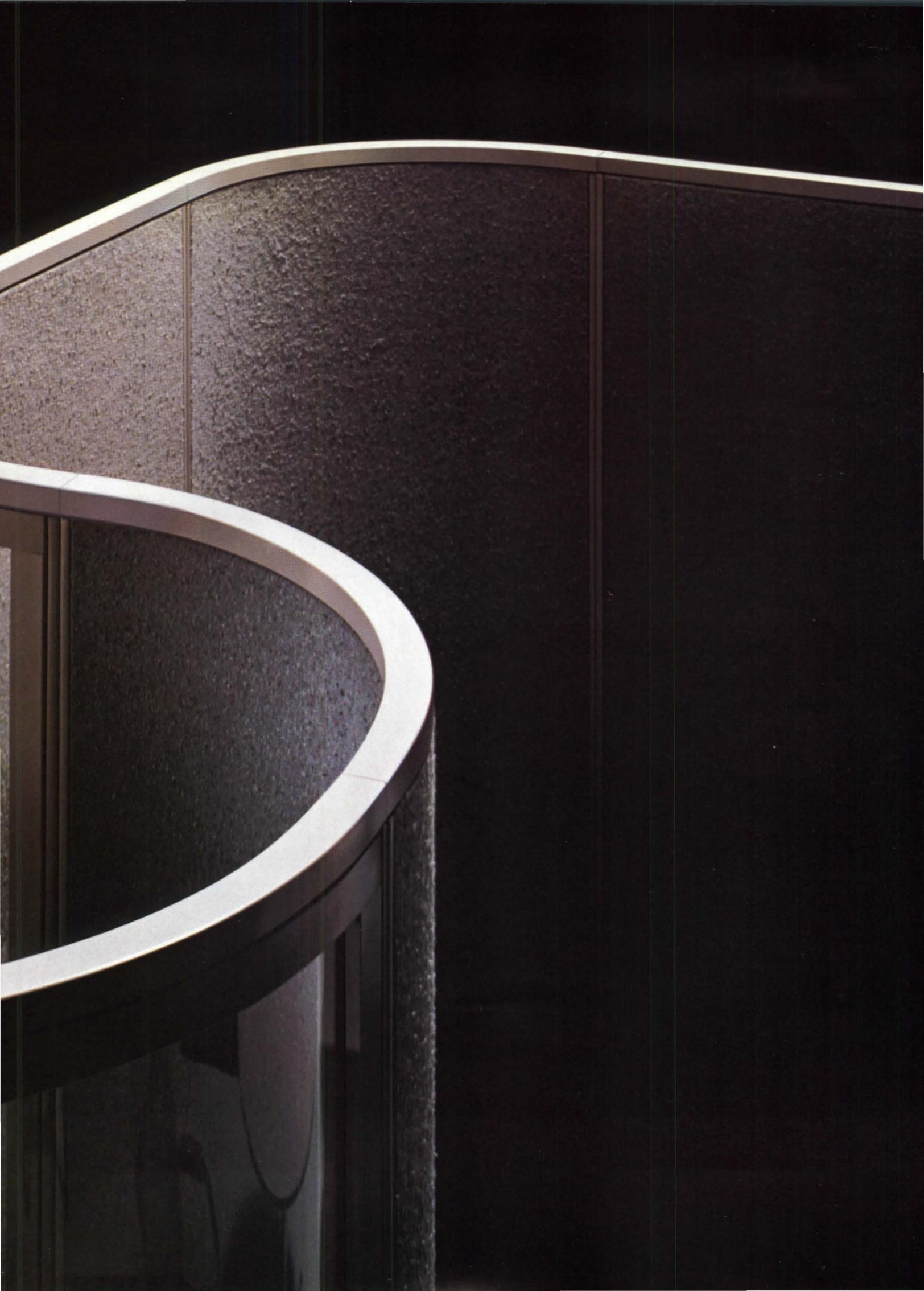
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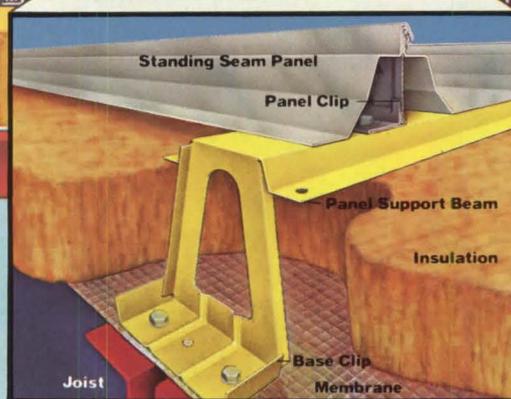
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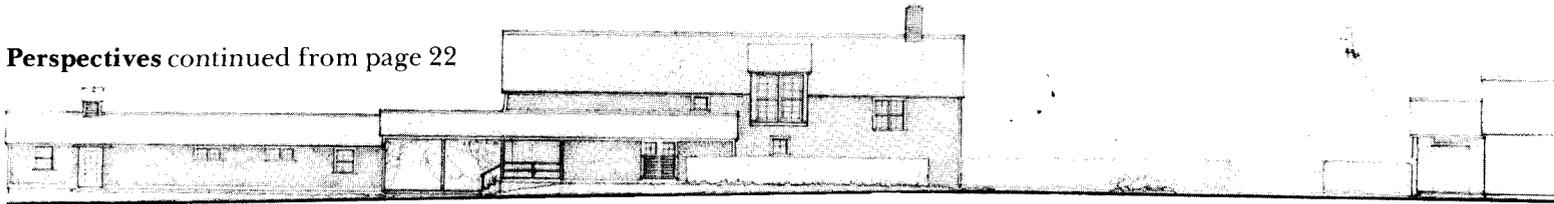
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Skowhegan charrette

"It will look like nothing ever happened, but in a wonderful way." That's how juror Robert A.M. Stern described the winning solution in an on-site design competition held last August for the design of additional buildings at the Skowhegan School of Painting and Sculpture in Maine.

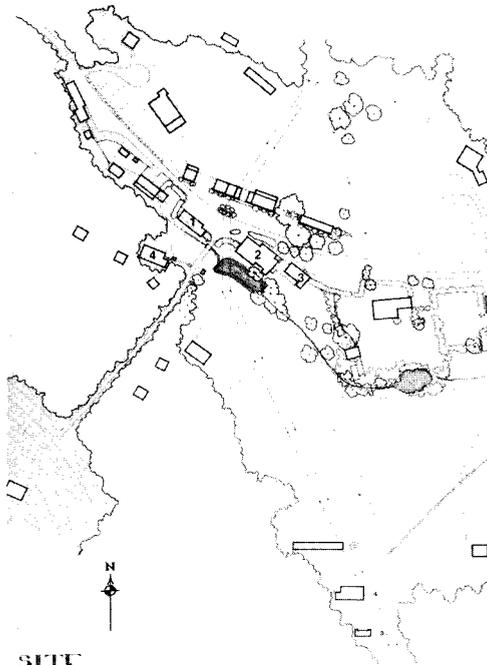
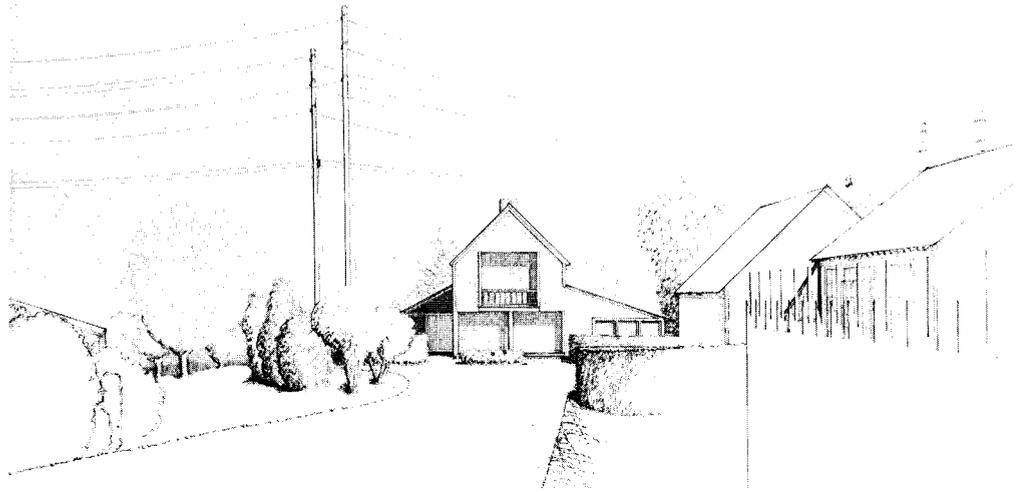
The scheme shown here, by architects Robert Page and Peter Millard of New Haven, Ct, was the unanimous choice of a jury that included architects Stern, Charles W. Moore, and Graham Gund, artist-alumnus-trustee Alex Katz, and Skowhegan's Academic Director Sidney Simon. The four other schemes (p. 28) were by Turner Brooks and Ross Anderson, Fred Koetter and Susie Kim, Ralph Lerner and Richard Reid, John Scholz and Jeremiah Eck.

Skowhegan, a 35-year-old institution where 65 carefully selected art students work with well-known artists each summer, is blessed with a charming setting. Studios, offices, and meeting hall occupy old farm buildings and newer shedlike structures scattered across hillside pastures and into the adjoining woods. (Living accommodations, not involved in this design, are on a lakefront about a half mile away through the woods.)

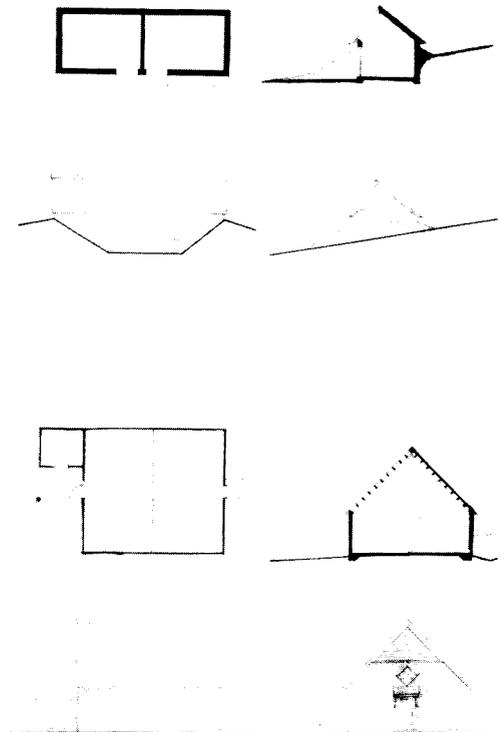
Skowhegan's problem was to improve its plant—with new library, offices, and more studios—without spoiling what they had. With private funds and a matching grant from the National Endowment for the Arts, they undertook an on-site competition according to guidelines newly published by NEA. Vision, The Center for Environmental Design and Education, drew up a school master plan and competition program; Vision president Joyce Meschan was project director and architect Michael Robinson, executive vice president, served as professional adviser. Teams of New England architects were chosen through a process of brochure reviews and interviews.

The chosen teams—limited to two professionals, with no assistance—were given four days, after an initial briefing, to produce a design on the site. They were assigned cubicles in the lecture barn and were open to visits at assigned hours by the school's faculty and students, who reacted initially with obvious distrust. They seemed to fear that these alien artists would try to turn their ad hoc, non institutional environment "into an art school." As the week passed, however, the architects learned what users wanted: small buildings, lots of wall surface, and privacy when they worked, among other things.

At the end of the week, each team made a half-hour presentation to the jury, which then took hardly an hour to reach a unanimous decision. They gave



SITE
1 Gallery 2 Library 3 Administration 4 Additional studios



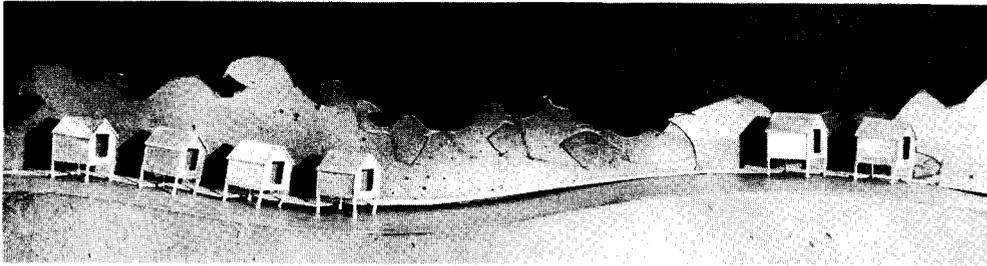
warm praise to all five solutions, which, as juror Stern said, "demonstrated that architects can make things appropriate for places; they need not lay out their whole stock of tricks for each commission."

The works of all competitors have been exhibited at the Leo Castelli Gallery in New York and the Graduate School of Design at Harvard, where a panel discussion among participating architects and jurors took place. The designs will be shown Feb. 14-18 at the Yale School of Art and Architecture gallery. [JMD]

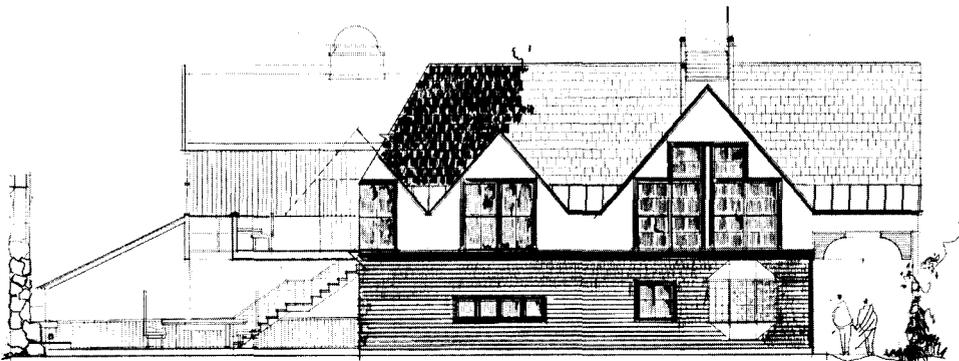
Robert Page and Peter Millard. "The improvement of facilities can threaten to transform workplace into showplace," say the architects, and their scheme comes closest to perpetuating the school's earlier building traditions. They allow various options for traffic movement (main car entrance may be from east or west) and power lines crossing site can be moved or remain; the plan can be executed gradually. But there is nothing haphazard about the placement and form of these buildings; their gables, porches, and dormers are as carefully considered as the formal gestures of other competing schemes. Only this design proposed a variety of studios—including a half-buried type with sloping "studio" glazing. Construction materials—mostly wood—were limited to "what the maintenance man knows how to care for."



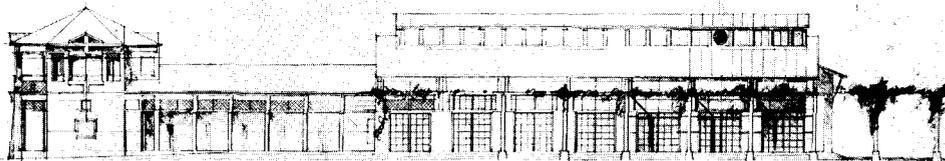
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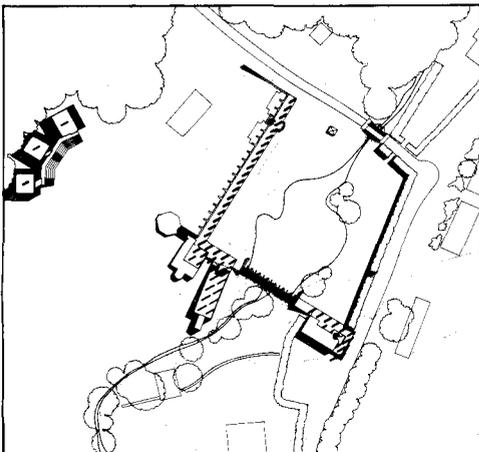
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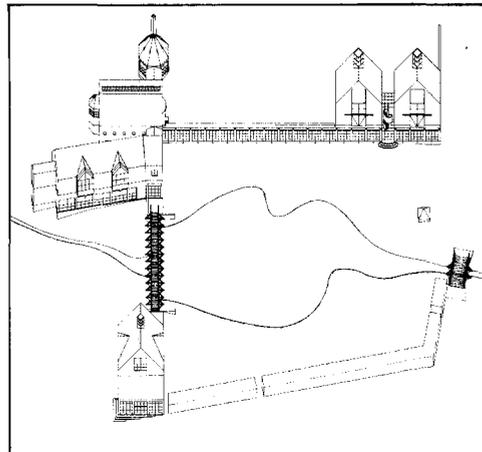
2



3



4a



4b

1 Turner Brooks and Ross Anderson. "We chose to place a building of aggressive character in a location that made significant outdoor spaces through its relation to the road, and gave some sense of hierarchy to the scattered studio buildings and sheds," say these competitors. The "aggressive" building, which accommodates most of program spaces, shows its diverse parts with visible joints in an irregular form that rises and narrows toward its climactic tower. Upper portions are meant to be clad in "a motley palette of reddish-bluish-purplish-greenish asphalt shingles" in a nod toward Maine's backwoods subsistence tradition; portions at pedestrian level would be of wood. Remote studios are pressed up against the edge of the woods and linked by a boardwalk that would expand work spaces in fair weather.

2 John B. Scholz and Jeremiah Eck. In this scheme, two-story buildings of consistent profile and varied internal section make a strong statement of arrival on the entrance road and define a space around the pond. The architects clearly felt that an upgrading of facilities implied at least some increase in scale and elaboration of buildings. In form and variegated surface, the buildings are reminiscent of Maine's low-eaved Victorian farmhouses. Inside, varying space demands call forth variations on 19th-Century exposed-truss roof framing. Location of studios in the middle of the fields, rather than at the edge as in other schemes, was unpopular with the jury.

3 Fred Koetter and Susie Kim. The architects spoke of the "tremendous presence and power of the surrounding landscape" and meant their buildings to intensify its qualities. In fact, their buildings showed the most visible Classical order of any scheme. Their pond-side gallery structure—a square, symmetrical pavilion—is set at an angle to a strongly linear structure fronting the road, but the placement recalls temple precincts of antiquity more than ad hoc plans of farms. The jury admired the formal elegance of their proposed buildings and the "charm and delight" of their presentation, awarding the architects a special commendation.

4 Ralph Lerner and Richard Reid. The intention of this team was to draw existing physical features—buildings, road, and the unusual massive hedges—into "a coherent spatial strategy." They proposed enlarging the pond on the site, then spanning it with a truss bridge and stretching a stoa-like half-buried colonnade along one side. The stoa could shelter sculpture and offer 200 feet of wall for the school's almost unique fresco program. Studios are grouped at the upper edge of the fields to form an amphitheater with their expanded stairs. Though the scheme's formal ambitions are not quite in character with the place, the jury was impressed with the spatial experience the design would afford artist-users.

[News report continued on page 32]



1863: North Railway Station, Place de Roubaix; Architect: Jacques Hittorf.

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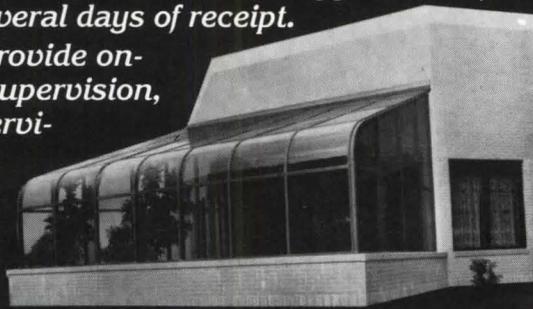
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So far, construction of this \$350 million endeavor has only begun, with pilings for the International Pavilion, demolition of unwanted warehouses, and site grading and drainage. Although its urban-sensitive design promises a source of life for the riverfront, the true success of the 1984 Expo will be confirmed only if the city and private developers continue to invest in the area long after its six months of festivities. [Deborah Dietsch]

Deborah Dietsch is an architect and freelance architectural journalist.

Expo '84 includes commercial preservation

New Orleans, with the Louisiana World's Exposition (see above) planned for 1984, a new Convention Center (incorporated in the Expo site), a high-rise building boom, and the general lure of the Sunbelt, has been experiencing a level of development unlike the rest of recession-bound America. These activities share one attribute—they all encroach in some way upon the city's Historic Warehouse District, a 36-block area containing the bulk of New Orleans's 19th-Century warehouse structures. A pragmatic plan will preserve the area, encourage its revitalization,

and give a valuable and unique dimension to Expo '84.

The architectural make-up of the district is similar in scale to other warehouse districts in the country, but distinct in its details: broad projecting canopies with lacy cast-iron brackets, large block granite streets, and French and Spanish elements all say "New Orleans." Ironically, while the forthright materials and spaces of 19th-Century warehouses have attracted revitalization efforts in cities across the country, in New Orleans, where preservation has a long tradition, large residential conversions of these commercial structures have not occurred, and only a few office conversions have taken place.

This trend is now changing, with the Louisiana World Expo playing a major role. Expo will rehabilitate 25 buildings in the district for temporary exhibition space, and the rehabilitated structures will revert to their owners after the fair's close. The ambitious reuse program, capitalizing on an existing historic environment, will cause Expo to differ markedly from past expositions, where history tended to be re-created—The Streets of Paris, Old Germany, and so on—rather than restored.

In response to the city's development activity, the Preservation Resource Center of New Orleans had commissioned Charles Caplinger Planners of New Orleans to prepare a Preservation Development Plan for the Warehouse District, with funds provided by a "critical issues" grant from the National

Trust for Historic Preservation. The recently completed plan will provide the framework for development in the area. The plan begins with a thorough documentation of the area, relates planning issues to municipal regulations and private redevelopment, and proposes changes to the zoning and historic district regulations. In the large district, overambitious multiagency projects have been deemphasized and private development encouraged by pragmatic civic regulations allowing incremental changes. Most blocks will maintain their existing zoning while nearly vacant sections are rezoned for larger development. The size of the historic district and the scope of the design review procedures will be increased. The plan proposes case studies showing the substantial advantages of reusing historic properties, and it also recommends supporting the existing industries in the area. With residential conversion unlikely in the near future, this will be a commercial mixed-use area, with offices, retailing, and industry. As one New Orleans resident put it, "The Vieux Carré represents a historic living environment while the Warehouse District represents a historic working environment. We see no reason why we can't have the best of both worlds."

[Michael Jackson]

Michael Jackson is a preservation architect practicing in New York.

[News report continued on page 36]

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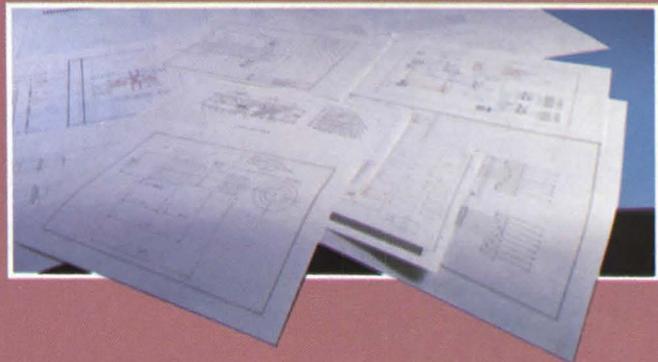
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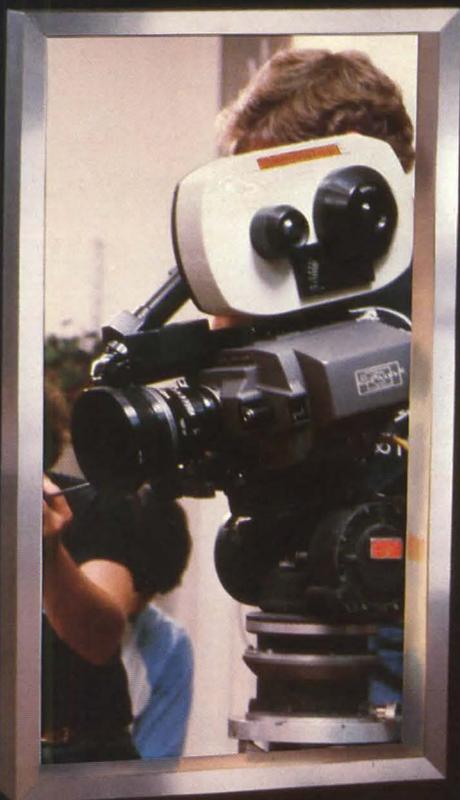
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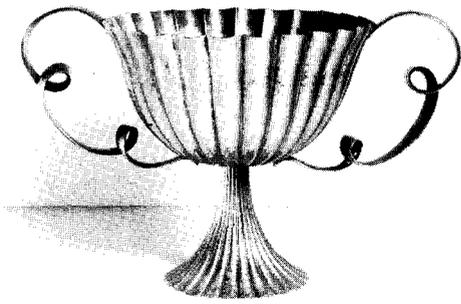
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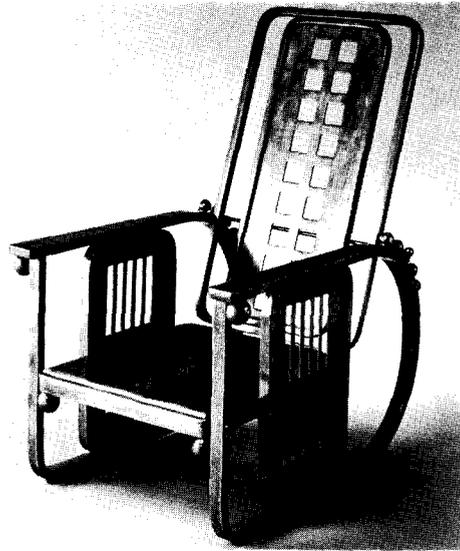
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Silver bowl, 1920, and adjustable reclining chair, 1905, by Hoffmann.



Malcolm Varon Associates

First all-Hoffmann exhibition

Until the Fort Worth Art Museum organized "Josef Hoffmann: Design Classics" this fall, there had never been a museum exhibition in this country devoted exclusively to the work of Josef Hoffmann, who is remembered best for the Purkersdorf Sanatorium in his native Vienna, the Palais Stoclet in Brussels, and a handful of chairs and tables.

FWAM director David Ryan spent two years assembling the furniture and decorative objects for this show, all dating from 1900 to 1930, Hoffmann's most productive period. The result is a

handsomely designed and elegantly installed exhibition that explains why suddenly Hoffmann has become the darling of designers and decorators.

We find the famous Purkersdorf Chair, with its elongated curved back and large wooden knobs, one of Hoffmann's favorite decorative touches. There are also deck chairs, barrel chairs, rocking chairs, a vitrine, a writing desk, and a coffee table with a slightly beveled oval top and rectangular base that neatly marks the transition from Art Nouveau to Modernism.

Equally impressive are the bowls, boxes, fabrics, flower vases, and utensils that combine eloquence and simplicity in the manner of contemporary Scan-

dinavian crafts. Many are one-of-a-kind objects made for specific patrons and rooms, while others were meant to be mass-produced. Unlike William Morris, Hoffmann never believed the machine was the devil.

The FWAM has patterned its installation on a showroom Hoffmann designed for J and J Kohn in Vienna—off-white and gray walls, with a border of small black pegs that recall Hoffmann's ubiquitous decorative knobs. The smaller objects have been arranged in wall cases, the chairs set on raised platforms against a background of delicately painted arches. Derived or not, the installation makes us feel that we are seeing Hoffmann's work for the first time. Which, thanks to the Fort Worth Art Museum, is precisely the case.

[David Dillon]

David Dillon is architecture critic for The Dallas Morning News.

Energy Secretary meets AIA

In a first for any energy secretary, Donald Paul Hodel—whose Senate confirmation had come only a day earlier—paid an informal two-hour visit to the American Institute of Architects. He met and conferred with about 50 solar and conservation advocates invited by the AIA and a handful of other groups sponsoring the gathering.

[News report continued on page 38]

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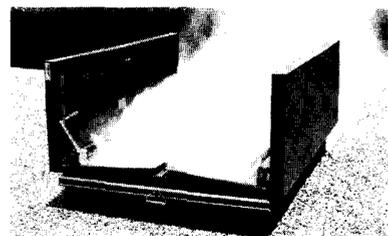


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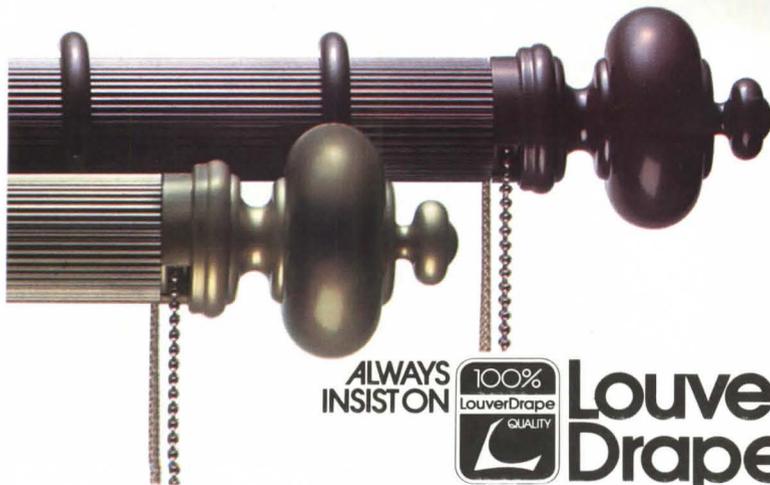
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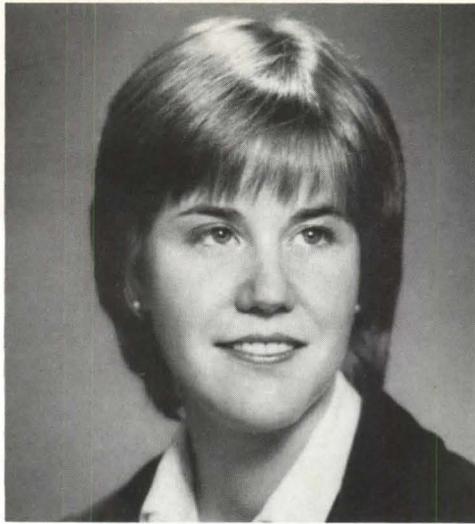
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Many took heart in Hodel's remarks about the need for a balanced national energy policy. Several Washington veterans noted his apparently conciliatory comments about the difficulty of introducing new technologies for buildings, taking this to mean that he may reconsider the drastic budget cuts suffered by conservation and solar programs under his predecessor, oral surgeon James B. Edwards.

Hodel, recently an undersecretary of Interior for James Watt and known for his staunch support of nuclear development while he served at the Bonneville Power Administration, made another first encounter at the session: Maxine Savitz, whose controversial ouster as deputy assistant secretary for conservation is being sought by her boss, Reagan appointee Joseph Tribble. Upon being introduced, Hodel remarked on Savitz's "many, many friends," a reference to her strong support in the Congress and among solar advocates. [Thomas Vonier]

Staff appointments at P/A

Daralice Donkervoet Boles, a graduate student of architecture, has been appointed Associate Editor in charge of the P/A News Report. She will be replacing Senior Editor Susan Doubilet, who



Daralice Donkervoet Boles.

will be responsible for feature articles. And Pilar Viladas, for one-and-a-half years Associate Editor in charge of interior design, has been promoted to Senior Editor responsible for interiors and general features.

Boles, who will assume her position with P/A's March issue, holds a Bachelor of Arts in Architecture, magna cum laude, from Princeton University and is a candidate for a Master of Architecture degree from Columbia University. She served as editor of *CRIT*, the national architectural student journal, has contributed articles to *Skyline*, *Metropolis*, *Precis*, and *P/A*, and has served as contributing editor of *Interiors*. Between

university sessions she worked in the offices of RTKL Architects and O'Malley & Associates, both in Baltimore.

Viladas, who holds a Bachelor of Arts degree, magna cum laude, in art history from Radcliffe College, was managing editor of *Skyline* and then Special Features Editor of *Interiors* magazine before joining P/A in 1981. As associate editor, she has covered the interiors field effectively and has contributed to the entire editorial process.

Disappointing case for favorite jewel

Johnson/Burgee's Neiman-Marcus store replacing a beloved San Francisco landmark, the 1896-1908 City of Paris, recently opened to the predictable mercantile hullabaloo and the predicted architectural disappointment. It was slated to be a granite jewel box with a glazed corner, encasing—in Russian Easter egg fashion—the graceful rotunda of the old store (moved to the corner of the site and restored by Whisler/Patri). Unfortunately, the building looks more like a packing crate decorated with two-toned, granitic contact paper. Thus Johnson/Burgee have added insult to the injury sustained by Union Square last year when the 1923 Fitzhugh Building was replaced by HOK's Saks Fifth Avenue store. The two demolished buildings were the *causes célèbres* of long preservation battles during which the square's [News report continued on page 40]

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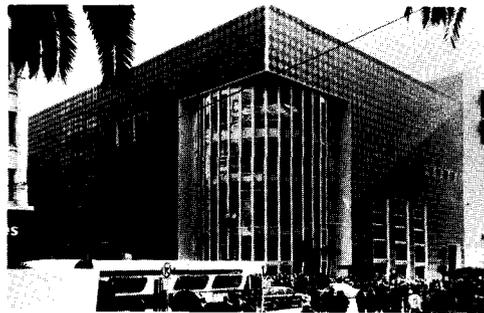
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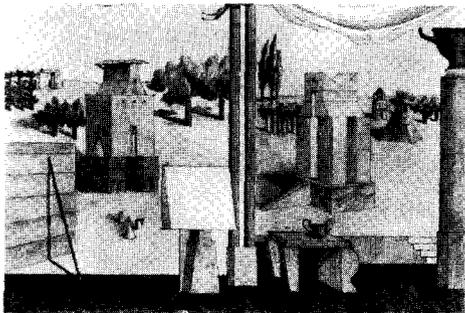
News report continued from page 38



Neiman-Marcus store.

architectural/historical continuity was an important issue. The loss of these battles suggests that the only really inviolable thing about the square is the green, open space. It is sad but apparently true that the prestige of being *on* the square is tied more to commercial vitality than to architectural excellence.

[Sally Woodbridge]



Set design for "Fire."

Graves tries his hand

The name of the ballet is "Fire," but its only fiery component was the *idea* of the collaboration between architect Michael Graves as set and costume designer, and choreographer Laura Dean. The outcome, seen in its Joffrey Ballet premiere at the end of December, is pallid indeed.

The set, which consists only of a backdrop, is more golden pastel than Graves's usual palette, and its brushstrokes are uncharacteristically in evidence. This does provide a pleasantly modulated field, but the grayer toned objects scattered without focus within it, and the dancers clad in blue-gray and rose-beige tunics before it, seem slight, cool, and unimportant surrounded by its full, optimistic glow.

Graves's other recent foray outside architecture, the design of the GQ trophy (P/A, Jan. 1983, p. 23), is, well, cute. Its chunky body teeters upon tiny pointed feet, and its handles delicately outline Mickey Mouse ears.

It is imaginative of Graves to use his talents beyond the narrower limits of architecture. His furniture and carpet designs, for example, have been sumptuous. In theatrical design, however, he had a fourth dimension, that of movement, to contend with. Perhaps his unfamiliarity with the vicissitudes of that element restrained him, and his touch, usually so sure, faltered. [SD]

Pencil points continued from page 17

(who must submit 8½" x 11" sheets describing—graphically or verbally—their "approaches," conceptual or philosophical) are being kept confidential. With good reason.

¶ Last year, rumored irregularities in the selection of Prime Minister Trudeau's friend Arthur Erickson for the design of the Canadian Embassy in Washington caused a major national scandal (P/A, July 1982, p. 25). And a 1976 competition for the design of the National Gallery (on a different site), with The Parkin Partnership as winner, was an event neither consummated nor quite ended.

¶ Jean Boggs, the Chairman of the Canada Museums Construction Corporation, who hand-picked the shortlisted architects (with the approval of the Corporation Board and the museums' staffs), has had a somewhat stormy history with the National Gallery. She had been its director for a decade until six years ago, when she parted company. After stints with Harvard University and the Philadelphia Museum of Man, she was called back last July to head the Construction Corporation.

¶ The names of the winning architects are expected to be announced later this month.

Holabird & Root wins firm award

One of the nation's oldest architectural firms, Holabird & Root of Chicago, has been chosen to receive the AIA's 1983 Architectural Firm Award for having "continuously produced distinguished architecture."

¶ The firm, founded in 1880 by architect William Holabird and landscape architect Ossian Simonds, became Holabird & Roche in 1882 with the advent of partner Martin Roche. It contributed significantly to the development of the modern skyscraper with the design of important early 'Chicago School' buildings, including the Tacoma building, the first metal frame building. In all, the 103-year-old firm has designed over 13,000 projects.

¶ During the past decade, the firm has received AIA Honor Awards for the Illinois Bell Telephone Company Equipment Building in Northbrook, IL (P/A, July 1979, p. 70); the Chicago Public Library and Cultural Center restoration; and the Monsanto Co. Environmental Health Laboratory in St. Louis.

Top AIA service honor

Princeton, NJ, architect and urban designer Jules Gregory has been selected to receive the AIA's highest service honor, the Edward C. Kemper Award, for 1983.

¶ Gregory has served the AIA as a national director and vice president and as chairman over the past ten years of its Regional/Urban Design Assistance Team (R/UDAT).

¶ A graduate of Cornell University's School of Architecture, he has taught and lectured in urban design at Pratt Institute and at Yale, Princeton, and Columbia University. [Pencil points continued on page 43]

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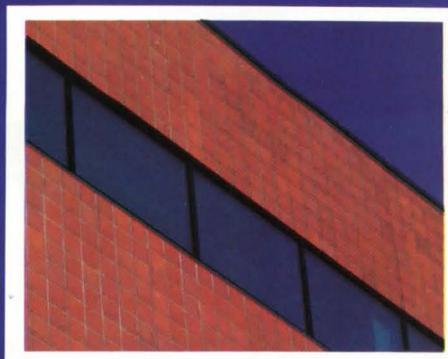
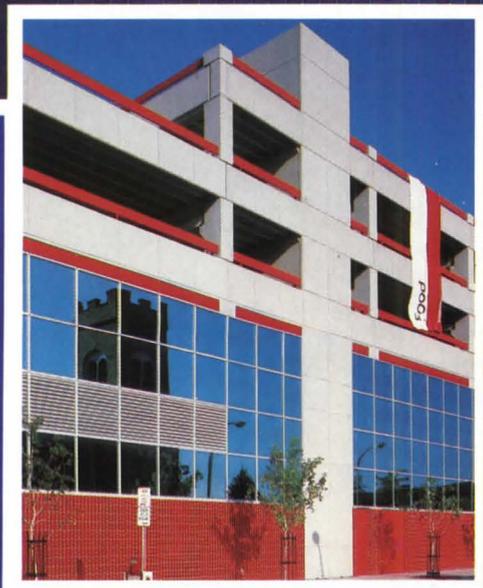
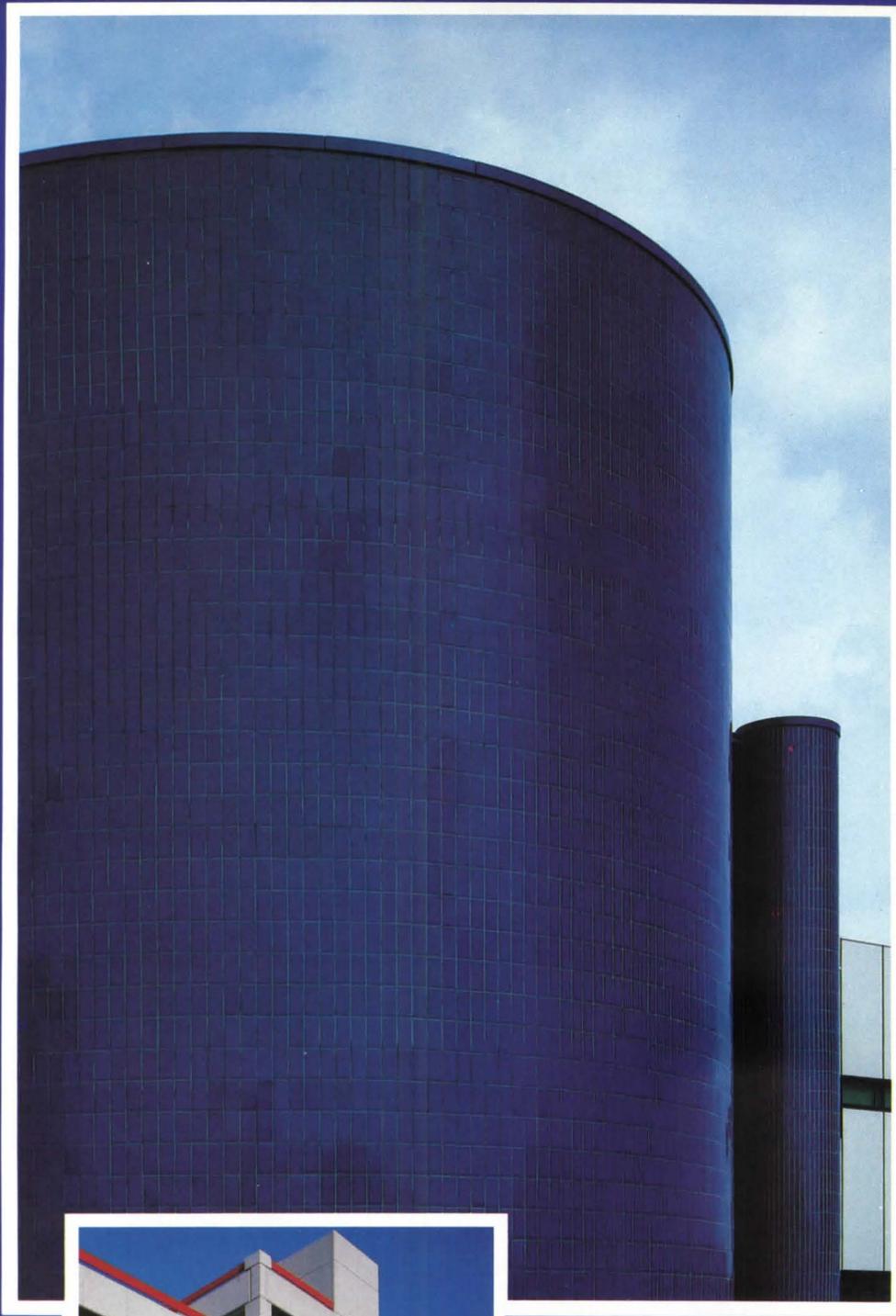
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Pencil points continued from page 40

sities, and was coauthor of the urban design issue of the international magazine *Process Architecture*.

AIA award for social responsibility Washington, DC, architect, educator, and community leader Howard Hamilton Mackey, Sr., dean emeritus of the Howard University School of Architecture and Planning, will be honored with the AIA's Whitney M. Young Jr. Citation for 1983.

Hauserman regrouping

Cleveland-based Hauserman, Inc., announced a major corporate reorganization reflecting a stronger distinction between its operational and creative sides. Two new divisions will share supervision of subsidiary companies E.F. Hauserman Co. and Sunar.

¶ *Innovations*, which oversees product development, design, marketing, and advertising, will be run by vice-chairman Robert B. Cadwallader, former chairman of Sunar and moving force behind the Sunar/Graves collaboration.

¶ *Operations*, the manufacturing/finance side, will be run by vice-chairman Richard Major, former president of E.F. Hauserman Co. Each vice-chairman is responsible for his own side of both subsidiaries, which means that Cadwallader will devote even more time to making Hauserman an architectural Medici.

Knoll acquires Sotheby stocks

Marshall S. Cogan and Stephen Swid, copartners of General Felt Industries and its wholly owned subsidiary GFI/Knoll International, in December acquired 1,623,500 shares of Sotheby Parke Bernet to become the largest stockholders of that international auction house.

¶ *Sotheby's sales declined dramatically in the last quarter of 1982, to fall below Christie's sales for the first time since the 1950s.*

Hotel disaster case 'settled'

A \$10 million settlement in the 1981 collapse of two suspended walkways at the Kansas City Hyatt Regency Hotel (P/A, Oct. 1981, p. 33) was tentatively approved by a Federal district court in January, thereby averting a trial to determine liability.

¶ *Out-of-court settlements and agreements in the Federal and State courts amounted to about \$63 million. The hotel, which opened in 1980, cost about \$50 million to build.*

John Lyon Reid, 1906-82

San Francisco architect John Lyon Reid, principal in the firm Reid & Tarics Associates, died this past fall after a lengthy illness.

¶ *Reid, internationally acclaimed for his contributions in the field of educational architecture, designed over 700 school and university buildings in California and other states.*

[Pencil Points continued on page 44]

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¶ His firm received several AIA Awards of Honor: in 1956, for Hillsdale High School in San Mateo; in 1965, for the Chapel at the Robert Louis Stevenson School in Carmel; and in 1967, for the Health Sciences Instructional & Research building at the University of California Medical School in San Francisco.

¶ He served as president of the AIA's California Council, was a member of the Field Act Advisory Board to bring California schools up to seismic safety standards, and was an advisor on the design of consular and embassy buildings for the U.S. Department of State.

Civic Center winners
Princeton, NJ, architects Kelbaugh & Lee

and South Street Design of Philadelphia have won first prize for their competition design of a civic center for Monroeville, Pa.

¶ The Civic Center includes a town hall, visual and performing arts centers, indoor swimming and diving pools, a gymnasium, and a public plaza.

¶ The winning scheme, which will cost approximately \$15 million, aligns the Sports and Arts Centers along an interior street, with the town hall as a freestanding building on a tilted plaza.

Rossi on living with Rationalism
Architect Aldo Rossi, interviewed for the monthly Italian design magazine *Modo* (issue 52) by its director Franco Raggi, was asked whether he could live in a rationalist house.

¶ His answer: 'It would be very tiring; I've always lived in old if not ancient houses.'



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Krueger's Wilkhahn 400 furniture features an innovative laminated wood frame concept. A technical achievement, it utilizes multiple plies of select hardwoods laminated into diverging configurations. The light scale of frames belie a strength that surpasses solid wood.

Program 400 furniture includes side and arm chairs as well as tables. See them at the showrooms listed, or contact Krueger, P.O. Box 8100, Green Bay, WI 54308, (414) 468-8100.

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Dallas (214) 747-7629 • Houston (713) 222-1408
Denver (303) 534-6060 • Los Angeles (213) 659-2133

Calendar

Exhibits

Through Feb. 19. Transforming City Space. Urban Center, New York.

Through Feb. 27. "American Picture Palaces." Cooper-Hewitt Museum, New York.

Through Mar. 3. Houses of Justice. Gallery at the Old Post Office, Dayton, Oh.

Through Mar. 5. John Hejduk: Solopacan Variations, Max Protetch Gallery, New York.

Through Mar. 6. The Goetheanum: Rudolf Steiner's Architectural Impulse. Cranbrook Academy Art Museum, Lower Gallery, Bloomfield Hills, Mi.

Through Mar. 15. Frank Lloyd Wright at the Metropolitan Museum of Art, New York.

Through Mar. 18. James Riely Gordon: Texas Courthouse Architect. Architecture Library, University of Texas at Austin.

Through Mar. 21. Parcs et Jardins. Centre de Creation Industrielle du Centre Georges Pompidou, Paris.

Through Mar. 29. Three New Skyscrapers. Museum of Modern Art, New York.

Through Apr. 10. Chicago Architects Design: A Century of Architectural Drawings from the Art Institute of Chicago. Art Institute of Chicago.

Through May 21. Designs for Theater: Drawings and Prints. Cooper-Hewitt Museum, New York. Also, **Feb. 8-May 1,** Carnegie Mansion "Embellishments."

Feb. 23-May 22. Four Villages: Architecture in Nepal. Galleries I & II, Craft and Folk Museums, Los Angeles.

Mar. 6-Apr. 1. Historic American Building Survey, Drawings from the 1930s and 40s. School of Architecture Gallery, University of Maryland, College Park.

Mar. 7-Apr. 4. Daily Mail Ideal Home Exhibition. Earls Court, London.

Competitions

Feb. 20. Submission deadline, California Building Officials Awards of Excellence for projects completed in California in 1982. Contact CALBO (916) 457-1103.

Feb. 21. Submission deadline, National Endowment for the Arts Design Research Recognition Program. Contact NEA, % BOSTI, 1479 Hertel Ave., Buffalo, NY 14216.

Feb. 28. American Gas Association/Solar Age passive solar design competition (housing). Contact Passive Solar Design Competition, American Gas Association, 1515 Wilson Blvd., Arlington, Va 22209, Att: Albert Ream.

Mar. 1. Entry form submission date, ASID '83 International Product Design Competition. Contact ASID, 1430 Broadway, New York, NY 10018 (212) 944-9220.

May 1. Postmark date, ASID/Wilsonart First Annual Design Competition in two divisions: Design concept, and Existing application. Contact 1983 ASID/Wilsonart Design Competition, % Ralph Wilson Plastics Co., 919 Third Ave., New York, NY 10022 (212) 753-8686.

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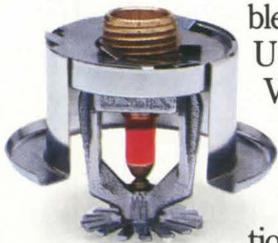


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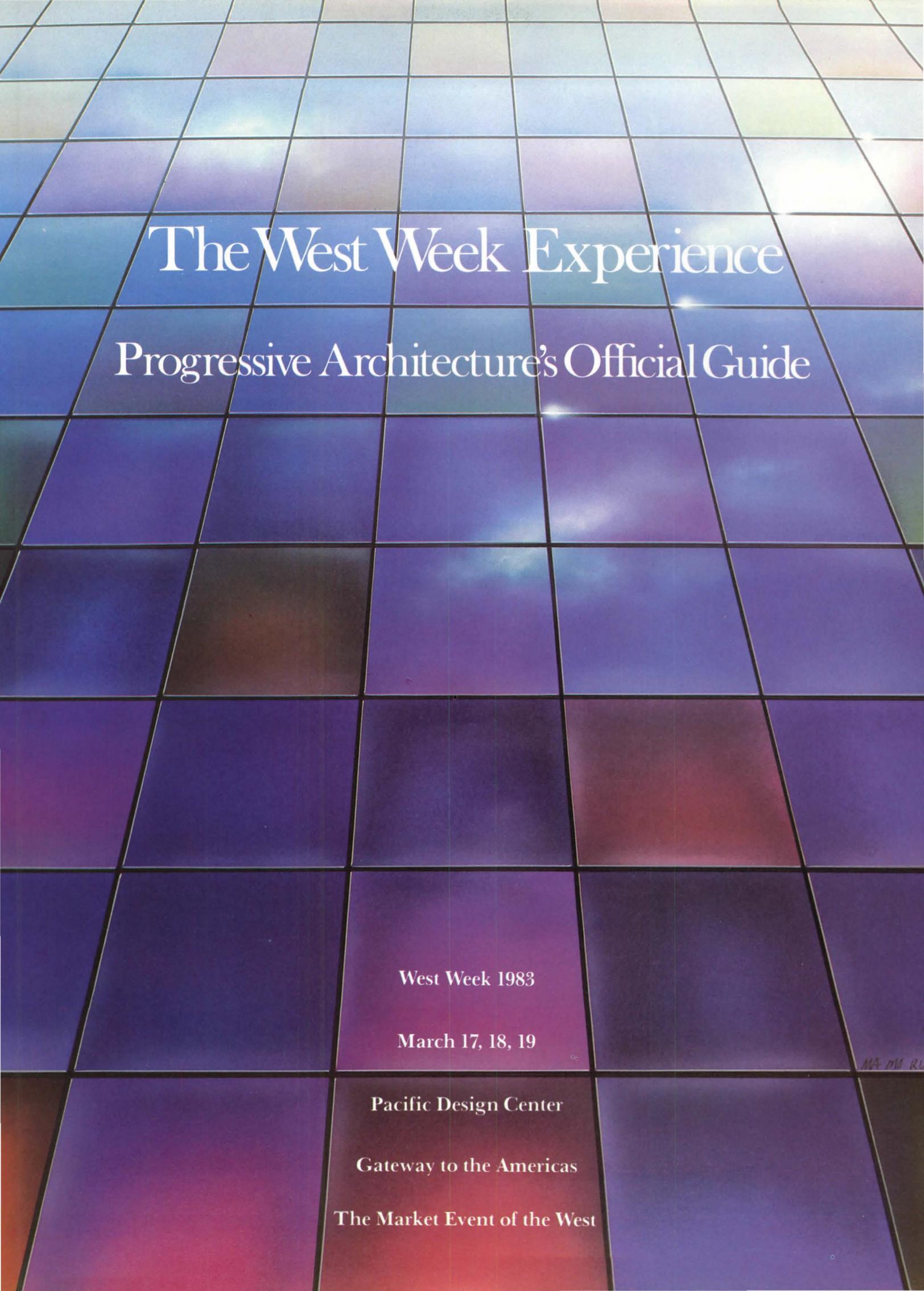
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The West Week Experience

Progressive Architecture's Official Guide

West Week 1983

March 17, 18, 19

Pacific Design Center

Gateway to the Americas

The Market Event of the West

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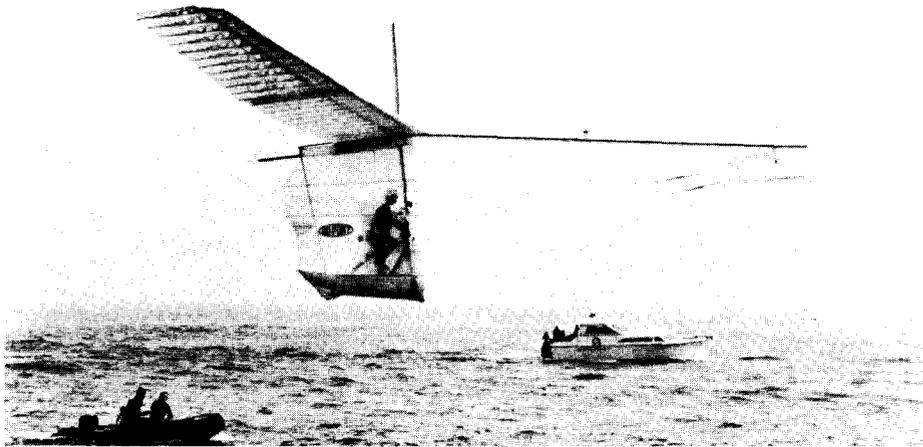
Pacific Design Center Contract Showroom Directory

American Seating (213) 652-6531	134	Gail Epstein Enterprises "G" (213) 659-8302	267	La Cuisine 2000 (213) 652-3472	406
Arc-Com (213) 659-0376	241	Eurotex (213) 659-9340	532	Jack Lenor Larsen, Inc. (213) 659-7770	601
Artebella (213) 657-5133	500	Executive Office Concepts (213) 659-6566	263	Lee/Jofa (213) 659-7777	678
Artebella Executive (213) 657-5130	543	Forms+Surfaces (213) 659-9566	245	Lightolier (213) 659-6510	404
Artec (213) 659-9660	230	GF Business Equipment (213) 655-0001	200	Lista International (213) 498-0079	355
Artemide A.S.T. Sommer Textiles (213) 659-9970	266	Gunlocke Company, Inc. (213) 657-8922	210	Madison (213) 657-8687	274
Atelier International (213) 659-9402	409	Haller Systems, Inc. (213) 854-1109	257	Herman Miller, Inc. (213) 659-7600	229
Baker, Knapp, & Tubbs (213) 652-7252	236	Harbor/Benedetti, Inc. (213) 659-2930	255	Monteverdi-Young, Inc. (213) 659-7220	275
Barri (213) 854-4484	525	Harter Corp. (213) 657-5780	261	Pacific-Condi-Focus (213) 658-5500	219
B&B America (213) 659-7955	370	E.F. Hauserman Co. (213) 657-3303	208	Poggenpohl (213) 652-3472	406
Beelner & Thomas (213) 657-1046	201	Haworth, Inc. (213) 652-2210	193	Harvey Propper (213) 652-7090	146
Beveled Glass Industries (213) 657-1462	256	S.M. Hexter Co. (213) 659-9340	532	Ron Rezek/Lighting (213) 659-2968	268
Beylerian (213) 652-2647	396	James Hill & Co., Inc. (213) 659-8440	M3	Ben Rose (213) 655-8790	211
Douglas Bickle Inc. (213) 659-6846	146	ICF, Inc. (213) 659-1387	239	Saporiti Italia (213) 854-0990	116
Boyd (213) 855-1313	642	Interior Resources (213) 659-2071	M4	Scandiline Industries (213) 659-4226	222
Brickel Associates, Inc. (213) 659-1667	600	International Tile (213) 652-2647	141	Shaw/Walker	253
Brintons Carpets (USA) Ltd. (213) 652-4020	260	Janus et Cie (213) 652-7090	146	Shelby Williams Industries (213) 657-8687	274
D.S. Brown Co. (213) 652-3527	305	Kasparians, Inc. (213) 659-2968	270	Sinclair Wallcoverings (213) 655-7633/659-2380	609
Brown Jordan (213) 659-0771	272	Kenro Light, Inc. (213) 659-6510	404	Paul Singer Floorcovering (213) 657-8101	384
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Carpets International USA (213) 657-6580	146	Koch + Lowy (213) 659-5660	203	Sunar (213) 657-2030	206, 207
Castelli (213) 659-8302	377	Boris Kroll Fabrics (213) 652-9067	639	Tropitone Furniture (213) 659-0116	345
Coordinated Resources, Inc. (213) 655-8421	267	Kreuger/Architectural Fiberglass (213) 659-2133	530	V'Soske (213) 657-8101	384
Corry Jamestown Couristan, Inc. (213) 657-8085	M16		226	Westinghouse ASD (213) 659-4280	250
Cunningham Associates (213) 854-3577	110			Winfield Design Associates (213) 659-7075	637
Decorative Carpets Inc. (213) 657-8840	304			Zumsteg (213) 855-1313	600
Design Tex West (213) 659-9900	M11				
	680				
	213				



Schedule of Events

West Week '83



The Gossamer Albatross, the human-powered vehicle which flew the English Channel, will be suspended from the ceiling of the PDC Galleria during West Week. Memphis Post-Modern furniture from Milan (right, with Ettore Sottsass) will be on view on the PDC Rotunda, first floor.

Thursday, March 17

9:00
Market opens/registration

10:30-noon
Conference Center
"The American Initiative: Alternatives in Energy and Design." Paul B. MacCready, Ph.D., President, AeroVironment, will present a 17-minute film of the Gossamer Albatross in flight across the English Channel.

12:30-1:45
Conference Center
"The Mediterranean: A Design Influence in the Americas." Jody Greenwald, ASID, IDEC will present an extensive audiovisual exploration of Moorish, Spanish, and Italian design influence in the New World.

2:00-3:30
Conference Center
"Memphis: Concept and Philosophy," sponsored by Artemide. Moderator: Edie Cohen, Senior Editor, *Interior Design*. Participants: Andrea Branzi; Ernesto Gismondi; Michael Graves; Arata Isozaki; Barbara Radice; Peter Shire; Ettore Sottsass.

4:00-5:00
Conference Center
"Structure Design Fees: Staying Competitive and Profitable," sponsored by IBD with speakers Shelly Campbell, Deberra L. O'Brien, and Scott O'Brien.



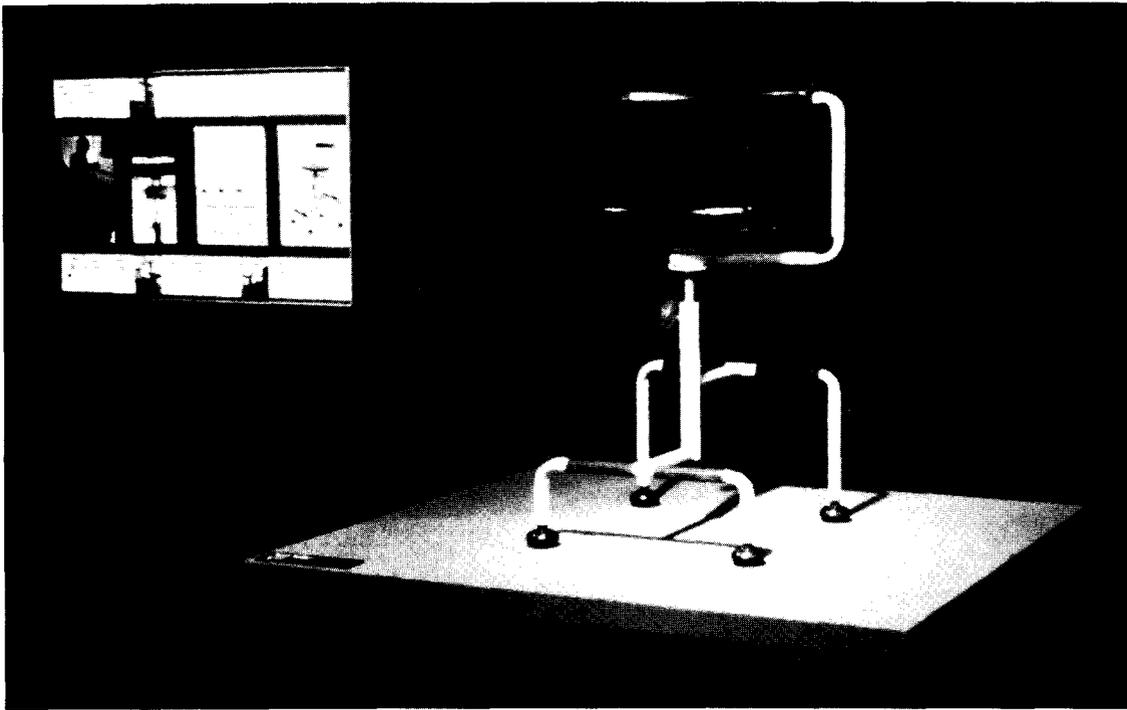
Friday, March 18

9:00
Showrooms open

9:30-1:00
Conference Center
Facilities Management Program, sponsored by PDC 2.

10:00
PDC Grand Court
fifth floor
"The Residential Product Design Process: A Design Dialogue," presents five designers who will discuss their approach to creating new designs for residential use. Moderator: Sherman Emery, Editor, *Interior Design*. Participants: Gretchen Bellinger, President, Gretchen Bellinger, Inc.; Richard Himmel, President, Lubliner and Himmel Corp.; Vladimir Kagan, President, Vladimir Kagan Designs, Inc.; Corinne Samios, Design Director, Brunswick & Fils, Inc.; Larry Williams, President, Keller Williams, Inc.

11:00-11:45
"New Design Concepts in the Workplace: From Automation to Amenities," moderated by Beverly Russell, *Interiors* magazine with participants Jim Hill, Director of Design/California Interiors Group, HOK Architects, Bruce Archibald, President, Cannell & Chaffin, Andrew Belschner, Principal/Director of Design, Robinson Mills & Williams, and Joseph Rosen, Vice President, ISD, Inc.



Prototypes, drawings, and models of winning schemes from P/A's International Furniture Competition will be exhibited.

12:15-12:30

Conference Center

"A Sneak Preview: The Progressive Architecture Third Annual International Furniture Competition," presented by P/A Senior Editor Pilar Viladas, including trends emerging from the competition and the winners.

1:00-2:15

Conference Center

"Pre-Columbian Art and Architecture: A contemporary Design Influence in the Americas," presented by Augustin Hernandez, Arquitecto, Mexico City.

2:30-3:15

Conference Center

"The Design Process: Personal Statements," a PDC 2-sponsored event, moderated by Eric Martin. Participants: David Hammer, Dewey Hogdon, Henrik Liisberg, Charles Pelly, Ben Rose, and Lella Vignelli.

3:15-4:45

West Hollywood Auditorium

"A Design Charrette and Evaluation," moderated by Charles Moore, with Michael Graves, Arata Isozaki, Ernesto Gismondi, and Massimo Vignelli.

3:30-4:15

Conference Center

"Design Trends," a PDC 2-sponsored event, explores the effects of New Design, New Wave, the New International Style, Post-Modernism, Memphis, Decoration, etc. Moderator: Frank O. Gehry. Participants: Sumner P. Adams, Jhane Barnes, Bergmiller, Bruce Burdick, Louis Mark, Richard Ogg, and Robert A.M. Stern.

4:30-5:15

Conference Center

"Design Basics: Lighting and Color in 1983," sponsored by PDC 2, moderated by Gere Kavanaugh, with Dan Flavin, O.J. Holohan, Perry Allan King, Ron Rezek, and Hazel Siegel.

Saturday, March 19

8:30-9:15

Conference Center

"Interiors by Architects," sponsored by Los Angeles AIA, *Arts + Architecture*, and PDC 2. Johannes Van Tilburg, AIA, will speak.

9:00

Showrooms open

9:30-10:15

Conference Center

"The Design Decade: Mass Quality or Elitism?" sponsored by PDC 2 and moderated by Susan Grant Lewin,

Creative Director, Formica Corp. Participants are Stanley Felderman, Michael Graves, Arata Isozaki, Lucia Mercer, Rich Thompson, Tom Tolleson, and Massimo Vignelli.

10:30-noon

Conference Center

"Spectacular Environments in the Americas," presented by Louis Oliver Gropp, Editor in Chief, *House & Garden*, the program will explore the great interiors throughout the Americas assembled by the staff of the new *House & Garden*.

10:30-noon

West Hollywood Auditorium

"Personal Profiles/Design Masters/Design Symposium," sponsored by PDC 2 and moderated by Charles Gandee, Senior Editor, *Architectural Record*. Participants are Bruce Burdick, Robert A.M. Stern, Lella Vignelli, and Ken Walker.

Noon-12:45

Conference Center

"The Future State of the Art of Systems," sponsored by PDC 2 and moderated by Timothy Walker. Participants are William Anderson, Douglas Ball, Bruce Burdick, Don Chadwick, Fritz Haller, and Mark Klungle.

1:00-1:45

Conference Center

"A Design Connection: How to Begin and Nurture the Designer/Manufacturer Relationship," sponsored by PDC 2 and moderated by Robert Cadwallader. Participants are Bill Brackney, Emil DePiero, Frank Ellsworth, Ernesto Gismondi, Nancy Hayward, Stan Hutchinson, Jeff Layne, Paolo Piva, and Ken Walker.

2:00-2:45

Conference Center

"Vision of the Future: The Influence of Film on Design," sponsored by PDC 2 and the Architecture and Design Support Group/Museum of Contemporary Art, Los Angeles. Presented by Jon Jerde and Gary Gilbar.

3:00-4:30

West Hollywood Auditorium

"The Americas: Three Viewpoints in Design," moderated by John Pastier, Urban Design Editor, *Arts + Architecture*. Featuring: Frank Gehry, Ricardo Legorreta, and Charles Moore.

5:30-8:00

PDC Galleria, 5th and 6th floors

West Week '83 Party

Cocktails, hors d'oeuvres and dancing, tickets \$17.50 (price includes drinks and \$2.50 tax-deductible donation to FIDER).

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West Week '83

PDC 2 Conversations

PDC 2 will host "Conversations" presentations featuring the 42 designers and key company officials on Friday afternoon and Saturday morning in each showroom.

Friday, March 18

2:00-2:15

Ernesto Gismondi, "Introducing: Aton Modular by Ernesto Gismondi—a Total System for Light in the Office." Artemide (266)

Perry Allan King, "King Looks at ai Light." Atelier International (235)

Ben Rose, "Design Considerations: The Coordinated Drapery, Upholstery and Wallcovering Collection." Ben Rose, Inc. (211)

Sumner Adams, "Introducing Anthropom: The Wood Ergonomic Chair." Executive Office Concepts (263)

Dan Flavin, Massimo Vignelli, "The Designer/Artist Collaborative." Hauserman (208)

Bruce Burdick, "Work Tools for Management." Herman Miller (229)

Ken Walker, "Design as a Deluxe Cheeseburger." ICF(239)

Charles Pelly, "Comfort Through Careful Ergonomic Contour Controls." Pacific Condi (219)

Jhane Barnes, "Her Design Process and the Transition from Apparel Fabrics to Upholstery." Knoll (203)

Ron Rezek, "Design Entrepreneurship."

Ron Rezek/Lighting (268)

Robert A.M. Stern, George W. French, John Crouse, "Alternative Resources as Enhancements to the Design, Planning and Specification Process." Shaw Walker (253)

2:30-2:45

Steve Brickel, "Q+A: The Grid Chair and New Textiles." Brickel (260)

Hazel Siegel, "Aesthetics and the Changing Contract Market: An Informal Conversation at Design Tex Fabrics West with Hazel Siegel Looking at the New Design Tex Direction Based on the Demands of the Contract Market." Design Tex (213)

Don Powers, "Ceilings." Forms + Surfaces (245)

Fritz Haller, "Design Criteria for Habitats Other Than Global." Haller (257)

O.J. Holohan, "So You Want to Design Products." Harbor/Benedetti (255)

Louis Mark, "High Performance Seating and Other Things Mother Never Told You About Office Life." Harter (261)

Rich Thompson, "Realm of Product Design." Kimball/Artec (230)

Paolo Piva, "The Italian Influence on American Design." Stendig (201)

Richard Ogg, "Introducing the Ogg Chair." Stow/Davis (351)

Douglas Ball, "Evolution of RACE." Sunar (206)

William Anderson, "The Westinghouse Commitment to Increased Productivity through Design." Westinghouse (250)

3:00-3:15

Jeffrey M. Layne, "Solving the Problems of Designers' Custom Requirements." Arc-Com (241)

Bergmiller, "The Development and Application of Industrial Design in Emerging Countries." The "G" Showroom (267)

Stanley Felderman, "The Juggling Act: Resolving the Design Statement with Client Needs." Gunlocke (210)

Mark Klungle, "Lighting for the Electronic Office." Haworth (193)

Kasparians Management, "A Look at What Makes Kasparians' Quality: A Demonstration of Upholstery Techniques." Kasparians (270)

Tom Tolleson, "The 45 Table Concept." Krueger (226)

William Anderson, "The Westinghouse Commitment to Increase Productivity Through Design." Westinghouse (250)

3:30-3:45

John Nichols, "Uniqueness of UNI." Atelier International (235)

Kimberly Christman, "Examining the Properties of Various Fibers and Their Suitability for Contract Use." Ben Rose (211)

Don Chadwick, "The Design Race: Will America Support Design Innovation?" Herman Miller (229)

Ken Walker, "Design as a Deluxe Cheeseburger." ICF (239)

Charles Pelly, "Comfort Through Careful Ergonomic Contour Controls." Pacific Condi (219)

Ron Rezek, "Introducing: The Design of Ron Rezek 1983." Ron Rezek/Lighting (268)

4:00-4:15

Robert A.M. Stern, George W. French, and John Crouse, "Alternative Resources as Enhancements to the Design, Planning and Specification Process." Shaw-Walker (253)

Ernesto Gismondi, "Introducing: Aton Modular by Ernesto Gismondi—A Total System for Light in the Office." Artemide (266)

Steve Brickel, "Q+A: The Grid Chair and New Textiles." Brickel (260)

Pat McCullen, "A Demonstration of Upholstery Wear Testing and Discussion of Flammability." Design Tex (213)

Chris Edwards, "Reglet Glazing Systems." Forms+Surfaces (245)

Fritz Haller, "Design Criteria for Habitats Other Than Global." Haller (257)

Paolo Piva, "The Italian Influence on American Design." Stendig (201)

Linda Thompson, "Color Development in Textiles." Sunar (206)

4:30-4:45

Jeffrey M. Layne, "Solving the Problems of Designers' Custom Requirements." Arc-Com (241)

[continued on page 10WW]



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PDC 2 Conversations

West Week '83

[continued from page 6WW]

Sumner Adams, "Introducing Anthropom: The Wood Ergonomic Chair."

Executive Office Concepts (263)

Bergmiller, "The Development and Application of Industrial Design in Emerging Countries."

The "G" Showroom (267)

Don Keith, "Designing Products with Hindsight and Foresight."

Gunlocke (210)

David Hammer, "Personalization: Should Visual Order Yield to Individual Need?"

Harbor/Benedetti (255)

Louis Mark, "High Performance Seating and Other Things Mother Never Told You About Office Life."

Harter (261)

Charles Pelly, "Introducing: Crista."

Hauserman (208)

Mark Klungle, "Lighting for the Electronic Office."

Haworth (193)

Kasparians Management, "A Look at What Makes Kasparians' Quality: A Demonstration of Upholstery Techniques."

Kasparians (270)

Rich Thompson, "Realm of Product Design."

Kimball/Artec (230)

Lucia Mercer, "Lucia Mercer: Designs in Granite."

Knoll (203)

Tom Tolleson, "The 45 Table Concept."

Krueger (226)

Richard Ogg, "Introducing the Ogg Chair."

Stow/Davis (351)

William Anderson, "The Westinghouse Commitment to Increased Productivity Through Design."

Westinghouse (250)

Saturday, March 19

9:30-9:45

Perry Allan King, "King Looks at ai Light."

Atelier International (235)

Ben Rose, "Design Considerations: The Coordinated Drapery, Upholstery and Wallcovering Collection."

Ben Rose (211)

Bruce Burdick, "Work Tools for Management."

Herman Miller (229)

Ken Walker, "Design as a Deluxe Cheeseburger."

ICF (239)

Charles Pelly, "Comfort Through Careful Ergonomic Contour Controls."

Pacific Condi (219)

Ron Rezek, "Introducing: The Design of Ron Rezek 1983."

Ron Rezek/Lighting (268)

Robert A.M. Stern, George W. French, and John Crouse, "Alternative Resources as Enhancements to the Design, Planning and Specification Process."

Shaw-Walker (253)

10:30-10:45

Ernesto Gismondi, "Introducing Aton Modular by Ernesto Gismondi—A Total System for Light in the Office."

Artemide (266)

Steve Brickel, "Q+A: The Grid Chair and New Textiles."

Brickel (260)

Bart Moore, "A Demonstration of the Fabritrak Wall Upholstery System."

Design Tex (213)

Bill Brackney, "New Hardware."

Forms+Surfaces (245)

Fritz Haller, "Design Criteria for Habitats Other Than Global."

Haller (257)

O.J. Holohan, "Product Design for Image or Profitability."

Harbor/Benedetti (255)

Louis Mark, "High Performance Seating and Other Things Mother Never Told You About Office Life."

Harter (261)

Dewey Hogdon, "Seating Design From Concept to Market."

Kimball/Artec (230)

Paolo Piva, "The Italian Influence on American Design."

Stendig (201)

Richard Ogg, "Introducing the Ogg Chair."

Stow/Davis (351)

Douglas Ball, "Evolution of RACE."

Sunar (206)

Jeffrey M. Layne, "Solving the Problems of Designers' Custom Requirements."

Arc-Com (241)

Sumner Adams, "Introducing Anthropom: The Wood Ergonomic Chair."

Executive Office Concepts (263)

Bergmiller, "The Development and Application of Industrial Design in Emerging Countries."

The "G" Showroom (267)

Stanley Felderman, "The Juggling Act: Resolving the Design Statement with Client Needs."

Gunlocke (210)

Mark Klungle, "Lighting for the Electronic Office."

Haworth (193)

Dan Flavin, Massimo Vignelli, "The Designer/Artist Collaborative."

Hauserman (208)

Kasparians Management, "A Look at What Makes Kasparians' Quality: A Demonstration of Upholstery Techniques."

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Lucia Mercer, "Lucia Mercer: Designs in Granite."

Knoll (203)

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William Anderson, "The Westinghouse Commitment to Increased Productivity Through Design."

Westinghouse (250)

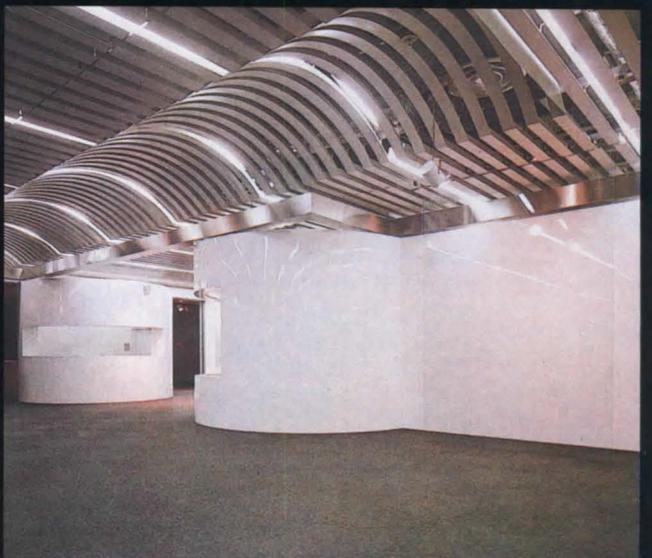
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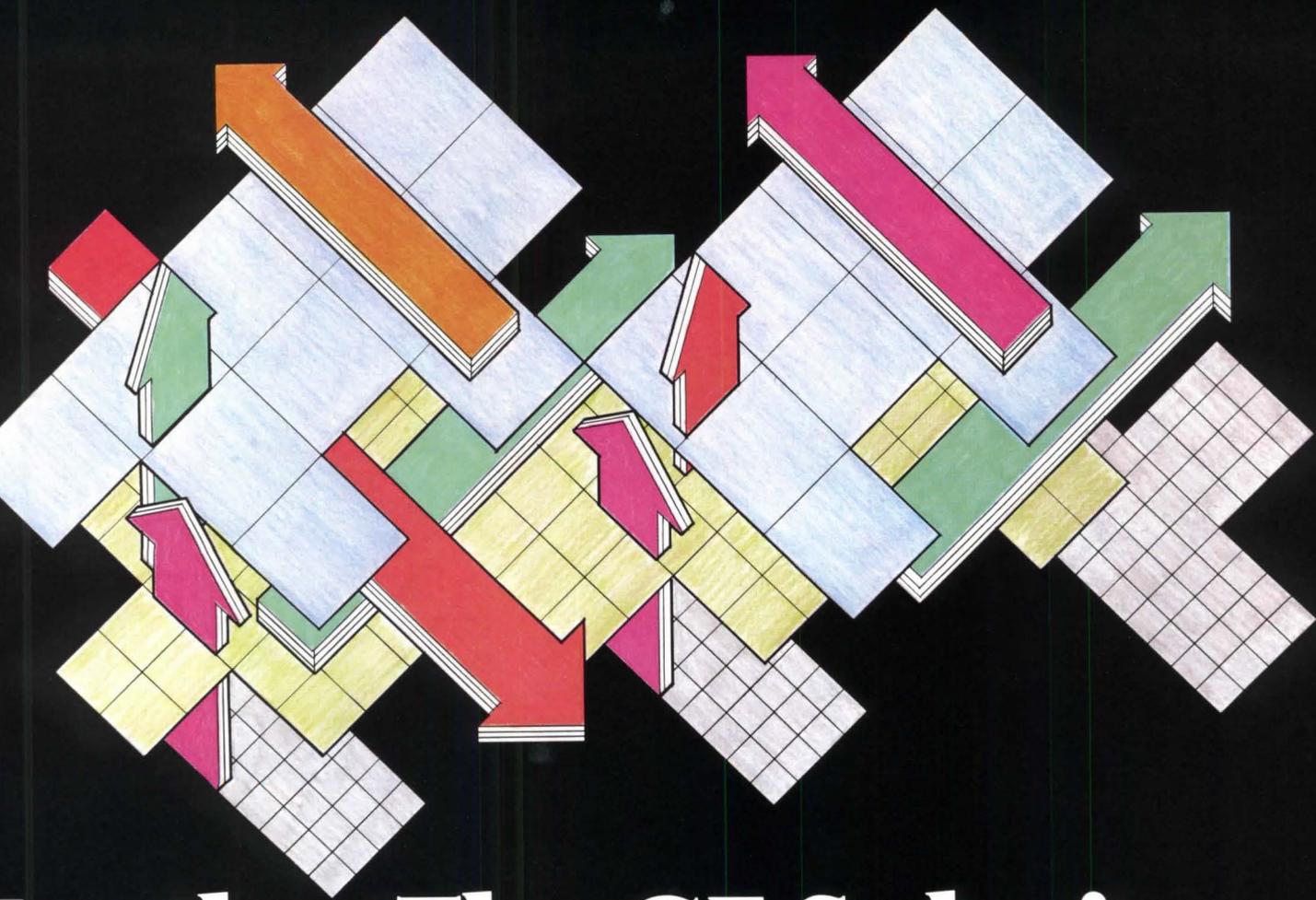
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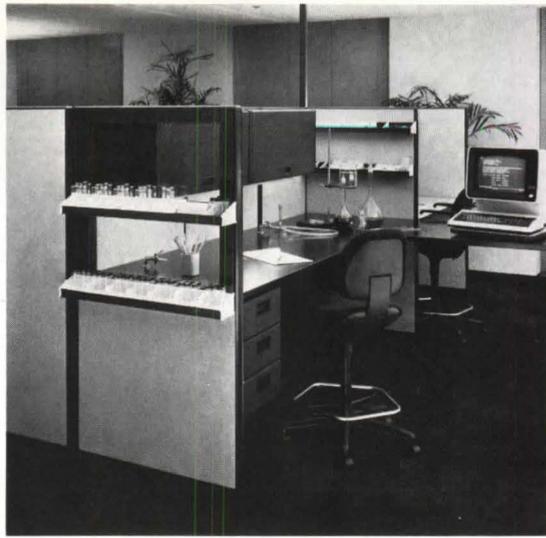
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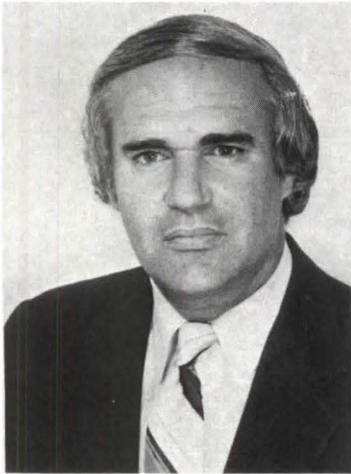
West Week '83



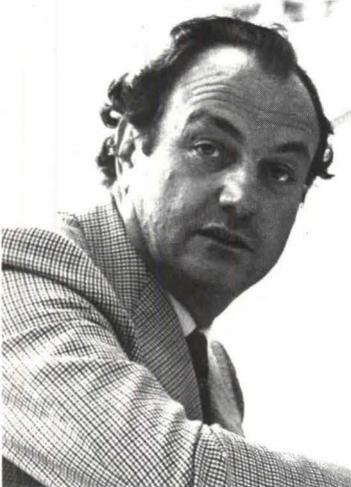
American Seating: Computer support stations, integrating high technology elements for automated offices with wood-accented furniture, will be presented at West Week. *Circle 100 on reader service card*



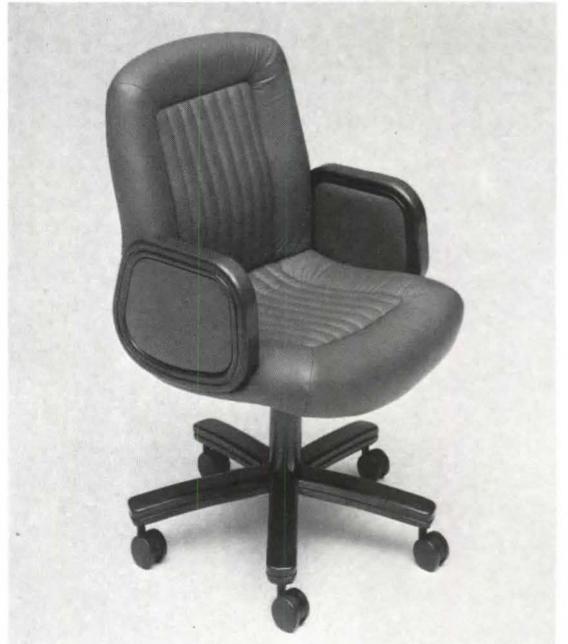
Arc-Com: Interphase is a small-scale geometric design of 100 percent wool, available in two tones and 18 colorways. *Circle 101 on reader service card*



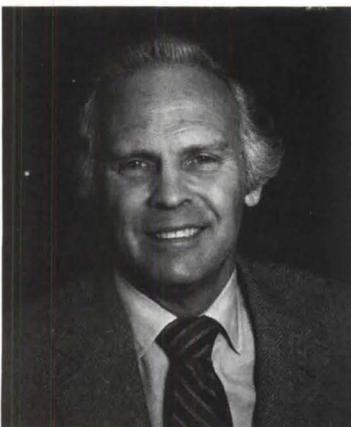
Jeff Layne



Ernesto Gismondi



Artec: The Pantera Seating Collection, a West Week introduction, includes executive, management, guest, and secretarial chairs, as well as stools. *Circle 102 on reader service card*



Dewey Hogdon

Artemide: The Jolly Chair is designed for the restaurant, hotel, and conference room where more than a folding chair is needed. Ernesto Gismondi will attend West Week. *Circle 103 on reader service card*

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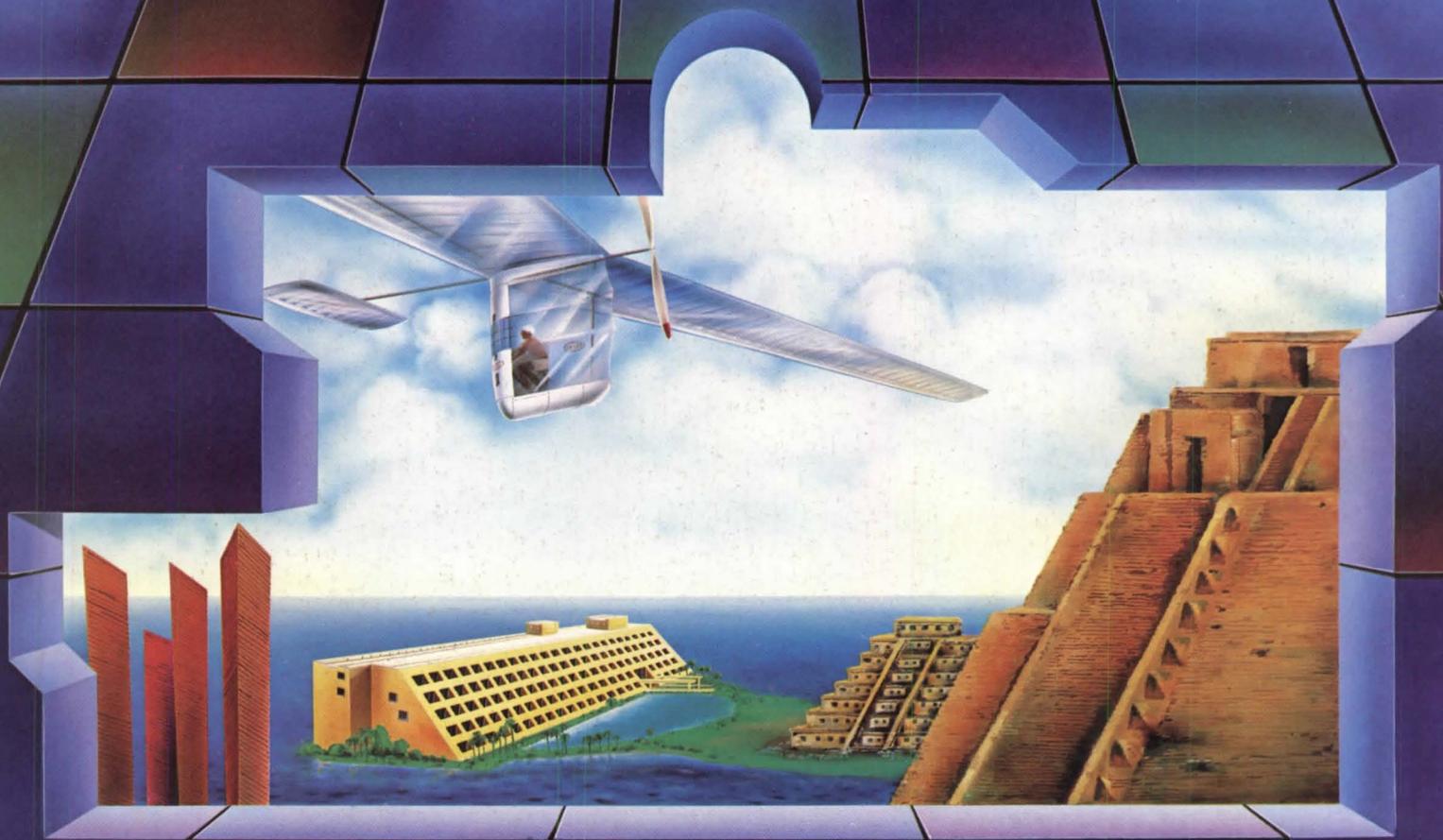
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The Pinstripe Family of Desks
Design: The Walker Group, 1982

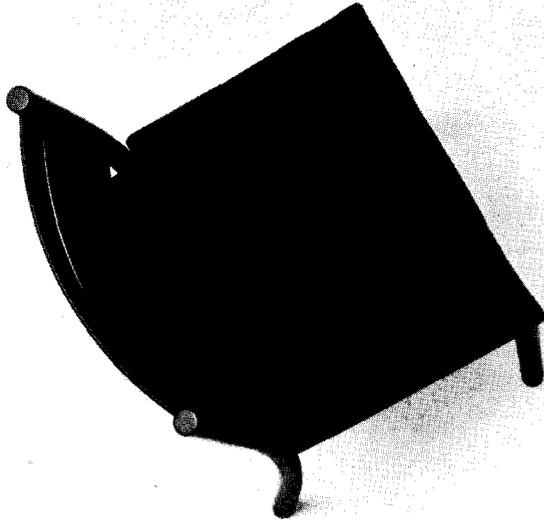
Ken Walker with The Walker Group has designed for ICF their first family of office furniture that gives one and all from secretary to president a sense of pride, identity and status through understated elegance, solidity of form and a large choice of genuine materials while being priced to bring joy to any purchasing agent's heart.

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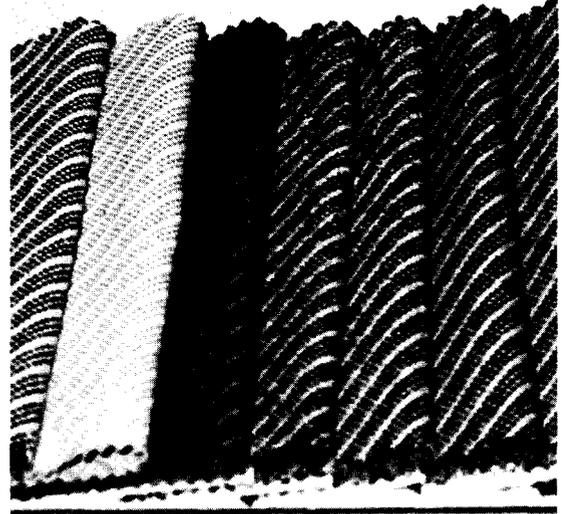


West Week '83



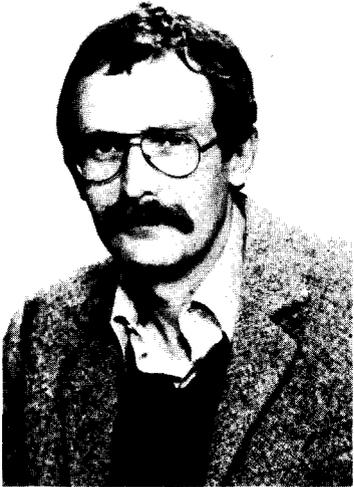
Atelier International: With 7 models and 98 possible variations, the UNI Chair fills many service and corporate needs. Perry King will attend West Week.

Circle 104 on reader service card

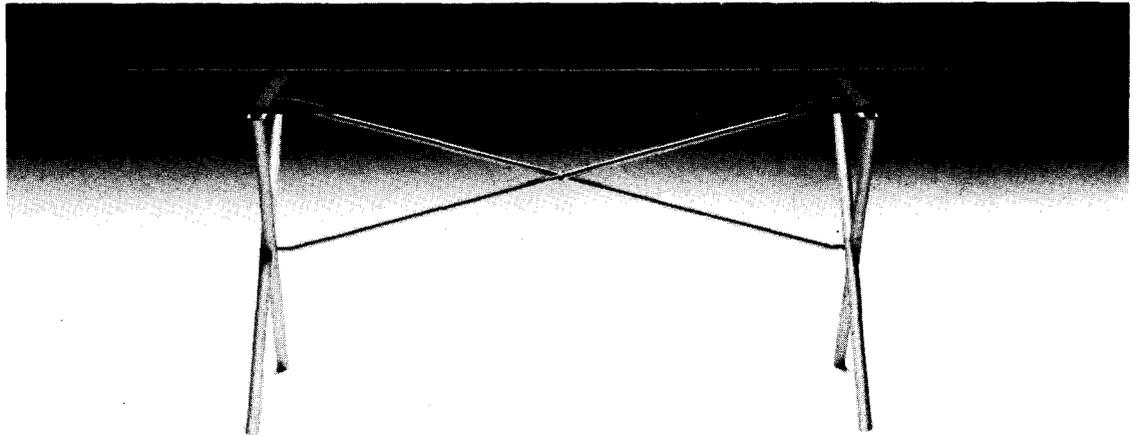


Barri: This collection of 100 percent nylon 54-inch-wide fabrics includes 15 colorways.

Circle 106 on reader service card

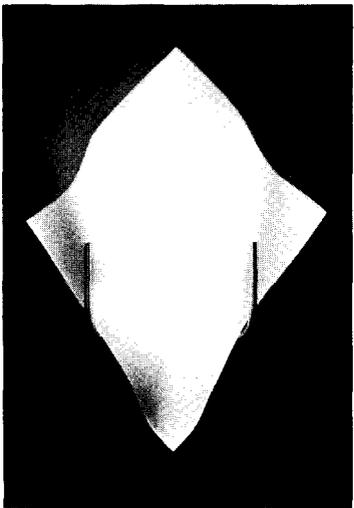


Perry King



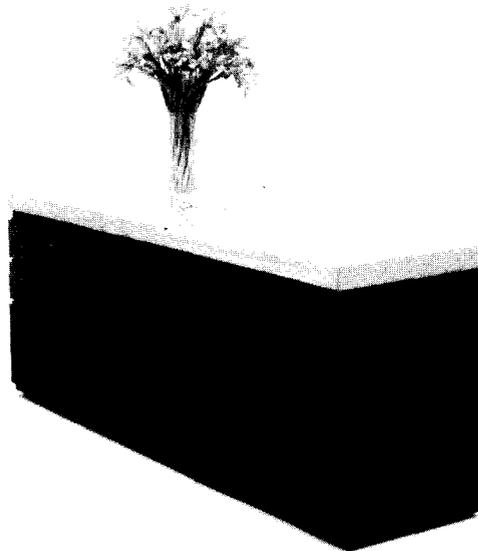
B&B America: The Quadrante Table, designed by Antonio Citterio and Paolo Nava, features a deeply beveled glass top with an anodized aluminum base.

Circle 105 on reader service card



Boyd: Glassform I, designed by Brad Purviance, is a swan-curved, hand-blown white or sand-etched glass, set into a support of polished chrome or brass.

Circle 109 on reader service card



Beelner & Thomas: The Intercase System is a full line of modular casework and work surfaces, with high-gloss, catalytic polymer pedestals and oak tops.

Circle 107 on reader service card



Beylerian: The new Gere Kavanaugh Table and Moderniste Chair can be coordinated in powder-coated finishes. The desk base is finished in black polyurethane.

Circle 108 on reader service card

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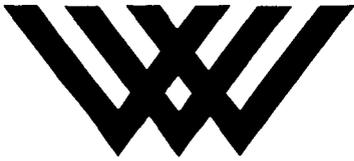
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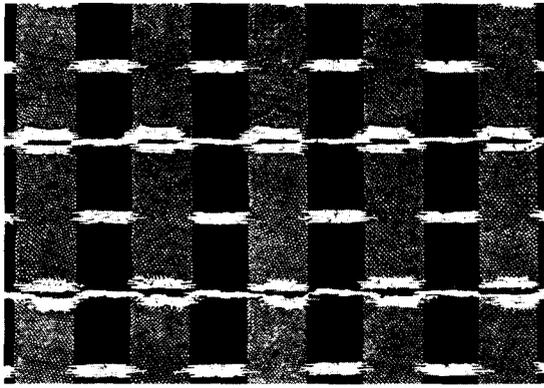
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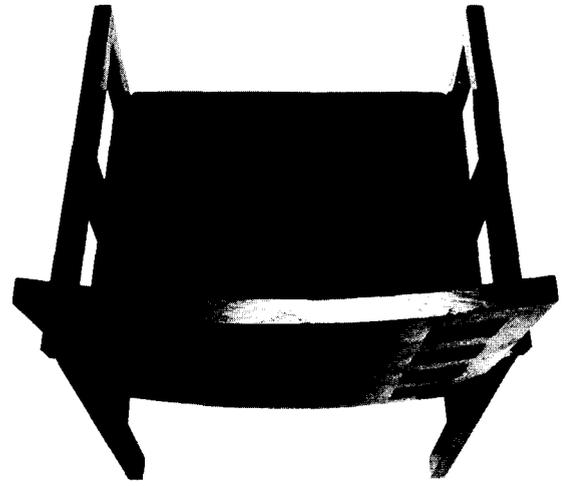


West Week '83



Brunschwig & Fils: Toile Normande is part of The Cooper-Hewitt Wallpaper Collection, 25 in. wide with a 13-in. repeat; it is available in 12 colors.

Circle 112 on reader service card



Brickel: A small-scale, pull-up version of Ward Bennett's Grid Chair will be featured at West Week. This newest addition is meant for dining, conference, and executive suites.

Circle 110 on reader service card

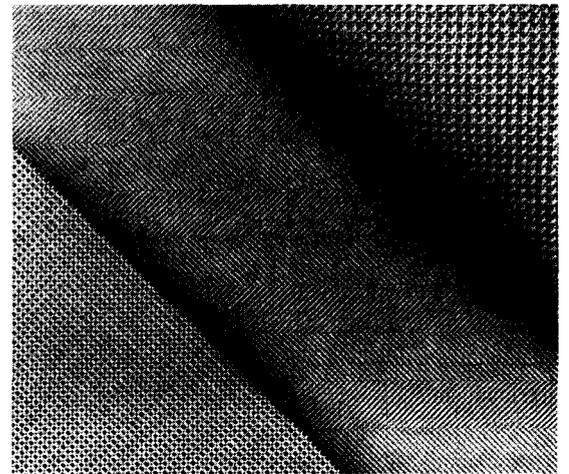


Charles Pelly



D.S. Brown: The Line Chair, available in natural beech, or stained and stainless steel with upholstery, will be introduced in the new PDC showroom.

Circle 111 on reader service card



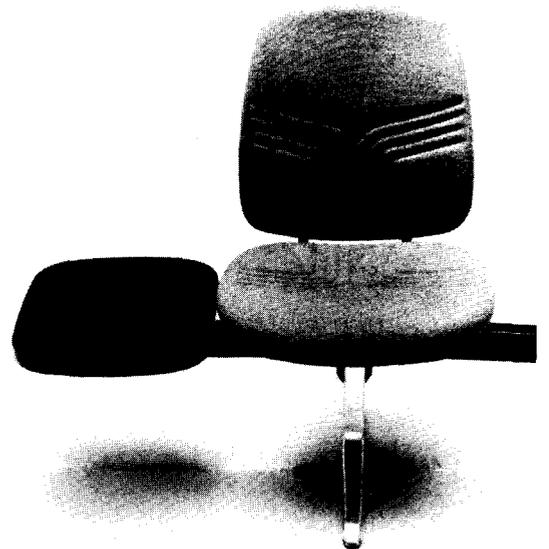
Carnegie: After 7 years of development, Xorel fabric makes its debut, in 3 designs (shown) and 30 colorways. It is heavy-duty, fade-resistant, and flame-retardant.

Circle 113 on reader service card



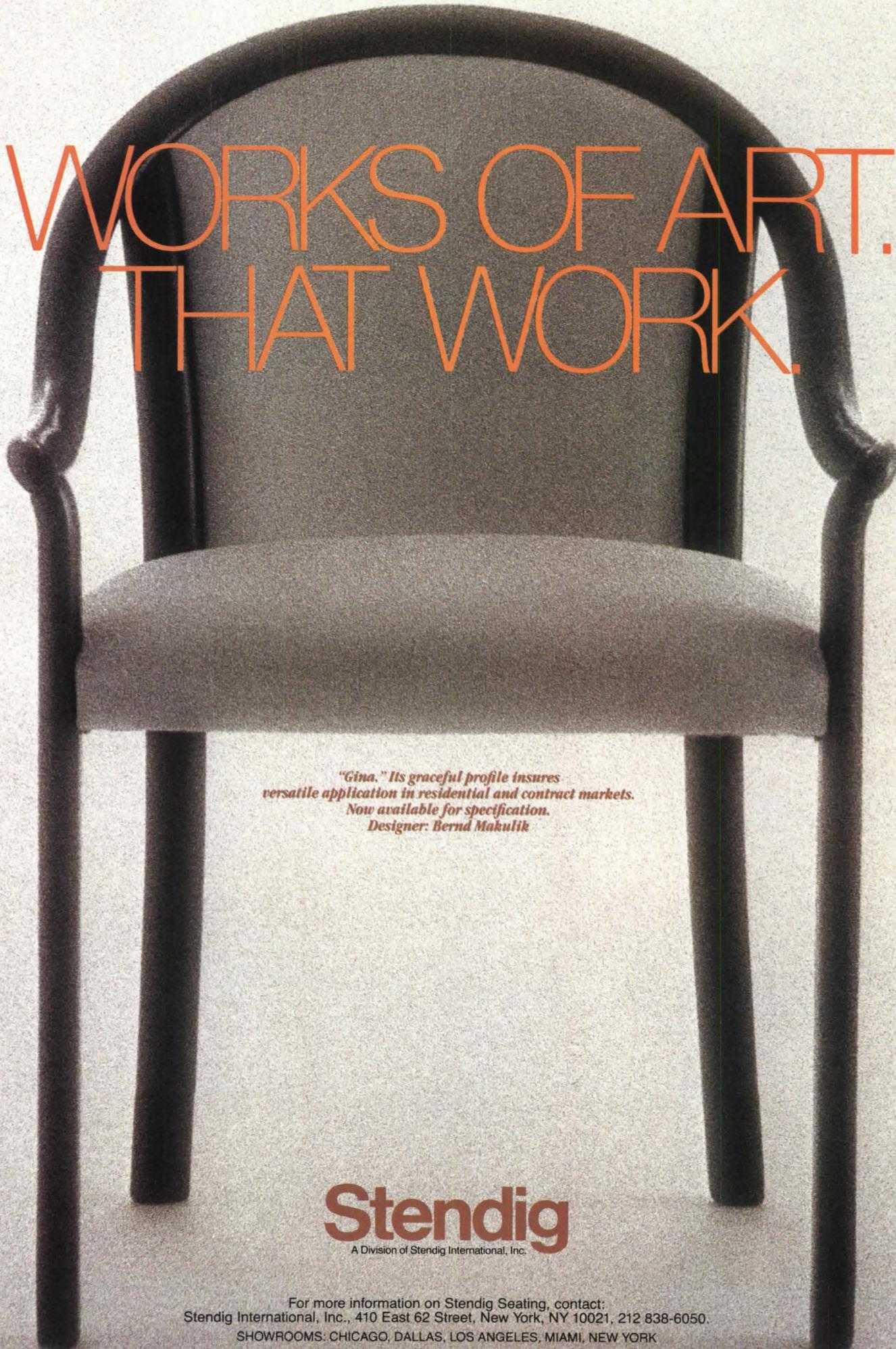
Castelli: The 106 Chair, conceived for use in meeting rooms, offices, large and small stages and platforms, and waiting rooms, will be introduced at West Week.

Circle 114 on reader service card



Condi: Charles Pelly's Infinity Seating System can be put together in both straight and angled modules. Pelly will participate in several West Week programs.

Circle 115 on reader service card



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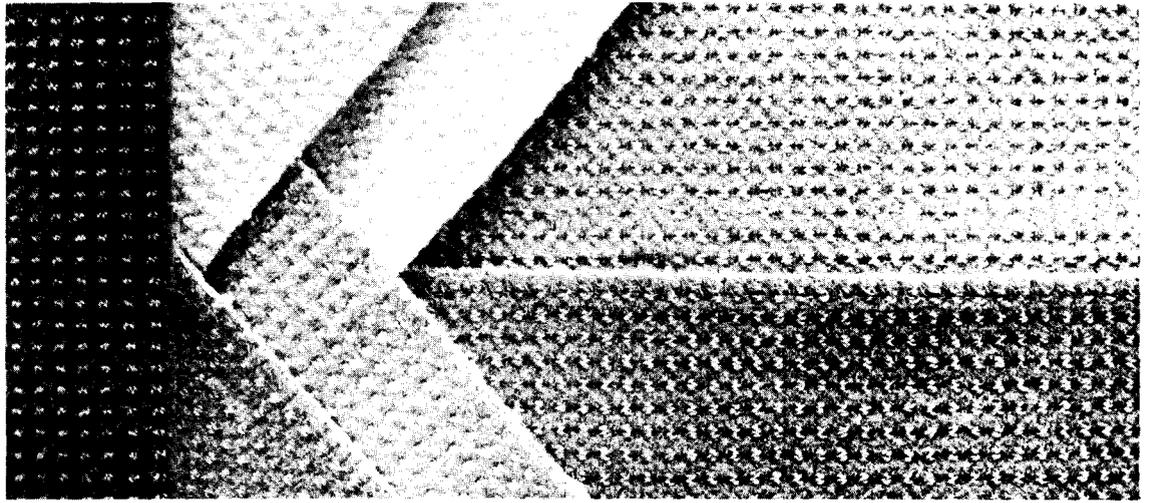
Friday, March 18 and
Saturday, March 19

Pacific Design Center
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3D



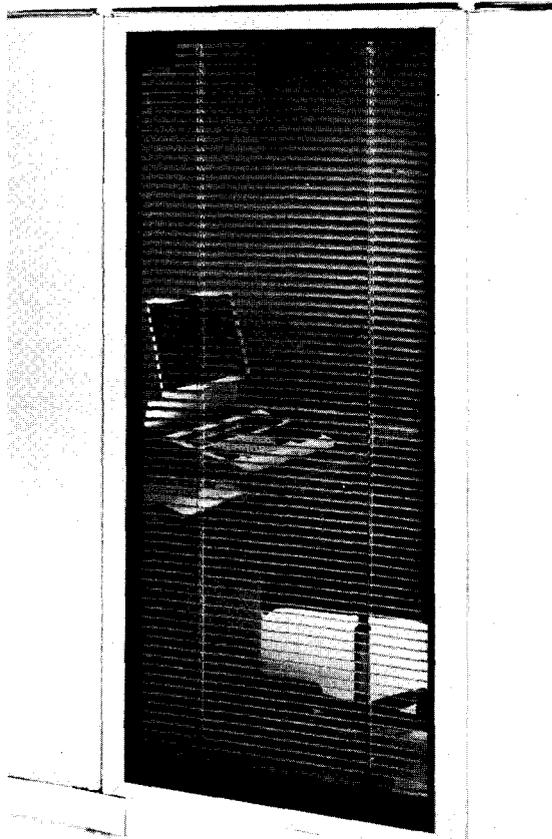
West Week '83



Design Tex: New for West Week is Wool Checkmate, offered in a range of 32 Post-Modern colors and extensively tested for durability. Designer Hazel Siegel will attend West Week.
Circle 117 on reader service card



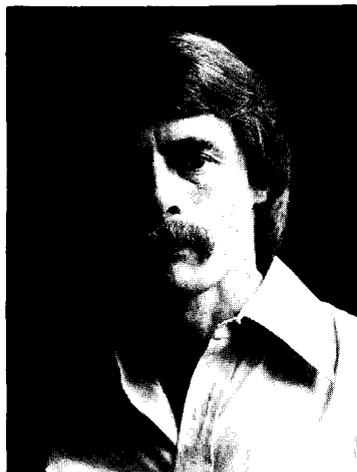
Hazel Siegel



Sumner Adams



Executive Office Concepts: Wood ergonomic seating design is realized in the new Anthrom Chair. Designer Sumner Adams will attend West Week.
Circle 118 on reader service card



Bill Brackney

Corry Jamestown: The Privacy Option Screen, available in several heights and widths, offers the choice of visibility or privacy within the open-office plan.
Circle 116 on reader service card



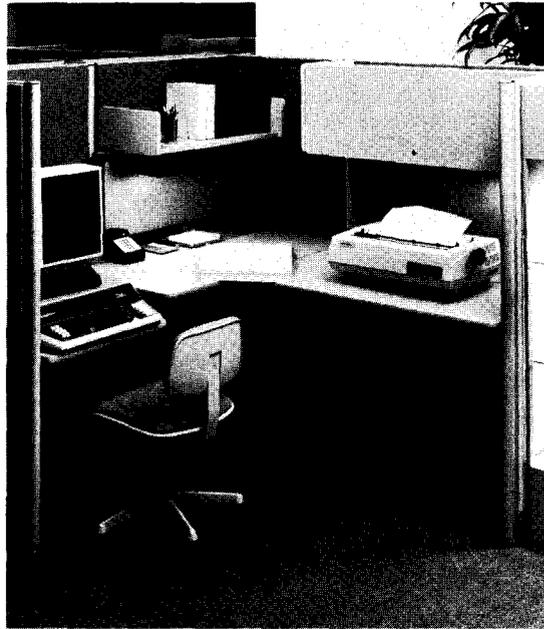
Forms + Surfaces: The AE2000 System is designed for outdoor park and street furnishing, in a broad range of colors. Designer Bill Brackney will attend West Week.
Circle 119 on reader service card



West Week '83



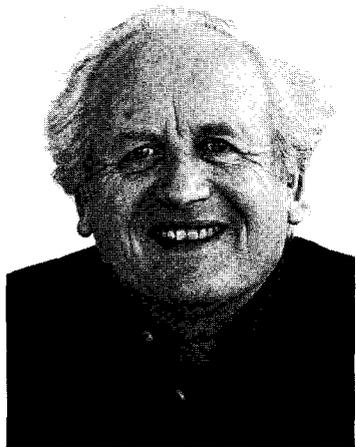
Stanley Felderman



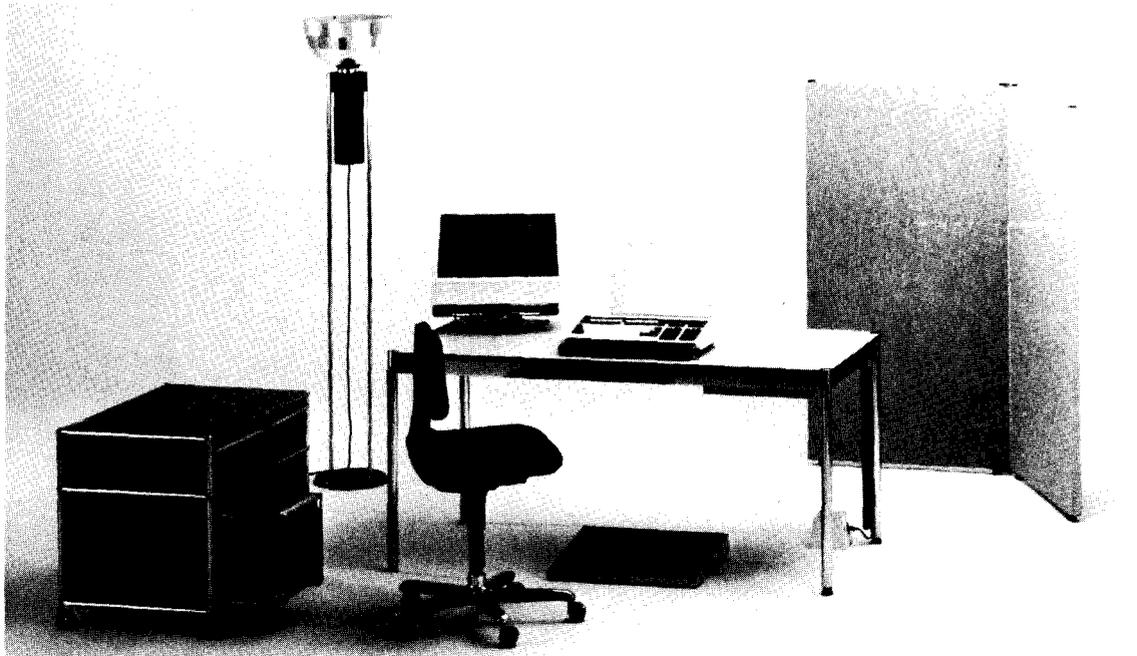
GF: The split-height Open Plan System is designed for the electronic office, with keyboard positions on the right, left, or center. Circle 120 on reader service card



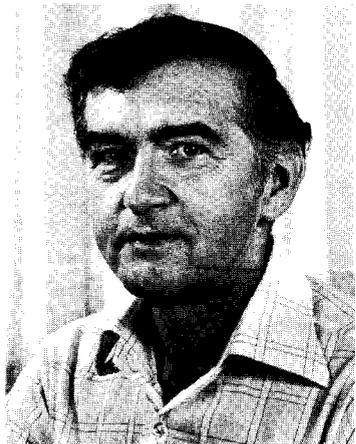
Gunlocke: John Duffy's Phoenix Stacker Chair has a removable tablet arm and stacking cart. Architect Stanley Felderman will attend West Week. Circle 121 on reader service card



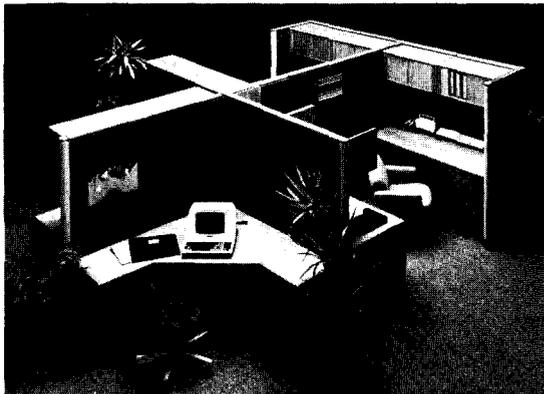
Fritz Haller



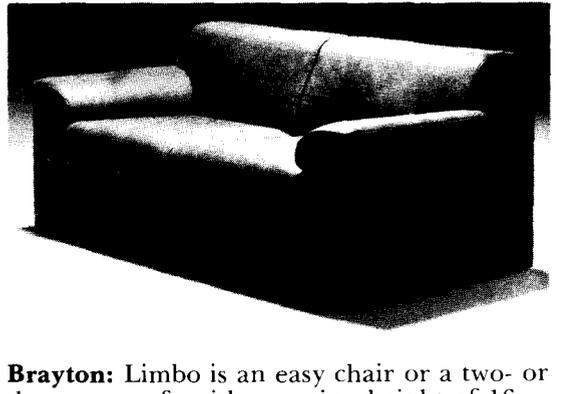
Haller: The Haller System is a series of components designed to be put together by the user to meet changing needs. Designer Fritz Haller will attend West Week. Circle 122 on reader service card



David Hammer



Harbor-Benedetti: For moderate CRT use, this X layout allows several workers to share a common terminal. Designer David Hammer will participate in West Week programs. Circle 123 on reader service card



Brayton: Limbo is an easy chair or a two- or three-seat sofa with a seating height of 16 inches. It features coil-sprung seat cushions and natural leather upholstery. Circle 124 on reader service card

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Energy Efficient in '83

1 Alistro task lamp, designed by Gismondi, features the new PL13 compact energy efficient fluorescent bulb. It is also available in a clamp-on model.

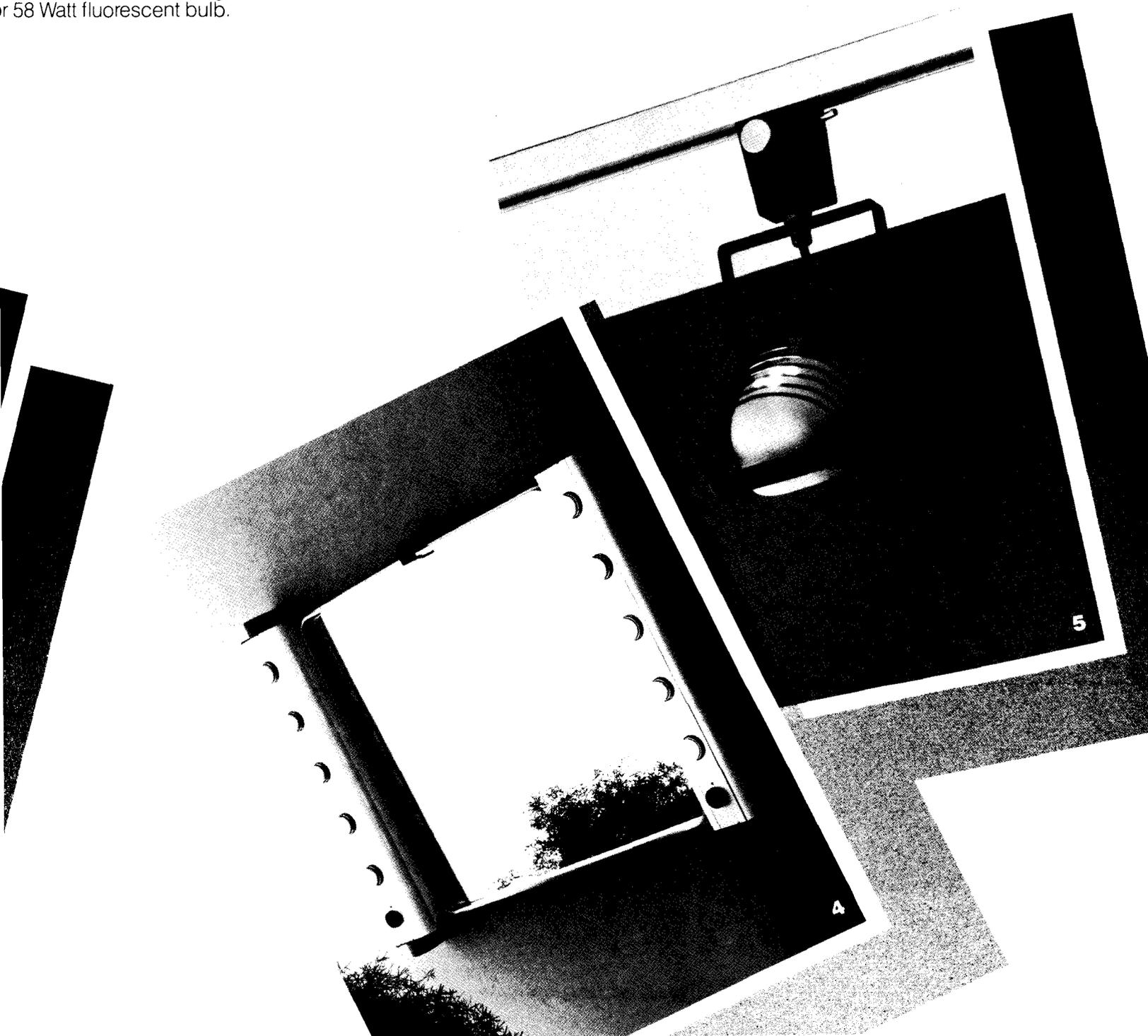
2 Pausania table/desk lamp uses the same PL13 bulb in a Memphis-style design by Sottsass.

3 Aton fluorescent floor lamp is available in heights of 65 and 83 inches, and uses an energy saving 36 or 58 Watt fluorescent bulb.

4 Aton mirror light is dimmer controlled and is available, like the Aton fluorescent floor, in white, black or Chinese lacquer red.

5 Sintesi track light extends this popular line from Gismondi for use in ceiling installations. A new Sintesi task lamp is available as well.

To receive "Lighting '83," a new color brochure featuring these and other new products, write to Artemide on your letterhead, or circle number 316.



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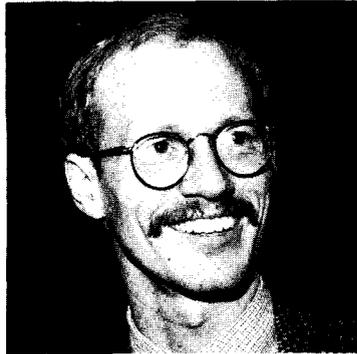
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West Week '83



Louis Mark



Arata Isozaki



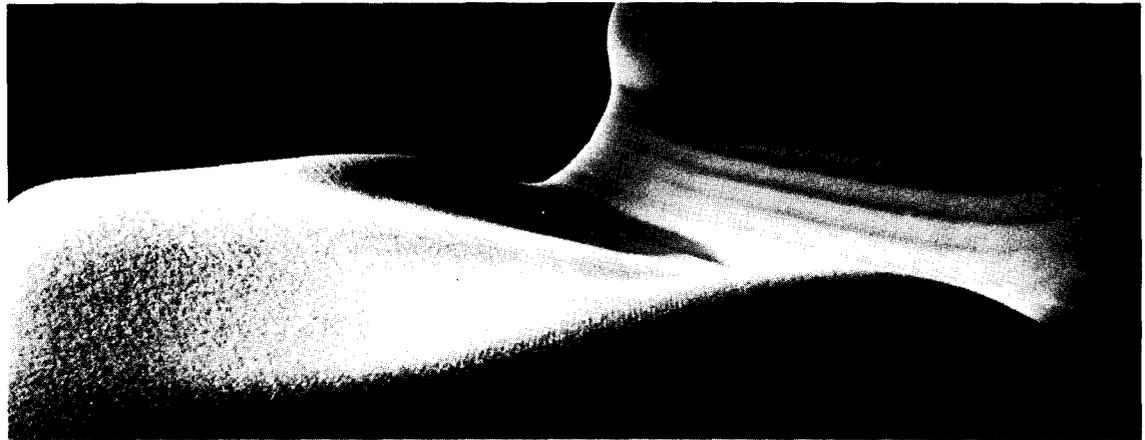
Nancy Hayward



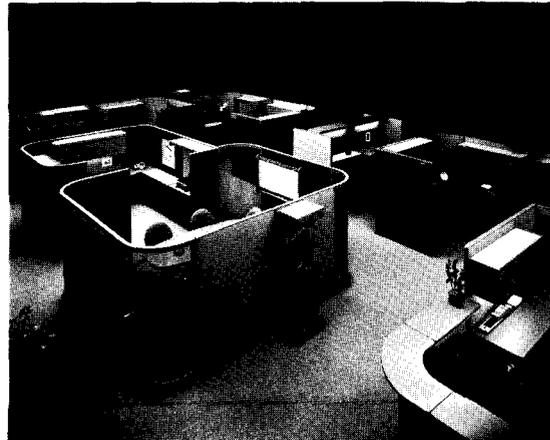
Ken Walker



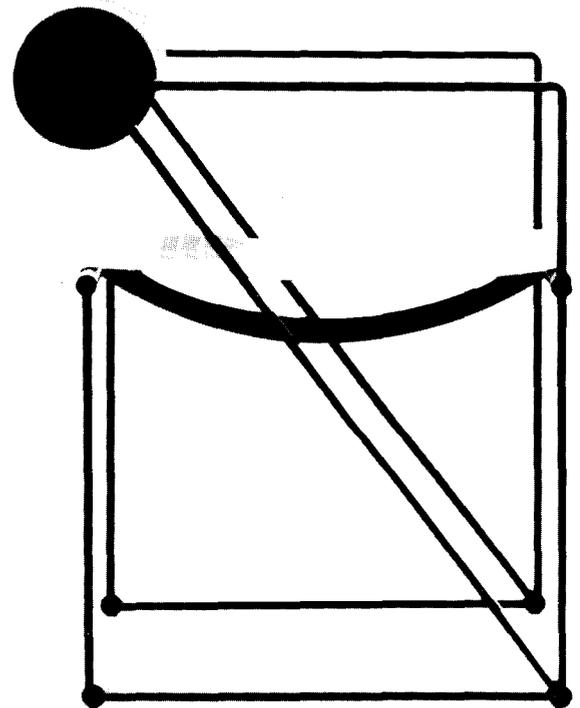
Harter: The Harter/Stoll Collection includes the N Series Chair (left) and the H Series Chair (right). Design director Louis Mark will attend West Week.
Circle 125 on reader service card



Hauserman: Charles Pelly's Crista Chair will be previewed, and architect Arata Isozaki will participate in West Week programs.
Circle 126 on reader service card



Haworth: TriAmbient Lighting is designed to fit open-office systems, display shelves, and task lighting uses. Designer Nancy Hayward will attend West Week.
Circle 127 on reader service card



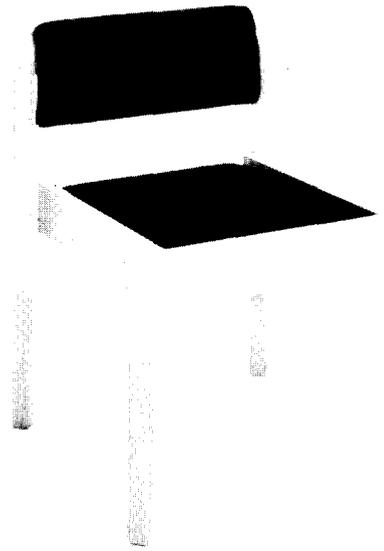
ICF: The first furniture designs by Swiss architect Mario Botta will be on display, and Ken Walker will participate in West Week programs.
Circle 128 on reader service card



West Week '83



Kasparians: Emil DePiero's Oxford Armless Chair is the latest addition to the Oxford Group. DePiero will participate in several West Week programs.
Circle 129 on reader service card



Kimball: The Diamond Armless Stack Chair features 45-degree-angle leg-to-frame fastening in a variety of finishes. Designer Rich Thompson will attend West Week.
Circle 130 on reader service card



Emil DePiero



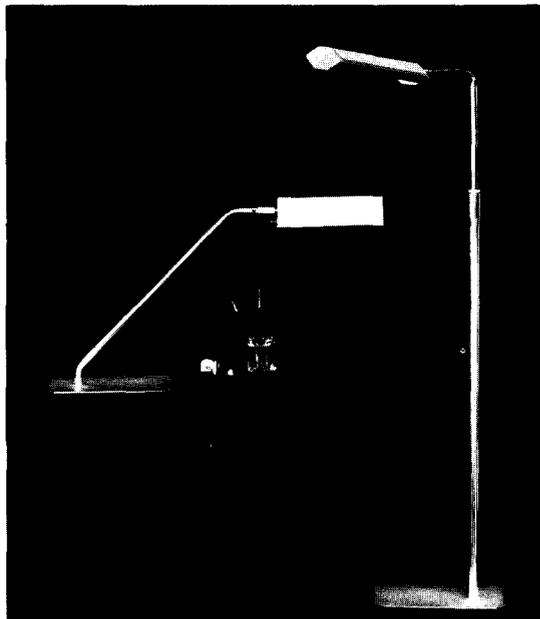
Knoll: Joining the Richard Meier collection is this chaise, which has no delineated back or front, so it can be used either way. Fabric designer Jhane Barnes will attend.
Circle 131 on reader service card



Rich Thompson



Jhane Barnes



Koch + Lowy: Facets is a solid brass series of lamps in floor and table versions (above), as well as a wall-mounted style. The lamps have multifaceted shades and hexagonal bases.
Circle 132 on reader service card



Lee/Jofa: "Akira" is inspired by an antique Japanese plate, using a stylized fish motif in a geometric design. Along with Sarita stripe, it comes in three colorways.
Circle 229 on reader service card

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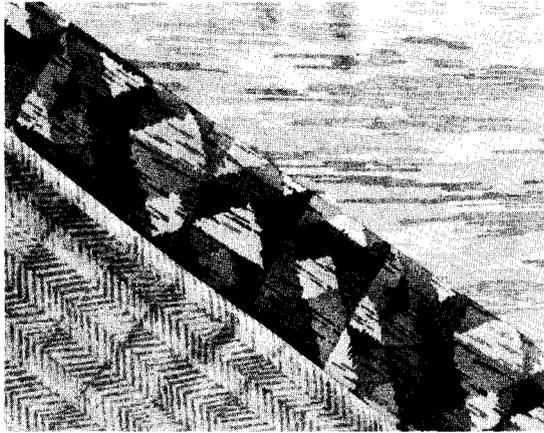
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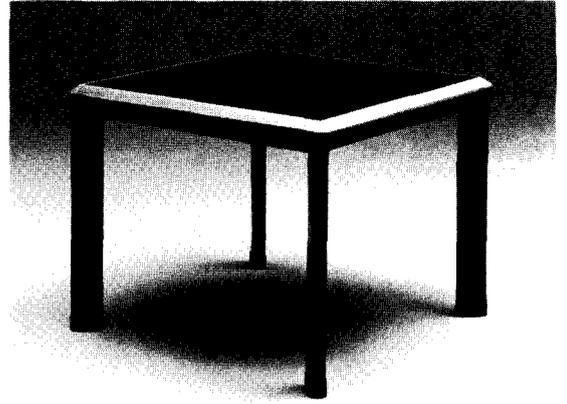
Circle No. 320 on Reader Service Card



West Week '83



Boris Kroll: Shadows, Scimitar, and Hebrides (shown) are three prints from the Island Cloth Collection. Vice president Lisa Kroll will participate in West Week programs.
Circle 133 on reader service card



Krueger: Tom Tolleson's "45" Table features beveled hardwood edges in hardwood or plastic laminate surfaces. Tolleson will be present at West Week.
Circle 134 on reader service card



Lisa Kroll



Tom Tolleson



Jack Lenor Larsen: Ernst Dettinger's Embassy Armchair has a solid beech frame available in several finishes. Both seat and back are upholstered.
Circle 135 on reader service card



Madison: ReActa II by Jerome Caruso features a 2-piece articulated shell, and a seat and back which react to the changes of the seated body; available with or without arms.
Circle 136 on reader service card



Don Chadwick



Herman Miller: The Kevi Chairs by Jorgen Rasmussen include management, secretarial, low-back, and sled-base models. Don Chadwick will be present for West Week programs.
Circle 137 on reader service card



Advent III shared access CRT workstations shown with new Prober Task chair (4137).

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West Week '83



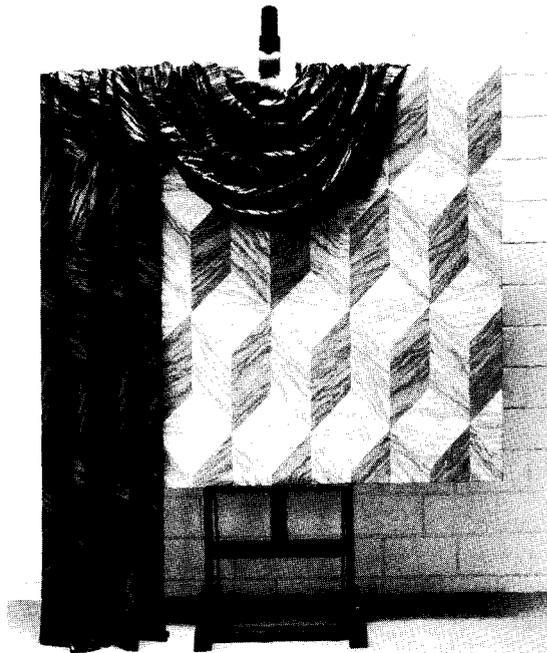
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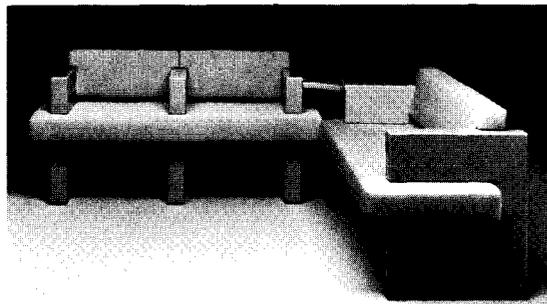
Ron Rezek



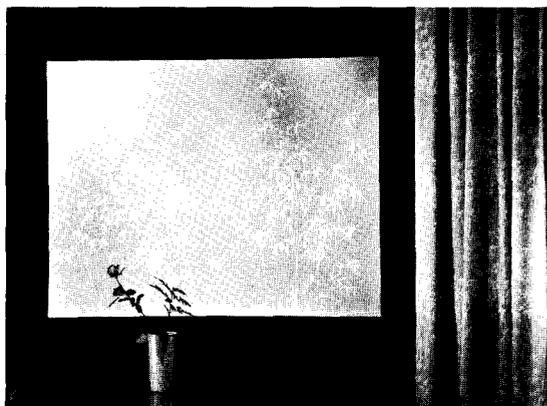
Ben Rose



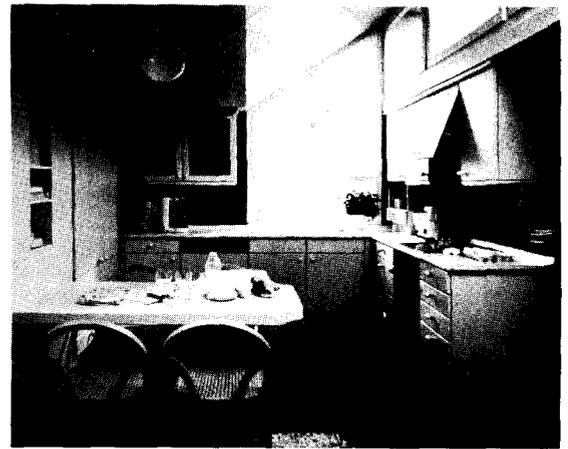
Mira-X: H-Collection fabrics, designed by Trix and Robert Haussmann, include Mira-Junctura Solum (left) in five colorways, and Mira-Junctura Alea (right) both in 100 percent cotton satin.
Circle 138 on reader service card



Harvey Prober: Interloc Seating has one universal notched arm unit which forms the seat and back elements of various combinations. Harvey Prober will attend West Week.
Circle 140 on reader service card



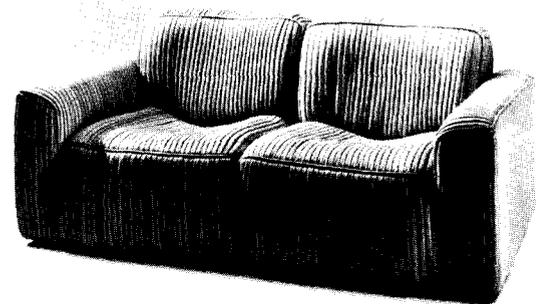
Ben Rose: Bamboo II is part of the Tone on Tone drapery fabric collection, which coordinates with other Ben Rose fabrics. Ben Rose will attend West Week.
Circle 143 on reader service card



Poggenpohl: The Dimension 75 Storage System is part of the Poggenpohl 2000 Collection and features a backsplash area that is at working height for the user.
Circle 139 on reader service card



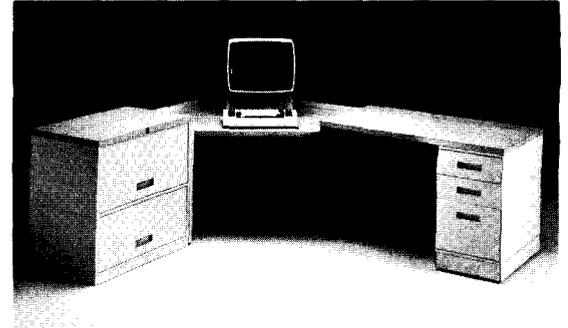
Ron Rezek/Lighting: The ball joint of the Orbis Desk Lamp allows 360 degrees of rotation and 30 degrees of vertical adjustment. Ron Rezek will attend West Week.
Circle 141 on reader service card



Edward Axel Roffman: Van Elu of Switzerland created the Turf Seating Group, which is available in modular styles, loveseats, and lounge chairs.
Circle 142 on reader service card



West Week '83

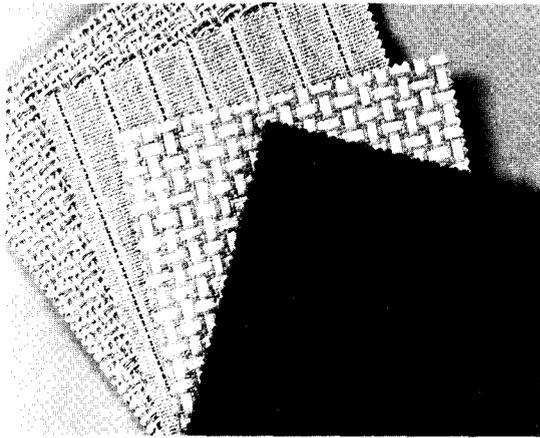


Shaw/Walker: ExpanDesk modular furniture can be integrated with the Tempo 3 Office System, and allows the user to custom-design the office. Architect and Shaw/Walker design consultant Robert A. M. Stern will attend West Week.
Circle 145 on reader service card

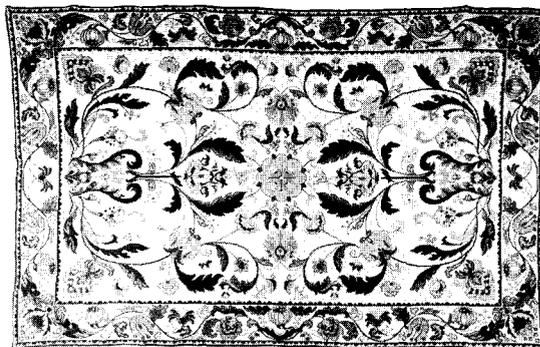


Stan Hutchinson

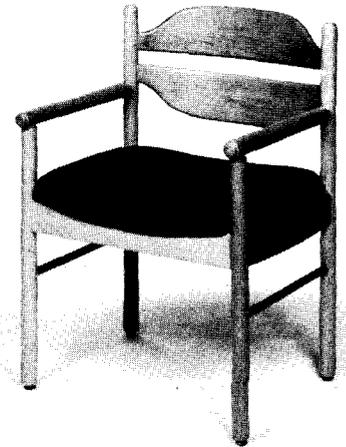
Scandiline: The EP Series features 2-inch-thick tops and end panels with half-round edge molds. Stan Hutchinson will participate in West Week programs.
Circle 144 on reader service card



Sinclair: The Cho Cho collection features wallcovering with fabriclike textures, and is presented in groups of patterns for use in combinations.
Circle 147 on reader service card



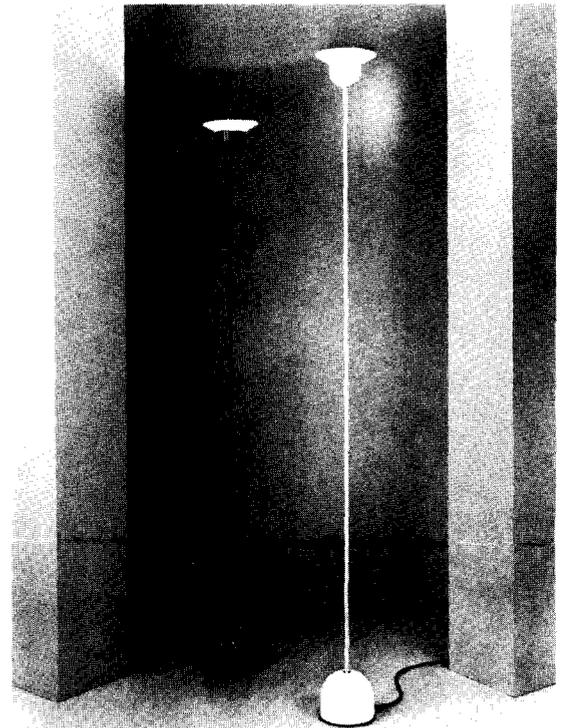
Stark: The Portuguese needlepoint rug in 100 percent wool is available in either standard or custom sizes and citrus colors.
Circle 148 on reader service card



Shelby Williams: The 4635 Contemporary Arm Chair in bleached wood has a foam-padded, contoured spring seat and a curved back.
Circle 146 on reader service card



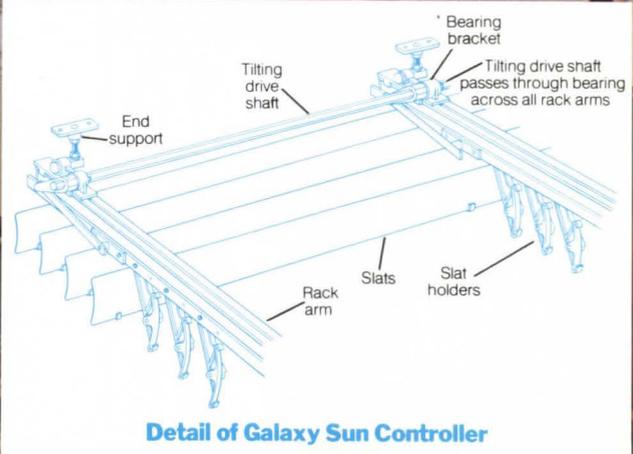
Robert A.M. Stern



Stendig: New halogen lighting features seven table and floor lamps. Most have dimmer switches on stems or line-cords. Designer Paolo Piva will attend West Week.
Circle 200 on reader service card



Paolo Piva



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West Week '83



Richard Ogg



Stow-Davis: Richard Ogg's new Oggs Chair has been made with a new technique that allows continuously bent strips of wood laminate. Ogg will be present at West Week.
Circle 201 on reader service card



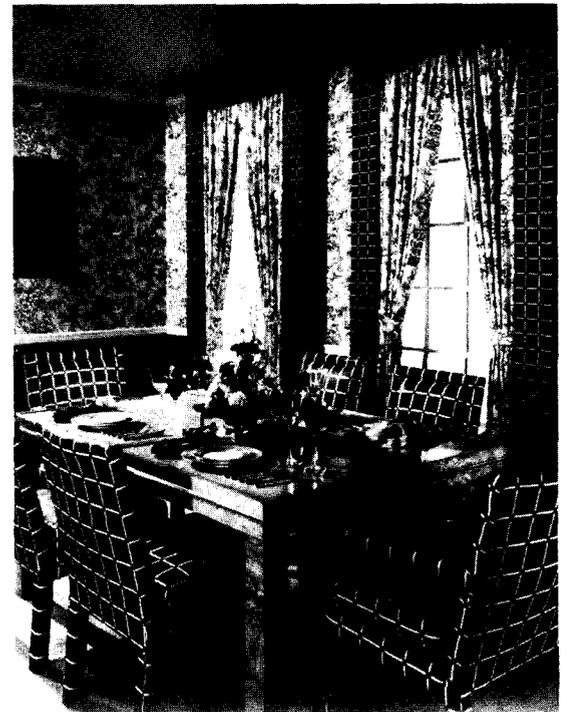
Westinghouse: The Wes-Tech Series is designed to accommodate and manage electronic equipment in an open office environment. William Anderson will participate in West Week programs.
Circle 203 on reader service card



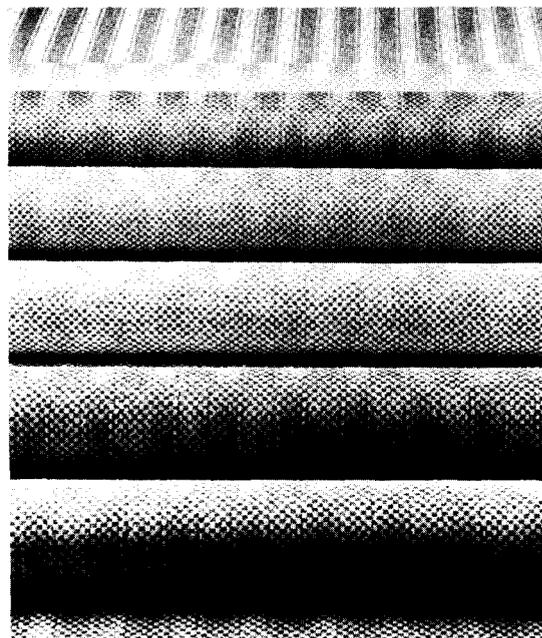
Douglas Ball



Sunar: The components in Douglas Ball's Cameron Group are modular and fit together with his RACE open-office system. Ball will attend West Week.
Circle 202 on reader service card



Winfield: This Mandalay series of wallcoverings is available in acrylic-coated paper, and fabric of 100 percent cotton sateen with a Zepel finish.
Circle 204 on reader service card



William Anderson

Zumsteg: Klio Faconne has a textural feeling achieved with printing a delicate, pointillist design on an embossed stripe, 54-inch wide cotton fabric.
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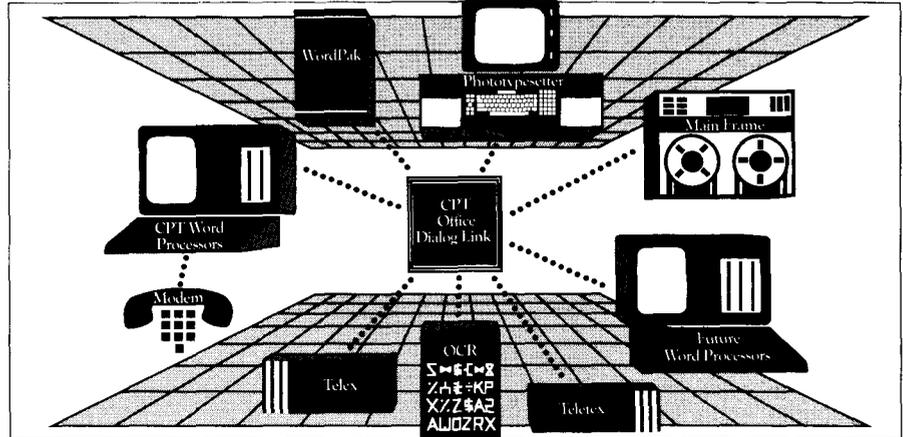
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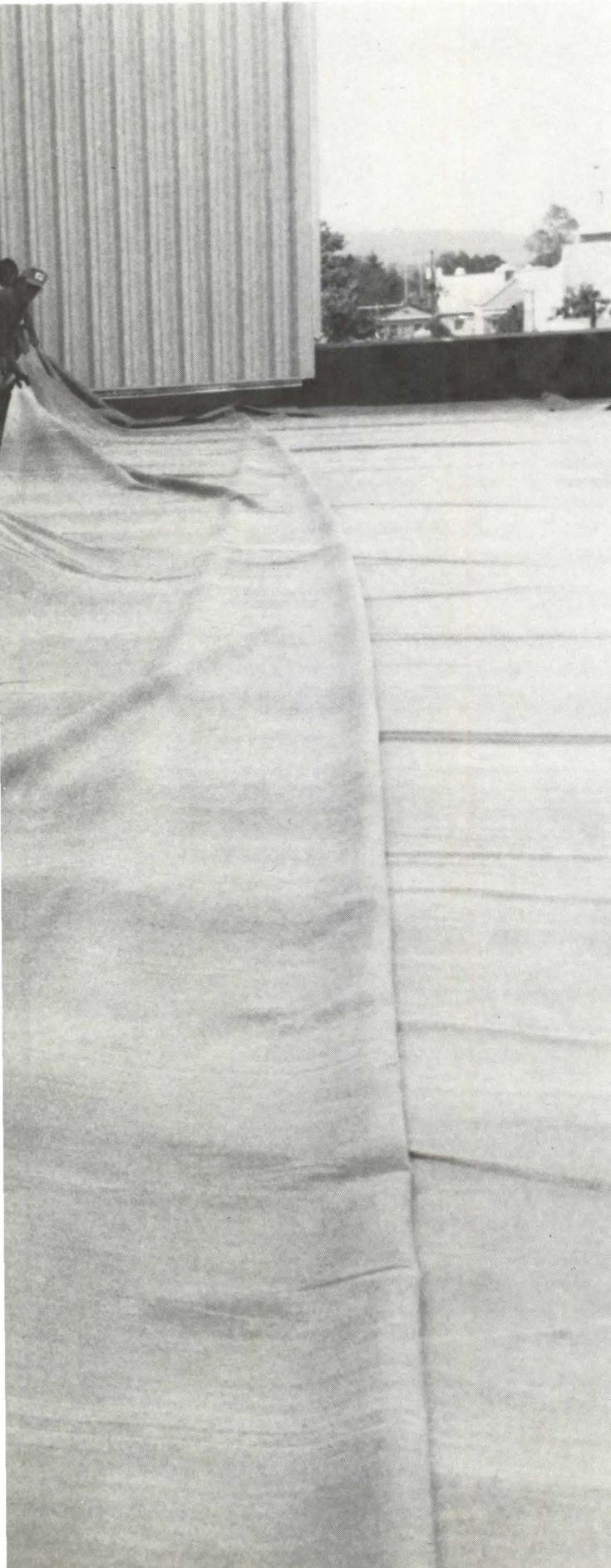
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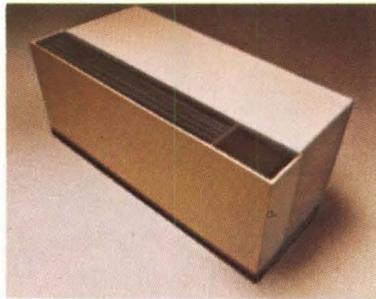
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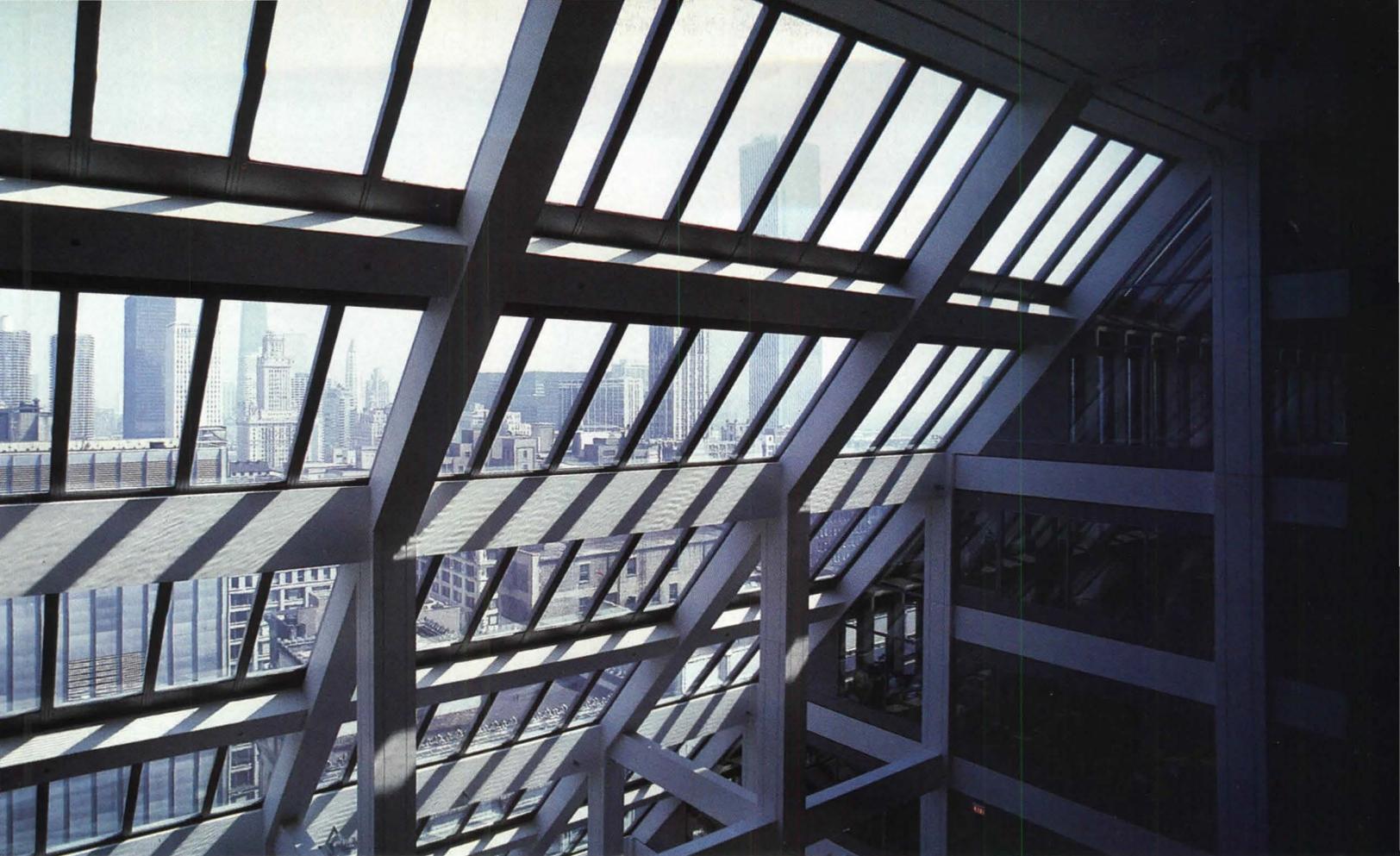
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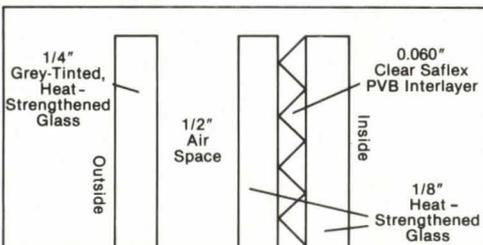
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Shading Coefficient	.55	.55

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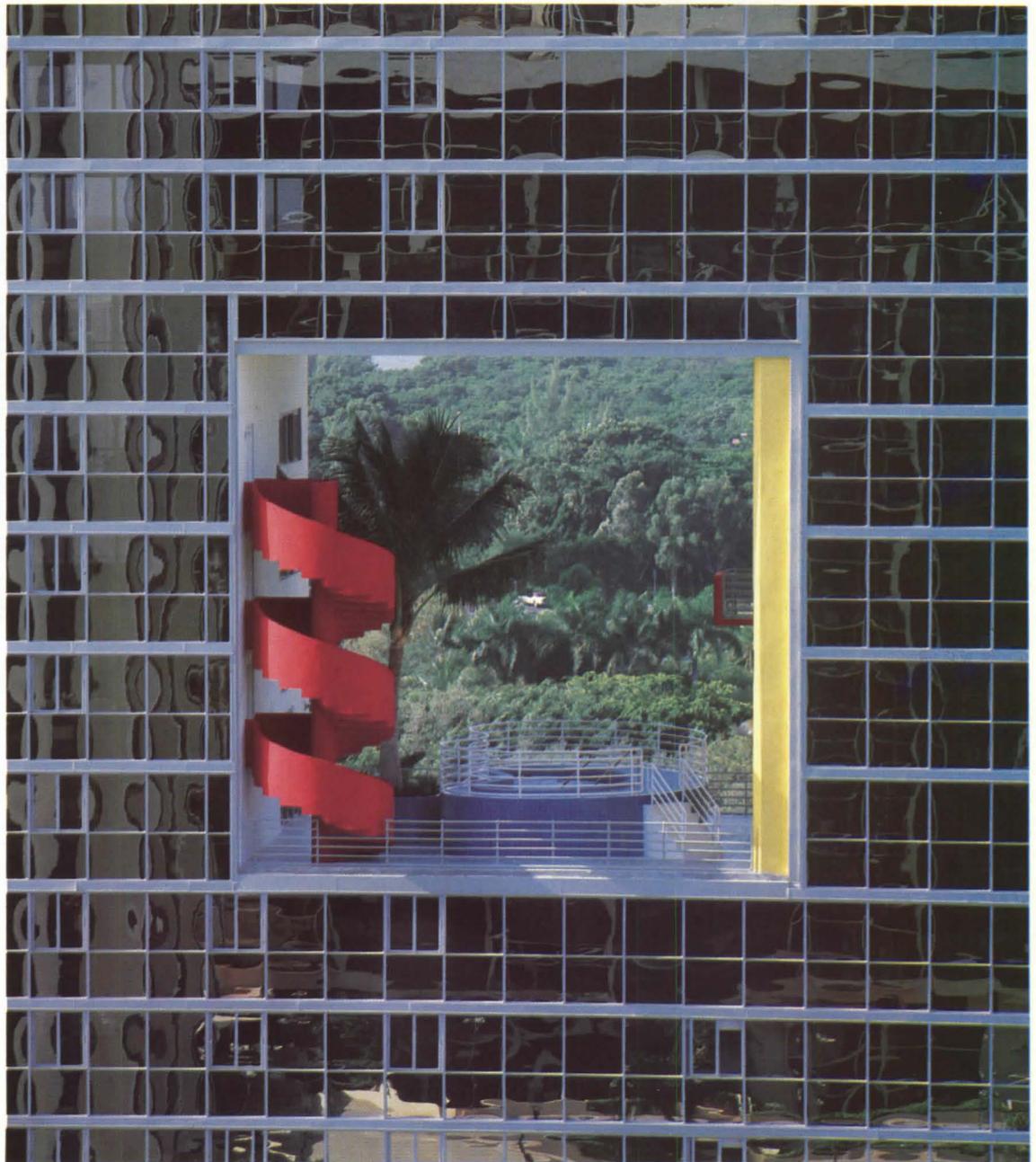
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Atlantis and Babylon,
Miami, FL

Rich and famous

Two apartment buildings by Arquitectonica—one large, one small—capture the aura of their time and place.

The Atlantis, north façade.



We all know about Arquitectonica. Accounts of the young firm's meteoric rise over the last five years have chronicled the process by which its three principals—Laurinda Spear, Bernardo Fort-Brescia, and Herwin Romney—have changed the face of Miami. But nowhere is this change more strikingly apparent than on and around Brickell Avenue, a major thoroughfare running along Biscayne Bay. There, in eleven blocks, you will find, from north to south, the Babylon, the Atlantis, the Imperial (under construction),

and the Palace (P/A, July 1982), with the Helmsley Center to follow soon (opposite the Babylon). Out of this impressive concentration of buildings, we now consider the Atlantis (on this and following pages) and the Babylon (page 106), P/A Award winners in 1980 and 1978, respectively.

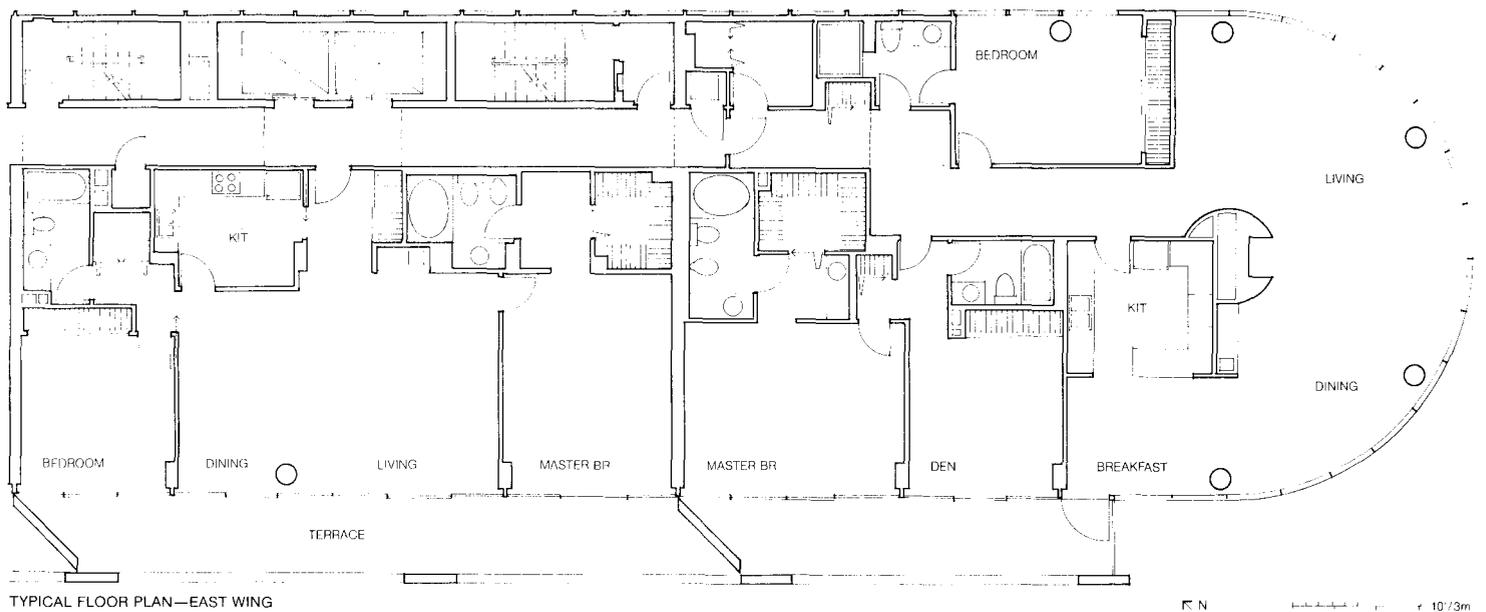
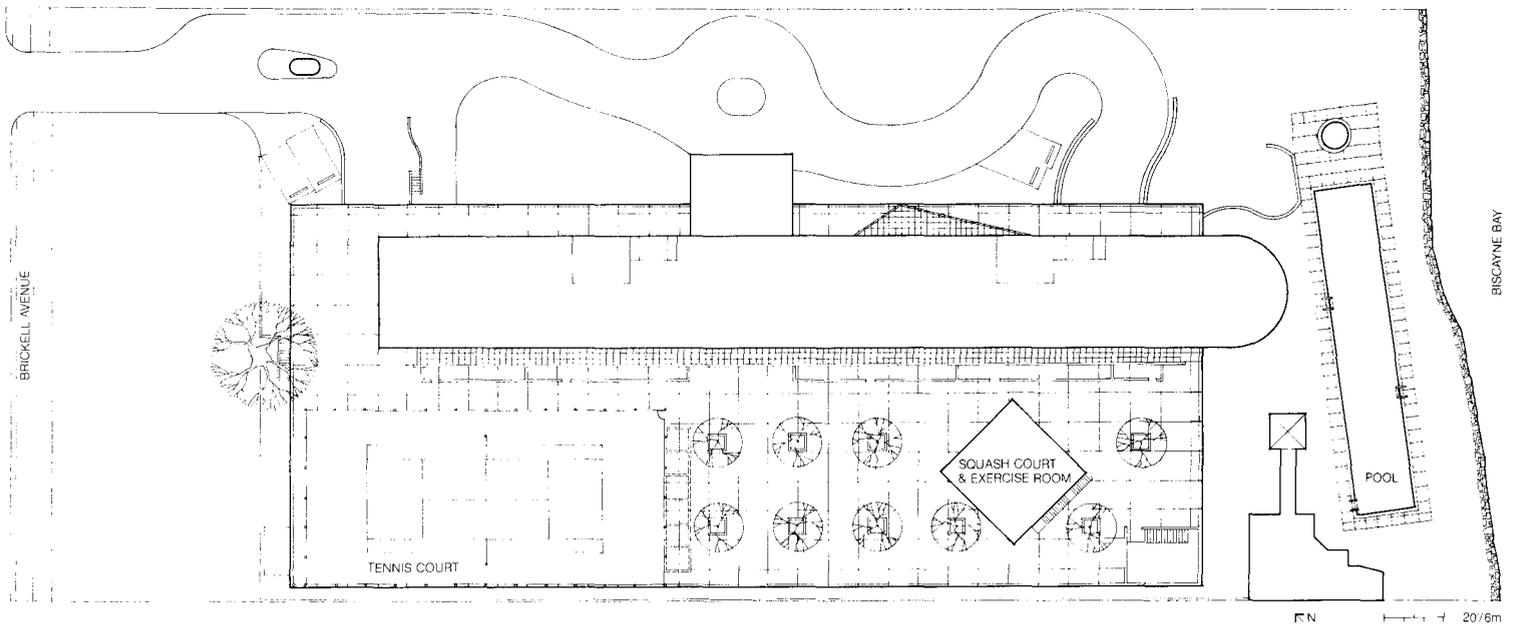
For sheer shock value, the Atlantis on Brickell is hard to beat. Driving south along the avenue, you are confronted with the fantastic sight of a reflective glass building that has a red triangle on its top, four yellow triangles



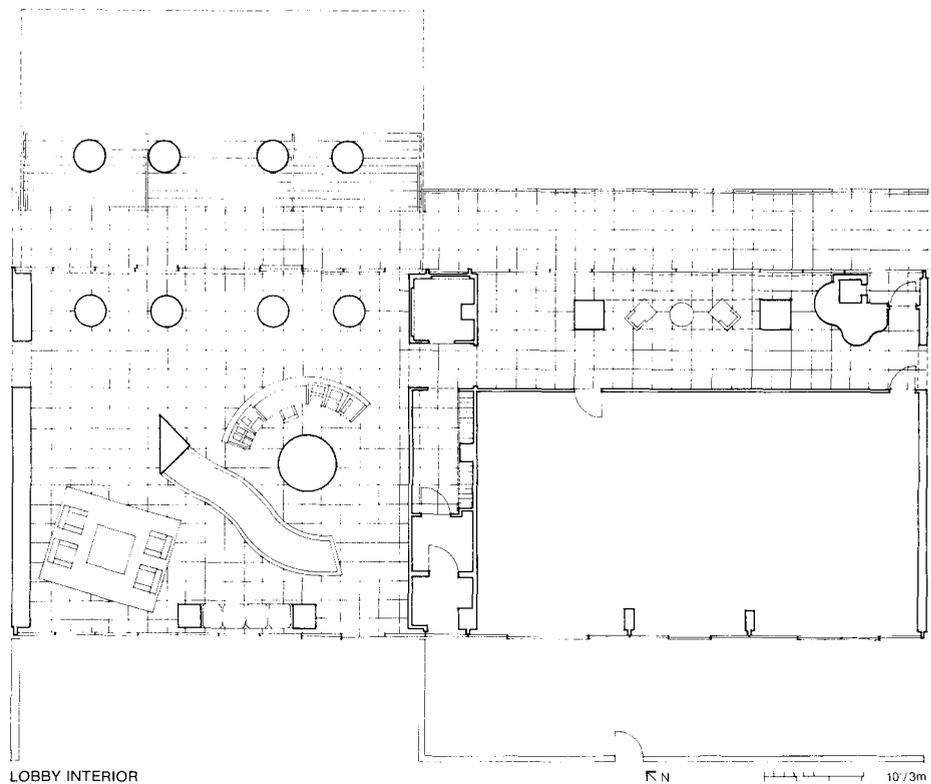
on its front, and an enormous square hole punched through its middle. If you follow your first instinct, which is to turn around and drive past the building again, you will see its equally fantastic south side, a brilliant blue grid of monster proportions laid over a much smaller grid of light gray balconies and railings. You also see what was punched out of the building—a 37-foot cube, lying just where it “fell,” on the deck, not too far from the tennis court. All of this contributes toward

From Brickell Avenue, the north façade of the Atlantis (above) surprises passersby with its red triangle “roof” and a 37-foot square hole that was “punched” through the building (the four yellow triangles are balconies). The east end (facing page) was rounded as a “nautical” gesture to Biscayne Bay; at left is the existing Shingle Style house that was renovated as the condominium’s meeting room. At the entrance (this page, far left), four big red columns seem to march up the white marble steps. In the luxuriously surreal lobby (left), a gigantic, round white marble column stands near a triangular white marble column that ends in a squiggly fountain. Set into the gray marble floor, a white marble “area rug” contains four over-scaled yellow chairs, set around a glass table that hovers just above the floor on four marble geometric solids.





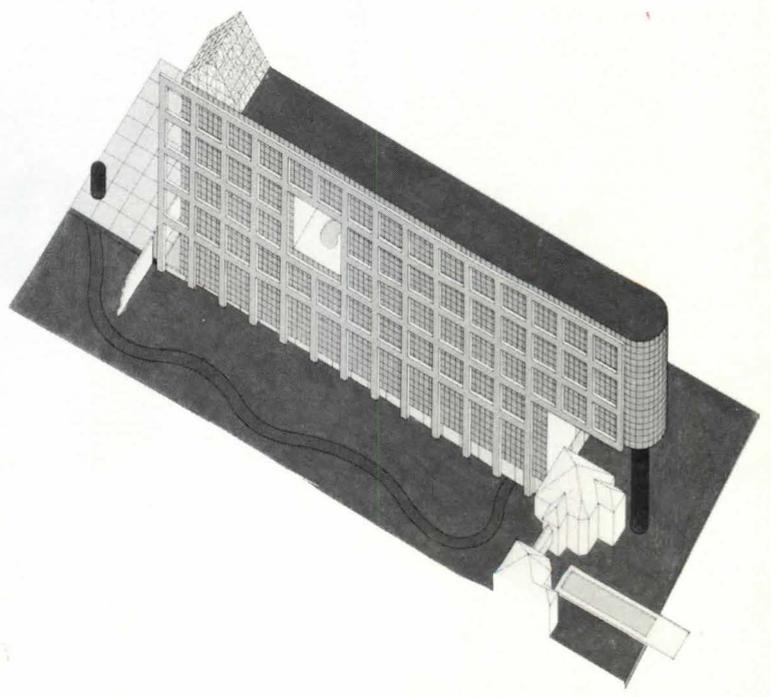
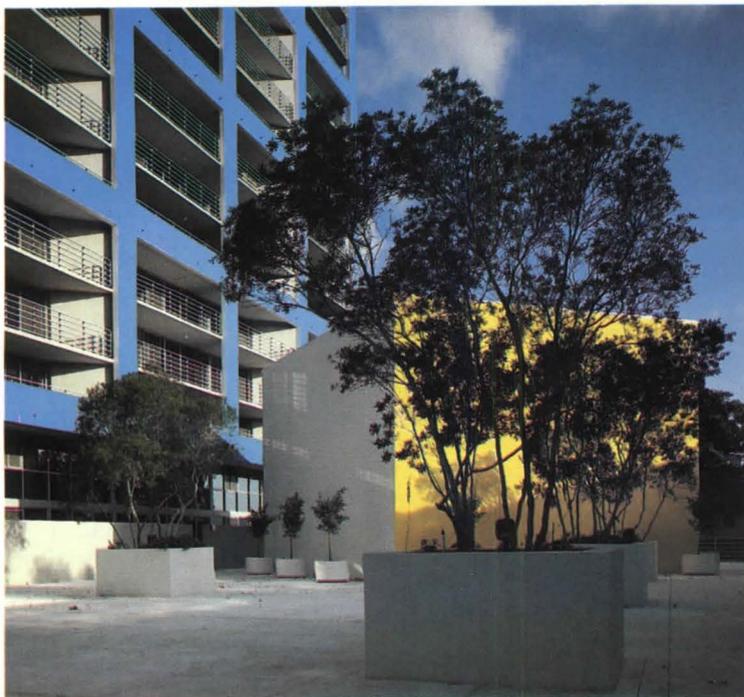
In the lobby plan (right), the triangular column conceals a plumbing stack, and the two columns at the back of the space became a square arch framing a window seat. The giant round column, five feet across, is a "hub" for the curving security desk and fountain. The four red columns inside the lobby mirror those under the entrance canopy; the left column of each interior pair is nonstructural. In the corridor, two columns form a square arch that frames more seating, while the curved poché wall contains the trash compactor chute.





The south side of the building is a large-scale blue stucco grid laid over the predominantly gray grid of floor slabs and balcony railings; on the ground floor are the private patios of the six duplex "townhouse" apartments. The mystery of the square hole (skycourt) is solved by the presence of the 37-foot cube (left), with its yellow side (matching the yellow wall of the skycourt), which is meant to read as the solid that has been punched out of the building and has landed not far from the tennis court. The cube houses a squash court and exercise room.

An axonometric of the original design shows the Atlantis spanning the larger of two existing houses (the smaller one is now the meeting house), before a new setback regulation pulled the building back another 24 feet, resulting in the demolition of the larger house. The blue grid would have projected well beyond the south side of the building. The red triangle on the roof appears here in marble; the single red column supporting the east end multiplied in the finished product; and the pool was moved, to lie more or less parallel to the shoreline.



Atlantis and Babylon

The blue grid's overlay is best seen from the east end (top), where, inside, continuous glazing offers a view of the bay (middle). The duplex apartments on the ground floor allowed for double-height corridors off the lobby (bottom).

In the skycourt (facing page, top), a red spiral stair affords access from four apartments, as well as spectacular views as it cantilevers out beyond the building's north face. The yellow wall opposite (facing page, bottom) serves as the backdrop for hot tub and whirlpool in this outdoor room with a view.

Data

Project: Atlantis on Brickell, Miami, Fl.

Architects: Arquitectonica International Corporation, Coral Gables, Fl.

Client: Solomon Luger and Samuel Greenberg, Developers, Montreal.

Site: 86,000 sq ft on Brickell Avenue, 200 ft on Biscayne Bay; existing house on site near bay-front over coral rock formation; and existing typical vegetation preserved on location.

Program: a 20-story condominium apartment building, containing 90 apartments and 6 duplex apartments at base; restoration and renovation of a 1910 bungalow for use as a meeting room; and two-level, covered parking.

Structural system: 3'6" concrete mat; reinforced concrete column; flat concrete slab.

Mechanical system: central cooling tower; individual air-handling units.

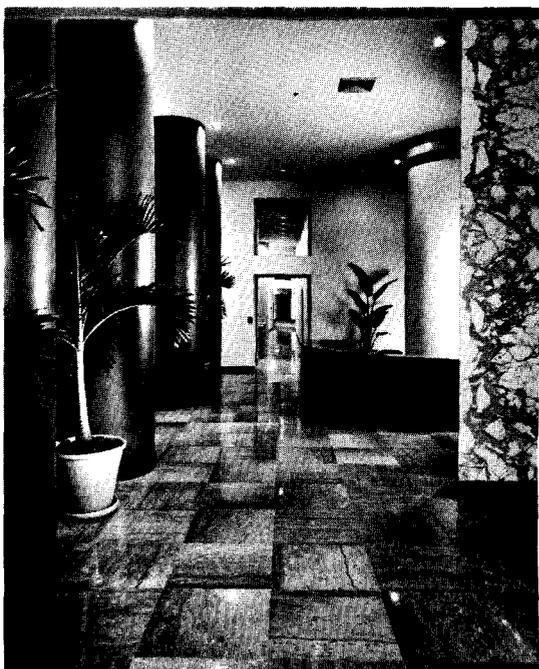
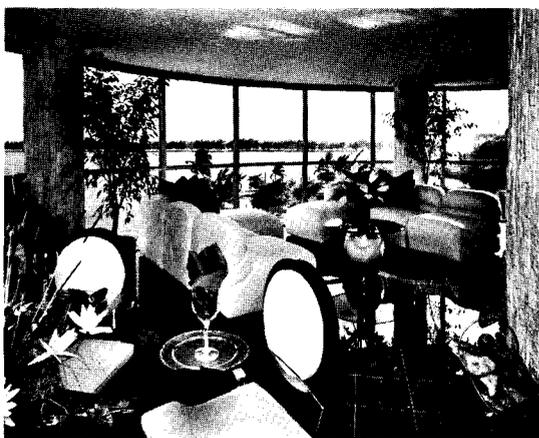
Major materials: painted stucco on concrete block; electrostatically painted aluminum framing and pipe railing; gray reflective solar glass; gray tinted sliding glass doors (see *Building materials*, p. 160).

Consultants: O'Leary-Shafer-Cosio, landscape; John Ross Associates, structural/mechanical/civil engineering; Arquitectonica, interiors.

General contractor: Cohen-Ager, Inc.

Costs: \$11.5 million, excluding fees.

Photography: Norman McGrath.



the 20-story condominium building's status as a local architectural wonder, whether seen from Brickell Avenue, the elevated highway that runs through the city, or the Rickenbacker Causeway that connects Miami to Key Biscayne.

A walking tour of the building begins back on its north side, where four massive red columns seem to walk up (or down) a series of white marble steps, under a large canopy. Inside the doors are four identical red columns, two of which were added by the architects, in the interest of symmetry. The entrance lobby, also a 37-foot cube, gives the impression that a rather sophisticated game of building blocks has just adjourned (see photos). A corridor leads from either side of the lobby to the elevators; each core serves three apartments per floor (there are 90 apartments in all, excluding the six duplex "townhouses" on the ground floor). At the back of the lobby, a door leads out to the deck that contains the townhouses' private patios, the tennis court, and the "misplaced" cube, which turns out to house a squash court and exercise room. A few steps to the east are the meeting house and pool. The architects preserved the existing vegetation, curving the driveway and sloping the site in deference to century-old banyan trees, and maintaining the lush, overgrown quality of the site. Under the rounded east end of the building (a "nautical" reference), which is supported by a series of slender red columns, a "veranda" opens onto the pool deck.

The white, Shingle Style meeting house and the big building stand politely apart, but this was not always intended to be the case. The original design of the Atlantis depicted it as spanning the larger of two existing cottages (built in 1910 on the Tiffany family estate), in a bizarre intersection of old and new. But before the Atlantis began construction, a zoning ordinance was passed requiring a 50-foot setback from the bay; the new building was only 26 feet from the water. Were it pulled back the necessary 24 feet, it would land squarely atop the larger Tiffany house. So the house went the way of all shingles, while the smaller one was saved, along with the bridge that connected the two. The meeting house is, in contrast to the colorful Atlantis, a study in black and white, and will be furnished in Mackintosh and Hoffmann. "Everything in here is old," explained Bernardo Fort-Brescia. "We made no attempt to relate it to the new building."

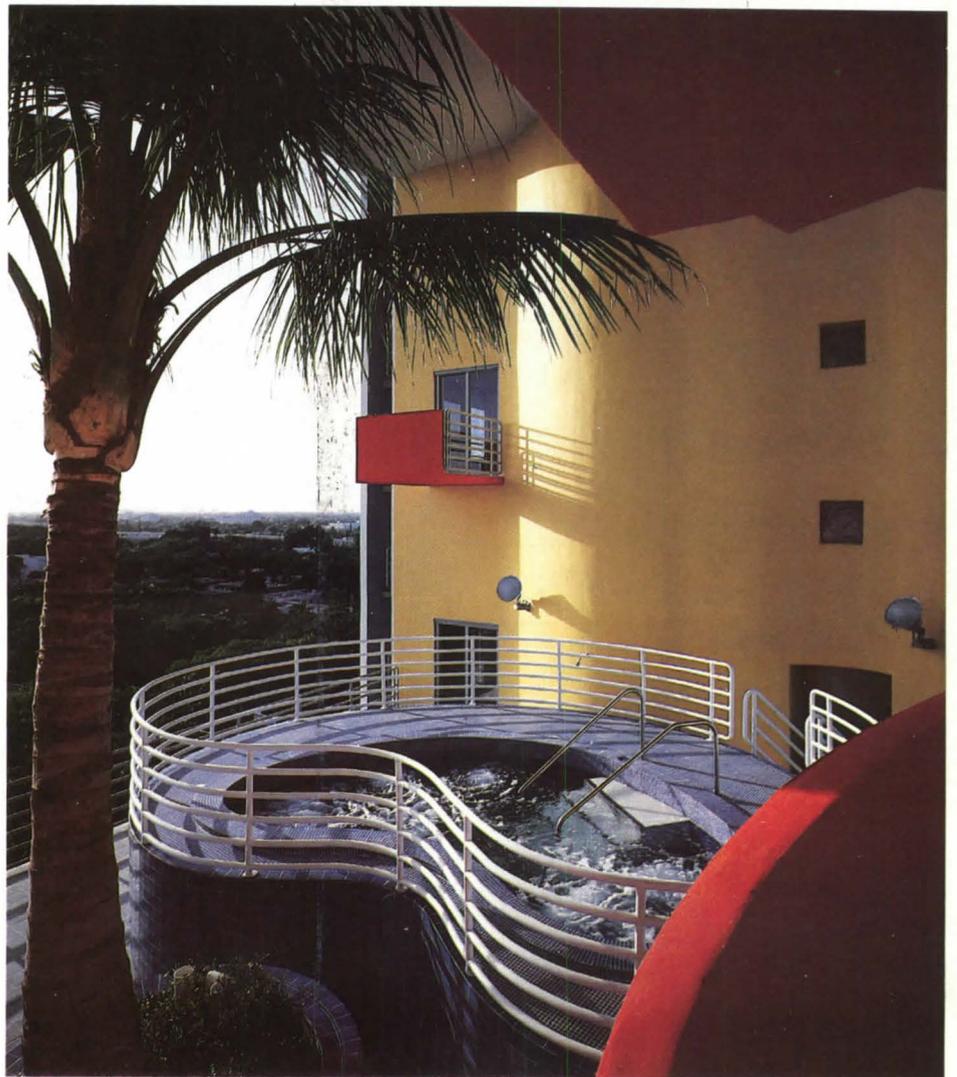
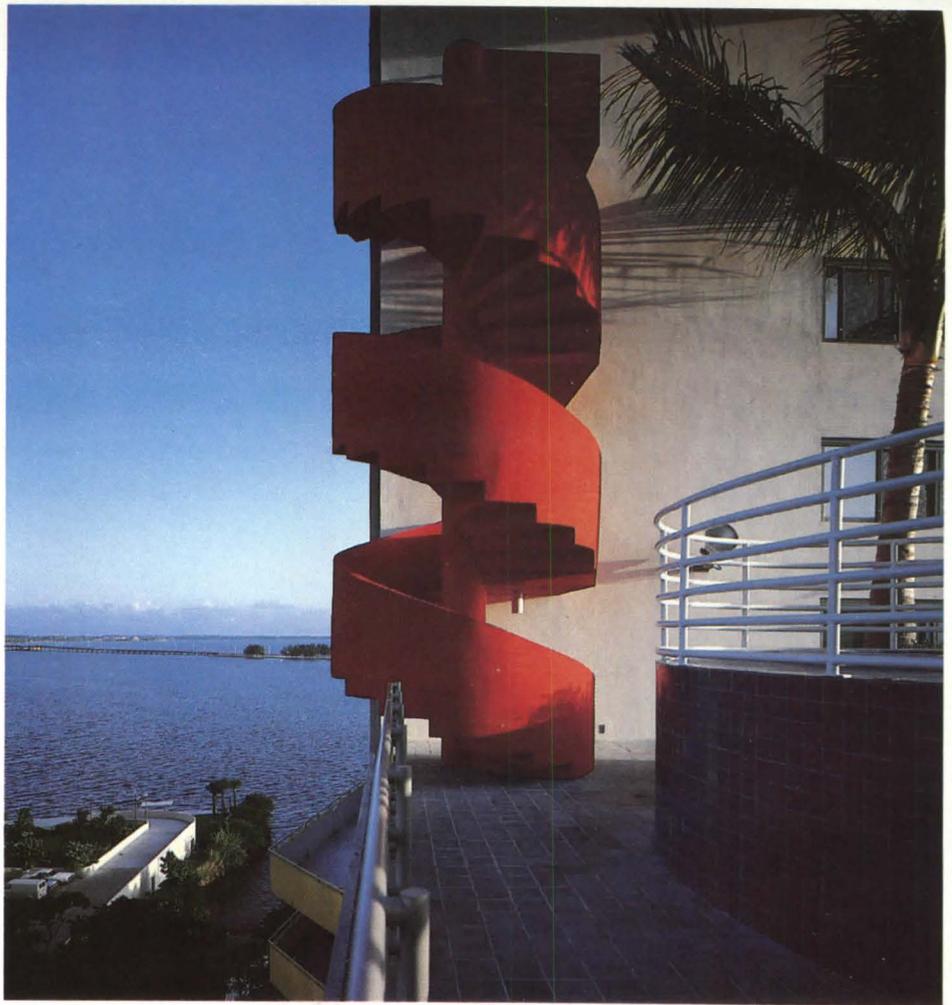
Back inside the Atlantis—well, not exactly inside—the skycourt offers jaded condominium dwellers just the right blend of danger and luxury. Accessible from either the elevators (at the 12th floor) or the red stair (for those lucky four who own apartments that open onto it), the skycourt houses a hot tub and whirlpool bath. A curved yellow wall with a red balcony conceals mechanical/electrical equipment. The space is almost too surreal to be true, with its breathtaking views and that improbable palm tree.

What seems to be a curtain wall on the north side of the building is not: the construction is of concrete slabs, with aluminum slab

covers painted the same gray as the stucco base and the pipe railings. This creates, according to the architects, a subtle horizontal banding, but still allows the façade to read as a “glass box” grid. The structure also facilitates the transfer of the load of the four floors above the void of the skycourt.

The apartments themselves, which range in size from 1350 to 2000 square feet and in price from \$200,000 to \$500,000 (for the bayfront townhouse), are typical of the “luxury” developer housing of our day; in spite of high price tags and superficially deluxe appointments, they lack the proportions and substance that make rooms seem truly luxurious. This less-than-perfectionist approach is visible on the exterior as well, where staining already mars the bright blue stucco grid, and some slab covers are beginning to pop off.

This is not a building that reads as a volume, except from the skycourt, or at the rounded east end. The reflective glass surface of the north façade seems too liquid and too bland for Arquitectonica’s uncompromisingly opaque planes (a chronic problem that may also be related to the quality of construction and materials). On the other hand, the juxtaposition of shimmering glass surface and cubic void is simply too seductive to ignore; it’s as if you could see through a break in a mirror. What the Atlantis *is*, essentially, is a pair of billboards sandwiched together, with a rather spectacular hole punched through them. It is a simple idea that works, and it should be kept simple. The red triangle, intended to address the “urban end” of the building with its schematic “roof” shape, is most successful as a landmark on the skyline; as an architectural statement, it is too cute for an otherwise glamorous design. For while the ideas are basic and the execution less than immaculate, the Atlantis is a quintessentially Miami building. Arquitectonica’s particular brand of Neo-Rationalism, spiked with delirious Deco and a dash of Hollywood, couldn’t be better suited to its context: waterfront views, lush greenery, and lots of money. This is the sort of architecture that is of and for its time and place, the place being a blue-chip strip of Miami property with a view straight out of the movies (which may be why Director Brian de Palma recently chose the building as a location for his remake of the movie *Scarface*). The Atlantis is not so much a commentary on a lifestyle as it is a manifesto for one, in which power and privilege are taken for granted—even by the architects, who seem to navigate these waters with accustomed ease. The principals of Arquitectonica quickly established themselves as a bright, brash young firm, whose mastery of the real-estate power structure belies their tender years, and their architecture shows it. So far, it isn’t perfect, but it is very, very good.



The Babylon



On the corner of S.E. 14th Street and Bayshore Drive stands The Babylon, a comparatively tiny (13-unit) apartment building that was Arquitectonica's first project, although it was not completed until 1982—four years after it was designed, and well after many of the firm's later and larger commissions were well under way. The long, narrow site made it difficult to provide every apartment with a bayfront view, but the architects' solution is an inventive one. They designed a "little skyscraper," a pair of ziggurat façades—folded in front, flat in back—sandwiching a "stepback" building, with terraces running the length of both sides and a walled swimming pool on top. The front façade is folded to maintain two planes of windows (i.e., view) parallel to the bay. The actual center of the façade is perpendicular to the bay and is marked by the crown of the ziggurat and a stack of glass-block windows. The two façades, which sit on a cement base painted gray and scored to recall Florida keystone (if you stand *way* back), are painted a brick red, to emphasize what the architects call their "masonrylike" quality, and to allude to early Modern brick buildings. This distinguishes them from the concrete columns, which are painted bright primary red in a reference to High Modernism—a much more familiar Arquitectonica allusion.

The elevator lobby, screened from on-

shore breezes by the projecting edge of the street façade, was left open to meet floor-area-ratio demands, but also eliminates the need for air conditioning in this part of the building. Under the first-floor lobby is the ground-floor parking area, and above it rise the five floors of apartments. The long, horizontal sweep of these all-white side elevations, with their pipe rails and sliding glass doors, contrasts sharply with the vertical, toylike zig-zag of the red façades. The unbroken line of the terraced sides is further exaggerated by the perspective distortion of the pie-shaped plan, which deliberately emphasizes the depth of the lot.

The building's construction was economical in the extreme. Beams on the ground floor support structural interior walls and prefabricated floor slabs. Because the walls are structural, their deep returns give a sense of substance normally wanting in such low-budget projects (although the interior finishes and appointments are a dead giveaway). The apartments are generally laid out in a manner that makes them seem fairly spacious; and the abundance of natural light and views more than compensates for their diminutive proportions. In plan, the building is simple yet resourceful in a way that subsequent Arquitectonica designs have not had to be. The idea of sleek, *haut* modern terraced floors sandwiched between cartoonlike, schematic-looking façades prefigures the firm's handling of larger projects such as the Palace (P/A, July 1982, p. 82) and the Atlantis, in which planar composition is pitted—with varying degrees of success—against volumetric manipulation. But then, the Babylon is a much more modest project.

Ironically enough, the Babylon, still unoccupied after a change in ownership, stands within sight of the 41-story Palace, and opposite the site of the 1.9 million-square-foot Helmsley Center, a mixed-used project scheduled for completion in 1984. Under different circumstances, the sight of the Babylon, dwarfed by the gargantuan Helmsley project (which will have a *real* keystone base), might bring a smile to those observers of the firm who knew them when. For Arquitectonica, however, there never really was a when; it was a very short trip to the major leagues. So the Babylon serves instead as a rather winsome reminder of lean and hungry years the firm never had. [Pilar Viladas]

Stepped terraces (above) offer sweeping views of Biscayne Bay. The Bayshore Drive façade (facing page, top) is "folded" to maximize the number of bayfront apartments, while the rear façade (facing page, lower left) is flat. The terraces and pipe rails of the side elevations create a strong sense of horizontality (facing page, lower right).



FIRST FLOOR—LOBBY



Data

Project: *The Babylon, Miami, Fl.*

Architects: *Arquitectonica International Corporation, Coral Gables, Fl.*

Client: *Pacific Developer Corporation, Coral Gables, Fl.*

Site: *a flat, 15,375-sq-ft trapezoidal lot, with a view of Biscayne Bay.*

Program: *13 apartments; one level of covered parking; and rooftop swimming pool.*

Structural system: *reinforced concrete footings, columns, and beams; prefabricated concrete slabs.*

Mechanical system: *central cooling tower with individual air-handling units.*

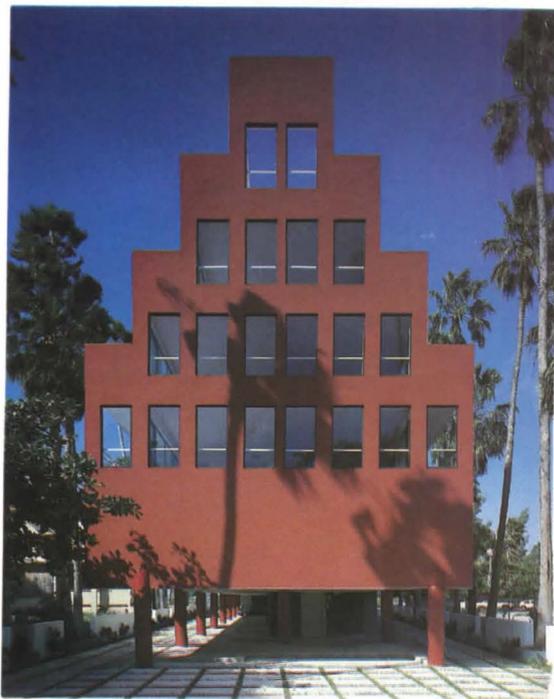
Major materials: *painted, smooth cement stucco on concrete block walls (see Building materials, p. 160).*

Consultants: *Kevin Rosen, landscape; Clement DeFillippo, P.E., structural; Florida Engineering Services, mechanical.*

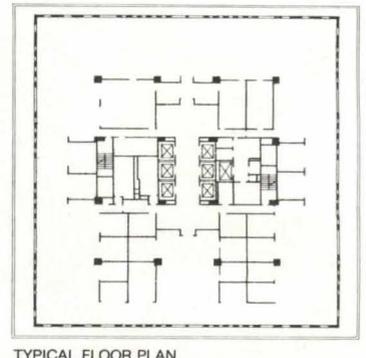
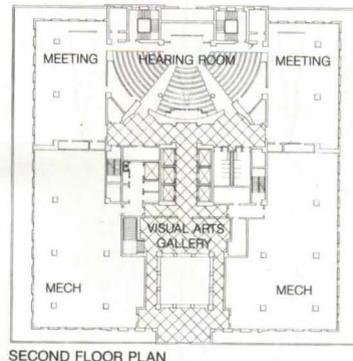
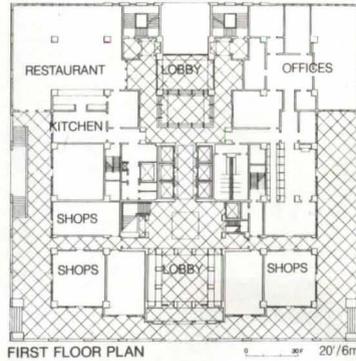
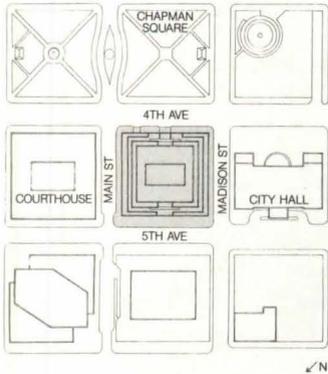
General contractor: *client.*

Costs: *\$1 million (construction only).*

Photography: *Norman McGrath.*



Conversation with Graves



The Portland Building has elicited comments and criticism—and a great deal of emotion—ever since its conception. P/A editors have invited architect Michael Graves to discuss its realization.

In the floor plans shown above, the interiors of the first two floors were designed by Graves, while those of the typical office floor were designed by Zimmer Gunsul Frasca. Opposite page: Models (top) of the building from the Fourth Avenue side show the design in its study phase (left), six weeks into the competition (right), and the final competition entry (middle). Large photograph (below) shows the realized building from the Fifth Avenue side, with flying garlands flattened.

It's not the most lavish building in the world, nor is it the most carefully crafted. Its clients must have wanted a noteworthy building, but just how noteworthy, they obviously were never sure. Yet the Portland Building by Michael Graves is the most talked about building in recent years, and the reason must be—it's a first.

It's a first, and it's a threat, both to practitioners of conservative Modernism and to proponents of Post-Modernism. The former—because it flies in the face of their lifelong beliefs in understatement and in "truthfulness" of material expression. The latter—because it proves, in part, their detractors' claims that "PM is merely billboard stuff."

Michael Graves, who has been given, up until now, the opportunity to produce little more than houses and drawings, may well have the most artistic personal vision among the architects included in that amorphous group, "Post-Modernists." Drawing, in part, upon historical forms (and not only Classical ones, he asserts), he attempts to derive a new yet culturally consistent vocabulary. The question was: Can he make big architecture? And can that architecture confirm a new direction?

The city of Portland, the client, must have had divided intentions. On the one hand, it wanted to make a statement: It organized an international competition in 1979 (P/A, May 1980, p. 25), inviting Philip Johnson—not known for following the herd—to be its adviser. On the other hand, it restricted the architect with a \$51-per-square-foot budget. Three finalists of international stature were chosen: Arthur Erickson, Mitchell/Giurgola, and Michael Graves, with their associates. Graves's winning design, built not without local protest—notably from the architectural community—achieved realization amidst

international clamor. It was both denounced as evil and touted as a potent symbol in the international press ever since its colored head took its place on Portland's skyline (see partial bibliography below).

Because of the emotions aroused, it has been treated as a greater building than it is—unfairly. Expected to be a flagship for Post-Modernism, it has had its flaws examined out of all proportion to the possibilities inherent in an inexpensive building by an architect inexperienced in large-scale work.

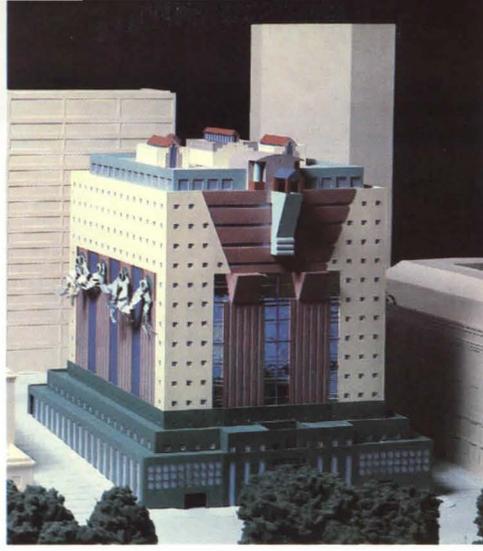
The boldness of the building, its attempt to redirect the flow of architectural culture, and the courage of its architect will undoubtedly inspire other practitioners. Rising now, on axis with the Portland Building and across the park from it, is a new Justice Building by Zimmer Gunsul Frasca whose monumental centrality (though not its architectonic vocabulary) echoes Graves's controversial creation. Bolder readings of Post-Modernism are sure to follow. Four P/A editors—Susan Doubilet, Thomas Fisher, David Morton, and James Murphy—visited the Portland Building and invited Michael Graves to discuss some of the questions raised: its intentions, its achievements, and its disappointments, relative to the given realities. [Susan Doubilet]

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Photo Acme Photo



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Greg Hursley

The Portland Building, Portland, Or

Fisher: *I would like to inquire about the design process. Project manager Lisa Lee, writing in the Sunar magazine "Leading Edge," made it sound as if the engineer and the contractors essentially determined the size, the shape, the core location, and the structural grid, and then you came in and applied the architecture to the engineer's box. Was that, in fact, the way it happened? Did you have more control than that? And if you did not, would you have preferred to have had more?*

Graves: It didn't happen that way. We had a meeting of all the participants of the team—the associate architects, the engineers, and the contractors—and we knew that we had a very short time, three months, in which to design, present, and cost out a building with a very strict budget. I didn't want to waste time and, realizing that given the constraints it was going to be a rather Plain Jane arrangement, asked to know from the beginning what would be the most efficient configuration. I was not interested—let me stress this—in arriving in Portland three months from that time with a building over budget. The other two competitors, to my surprise, did not assume that this was a strict rule, but I felt that it had been spelled out quite clearly, that the city had recently had two cost overruns on a public works project which had become a *cause célèbre*—and there was a mayoral race in the balance.

Murphy: *The other competitors may have felt that one ought not to carry out a public building so cheaply, and that they ought to persuade the city to pay the extra cost.*

Graves: That is very likely, but we did not feel that way, though we found the cost problem frustrating throughout. So at that early meeting we talked about possible configurations for the building, the relationship to the site, the structural requirements for earthquake resistance, and so forth. There were folks around that table, myself not included, who had lots of experience in building tall buildings. We discussed the idea of "lobby" and talked about how much space we thought we had available for the lobby. We debated the best location for the mechanical services, and this was the only major item that later changed dramatically, from an original location at the top to its present position within the base. So, using the best possible advice, we arrived at a most pragmatic configuration. And even then, we were slightly over budget and had to cut off a lot of things—we had to eliminate much of the tile we had planned for the exterior, for example.

Douilet: *Would you use this approach again—having consultants define the design limitations—in a speculative building or in another public building with a rigid budget?*

Graves: Absolutely. Remember, we

weren't merely decorating a box, because there was a certain latitude in the configuration of the building. We had choices. But I had to know the limits because it would have been silliness to work outside the limits. I would, however, make one definite change in the arrangements—I would insist upon being responsible for the interiors as well, except in the case of a speculative office building. In a city building, people assume I did the interiors, which was not the case here. Zimmer Gunsul Frasca Partnership won the competition for designing the municipal office interiors. Only in the public spaces on the base levels did we design the interiors.

Intentions and realizations

Morton: *We would like to understand how close the actual building comes to realizing your design intentions. With respect to the colors, for example, the drawing on the cover of Post-Modern Classicism (the AD Profile edited by Charles Jencks in 1980) led me to expect the base to be more charcoal and the pilasters to be more red in tone than the aqua and brown that they actually are.*

Graves: No, in fact the colors are quite close to my original design. The tiled base was to be a very dark green (never charcoal), but the members of Portland's Urban Design Review Board feared that it would be a little gloomy, so we lightened it a bit, to the present greenish blue. As for the pilasters—we expected them as well as the lintels to be clad in tile, but when we could afford tile only on the lintels, we didn't try to match the reddish tile color, but painted the pilasters a little darker to, in effect, support the lintel.

Douilet: *But in daylight the pilasters are seen as brown, in fact a rather yellowish brown by comparison with the keystones.*

Graves: No, I don't think they're brown. We took the same color value as in the tile and added black to it, and made several trials on the site until I was satisfied. You may like it or dislike it, but I wouldn't change it: It's just as I want it, a darkened red, not brown.

Douilet: *What about your intentions with respect to the perception of the relative depths of surfaces? You use colors and finishes to create greater depth than the simple box actually has, and some of the surfaces have a very clear presence—the basic scored, cream-colored walls with the punched dark windows have a very persuasive, tactile, plastic physicality with a successful tension between solid and void. Other surfaces are more ambiguous, and one suspects that the design intentions were not fully realized, possibly due to budget constraints. The reddish keystone seems to advance, partly due to its color, partly due to the position of the tiles upon the surface of the concrete, and partly due to the smallness of the parapet above, which seems to be half hidden behind the keystone. Did you want the keystone to protrude? Then the large surfaces of reflective glass imply contradictory*

messages: Because of the darkness of the glass and its reflectivity, it seems to recede into the concrete wall. Yet the detailing contradicts this effect, as one sees the window frame wrap over the edge of the concrete. Finally, the relationship of the box itself to the base is troubling: Because the highest level of the stepped base stands out from the concrete box by the thickness of one tile, while the large glass surfaces are shiny and therefore "slippery" and the pilasters convey a strong vertical movement, the box seems to be slipping downward. The base becomes a sleeve, not a pedestal.

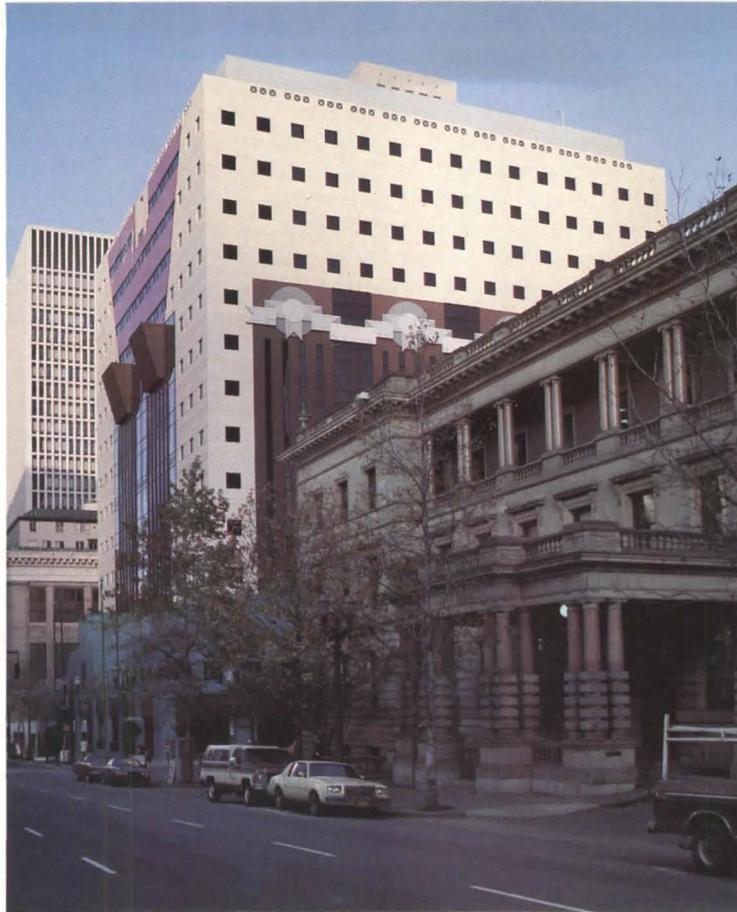
Graves: The keystone does advance beyond the other materials because of the color values, but not much. The parapet, in fact, was to be a good deal behind the surface of the building, but that was given up due to cost considerations. As to the reflective glass, if economy had not dictated that it be located on the surface of the box, I would probably have pushed it back six inches—hardly a significant amount. But notice that the ability of reflective glass to convey a sense of depth—a wonderful quality, I believe—is especially successful when identified with a solid material adjacent to it. An all-reflective glass building, like the Orbanco building across the street, has little ability to recede and advance.

As to the shaft of the building sliding into the base—that is an interesting idea with which I have struggled in other compositions, but I didn't realize it was a problem here. Of course there are various ways one can fix this critical relationship traditionally, using moldings and other Classical elements. But you must remember the stringent limitations imposed upon the aesthetics of a building by a \$51-per-square-foot budget. This seems to be forgotten in the critical debate that surrounds this building. Vincent Scully, in the panel discussion held in November at the Institute for Architecture and Urban Studies in New York, bemoaned the weakness of this building compared with the compressive strength in works of Frank Furness. With a limited budget you can't have the richness of solid/void relationships necessary to create a real sense of density. Now, for the Humana building in Louisville, I have exactly double the budget for the same square footage, and it ought to be an entirely different proposition.

Choices and limitations

Murphy: *There has been much criticism about the size of the square windows. I understand that they were originally 9 square feet, and then they were increased to 16 square feet. How was the size determined?*

Graves: It was determined following two main criteria—the relationship of windows to the individual desk, and energy considerations. In terms of the person working at the desk, the window height was established to provide views



David Morton

The urban context: The Portland Building is shown from the Fifth Avenue side (top) with the 1895 City Hall in the foreground, and from the park side (bottom) with the 1913 Multnomah County Courthouse. While Graves asserts that the magnified “Classical” elements have both more primitive and more modern derivations than the strictly classical, he designed the punched fenestration in keeping with the scale of the neighbors’ windows. The strongly expressed base, whose presence relates to the adjacent buildings, is seen from the street entrance (middle right) and the shopping arcade it contains (middle left).



Photos: Robert M. Reynolds



from sitting and standing positions. I myself get tremendous vertigo when standing at the edge of a building glazed from wall to wall and from floor to ceiling—the nearby Standard Plaza, for instance. It’s just madness to give the base of a table a view! (Unfortunately, because we did not design the interiors, we did not complete our design intentions with respect to the internal window arrangements.) We also wanted to design a window size in keeping with the windows at the City Hall and the County Courthouse on either side, and we wanted the windows to enliven the façade by virtue of the tension between solid and void. We also had to consider



Doug Benson

the cost of the wall, which limited the use of glass, and finally, and importantly, we were given “points” for the energy efficiency of the wall.

Fisher: *The building actually was predicted to perform quite well, according to P/A’s energy analysis carried out before the building was complete (P/A, Oct. 1981, pp. 108–109). But the passive solar community has questioned the use of a massive exterior wall with small windows, which might be more appropriate in either a very hot or a very cold climate. Given Portland’s rather mild year-round temperatures and the relative frequency of overcast skies, many have wondered whether a more glassy skin that would allow abundant daylighting, and operable windows*

The Portland Building, Portland, Or

that would provide ventilation, might have provided a more appropriate solution. After all, consider the high internal heat loads of the computers and of the lights that must be on most of the time.

Graves: That may be so, but there were other considerations as well. In our original scheme, the core was the element that stabilized the building relative to earthquake forces. In the second scheme—the one that was built—it is the partnership between the core and the outside skin that reacts to these forces, so the mass of the skin became especially important. In the second round of the competition, the city required that we change the exterior wall from stucco on block to reinforced concrete. They seemed to see the stucco as a temporary or a fragile material.

As to the windows—I would have preferred clear rather than tinted glass, and operable sash. I even made it a semi-moral issue with the city that they use operable glass, but they felt that fixed glass was more efficient.

Morton: Do you feel it's more efficient?

Graves: Well, it's probably less trouble with respect to the computers, which have thermostatic controls.

Doubilet: What other limitations were suggested to you by the engineers and contractors?

Graves: The base and the stepping of the base. On the one hand it would have been cheaper had the shaft risen straight up from the base at the 200-foot-square block dimension. But because of the lack of stability at the periphery of the site, the structural engineers asked us to support the core of the building in the center and, indeed, to have less mass at the edge.

Morton: What is the reason for that?

Graves: It has to do with shoring—what could be done at the street edge. I can't give you an accurate answer on this point. I think it has to do with construction techniques as well as the soil stability. But they gave us a dimension of 150 feet for the shaft of the building. As I had to take up the gap between 200 feet and 150 feet, I wanted to step the base three times if I were to step it at all. The last echelon is on the surface of the cream wall, extending beyond only by the thickness of the tile, for cost reasons.

Murphy: What about the arrangements for parking? Was the garage higher due to soil conditions?

Graves: No, that was due to costs. First of all, it was an absolute requirement of the program to locate the parking entrance on Fourth Avenue, the park side. We chose to place it centrally on the elevation. Then we realized that if we raised a section of the ground floor over the parking entrance—the central section on the park side, which is used as a

lobby café—we would not have to raise the entire structure.

Fisher: I realize you had budgetary constraints, but I wonder about maintenance problems in the future due to the selection of certain materials. The enameled metal dado on the ground floor, for example—I realize you had to cut the terra cotta surfaces, but how are you going to protect the dado from being nicked in a public space? I also wonder about the costs of washing the reflective glass beneath the projecting capitals. And most worrying is the cost of periodically recoating the painted concrete on such a tall building.

Graves: I don't think they are serious maintenance problems. The window-washing contractors said that all windows were within reach of their tools. In fact, I think it's wild that people worry about window washing on a building like this, and don't care to think about the problems on an all glazed, multifaceted building.

Doubilet: And the dado? And the repainting?

Graves: The paint is 20 mils thick and it will be 20 years before it needs repainting. But I'd just as soon they not repaint it at all. I want it to look old. I want it to have a little girth to it. It's going to look fabulous in 20 years. It will look even better in 50 years, but it's our hygienic aesthetic that makes us keep whiteness white, whiter than white: If it's sparkling clean we seem to think that government will be more efficient. I don't think this is going to need more maintenance than a building that needs to be sandblasted every 50 to 80 years. I'm perfectly happy to let it go, but they won't do that.

Morton: Did you consider coloring the concrete integrally? It would age nicely.

Graves: Yes, but it would have been more expensive and the contractor was uneasy about the variations in color in the different pours. I had no problem with that if we had coordinated the pours with the concrete courses, but they wouldn't agree.

Doubilet: It's one thing if a masonry building, say, ages and develops a patina. It's another thing if paint peels. How does this paint wear?

Graves: It's an elastomeric finish that doesn't act in the same way as an oil-based paint. It will depend upon how the Portland environment attacks it. I don't know exactly what will happen.

Doubilet: But others may try to use it. How do the paint chemists predict it will wear?

Graves: Let's watch and see.

Urban connections

Doubilet: You speak of raising, for pragmatic reasons, the central section of the ground floor overlooking the park. I find it a notable gesture, to step up on a platform to view the park. But what about access to the park from the public level? There are two fire stairs, to be sure, but there is no grand way out to the park.

Murphy: The entrances to these stairs are elaborated by little peristyles, but these are only really seen when you know to look for them.

Graves: It would have been wonderful to give people a glorious way out. But the city didn't want a glorious way in from Fourth Avenue. They wanted to control the entry from Fifth Avenue, so the fire stairs were merely an exit. Perhaps they could have been more lavish on the way down, but without suitable expression on the exterior.

Fisher: I noticed that some of the storekeepers in the loggia were having problems with visibility into their stores. One had a sign saying "Yes, we are open."

Graves: The store windows are being changed to clear glass, which I would have preferred at the outset.

Doubilet: Even so, I would expect that the retail spaces on the sides, other than the corner locations, would have trouble deep within the loggia, especially on the Main Street side, where they are a flight above street level.

Graves: The intermediate location for the cookie store, on the other side, is a great success: They're lining up for cookies.

Interiors: a moral dilemma?

Murphy: I found that the public spaces on the lower levels seemed rather dark and joyless. Perhaps it is the colors, perhaps it is the dark floors, or perhaps the lighting has been turned down too low. Furthermore, there are some bright spots that make the signs difficult to read.

Doubilet: All the glossy surfaces—the floors, the dados—are below eye level and, in contrast, the upper surfaces seem dull. This effect is exacerbated by the indirect lighting. Unlike traditional public spaces with, say, gilt cornices, the effect is not uplifting.

Graves: I don't agree that it's not uplifting. On the other hand, it wasn't the intention to make it uplifting. But I will agree that some of the colors are too warm. In our efforts to keep the spaces from being cold, we used too much red. Like in the Chicago Sunar showroom, we warmed the spaces up a little too much and they close in on you a bit.

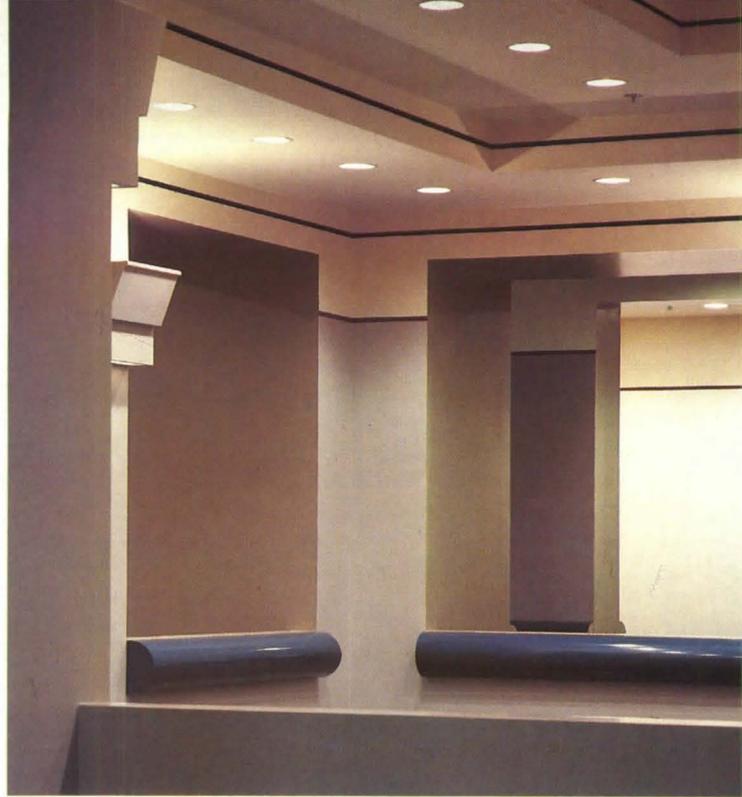
Doubilet: You seem to contradict your efforts to create three-dimensional rooms by using moldings in a planar way: They don't wrap around into the third dimension.

Graves: I may be the odd man out here, but I don't see that as planar. The moldings are sheared so that I read it as cutting through a rather deep wall.

Morton: That's the type of detail traditionally done in a masonry building, or in marble. It requires a sense of massiveness. In gypboard, it's not the same.

Graves: I don't know whether lay people know it's gypboard. For many modern architects, on the other hand, it's a moral question: If it's gypboard, they feel it should be read as gypboard. That doesn't interest me. It's a surface

Detail of upper part of the two-story lobby space (right) and view of the Visual Arts Gallery on the second floor (below). A model of the Portlandia sculpture to be located above the front entrance is on display. Interiors in the building also designed by Graves include the hearing room (bottom left) on the second floor and the ground-floor elevator lobby (bottom right).



Robert M. Reynolds



Photo Acme Photo



Photos: Photo Acme Photo



The Portland Building, Portland, Or

that gains some identification beyond the junk it's made of, by virtue of its color, its texture, its placement. It was no moral dilemma in Pompeii: You painted it on. During the competition controversy, a local architect said he wanted the building to be made of "real stuff, like the real marble of the columns in the lobby of the city hall next door." In fact, those columns are faux marbre, a glorious example of a craft that we had and still have.

Doubilet: *In the Portland Building, it's not a matter of the moral dilemma. The problem is, it's not an application of a glorious craft. Cutting through gypboard walls and painting the returns in contrasting plain, flat colors merely intensifies the experience of the gypboard.*

Graves: Not for me.

The violence of public reaction

Morton: *There seems to have been violent reaction against this building, whereas if it had been a dull, ordinary building people would not have objected. What were the forces at work here?*

Graves: Time and place are two factors. It was designed two-and-a-half years ago. Today, people are more used to this type of approach, and the reaction might be different. And it was designed for Portland, which is a kind of hotbed of Modernism. I think the Portlanders felt like guinea pigs, and asked themselves: Why shouldn't this sort of thing happen in New York instead, where the media helped create it? Just the fact that an international competition was removing an opportunity from the local architectural community was a threat to local practices, and then the aesthetics was a further blow to the type of architecture preferred there—a Modern, commercial sort, but very good of its type. My building looked like it came from Mars, to them.

Fisher: *What about the reaction of the people in the street? Apparently, some likened the building to Swiss cheese, some to pet carriers used in airplanes, but they didn't read the more sophisticated architectural symbolism.*

Graves: I love the idea that people can identify with this building in a variety of ways, more than with a steel and glass box that can be called gray, or vertical, or black. But architecture must communicate not just on a populist level, but on an educated level as well.

Murphy: *Were people reacting against the colors you used?*

Graves: Yes, and I find that extraordinary, given the basis of color already existing in Portland itself. Furthermore, you have to work very hard to find or make bland-looking materials.

Morton: *Do you think people were reacting to the scale of the façades?*

Graves: That's part of it, yes. The central figure, which tends to be read as a column, is the result of my compositional decision to let the edges of the building go somewhat "sleepy" in order to have the 150-foot cube appear slimmer. I had wanted that central figure to exist on the fine line between wall and column, but perhaps I was kidding myself. Because it is a terra cotta color, it advances somewhat beyond the surface and is read as a column—a giant column, too large to be identified with, according to historian Rosemarie Bletter. On the other hand, if you could identify it as part of a larger urban order, a collective order, that would work.

Symbolism

Doubilet: *Can you elaborate upon the symbolism you intended in your building?*

Graves: I'm quite curious about the differences between a tall building and a horizontal one. I, personally, would prefer to work in the Uffizzi, related directly to the ground, than in the Portland Building. I am interested in the architectural *marche*, or promenade through the building—the way one space gives over to the next and reveals itself by virtue of its hierarchical relationships. In the case of the Portland building, the *marche* is expressed vertically: The two massive "pilasters" express the idea of the structure of the building and the idea of the movement in the building.

Morton: *But the marche is an interior concept, and you're expressing it on the exterior of the building. The person inside loses the idea.*

Graves: Once you get into the elevator you lose it. It's a symbolic relationship, like the garden painted on the wall surface of the Pompeian house that is actually cheek by jowl with another house.

Fisher: *You emphasize the procession through the building, and yet when you're there, the triumphal two-story entrance to the parking garage reads as the primary entrance while the front entrance, located within the arcade, recedes in importance. Are you commenting on the use of cars today?*

Graves: No. Part of the reason for the high parking entrance was pragmatic, as I have explained. But I also assume that once the sculpture is placed over the head of the front door, it will gain enormously in symbolic intent.

Murphy: *What reference were you making in the reflective glass?*

Graves: I took the reflective glass directly from the Modern architecture of some of the nearby buildings, but I did not make a window wall out of it. I made a giant window that might reflect the urban context, and relative to which one might see oneself. The attic of the building, by the way, behind the lintels, was to contain rentable offices, but the city misjudged its needs and now occupies all but one floor.

Murphy: *The green terra cotta base of the building may reflect the park side of the site, but how does it relate to the transit mall?*

Graves: I maintained one vocabulary partly out of a sense of modern unity and partly because I couldn't change the detailing due to cost. So the urban presence dominates in the form of the base—the retail loggia—and the landscape presence in the color.

Doubilet: *The Portland Building, when first designed, was an acropolis supporting a group of small buildings on its head. What was the symbolic implication of eliminating these?*

Graves: It's interesting. I thought it quite reasonable to describe with those buildings the paradigm of the city organization. They also allowed a rather decent view of Mount Hood and the Willamette River, and they provided an extension of the second-floor Visual Arts Gallery. But it didn't seem reasonable to the majority of the local Fellows of the AIA who were opposed to the building. Why wasn't it appropriate to them? So now, in fact, the new symbol becomes the *removal* of that group of buildings. It became another *cause célèbre*. But in a curious way, because of the conversation created by the removal, I have a feeling that I won't lose that kind of battle again.

Data

Project: *The Portland Building, Portland, Or.*

Architects: *Michael Graves Architect; Lisa Lee, project manager.*

Associated architects: *Emery Roth & Sons, New York City and Edward C. Wundram, Portland.*

Client: *City of Portland Public Buildings Corporation; Earl Bradfish, Director of General Services.*

Site: *200-ft square block in Downtown Portland adjacent to city hall and county courthouse, across from city park.*

Program: *362,000-sq-ft 15-story block to house city services, with publicly accessible functions, including auditorium, restaurant, meeting rooms, and gallery space located in the first two floors.*

Structure and materials: *concrete cast-in-place structure with 30' x 30' structural bays around central core; gypsum board, paint, terrazzo floors (public areas).*

Cost: *\$22.4 million, approximately \$51 per sq ft.*

Consultants: *DeSimone & Chaplin, Consulting Engineers (structural); Thomas A. Polise, Consulting Engineer and Cosentini Associates (mechanical/electrical).*

Interior designers: *Zimmer Gunsul Frasca Partnership, municipal offices; Michael Graves Architect, ground- and first-floor public spaces.*

General contractor: *Pavarini Construction Co. and Hoffman Construction Co. (joint venture).*

Construction manager: *Morse/Diesel, Inc.*



INDUSTRIAL ELECTRIC SUPPLY

PLACE

Subtle shifts

Abstract references, axial rotation, and unusual materials mark a New York bank office.



In the game of architectural allusion, there are two basic playing styles: literal and abstract. Of course, there are endless variations and vast gray areas in between, but even these ultimately reflect one choice or the other. How an architect plays the game (and there are few who haven't these days) depends on stylistic affinities, talent, and the demands of the client and program.

In the case of the New York offices of Banque Worms, Rivkin/Weisman Architects play the game, at the client's insistence, in the abstract style. It is hardly surprising that a prestigious foreign bank—one of many that have opened branch offices in New York recently—would insist on a somewhat conservative image, “without capitals and porches,” but *with* a demonstrable architectural sophistication. So Rivkin/Weisman, who already have several such projects to their credit, sought a design solution that was timely rather than temporal, or, in the words of project designer Stephen Lesser, “a modern architecture that digests richness, on a level that really works.”

And work it must. The 7400-square-foot office, which houses commercial, or trading (as opposed to retail) bank operations, must accommodate a substantial amount of electronic equipment—computers, extensive telephone lines, Telex, etc.—to serve the trading and foreign exchange functions, as well as providing a clear, fairly open organizational plan. The only given in the plan was the location of the general manager's office, at the southeast corner of the floor. But it did, to a certain extent, generate the four-cornered “anchor” placement of the supervisors' offices—two on each side of the floor, with related work areas between each pair (see

plan, p. 118). Thus, supervisors are afforded both privacy and visual access to their departments. At each of these private offices, rank as well as entrance is marked by a pair of red columns.

The perimeter offices are connected along the circulation corridors by screens of narrow square columns, whose bay rhythm mimics that of the window walls. This *marche* of “pavilions,” screened by colonnades (for which the architects cite Jefferson's University of Virginia scheme as a precedent), create an open “courtyard” in which the architects chose to place a series of objects—the rectangular small meeting room, the round conference room, and the Greek-cross-shaped computer/Telex room. These objects, set on a slightly angled axis that defers to the view from the reception area northward, shift subtly but powerfully against their frame—a parallel set of piers and beams. The piers, which are rounded to distinguish them from the square structural piers, conceal mechanical and electrical necessities; their massiveness sets up a scale dialogue with the slender red columns and the screens. The problem of the circle and square floating in the plan reminded the architects of the scheme of the Pisa Cathedral, where the church, tower, and baptistry are separate objects in a field, the disparate forms unified by an arcaded surface treatment. In the case of Banque Worms, the unifying element is ground-face concrete block—about as un-corporate a material as you can find, but one that imparts a bunker-like aura of impenetrability to the volumes (especially the conference room), which ultimately seems perfectly appropriate.

The processional sequence through the space is gratifyingly logical, starting at the paired columns flanking the entrance doors, proceeding along the diagonal, ceramic tile reception path (which hints at the major axial shift to come), around the corner and along the skewed axis of the “object” rooms, down to the other set of columns that end the sequence just beyond the computer room. The referential elements in the scheme



A double pair of red columns flanks the entrance doors of the Banque Worms offices (facing page), and leads visitors along a ceramic tile "carpet" to the reception desk (this page, left). The screen of columns and bays defines perimeter offices, while the gentle curve of concrete block along the wall at left contains the conference room (above), which is lined with an acoustical version of the same block. A cruciform cove in the room's ceiling acts as a directional device within the "referenceless" circular room, reinforcing the shifted axis of the conference and computer rooms (see plan and axonometric, overleaf).

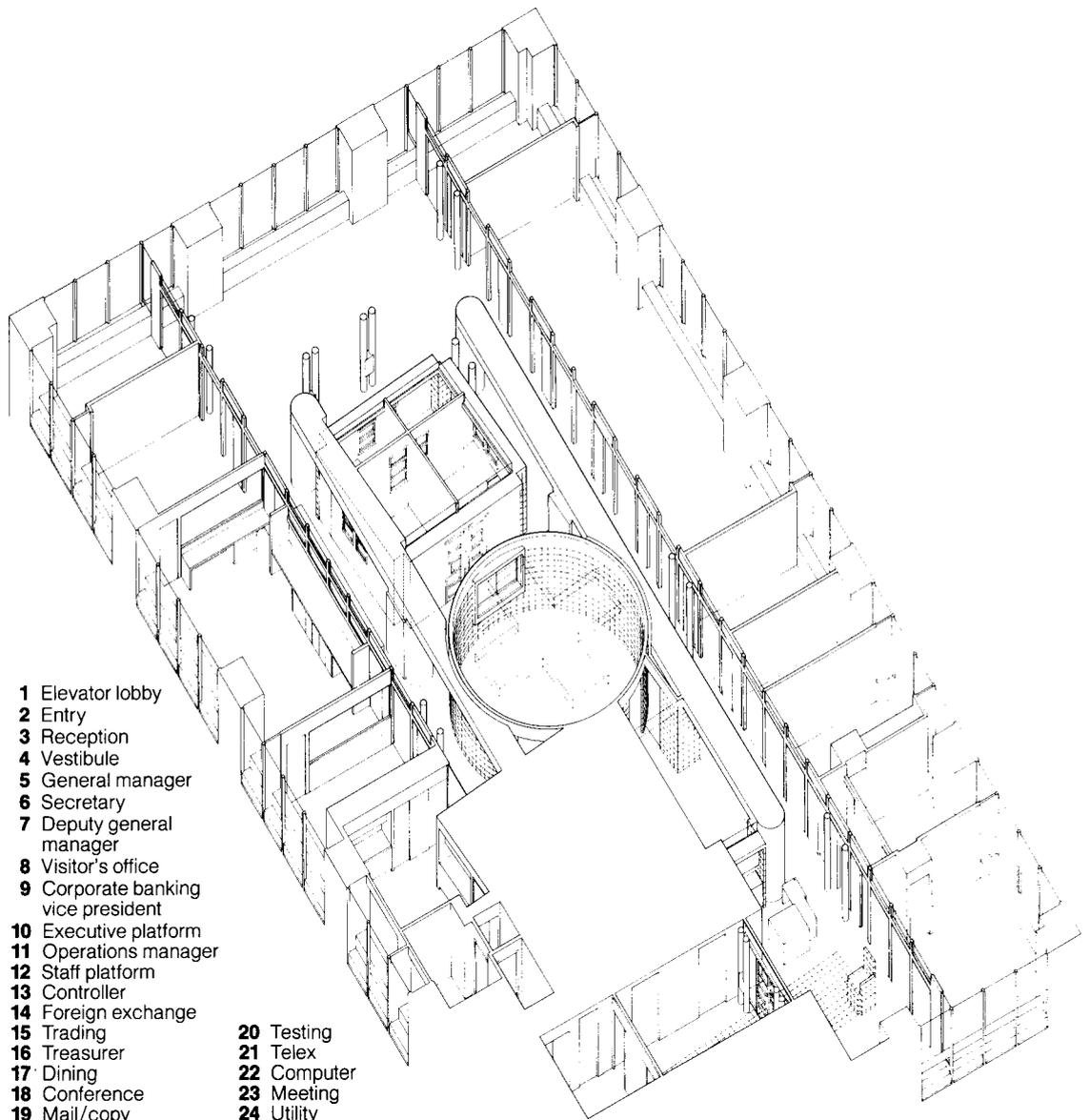
Banque Worms, New York

The axonometric and plan illustrate the disposition of offices along the perimeter walls of the floor, screened by "colonnades" of open and closed bays. In the resulting "courtyards," the small meeting room (abutting the service core and fire stair), the circular conference room, and the Greek-cross-shaped computer/Telex room, are all set on a rotated axis, shifting against their "frame" of piers and beams.

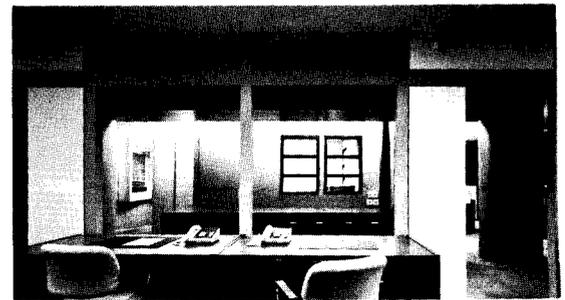
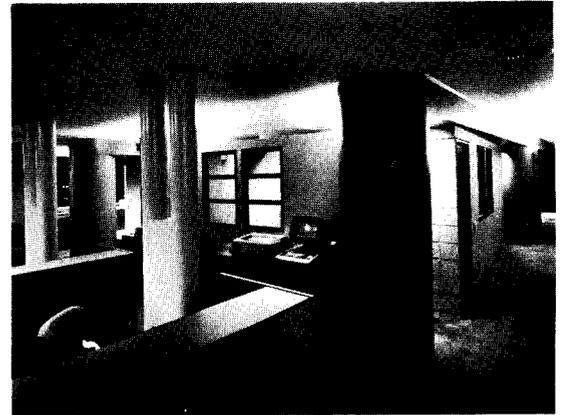
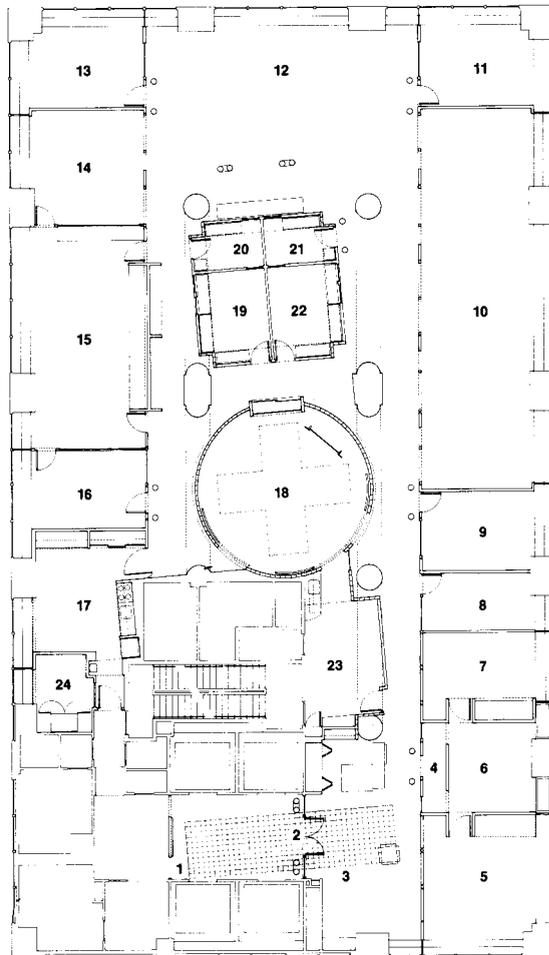
The processional sequence of the space begins at the elevator lobby (which was shortened to make it symmetrical about the four elevator cabs), and moves along a "carpet" of ceramic tile, through the entrance doors and columns, along a diagonal path that warns of the axial rotation that is revealed when visitors round the corner and proceed along the corridor; the axis ends at the double pair of columns just beyond the computer room. The tiled pedestal at the end of the reception area tile "carpet" was never built; neither were the French doors to the computer room (they were replaced by a window).

Red columns flank the entry to each of the supervisory offices; at the door to the computer room (facing page, bottom) they mark the location of a stair that will eventually be opened when the office expands to the floor below (now occupied by a subtenant).

The double pairs of columns in front of the computer room (middle right) are painted a light beige-pink and terminate the shifted axis on which the "object" rooms are placed within the plan. A view from the executive platform (this page, bottom right) shows the open/closed bay structure of the office-area "colonnade" screens and affords a view of the computer room and conference room, in which a display-case window, placed on the rotated axis, affords a sight line through the computer room windows to the view northward. The sailing ship model refers to the bank's extensive maritime activities.



- 1 Elevator lobby
- 2 Entry
- 3 Reception
- 4 Vestibule
- 5 General manager
- 6 Secretary
- 7 Deputy general manager
- 8 Visitor's office
- 9 Corporate banking vice president
- 10 Executive platform
- 11 Operations manager
- 12 Staff platform
- 13 Controller
- 14 Foreign exchange
- 15 Trading
- 16 Treasurer
- 17 Dining
- 18 Conference
- 19 Mail/copy
- 20 Testing
- 21 Telex
- 22 Computer
- 23 Meeting
- 24 Utility





Provocative juxtapositions of geometry and materials occur in places such as the conference room (left), where concrete block circular walls contrast with the gypsum-board "colonnade" beyond, or the subtle but powerful shift of the conference and computer-room axis against its frame of piers and beams (below).

Data

Project: Banque Worms, New York.

Architect: Rivkin/Weisman P.C. Architects, New York. Design team: William G. Rivkin, Hugh S. Weisman, Stephen A. Lesser, Philippe Dordai, Kathy Kling, Jonathan Stark, Lisa Reindorf.

Program: a 7400-sq-ft branch office for a bank, on the 29th floor of a midtown office building, to include reception; executive offices; banking, credit, operations, foreign exchange, and accounting work areas; trading room; conference and dining rooms; computer and support rooms; and planned expansion to the floor below.

Mechanical system: supplementary HVAC for extra equipment loads.

Major materials: ground-face concrete block; gypsum board; carpet; ceramic tile, paint (see Building materials, p. 160).

Consultants: Laurie Rolfe, interiors; CHA Design, Inc., lighting.

Cost: withheld at client's request.

General contractor: NICO Construction.

Photography: Peter Aaron, © ESTO.

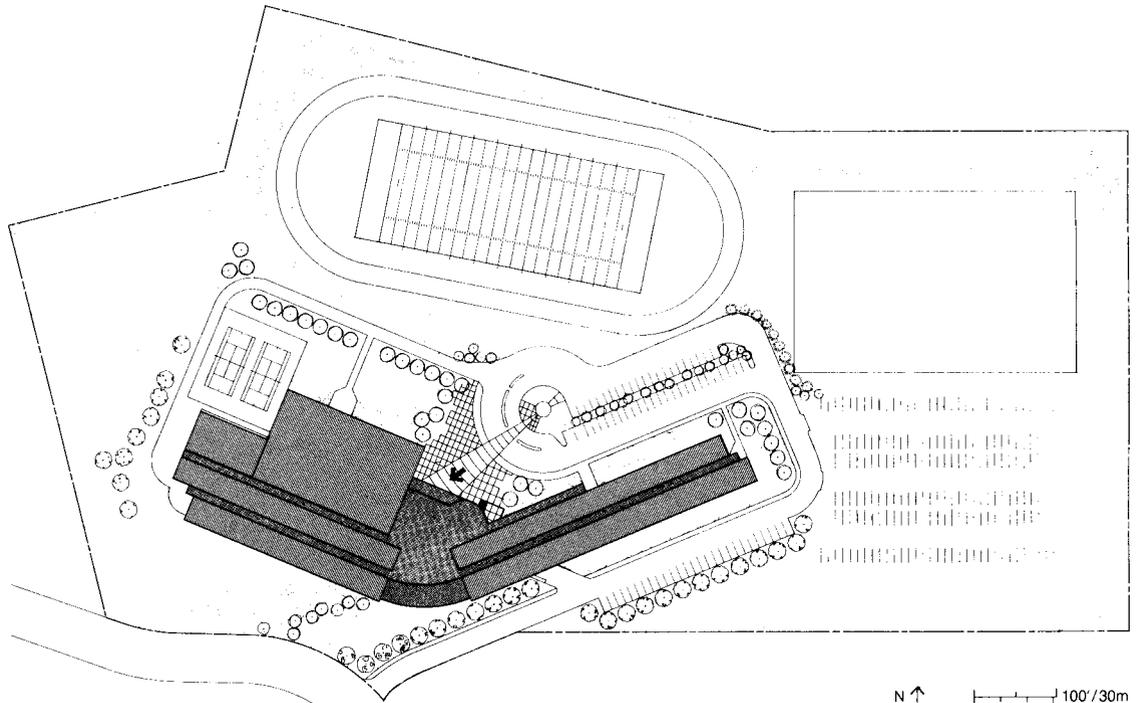
never get more literal than this, and are deployed with a rather elegant economy that is one of the project's great strengths. The subtle color scheme of neutrals (with accents); the use of unorthodox materials; the sophisticated geometry of the plan; and the graceful disposition of functional spaces produce a disciplined, but not predictable, interior. Stephen Lesser comments, "We do better *not* thinking about currency." Obviously, they have thought about it. But the architects have clearly decided to let the bankers worry about currency, preferring instead just to digest its richness. [Pilar Viladas]



Taking sun

A new junior high school in Oregon derives its form and spirit from its environment and its solar implications.

Entry to the school is on the north side at the knuckle between the two wings (opposite page, top). The south side is atop a rise, with an exit stair at the west end (opposite page, bottom two photos).



No little red schoolhouse would do in Pendleton. School commissions are rare enough in these economic times, but to have one and carry it out with flair is a doubly happy event. Still, that is what Portland architects Martin/Soderstrom/Matteson accomplished in the Pendleton Junior High School, and more. It's yellow.

In consolidating two older schools, the Pendleton School District sought a 20-acre site, something impossible to assemble near the center of town. The chosen site, therefore, is in a mostly rural area south of the town, on a hill that faces south. This area in the northeast part of Oregon rolls very dramatically, with views in all directions, and weather that can range from windy and cold in winter (-20 F) to hot in the summer (105 F). While some of the Midwestern states can be said to roll, the rolling land forms in this sector give a new meaning to the term.

Even though it can get quite cold, winter weather in Pendleton is usually predictably clear, with a minimum of precipitation. For this reason, solar heating was an early and obvious option. The southern exposure of the site, along with its slope, makes it an ideal location for a building with early programmatic concerns about energy. Solar access will never be a problem, since the site is high above a nearby development, and adjacent areas, if not used to grow wheat, will no doubt continue to be residential anyway.

Although the land looks softly mounded, the forms are the result of windblown soil deposits over solid rock. In determining a for-

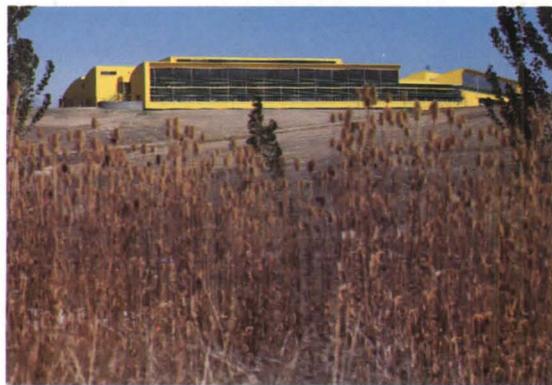
mal solution for the building, therefore, three factors were considered: orientation for solar conditions, the slope of the site, and the avoidance of excessive rock excavation. Because of its south face, the site orientation was clear, and the school was designed to run along the slope with the front façade bermed on the north to expose a minimum amount of wall to the cold winds. Garnering the fullest possible dimension to face the sun, the entire back façade faces south in some degree. End walls, facing northeast and northwest, are kept free of windows.

In a clear gesture to the worst of the wind conditions, the higher masses of the building, containing mechanical functions primarily, are rounded in section. From across the fields, the effect is that of bright yellow sails floating in a sea of either bright green new wheat, or the rich golden brown of a mature or harvested crop. In general, the forms are simple with straightforward, almost industrial, detailing. It is the south wall that does most of the work, and it is certainly the most articulated, although not overworked.

Trimmed in a bright green, the south wall comprises operable vision windows, spidery catwalks suspended from the edge of the curving roof, and 16,400 sq ft of air-based solar collector panels. A mechanical duct



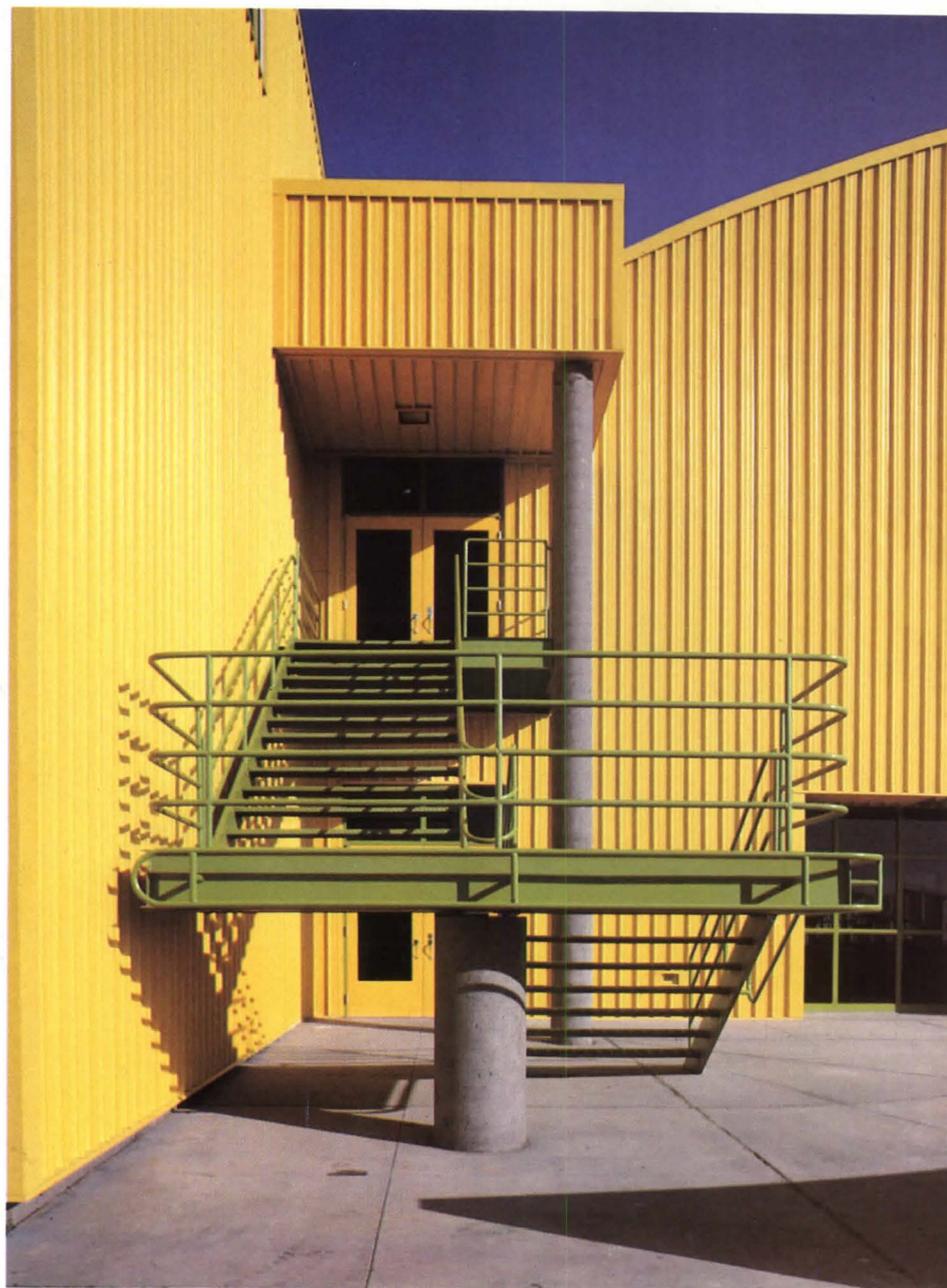
Matt Johnson



Robert M. Reynolds

chase along the grade level forms a base for the composition. The catwalks serve a dual function, allowing routine maintenance should the solar collector array need it, and simultaneously shading the vision glass from the sun. Because the collectors do not contain liquid as a heat exchange medium, it is expected that little maintenance will be called for, however.

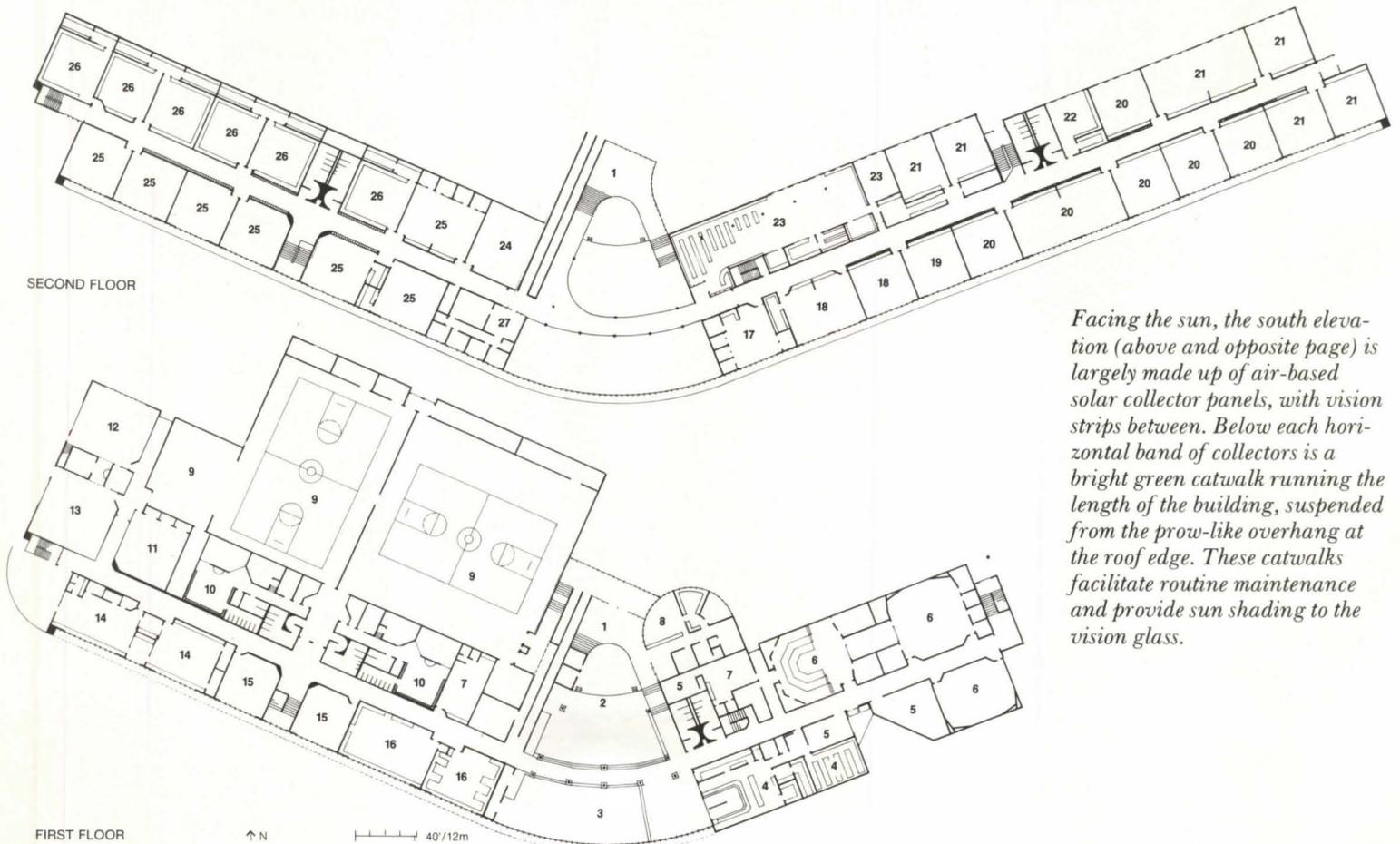
Depending on the heating requirement at a given time, the heat from the collectors may be circulated directly to occupied areas and, if necessary, brought up to the desired temperature, or it can be channeled into the two large rock-bed storage bins under the building. Electric resistance duct coils and tank heaters act as auxiliary systems when heat is not available from the collectors or storage. Electricity was chosen so that when photovoltaic sources become viable as generators of electricity, that option will be available. As of the first of December the building had been working so well on the collectors that when the first complaints about chill came from the occupants, it was then discovered that some of the auxiliary units had not even been wired up in the construction process.



Robert M. Reynolds

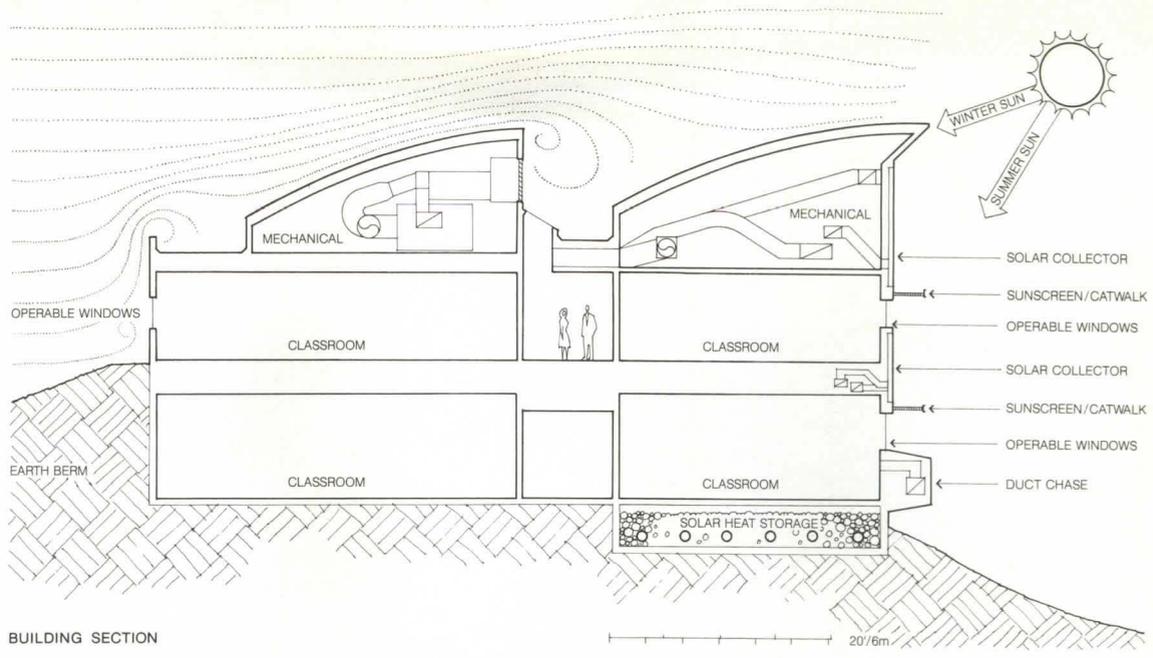
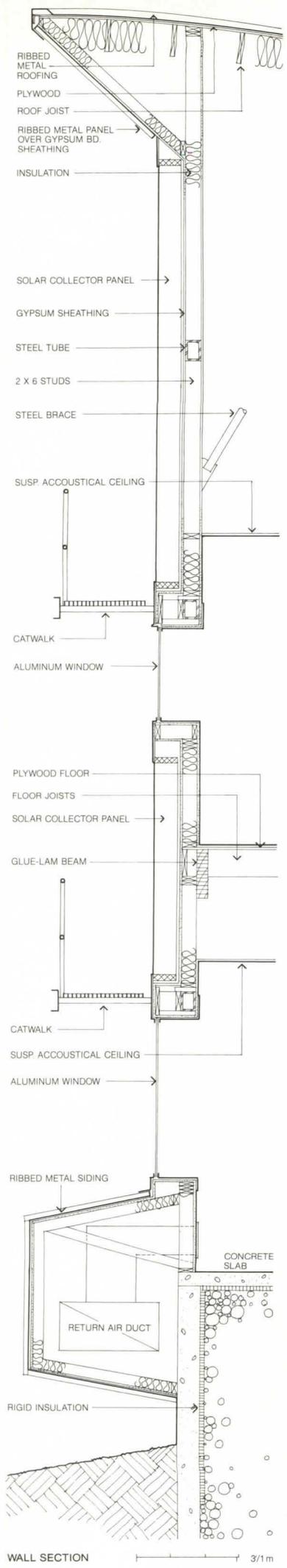


Matt Johnson

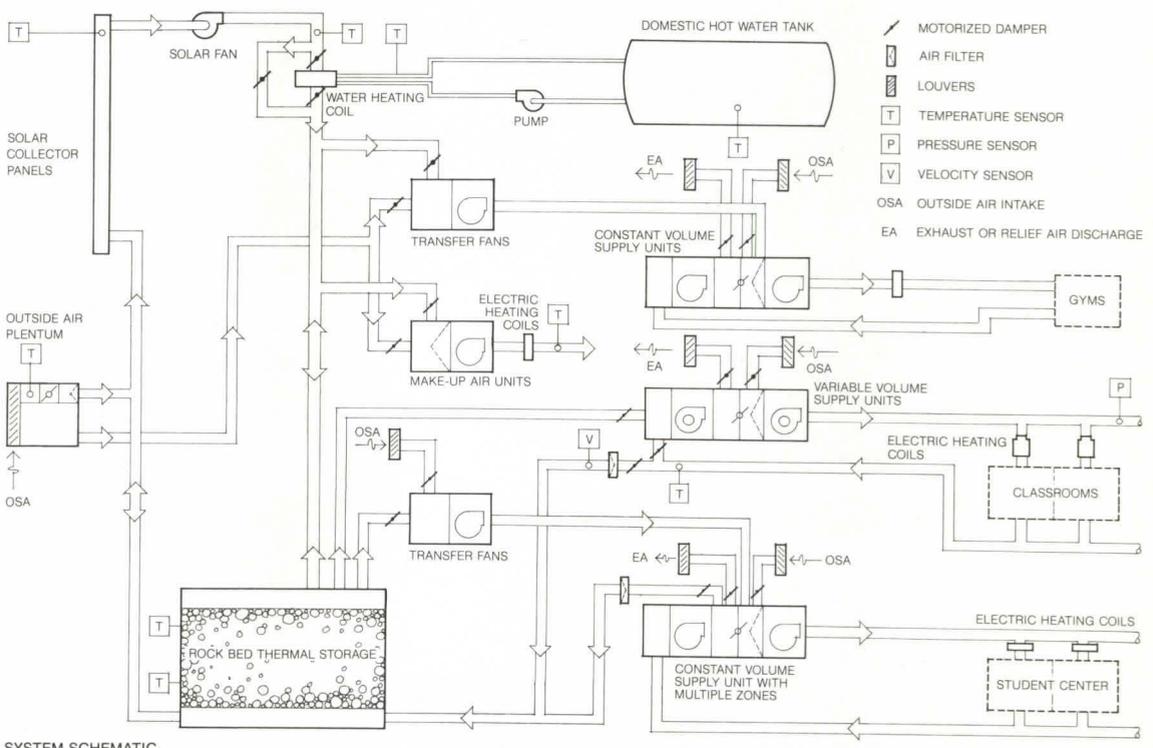


Facing the sun, the south elevation (above and opposite page) is largely made up of air-based solar collector panels, with vision strips between. Below each horizontal band of collectors is a bright green catwalk running the length of the building, suspended from the prow-like overhang at the roof edge. These catwalks facilitate routine maintenance and provide sun shading to the vision glass.

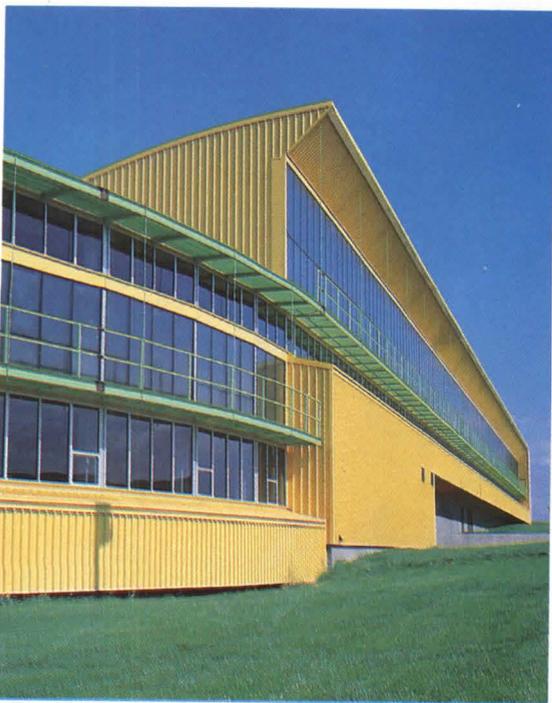
- | | |
|---------------------------------------|--------------------------|
| 1 Lobby | 15 Health |
| 2 Stage platform | 16 Home economics |
| 3 Student center/cafeteria/auditorium | 17 Special education |
| 4 Food preparation | 18 Reading |
| 5 Storage/Maintenance | 19 Foreign language |
| 6 Music | 20 Language arts |
| 7 Teachers' lounge | 21 Social studies |
| 8 Administration | 22 Teachers' preparation |
| 9 Gymnasium | 23 Library |
| 10 Locker room | 24 Typing |
| 11 Agriculture/drafting | 25 Math |
| 12 Metal shop | 26 Science |
| 13 Wood crafts | 27 Guidance |
| 14 Art | |



BUILDING SECTION



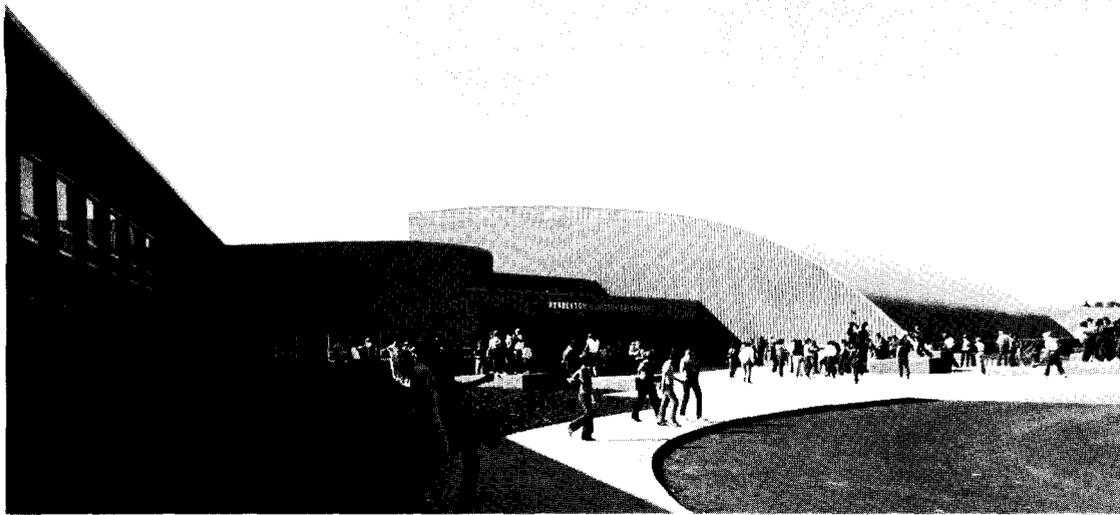
SYSTEM SCHEMATIC



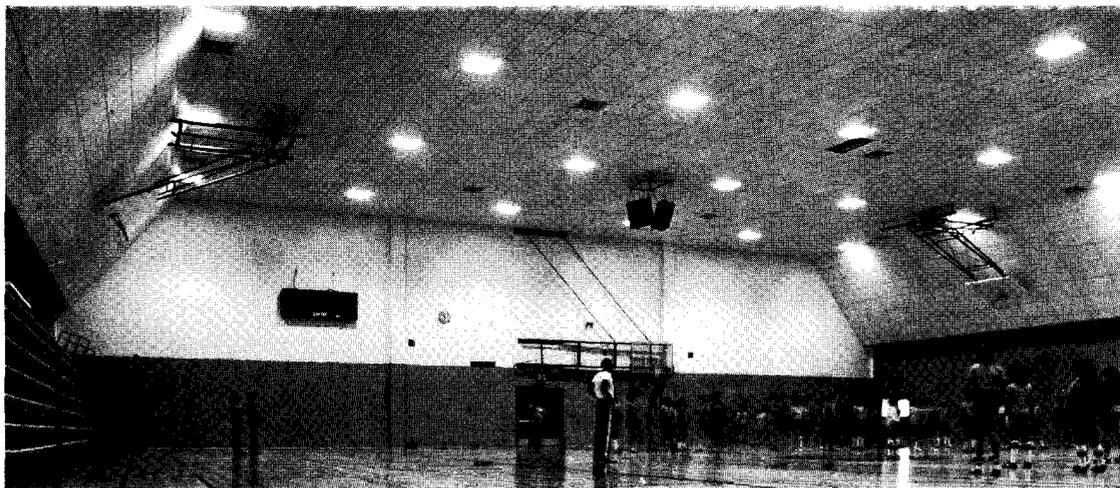
Matt Johnson

In plan, the building is a boomerang shape with basically double-loaded corridors on both floors. Just inside the main entrance is a large student center space which serves as a gathering place, a performing area, and a cafeteria. The plan configuration satisfies the school district's requirements for simplified supervision of the students and for an easily understandable circulation system. The two-story student center provides an orientation space around which activity flows, and a bridge at the second level allows overviews of the area, the entry, and the administration suite. Skylights bring natural light into the corridors on the upper level.

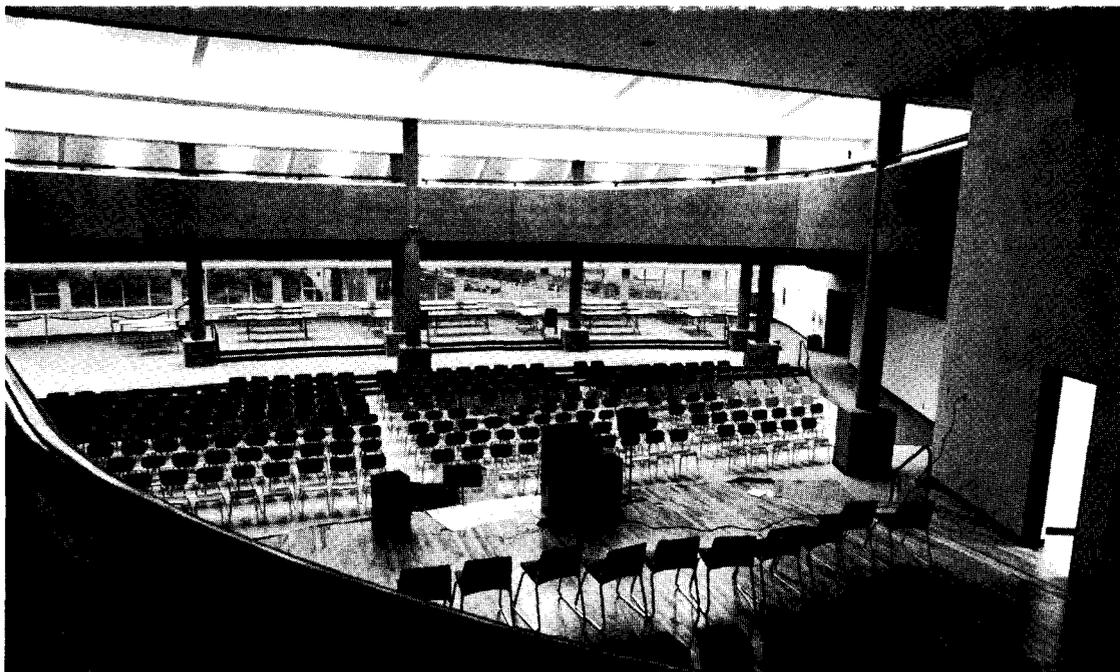
In contrast to the bold exterior colors, the interiors are painted in very soft tones, in some areas coming close to making the feeling too cold. But in general the spaces are



Robert M. Reynolds



Matt Johnson



Matt Johnson

Data

Project: Pendleton Junior High School, Pendleton, Or.

Architect: Martin/Soderstrom/Matteson Architects PC, Portland, Or. David Soderstrom, partner in charge of design; German Valdez, project manager; Paul Franks, project architect; Greg Donald, Cary Guenther, Doug Walton, and Ted Lundin, design team.

Client: Pendleton School District No. 16R.

Site: 20 acres of former wheat field in a rural area.

Program: core facilities for 1000 students, with classrooms for 850, including 2 gyms and outdoor sports facilities.

Structural system: glued laminated floor and roof beams supported by steel columns on concrete spread footings.

Mechanical system: active air-based solar collectors with rock-bed storage for space heating, water for domestic hot water; electric resistance duct coils and tank heaters are auxiliary.

Major materials: ribbed metal siding and roofing, exterior; gypsum board walls, interior (see *Building materials*, p. 160).

Consultants: Storch Corporation Engineers, structural; Carson, Bekooy, Gulick & Associates, mechanical; Dr. Jan Kreider, solar; Halliday & Associates, food service; Cliff Sroka Engineering, acoustical.

General contractor: The Timber Company, Inc.

Cost: \$8,600,000, \$55.70 per sq ft.

Just inside the front entry (top) is the student center/cafeteria (bottom), which is a mixed-use space for assembly, dining, performances, and circulation. A second-level bridge cuts across the space completing the corridor between the two wings of the building. The ceilings in the gymnasium (center) were not allowed to take the configuration of the building because of sprinkler system requirements.

pleasant and cheerful, and the subtlety of the paint combinations is appealing. The length of the corridors—over 800 feet on the upper level—is mediated by the curve in the building and by the skylighting points.

In the end, however, the building's strongest point is its formal exterior expression. Despite its stern materials and detailing, it is a happy building; it makes the observer smile. It integrates active solar components into the design with obvious ease and skill, and complements the terrain from which it seems to spring. It is, again, the result of combining a good client with talented design. [Jim Murphy]

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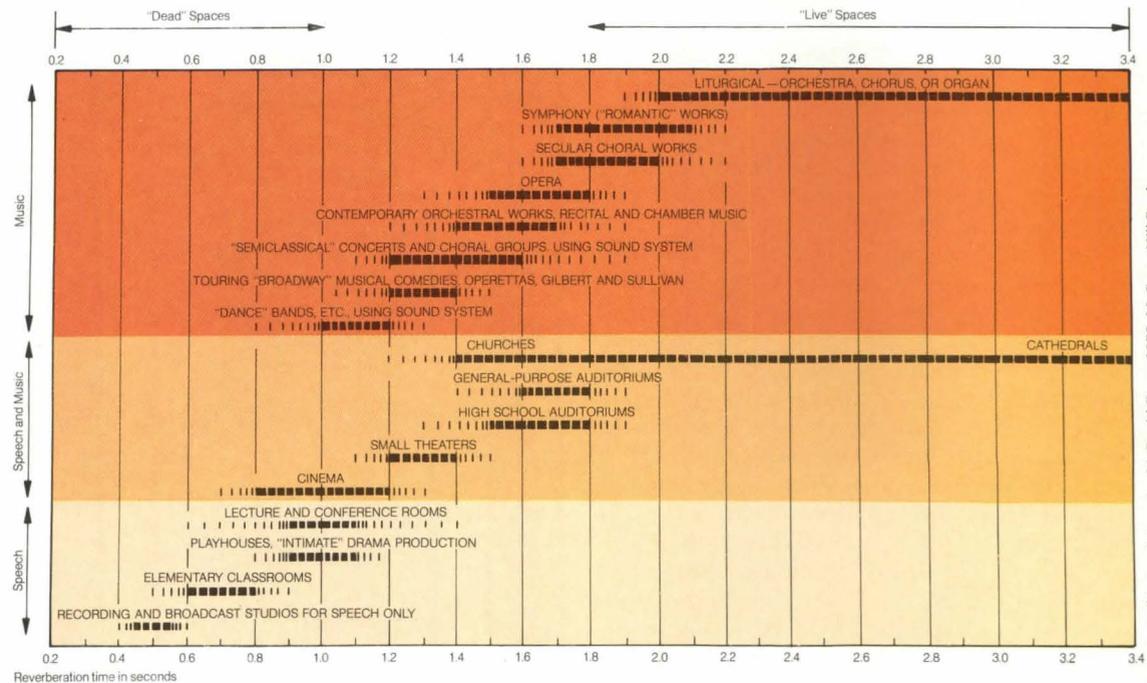
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Sound tract

Electronic acoustics has emerged, amidst great controversy, as a major development in the field. Architects should know how, when, and why to use it.

While reverberation time is no longer the sole criterion for judging a hall's acoustics, this graph conveys the conflicting reverberation requirements of various performance types often found in multipurpose halls.



Reverberation time in seconds
Note: in general, large rooms should be nearer the top of the reverberation time ranges than smaller rooms of the same type.
Courtesy of Bolt, Beranek & Newman

OPTIMUM REVERBERATION AT 500/1000 HZ FOR AUDITORIUMS AND SIMILAR FACILITIES

Concepts In Architectural Acoustics, M. David Egan, 1972, McGraw-Hill Book Company, used with permission.

Acoustics is a young science that was not formulated until the end of the 19th Century. And, like other young sciences, it has had to face an inquisition of skeptics. *New York Times* music critic, Donal Henahan recently labeled acoustical science "a brash young discipline," while cultural critic Harold Schonberg claimed that "the public has decided that the 'science' of acoustics is akin to the reading of tea leaves or chicken entrails."

Inquisitions usually follow scientific revolutions. In acoustics, the latest revolution has been in electronic systems—methods that use microphones, amplifiers, time delays, and speakers to alter the reflective and reverberant qualities of concert halls. While skeptics question the quality of electronically assisted sound, the methods have enormous architectural implications. They can correct the acoustical deficiencies of an existing hall, adapt the acoustics of multipurpose halls to the requirements of classical music, and simulate concert hall acoustics in open-air amphitheatres and pavilions.

The science of acoustics began with the analysis of sound waves by the German physicist Herman Von Helmholtz and the analysis of reverberation time by the American physi-

cist Wallace Clement Sabine. Harvard University asked Sabine in 1895 to improve the acoustical quality of the auditorium in the Fogg Art Museum—a highly reverberant room that garbled speech. During that project, Sabine developed the theory that reverberation time—the number of seconds it takes for sound energy levels in a room to diminish by 60 decibels—is directly proportional to the room's volume and inversely proportional to the area of its absorbent surfaces. For the next half century, that formula served as the major design tool of acousticians.

In 1900, Sabine served as the acoustical consultant for McKim, Mead & White's Boston Symphony Hall, making it the first and, in the opinion of some critics, still the best hall designed according to scientific principles. Sabine modeled Boston after the shoe-box-shaped halls of Europe. He relied upon statuary, niches, pilasters, and moldings to disperse sound, extensive wood paneling and

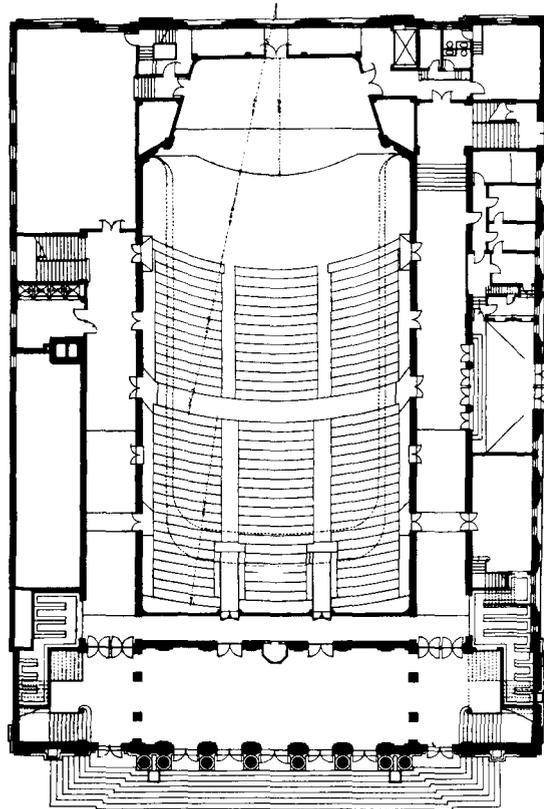
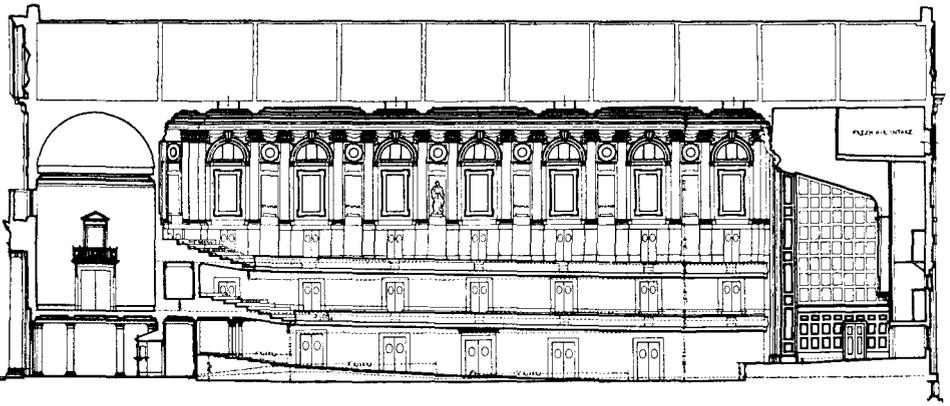
Electronic acoustics

plaster to increase the reverberation time, and a high, narrow volume to provide early reflections.

Boston's Symphony Hall ended as much as it began an era. Because of the wars and depression, few concert halls were built until the 1950s, an interval in which both acoustical science and architecture changed dramatically. Acousticians, under pressure from orchestra management to increase the seating capacity and decrease the volume of halls, had begun to accept wider, fan-shaped rooms with lower ceilings and more seats as an alternative to the classic shoe-box form. At the same time, architects, no longer comfortable using classical ornament, had begun seeking its modern equivalent in convex decoration, rounded edges, and faceted forms.

The London County Council's 1951 Royal Festival Hall, one of the first large concert halls built after the war, employed many of those features. Orchestral performances, though, sounded muddy, distant, and lifeless. Two physical solutions to the hall's acoustical problems presented themselves: raising the roof 12 feet or decreasing the number of seats by 1000. Since both alternatives entailed too much cost and disruption, an acoustical consultant, P.H. Parkin, installed one of the first electronic acoustical systems in 1964. His "Assisted Resonance" system, adjusted to pick up and extend the lower musical frequencies, consisted of several audio channels, with a microphone and speaker for each channel connected by a stabilized audio amplifier. Neither critics nor musicians were told of the trial installation. After both groups began commenting favorably about the hall's liveness due to the longer reverberation of bass notes, a more complete 168-channel system was installed in 1969 covering the low- and mid-frequency musical range.

While Parkin improved the Royal Festival Hall's acoustics at a fraction of the cost of physically altering the space, the idea of electronic acoustics encountered considerable resistance within the musical community. That resistance stemmed, in part, from a simple distrust of technology. Much of the musical community, though, had grounds for suspicion, given the frequently uneven or distorted sound of public address and amplification systems, which were often poorly adjusted or improperly sized for concert halls, and which put the musician at the mercy of the person at the sound control board. Assisted Resonance, apart from its equipment, had little in common with conventional sound systems for, among other things, it did not amplify direct sound nor did it have a sound control board. Few critics at the time recognized those distinctions, though, as they began their inquisition.



GROUND FLOOR PLAN

Boston's Symphony Hall, like some of the best European halls, has a narrow width, a large volume, ornamented walls, and a stage integral with the main room.

Monograph of the Work of McKim, Mead & White, 1879-1913, 1981, Architectural Book Publishing Company, used with permission.

Since the introduction of electronic acoustics in the 1960s, advances in other fields have made the concept even more compelling. Psycho-acoustic research, which studies our subjective response to sound, has shown that electronic reflections can improve people's perception of acoustically deficient halls. In research recently conducted by the German physicist Manfred Schroeder, the acoustical preferences of people asked to rate various concert halls changed consistently for the better when Schroeder generated sound reflections electronically. The source of those reflections went unnoticed.

The social and economic position of orchestras has also changed since the 1960s. Facing increasing costs and, in some cases, declining attendance, orchestras have extended their seasons, broadened their repertoire, and played more open-air concerts in an effort to change classical music's inaccessible image. The St. Louis Symphony, through research conducted by acoustician Christopher Jaffe and Richard Larry Medlin's Environments Design Group, became one of the first organizations to use electronic acoustics as the basis for a series of outdoor concerts in various parks and plazas around the city. The

research showed that adequate concert hall acoustics could be achieved electronically even in the local arena or a local cavern. While it presented an extreme application of electronic acoustics, the research and subsequent concerts by the St. Louis Symphony proved the effectiveness of the new systems in improving acoustics where architectural boundaries either don't exist or are not ideal, as in open-air sites, multipurpose halls, or rehabilitated theaters.

Since the 1960s, stereo systems have become as common as televisions in the home. Because of their prevalence, stereos have made us more accustomed to the transparent sound of recorded music, where multitrack taping makes the parts of a composition much more distinct than the blended sound of a live performance. This has led to a paradoxical situation: some people prefer electronic acoustics in a concert hall because of its potentially greater fidelity to recorded music. As critic Donal Henahan said with sarcasm, "If audiences that have been raised on loudspeaker sound really do prefer to distance themselves from music . . . acoustical science is serving its own century very well indeed."

Electronic acoustics

How does electronic acoustics work? Two systems currently exist: Electronic Reflected Energy Systems (ERES) developed by Christopher Jaffe in Norwalk, Ct, and Assisted Resonance, developed by Peter Parkin and manufactured by the Acoustical Investigation and Research Organization Ltd. in Hertfordshire, England. The two systems complement each other, with each addressing different acoustical problems. Many halls built since World War II share the deficiencies of the Royal Festival Hall. They lack either early lateral reflections, which are the first reflections to reach the listener 20 milliseconds after the direct sound, or sufficient reverberation time, especially in the lower bass frequencies. ERES makes a hall seem narrower and more intimate by delivering early reflections sooner than they normally would arrive in a wide, fan-shaped hall. Assisted Resonance gives a hall greater volume and warmth by extending the reverberation time. One system makes the hall seem smaller and the other, larger. While that seems contradictory, the simultaneous early arrival and slow decay of sound characterize the best concert halls and make acoustics such a difficult science.

Electronic Reflected Energy Systems

ERES consists of a single microphone, usually located within the orchestra's acoustical shell about 20 feet above and just behind the conductor. That location gathers the orchestra's blended sound without favoring any one sec-

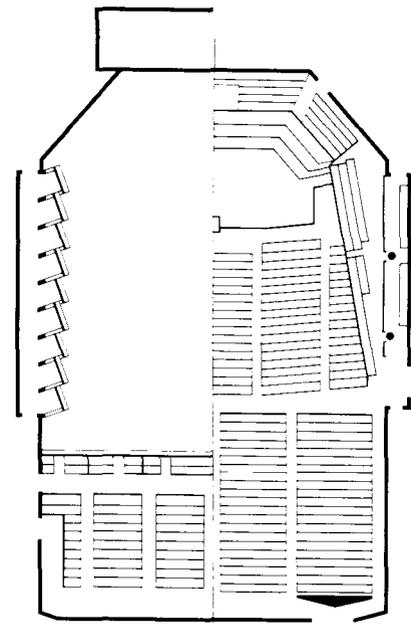
tion. The sound, converted to an electronic signal by a series of amplifiers and equalizers, is modified by digital time delay devices. ERES times the release of the signal to the speakers so that their sound reaches the listener within 20 milliseconds after the direct sound. Since the electronic signal travels much faster than sound waves through the air, the system progressively delays the signal to speakers as they are mounted further from the stage, to simulate the natural reflections in the hall.

ERES uses standard, off-the-shelf sound equipment. For example, it employs either suspended ball speakers for multidirectional sound coverage or column speakers for more focused 60-degree coverage. Since the system operates at a very low volume, the speakers are not large or obtrusive. Most installations have them integrated into the walls or ceilings and painted to match the adjacent finishes. With sound waves traveling at about one foot per millisecond, the speakers average about 30 to 40 feet apart along a wall, insuring that the first reflections reach every seat within 20 milliseconds after arrival of direct sound. If, as in many halls, reflections arrive after that limit, the music would lack presence and sound distant and muddy. The speakers in extremely wide halls can be ceiling-mounted for adequate coverage of center seats. If the horizontal dimension between speakers is crucial to effect the proper sound delay, not so their vertical dimension. Because of the ear's location at the side of the head, we can easily locate the horizontal location and movement of sound, but we have difficulty pinpointing the height of a sound's source when less than 45 degrees above horizontal.

In addition to the first reflections of the middle and high frequencies, ERES picks up the lower frequency bass notes and delivers them between 100 and 200 milliseconds after the direct sound, giving the music greater warmth. Strong early bass reflections become crucial, not only for the proper interpretation of, for example, the 19th-Century romantic repertoire, but for masking some of the natural reflections within a hall.

Assisted Resonance

Assisted Resonance operates in a much different fashion from ERES. Rather than hasten early reflections, it lengthens a hall's reverberation time. Traditionally, concert halls achieved the proper reverberation time because of their large volume-to-seat ratio (between 300 and 350 cubic feet per seat) and because of their hard plaster and wood surfaces. Many modern halls are plagued with short reverberation times because of financially motivated efforts to decrease their volume as a way of decreasing construction costs, and to increase their seating capacity as a way of increasing revenue. The multipurpose function of many new concert halls also requires that they accommodate the shorter reverberation time, ranging from 1 to 1.5 seconds, demanded by speech, drama, opera, and ballet. Since shortening reverberation time mechanically (using adjustable acoustical systems) can be expensive and time-



The Royal Festival Hall, with its wide sidewalls and lack of an acoustical shell, was the first hall to use electronic acoustics to compensate for its sound deficiencies.

Electronic acoustics

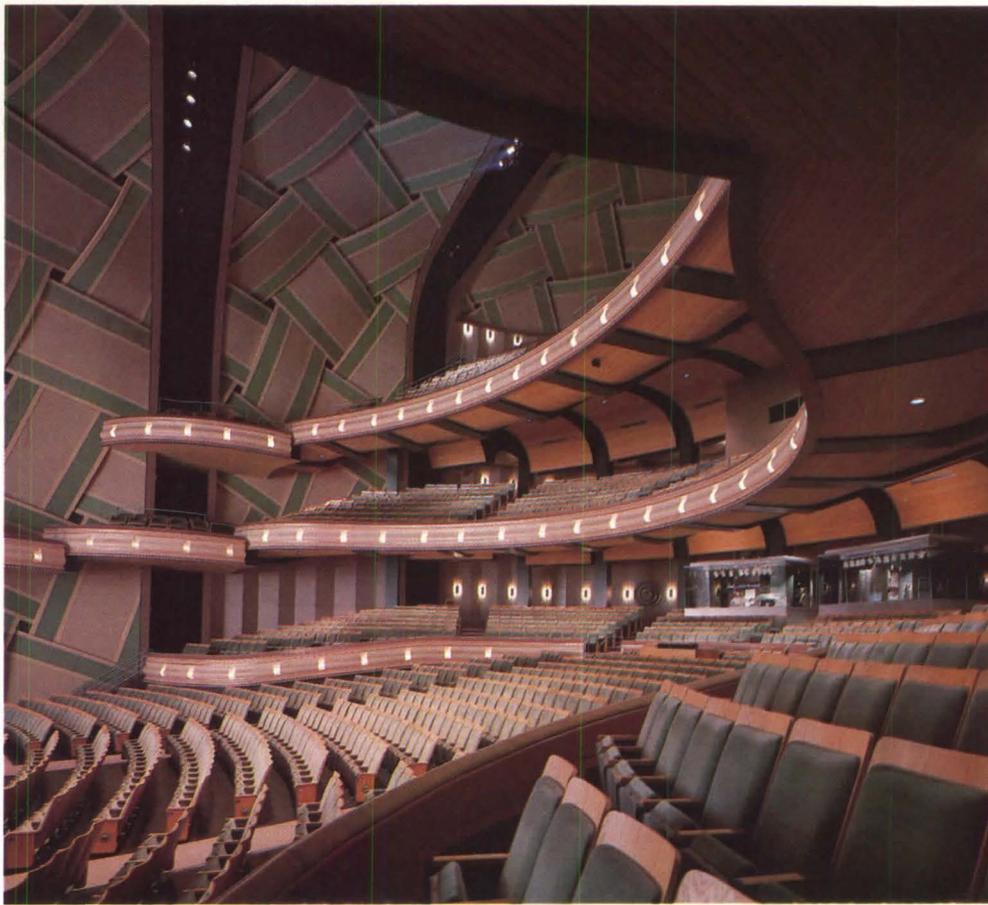
consuming, it is often more cost effective to design multipurpose halls with a short reverberation time and then increase it electronically through Assisted Resonance.

The Assisted Resonance system contains an array of electronic channels, each adjusted to operate at a particular musical frequency. A single channel consists of a microphone housed in a resonant filter to shield it from unwanted frequencies, a preamplifier, an attenuator, an amplifier, and a speaker. The principle of controlled feedback underlies the system. Each microphone and speaker is adjusted to be in phase at the desired frequency so that an increase in the amplifier's gain increases that frequency's reverberation. The system demands careful adjustment, for increasing the amplifier's gain too much leads to the howl of uncontrolled feedback. Unlike ERES, which employs a single microphone and a limited number of speakers, Assisted Resonance usually contains between 72 and 90 microphones, circuits, and speakers, depending upon the reverberant deficiencies of the hall. To be in phase, the microphones and speakers are located at peaks in a hall's acoustical pressure response, although, as in ERES, the equipment can be integrated into the ceiling or lighting catwalks and painted to match adjacent finishes.

Research has shown that extending the reverberation of the lower musical frequencies, under 250 Hertz, has the greatest impact on the warmth and fullness of sound. The middle and upper frequencies, above 250 Hertz, require less electronic assistance, given their naturally lower reverberation times due to absorption in the air. While the Royal Festival Hall had 168 channels, because its unusually short reverberation demanded the extension of middle as well as lower frequencies, most installations since the 1960s have contained under 100 channels.

Both ERES and the Assisted Resonance system require careful design. The placement of microphones and speakers with ERES can occur in the schematic design stage of a project, as soon as the preliminary plans have been determined. The final placement of the Assisted Resonance system, because of its dependence upon the peaks in a hall's acoustical pressure response, must wait until a hall is substantially complete, although approximate locations can be determined earlier in the design process to allow the system's integration with the architecture.

Computer technology has eased the adjustment and maintenance of electronic acoustics. ERES employs preset digital time delay devices, while Assisted Resonance has a microprocessor calibration unit to test the proper functioning of each channel, plus a computer terminal to control a preset library



Norman McGrath

of desired reverberation times or to program in new times. Apart from its speed and reliability, that computer technology uses electronic security to prevent tampering with the acoustics by unauthorized personnel.

Installations

While the operation of electronic acoustics is straightforward, its installation must balance the acoustical needs of a hall with the architectural constraints upon equipment location and budget constraints upon the systems themselves. The following projects strike that balance in different ways. Chris Jaffe, the acoustician in this country most noted for his work in electronic acoustics, served as the consultant for every one.

The Silva Concert Hall in the Eugene, Or, Performing Arts Center, a multipurpose auditorium designed by Hardy, Holzman, Pfeiffer Associates, has one of the most complete electronic acoustical installations in the country. With a natural reverberation time of 1.2 to 1.3 seconds, the main hall's acoustics are very dry. Jaffe installed both ERES and an Assisted Resonance system, in addition to a conventional sound system for dramatic productions. He located the ERES microphone in the acoustical shell above the conductor, while he hung the array of Assisted Resonance microphones from the lighting catwalk between the first two wall and ceiling bands, about 60 feet from the stage. The speakers sit behind the proscenium grillage, in slots in the ceiling, and under the balconies. The Assisted Resonance system, whose computer and other electronic equipment are stacked in two 6-foot-high by 2-foot-square cabinets, can extend the hall's reverberation time to 1.8 seconds for opera, 2.1 seconds for romantic

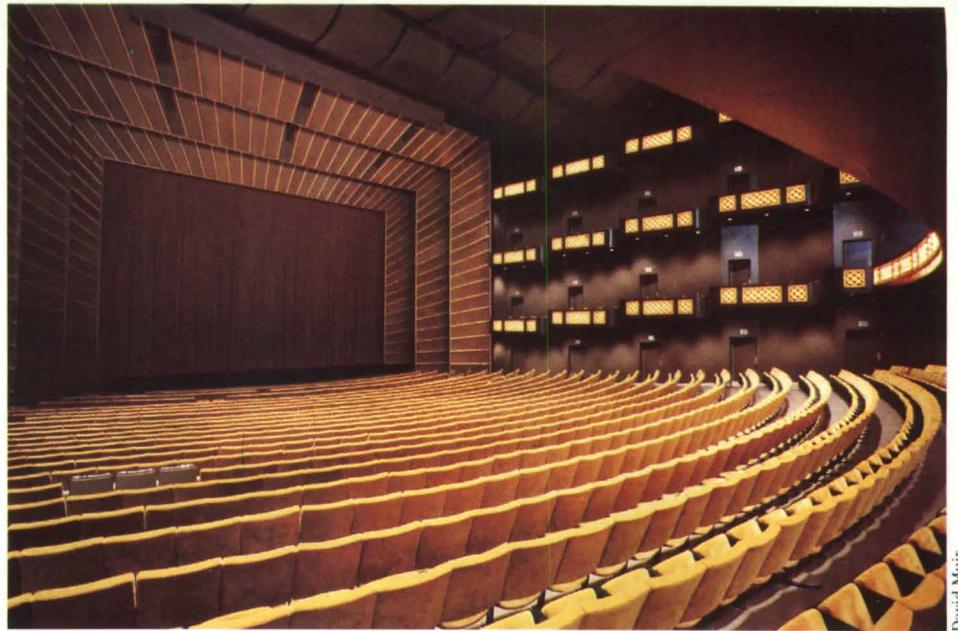
The size, shape, and treatment of the Silva Concert Hall in the Eugene Performing Arts Center show the design flexibility offered by electronic acoustics. The equipment is suspended between the basketweave arches and in the slots under the balconies.

symphonies, and 2.7 seconds for liturgical music. The computer can be switched from one acoustic to another instantaneously.

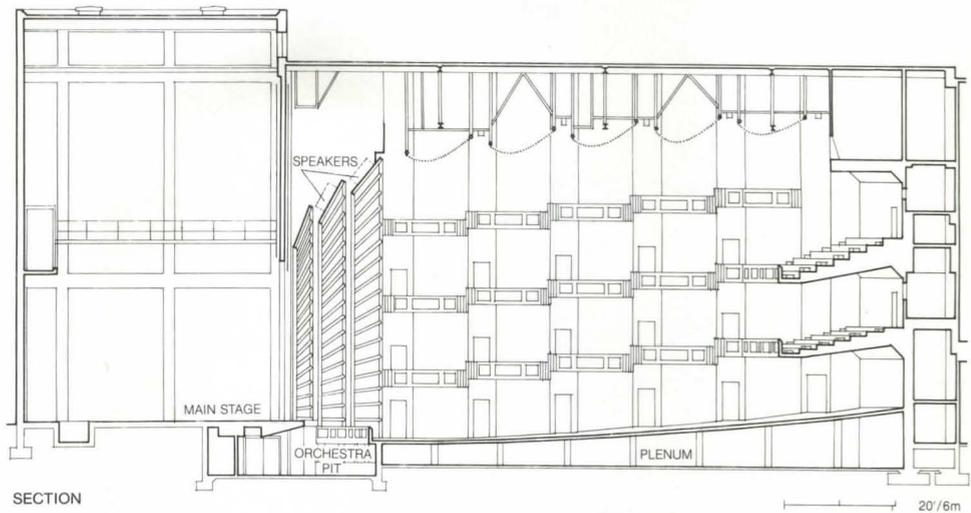
The theater in the new Peoria, Il, Civic Center, designed by Johnson/Burgee Architects with Lankton, Ziegele, Terry & Associates as associated architects, had a similar multipurpose program. Part of a three-building complex that includes an exhibition hall and sports arena, the theater has a large stagehouse, and a hall containing over 2200 seats, with two levels of balconies and stepped side boxes over the main stalls. The hall's narrow 94-foot width with faceted plaster walls provides enough early lateral reflections to obviate an ERES system. Its volume, just under 300 cubic feet per seat, also could provide adequate reverberation for concert hall acoustics, were the decision not made to increase the absorbency of the room to prevent the garbling of speech and to accommodate amplified sound. The amount of absorbent surface, especially along the curved back wall, deadens the low musical frequencies. Jaffe thus installed not a complete Assisted Resonance system, but an electronic reverberant device tuned to extend just the lower frequencies and enhance the energy of the bass notes' early reflections. The speakers are located behind the acoustically transparent proscenium and ceiling.

A much more modest installation, but one that shows the potential of electronic acoustics in bringing concert hall sound to virtually any performance space, is in the high school auditorium in Greenwich, Ct. The auditorium has an unusual shape, with a width of 104 feet, a depth of only 60 feet, and a volume as low as 175 cubic feet per seat. While its architect had designed the hall originally for legitimate theater, the community used it for choral and symphonic productions, suffering with a muddy sound due to late lateral reflections off the wide side walls and a lack of reverberation due to the low volume. Even the performers had difficulty hearing each other on stage because of a small stagehouse and acoustical shell.

Unable to afford a physical alteration of the space, the client hired Chris Jaffe to design electronic systems, including ERES, for about \$40,000. He solved the cross-hearing problem on stage with a microphone over the orchestra, transmitting its sound to high-frequency ball speakers above the musicians and to low-frequency speakers at the back of the stage enclosure. The low budget did not allow the installation of a multichannel Assisted Resonance system. The installation of ERES, though, solved the problems of both poor lateral reflections and poor low-frequency impact in the auditorium. The system consisted of two rows of suspended high-frequency ball speakers, 25 feet apart,



David Muir



SECTION

and two rows of low-frequency speakers set against the ceiling's structural beams. Unlike the hall's new sound, the new equipment has gone unnoticed.

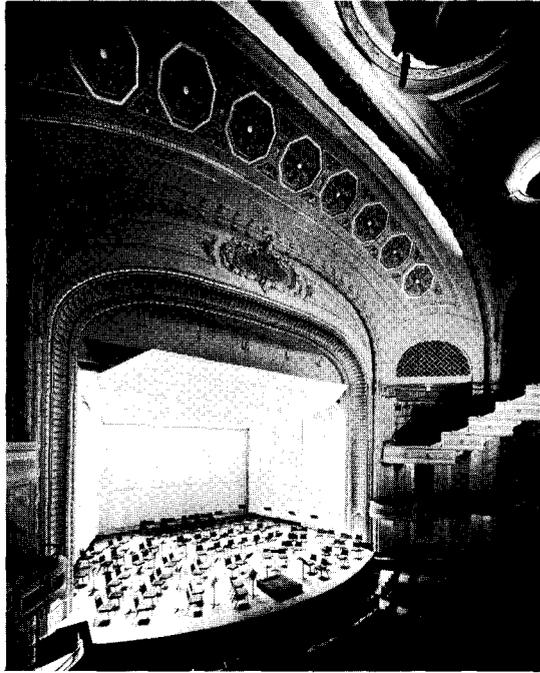
A retrofit on a similar budget but a much grander scale occurred recently in New Orleans. The Orpheum Theater, built in 1921, served as a vaudeville house and B-movie theater before the New Orleans Philharmonic Symphony purchased the building, hired the local architectural firm of Lyons & Hudson, and invested \$3 million into its rehabilitation as a concert hall. The auditorium contains 1928 seats within a shallow but very high volume. The problems with the hall's natural acoustics lie with its steep balconies, which prevent the reflected energy of the music from reaching the back rows. Jaffe solved that problem with an ERES installation, mounting small 4-inch speakers in two rows, under each balcony with each row on a progressively later time delay. Since both the architect and the client wanted to preserve as much of the hall's Renaissance ornament as possible, Jaffe recessed the speakers into the ceiling and covered them with grills, painted to match the soffit color. He also installed an acoustical shell on stage to better blend and direct the orchestra's sound. The microphone is located in the forestage shell panel.

While not included because of budget constraints, the placement of a microphone in

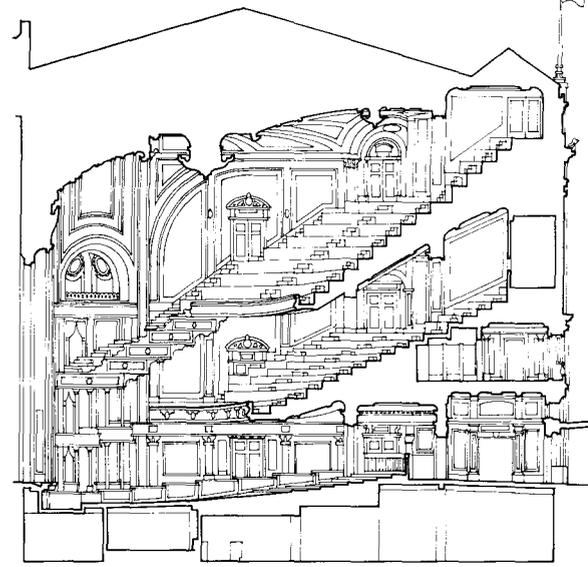
The theater in the Peoria Civic Center employs a fairly traditional shoe-box shape, concealing its acoustical equipment behind the proscenium and above the ceiling scrim.

Electronic acoustics

The steep balconies and high volume of the Orpheum Theater typify many vaudeville houses. The ability to conceal equipment behind flush grillwork makes electronic acoustical systems ideal for such architecturally significant interiors (right). Electronic acoustics can bring concert hall sound to larger numbers of people in open-air theaters such as the Concord Pavilion (below).

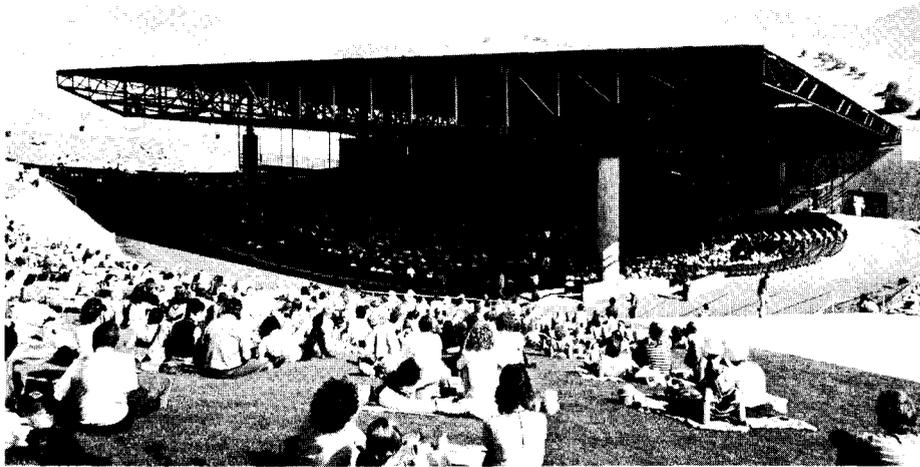


Frank Loz Miller



SECTION

10/3m



Courtesy Audrey Michaels

the generally empty stagehouse would have allowed that space to act as a reverberation chamber, transmitting the sound back into the auditorium. Jaffe had also considered using the heating plenum under the main floor as a reverberation area. The air-supply openings under each seat would allow the reverberant sound in the plenum to reach the less reverberant orchestra seating. Low frequency speakers on time delays would energize the plenum.

The Orpheum Theater rehabilitation highlights both the financial benefits and the critical hazards of electronic acoustics. Jaffe's ERES created concert hall acoustics at a fraction of the cost of physically altering the room, leaving the historic architectural fabric of the interior intact. Yet, the night *New York Times* critic Donal Henahan attended a performance at the Orpheum Theater, he found that "downstairs, under the overhang, the sound was not so good." The ERES installation had yet to be turned on and adjusted. Electronic acoustics, while lower in initial cost than conventional acoustical techniques, requires that the acoustical consultant periodically check and readjust the systems.

Electronic acoustics has become an important component in the feasibility of re-

habilitating existing halls and in building new multipurpose halls. Its early use, though, occurred in open-air pavilions. The Concord Pavilion in Concord, Ca, designed by Frank O. Gehry & Associates, epitomizes the role electronic acoustics can play as a substitute for properly located walls and a properly sized volume. The City of Concord, near San Francisco, wanted a multipurpose amphitheater which, because of the area's mild weather, could be used year-round. Frank Gehry's design includes an arena stage and seating for 3500 people beneath a steel truss roof, which is supported on two concrete columns and the backstage wall and which opens out to a grassy bowl seating 4500. Because fire code requirements resulted in a huge volume, the pavilion received absorbent finishes to shorten the reverberation time for speech. To then lengthen the reverberation for orchestral concerts, Jaffe suspended 90 tuned microphones for the Assisted Resonance system around a circular catwalk and mounted their speakers above four acoustical baffles over the stage. The ERES microphone, also located over the stage, transmitted the direct orchestral sound to column speakers hung from the catwalks and roof trusses, providing time-delayed reflections to the concentric pavilion seating and lawn area in the absence of enclosing walls and reflective surfaces. The control room, containing the systems' amplification equipment, sits suspended from the trusses.

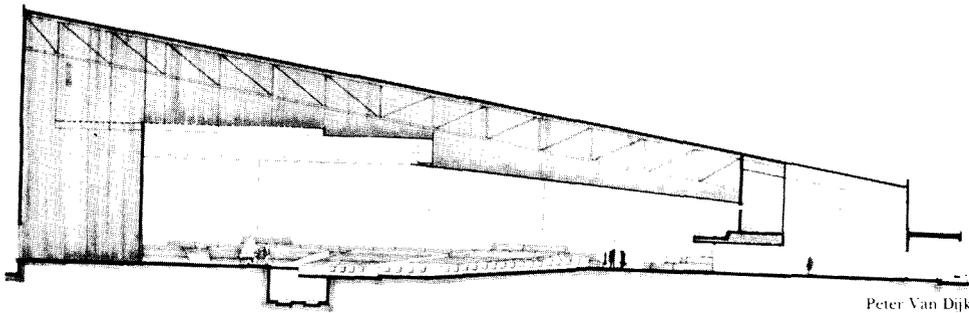
Consistently turning a profit at a time when many performing arts centers require substantial subsidies, the Concord Pavilion has shown that electronic acoustics can bring classical music to a greater number of people than ever possible before and, in so doing, improve the financial condition of orchestras. Its success, though, has not been matched by similar outdoor pavilions. They have been hampered by limited performance seasons,

since most of the facilities are located in the North or Midwest. To overcome the problems of weather, Chris Jaffe and architect Peter Van Dijk, with the firm Dalton, Van Dijk & Johnson in Cleveland, developed the idea of an indoor performance pavilion, with seating for 2500 including indoor lawn seating under a greenhouse structure, electronic acoustics to create the proper reflections and reverberations, and a thrust stage with a fly tower for proscenium performances, all enclosed within a space-frame or cable structure supporting a heavily insulated skin. Chris Jaffe thinks that "the climate-controlled indoor performance pavilions are on the horizon," for they are "facilities that will pay their own way."

Paying its own way holds true for electronic acoustics generally. Of all of the acoustical techniques available to the designer, it offers the most return for the least money. The controversy surrounding electronic acoustics, nevertheless, continues. Some acousticians question its necessity. Cyril Harris, the acoustical consultant responsible for upgrading Avery Fisher Hall and the New York State Theater in Lincoln Center, thinks that "if you're dealing with a new hall, you should design it right in the first place . . . without electronic reinforcement." In multipurpose halls, where electronic acoustics has proven so valuable, Harris recommends that clients rehabilitate a theater with a shorter reverberation time for drama, and build a new hall, with the proper natural acoustics, for music. He claims that the elaborate multipurpose halls "cost as much as two simpler halls" especially when you consider that "sooner or later, the new technology will break or become unadjusted. With an owner spending from \$10 to \$60 million on a new hall, I'm going to let others experiment with the electronic systems."

Some clients think that electronic acoustics decreases rather than increases their risk. Paul Dustrud, the technical director of the Eugene Performing Arts Center, sees electronic acoustics as an insurance policy. "Without any assurance that the natural acoustics of a new hall are right until opening night, most owners would find the relatively low cost of the electronic systems negligible compared to the benefit of being able to adjust the acoustics."

Adjustment, though, is just what some music critics fear about electronic acoustics. Harold Schonberg, writing about Chris Jaffe in the *New York Times*, thinks that "the concept of electroacoustic concert halls raises all kinds of ethical, philosophical and even social problems. . . . How can one be sure that a conductor, who from his podium does not hear the way people in the audience do, is going to choose the 'right' setting from the infinite number of choices at his disposal? Or is there such a thing as a 'right' setting? Suppose the technician's right setting is not my right setting? . . . It's something to worry about, this interpolation of electronic aids to music. A first step will lead to other steps . . . (and) all



of a sudden pure sound qua sound is a thing of the past and nobody realizes what has happened." Many musicians, too, feel uncomfortable with the idea of electronic acoustics. The managers at Eugene have overcome that problem by simply not telling the performers of the electronic systems. That is perhaps the best test of electronic acoustics; when not told of the installation, performers have not noticed a degradation in the quality of their sound.

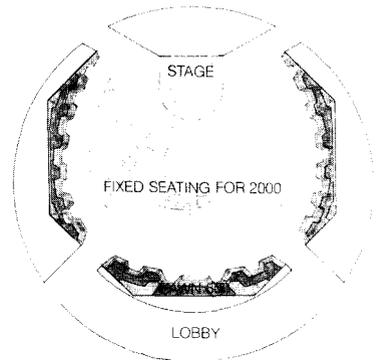
Where does that leave the architect? Is electronic acoustics a threat, yet another example of clients investing in equipment rather than in architectural solutions to problems, or is it a benefit, freeing the architect from the highly prescriptive dimensions and forms required for good natural acoustics? Is it a fad, a technological quick-fix in a difficult economy, or a permanent fixture in acoustics, an acknowledgment that we consider the technological image of reality an acceptable alternative to the real thing?

It is, of course, our use of this new technology rather than the technology itself that poses the problem. Chris Jaffe recognizes that as much as anybody. "Electronic acoustics is not a panacea. It is not a substitute for natural acoustics, allowing the architect to ignore the physical requirements of good acoustics. ERES is just one of many tools we have at our disposal. Why not use it where appropriate?" While Jaffe admits that electronic acoustics "takes getting used to because of the eye-ear problem," where the acoustical system makes a hall sound much smaller or much larger than it appears, he thinks that the programmatic flexibility and design freedom that electronic acoustics offers outweighs its potential overuse. "We're learning more and more about it all the time . . . what it can and cannot do." So should we all.

[Thomas Fisher]

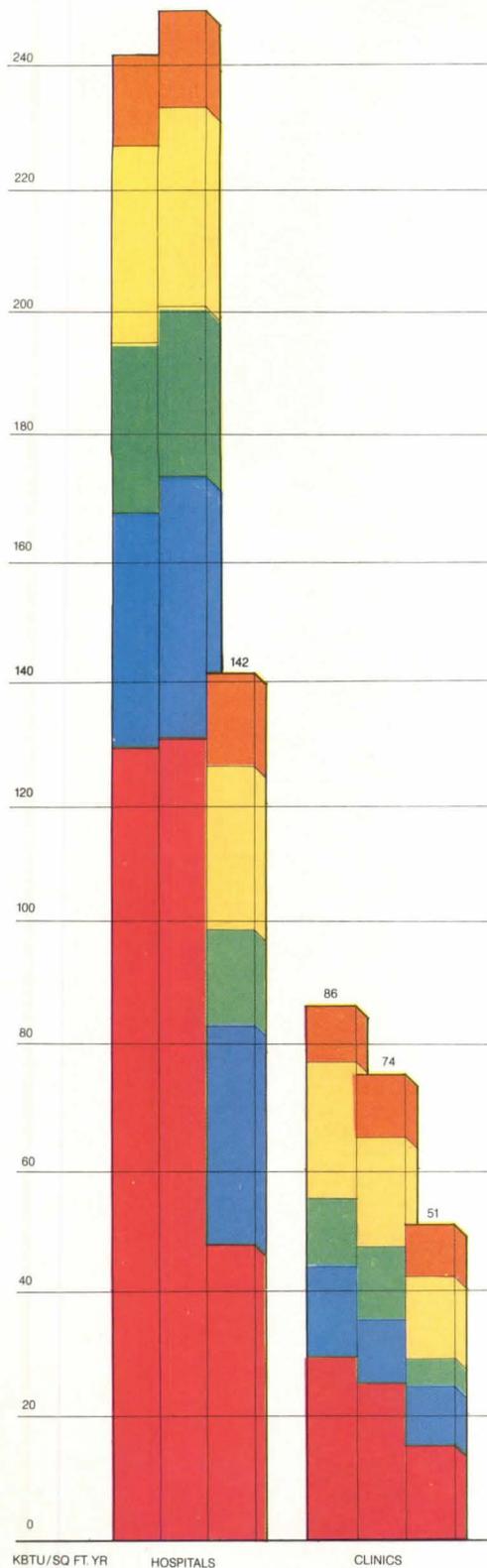
Acknowledgements

We would like to thank the following people for their assistance in the preparation of this article: Robert Hill, A.J. Jones, Acoustical Investigation and Research Organization, Ltd.; Theodore Schultz, Bolt, Beranek & Newman; Peter Van Dijk, Dalton, Van Dijk & Johnson; Luke Bandle, Paul Dustrud, Eugene Performing Arts Center; Mike Thompson, Hardy, Holzman, Pfeiffer Associates; Cyril Harris; Ann Boyar, Mark Holden, Christopher Jaffe, Chuck McGregor, Jaffe Acoustics; Thomas Bellingham, Johnson/Burgee; John Eargle, Nina Stern, JBL; Alfred Lyons, Lyons & Hudson; Chris Miller Hutton, Peoria Civic Center; Douglas Pearson, Paramount Sound Systems.



The indoor concert pavilion may become a financial necessity for orchestras needing to attract larger audiences year-round.

Energy to recover



Apart from restaurants, hospitals are by far the most energy intensive of all the building types studied in this research effort (see Fig. 2 and P/A, April 1982), approaching a mean annual energy consumption of 240 kBtu per sq ft in the original designs. While areas as diverse as surgical suites and patient rooms have different operating hours, internal loads, and use profiles, the predominant 24-hour-a-day operation of hospitals is inherently energy intensive. Strict environmental, life safety, and regulatory requirements heavily affect design requirements for hospital HVAC systems because precise temperature and humidity levels and high ventilation rates are maintained. While this is costly from an energy standpoint, it is necessary; the environmental requirements for a burn victim or a cardiac patient can be nearly as critical to their recovery as drugs and medical treatment.

The research in this article is based upon results from the redesign samples of two major types of health care buildings: clinics and hospitals. The ten clinics resemble office buildings more than hospitals, as their predominant space use is for offices and circulation. Medical service areas are minimal. They lack patient rooms and the related housekeeping and support areas that accompany them. Because the clinics were similar to office buildings, we will treat them separately (see sidebar) and feature the hospital redesign effort.

The eleven hospitals contain the full range of ancillary, support, and patient areas among the three primary care facilities, five regional community hospitals, a mental health care community hospital, a mental health building complex, and a cancer research facility.

Overall, a 40 percent energy saving was achieved by the hospital redesign teams, resulting in an estimated mean annual energy performance of 140 kBtu per sq ft per year. The largest savings were in heating energy and related auxiliary equipment such as fans and

pumps. In many instances this energy use was cut in half. Additional energy savings of about 21 percent were found in lighting systems.

The widespread perception that hospitals are internal-load-dominated is questioned by certain aspects of the energy results. The design energy data (Fig. 2) show that the predominant energy consumption is for heating, taking seasonal heating and cooling equipment efficiencies into account; this is not the intuitive finding. Heating energy consumption would generally not be that high in buildings that are internally loaded. However, major portions of hospitals have substantial heating needs. Patient areas, corridors, and certain support areas that do not experience high internal loads are often ventilated continuously. Another cause of high heating energy is humidity control of ventilation air in areas that require narrow temperature and humidity ranges.

The problem of analyzing energy use in these hospitals is further complicated, as "process" energy loads were not modeled in the computer energy analyses (see P/A, April 1982). The lack of this process energy in conditioned spaces could have caused heating energy to be erroneously exaggerated. Unfortunately, there are not adequate redesign data to answer these process load questions for this complex building type. Extensive statistical analysis that tried to relate weather data to the hospital sample's energy use uncovered no significant cause and effect relationship. Indeed the BEPS energy targets for hospitals are a uniform 140 kBtu per sq ft per year nationwide.

Hospital redesign strategies

Our analysis of the hospital redesigns examined the strategies for both individual functional spaces and the whole building. As shown in Fig. 1, conservation opportunities and design strategies vary by function. The three major functional groupings of hospital spaces used in our analysis include: **1** patient areas, **2** ancillary facilities such as operating rooms, intensive care units (ICUs), emergency rooms and their direct support areas, which have the most strict

The energy redesign of hospitals is the subject of the sixth article in this energy-conscious design series. Although the demanding environmental requirements of hospitals limit the use of conservation strategies that are viable in other building types, the researchers find that HVAC and heat recovery strategies were keys in dramatically reducing energy use without compromising health care criteria.

The clinic redesigns

The redesign sample of eleven clinics ranges in size from 6000 to 93,000 sq ft. With the exception of a few specialty clinics, these buildings are essentially offices with limited medical areas. Their operating profiles resemble those of office buildings (see P/A, June 1982) except that they are occupied on weekends and evenings. This is one reason why their original mean energy use of 86 kBtu per sq ft per year is higher than office buildings. In the redesign, clinic energy use was reduced by 48 percent to 51 kBtu per sq ft per year.

Like office buildings, clinics share the problem of diurnal heating and cooling. Daytime operation finds these buildings subject to internal gains and solar loads that often require cooling. During unoccupied periods they experience significant conductive heat loss. It is not surprising, therefore, to find that the clinic redesign teams used many of the strategies found in the office sample. To optimize gains and losses, the clinic redesigners improved the composite U-value and tended to use more compact building forms. The selective reorientation of glass by exposure depending on climate was also reminiscent of the office redesigns. Glazing areas were generally reduced and solar shading devices employed. Several of the clinics also used insulating shutters as an additional window treatment.

Lighting strategies, such as using fluorescent fixtures with energy-efficient ballasts in place of incandescent lighting, were used. However, daylighting was not predominant in the clinics and only three designs using skylights and photocell controls were noted.

Nearly all the original clinics used constant volume or dual duct HVAC systems. However, six of the clinic redesign teams chose VAV systems, while three selected heat pumps. Other similarities to office HVAC strategies include the widespread use of economizer cycles, changes in heating and cooling setpoints, the use of night setback strategies, and reduction of outside air quantities. In contrast to the hospitals, the one instance of using a heat wheel constitutes the only clinic heat recovery application.

We did not find strategies that relied on unique characteristics of clinics in the inventory of clinic redesign strategies. From a design standpoint, therefore, it may be more appropriate to view them as offices.

Original patient room lighting levels, installed capacity, and fixture types were retained in the redesign, apparently because of adherence to design criteria. Patient room lighting systems must serve multiple needs, such as providing good color rendition for patient examination and diagnosis, as well as the patient's own needs, such as reading without disturbing others.

Support areas: Reduction of controlled lighting capacity was observed in patient support areas such as corridors and nurses' stations, as was the use of improved lighting controls, such as timeclocks and local two-step switching. Two hospitals used photocell-controlled daylighting strategies for nurses' stations and corridor lighting.

Lighting and environmental criteria can be relaxed in certain areas without detrimental effects on health care. Lighting levels and installed capacity were reduced in storage areas, mechanical rooms, corridors, and similar spaces. Incandescent lighting was generally replaced with fluorescent fixtures using high efficiency ballasts. Photocells, local two-step switching, and timeclocks were frequently used. In office and administrative areas, VAV systems were employed, and task lighting was used where applicable.

In hospital kitchens, a prevalent strategy was the use of heat recovery coils in kitchen exhaust ducts, adding another resource to plant heat recovery and storage systems. In several instances mechanical and storage areas were relocated to an advantageous exposure to serve as buffer zones for conditioned interior space.

Building form and envelope

Basic decisions on the organization, placement, and treatment of patient rooms seems to have governed most of the buildings' form and orientation in the redesigns.

In a hospital, patient rooms can comprise up to 75 percent of a hospital's exterior surface areas, and as is characteristic of most "sleeping rooms," conductive heat loss and gain are of concern as is solar control. In half of the redesigns, patient rooms with exterior exposure were minimized by locating them around interior courtyards and enclosed atriums in locations as diverse as Chicago and Dallas. Not only did this strategy allow the form to become more compact, reducing exposed surface area for these external-load-dominated spaces, but it also allowed natural light to reach patient rooms.

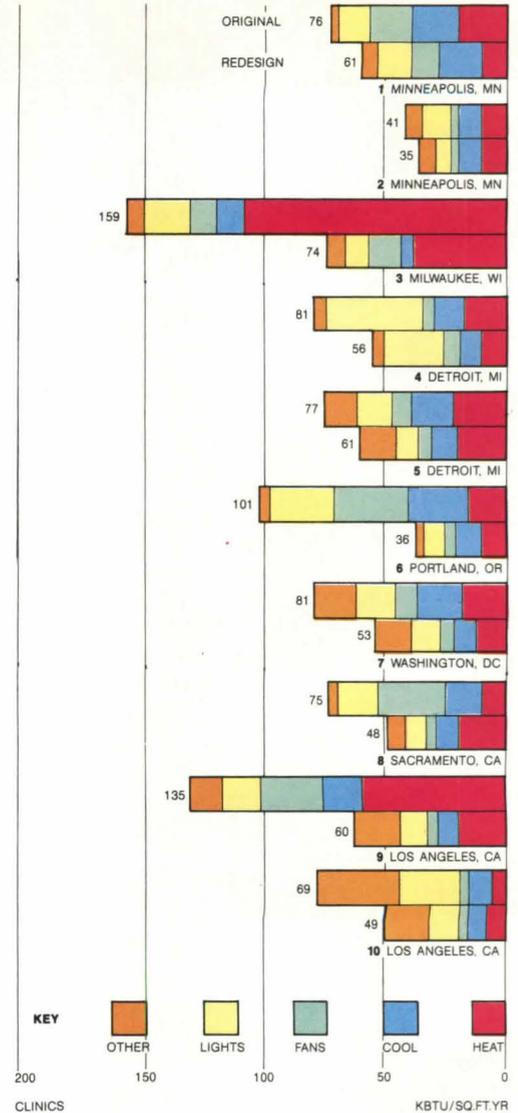


FIGURE 2: ANNUAL ENERGY END USES FOR REDESIGN EFFORTS

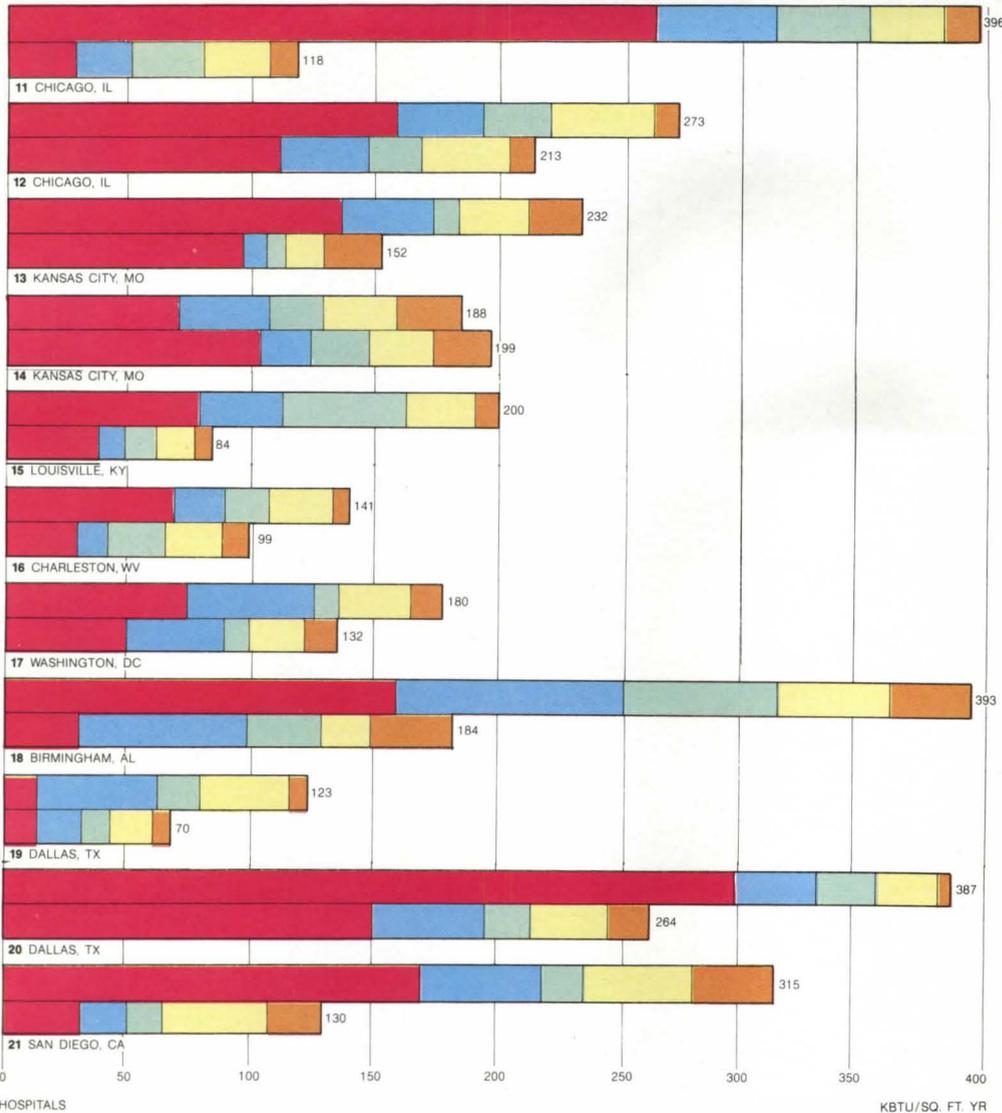
For the exterior patient rooms, the redesign teams increased the overall thermal integrity of the envelope. This was accompanied by a variety of fixed and movable interior and exterior shading devices to control solar gains on a seasonal basis. Several redesign teams reported reductions of peak heating and cooling loads by as much as one-half through the combination of these strategies.

It is important to point out that passive solar heating strategies were not used in patient rooms because of the need to maintain stringent environmental conditions for patient care. Although seasonal control of solar gain was used, no provisions for thermal mass storage were made.

Although these patient room treatments often led to noticeably different forms, no major changes in patient, ancillary, and support area relationships were noted.

HVAC zoning strategies

Unlike other building types previously analyzed in this series, the hospital redesigns did not exhibit any trends to adopt a particular type of HVAC system. What is apparent in the redesigns is a strategic



regrouping of the mix of functional spaces assigned to a particular type of HVAC system on the basis of similarities in operational hours, temperature setpoints, and humidification requirements. Many of the redesigned HVAC systems were arranged to provide humidity control through reheat at the space level rather than at the central air handler. This also allowed more flexible control of ventilation air.

It is likely that the significant heating and cooling energy reduction in the redesigns was achieved in part with this strategy of HVAC zoning, as unnecessary system operation and energy required for precision conditioning of supply and ventilation air was minimized.

Plant strategies: The predominance of heat recovery and thermal storage strategies in all the hospital redesigns is not surprising, as a near ideal environment for these applications exists. Recoverable waste heat resources are co-

incident in time with many energy demands, and multiple resources can be tied into recovery systems. Resources such as refrigeration, central water chilling equipment, and large quantities of exhaust air are often available continuously. Combined with thermal storage systems and the central control available at the plant level, the heat recovery sources can be matched with energy needs such as heating and preheating of service hot water and ventilation air. In some instances recovered energy was sent to reheat coils for humidity control or to heating coils in dual duct systems.

Double bundle (heat recovery) chillers were used in most hospital redesigns, primarily to help meet hot water loads. Two hospitals used chilled water coils to remove heat from exhaust air. In a 96-bed mental health facility (#15) this was reported to reduce electricity demand for make-up air heating by two-thirds. Although extra chiller electricity is used in this strategy, a community hospital (#18) in Texas estimated that six Btu's were reclaimed for each Btu expended in the recovery process. Other heat recovery applications included heat wheels, "run-around" loops, variable chilled water pumping, evap-

orative humidifiers, and the use of separate steam boilers for sterilization processes. Calculations by several of the hospital redesigners placed the conservation potential for heat recovery at two to three times that of architectural or lighting strategies.

Observations and conclusions

The hospital redesign experience is distinguished from that of the other building types in that the major redesign emphasis was placed on HVAC systems and heat recovery. The choice of architectural strategies (especially those for patient rooms) heavily influenced the buildings' form and reduced peak heating and cooling loads, but was not the source of the predominant redesign energy savings.

The greatest value of the hospital redesigns, however, may be the demonstration that energy-efficient design is possible even under the most constrained circumstances. Although hospital conservation potential was frequently limited at the space level, the redesign teams were able to achieve substantial energy savings without compromise of health care requirements. □

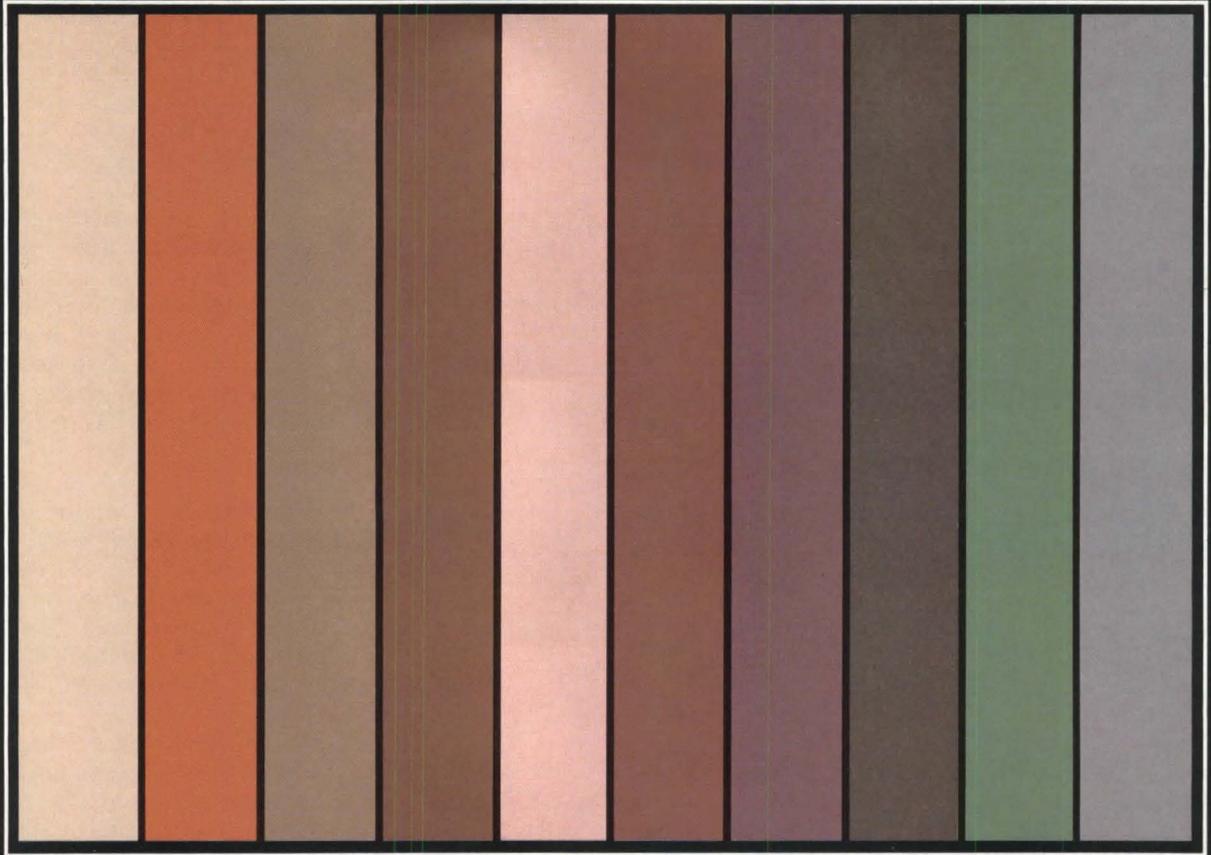
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This effort has been funded by Battelle Northwest Laboratories under a program sponsored by the Buildings Division of the U.S. Department of Energy. For a complete description of this article series, see P/A, April 1982, p. 110.

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Words, words, words

William T. Lohmann

Mark Twain observed that 'the difference between the right word and the almost right word is the difference between lightning and the lightning bug.'

Language is perhaps the most sophisticated tool developed by humankind, at once elemental and infinitely complex. Evolving from a primitive need for mutual security, it now binds together the totally interdependent elements of today's technical society. Communication has become an essential science. Without words, our institutions would collapse.

Specifiers live with words daily, writing detailed product descriptions and instructions for their installation. They wrestle with changing and contradictory terminology, obsolete terms, and regional variations in language. New words appear on their desks overnight, becoming both source and solution of communication problems, since a wrong word can snowball into litigation.

In our fast track society, it is difficult to keep up with changing terminology. Without any evident product modifications, the phrase "vapor barrier" is gradually shifting to "vapor retarder" because the traditional term is now considered too absolute and exposes manufacturers to potential liability. "Vapor retarder" represents actual product attributes more accurately and is appearing in product literature and specifications across the country.

Deliberate change on a national scale is possible, at least in widely used reference documents. Under pressure, ASTM and UL have moved recently to revise their fire resistance standards and terminology. The description of architectural field services in AIA Document A201 has been changed abruptly from "supervise" to "inspect" to "observe" in less than 10 years. Independently, many offices have revised their contracts for submittal procedures, changing "approval" to "review" of shop drawings and samples. In court tests, "approval" has demonstrated the gap often occurring between trade meaning ("general acquiescence") and dictionary definition ("official sanction").

Common usage evolves slowly, however. Because of known hazards in the use of asbestos (and in lawsuits relating to them), many products have been reformulated to eliminate the material. But changes in terminology lag. We still call one of those products "vinyl asbestos tile" or "VAT" in our documents. Even without asbestos, an entire industry still refers to the insulating material applied to structural steel members and metal decking as "fireproofing," knowing that a dictionary definition of the word is "incombustible."

Obsolete terms stick with us. "Drawings" are still called "plans" in government documents, theoretically excluding elevations, sections, and details. Hidebound contracts refer to "drayage" instead of "trucking" or "transportation." A dray is "a rude sled." The term

"provender" was sighted recently, too, meaning "food for animals, as hay."

Simple terms are recommended for technical writing, but must be used correctly and consistently. Some basic guidelines apply.

- Use "furnish" and "install" separately or combined for all work. If "provide" is preferred, define it to mean "furnish and install."
- Use "shall" for mandatory acts involving any party to a contract, in lieu of "will" or "must." "May" implies that a choice may be made.
- "Either" implies a choice of two options while "both" includes them.
- Avoid "and/or," which allows an attorney to decide which phrase is applicable.
- "Replace" can be construed to mean either "reinstall the old" or "furnish and install new."
- "Exposed" is too vague and should be further defined by "to view," "to weather," "after completion of construction," or a similar limiting phrase.
- Refer to an "alternate" or "alternative" for bidding purposes and an "option" when a contractor's choice is allowed.
- Wait until popular trade terms, such as "anodize" and "neoprene," have industry-wide acceptance before using them generically.
- Refer to "record drawings," not "as-built drawings."

Published resources, including dictionaries, association glossaries, and jurisdictional settlements, are essential for reference in the office, if they are current. CSI's MasterFormat document is at present undergoing a nationwide review to reflect recent changes in construction industry terminology. But response lags even there. "Fireproofing" may appear for another five years. □

William T. Lohmann, AIA, FCSI, is Specifications Manager for Murphy/Jahn, Chicago.

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Damage claims arising from inspection reports

Norman Coplan

Third parties who rely on an architect's building inspection report can sometimes make damage claims, even though the architect had no direct contract with the claimant.

An architect who is retained by a client to make an inspection of an existing structure and to furnish the client a report of its physical condition may be subject to suit for negligence by third parties with whom he has no contractual relationship. In some jurisdictions, for example, the sponsor of a condominium or cooperative conversion project must secure a report from a licensed architect or engineer as to the physical condition of the building being converted, which report is included in the sponsor's presentation. The architect is usually on notice that his report will be relied upon by prospective purchasers of such condominium or cooperative apartments and that he may therefore be subject to claim if such report is inadequate or does not reflect the true state of facts.

A dangerous extension of the potential liability of an architect in this area is reflected in a recent decision of the Georgia Court of Appeals in which an architect was held subject to liability arising from an inspection report he had made for his client even though he had no knowledge that any particular third party might rely on that report (*Rhodes-Haverty Partnership v. Robert & Company Associates*, 293 S.E. 2d 876). This case involved a suit for damages asserted by the purchasers of certain real property against an architect, with whom there was no contractual or other relationship, based upon certain alleged structural deficiencies in the building. The original owner of the property had entered into a sales contract with the purchasers in Feb. 1978. At the same time, the owner retained an architectural firm to make a "general evaluation" of the subject building. Pursuant to its contract, the architect visited the building and conducted a "walk-through inspection" to ascertain the condition of the building insofar as it could be determined by a visual observation. Eventually, the architect furnished a written report to his client, and subsequent to the furnishing of such report, the real estate transaction was consummated and the property sold.

Several months after the acquisition of the property, a piece of terra-cotta facing broke loose from the top portion of the building and fell to the sidewalk. Upon investigation, it was found that substantial repairs were required to the exterior facing of the building at a cost of approximately \$139,000. The purchasers contended that they had relied on the report of the architect (which had been furnished by the seller) in reaching the decision to purchase the building, although it was conceded that the architect had never been specifically advised that this particular purchaser would utilize or rely on such report. It was the contention of the purchasers that despite the absence of any contractual relationship between them and the architect, they were entitled to recover damages arising from structural deficiencies in the building which had not been reflected in the inspec-

tion report prepared by the architect for the original owner. The purchaser not only asserted that the architect had negligently performed, but that he was subject to liability for "breach of warranty" in failing to describe adequately and reliably the observable and ascertainable defects in the building.

In reversing a dismissal of the action against the architect, the Georgia Court of Appeals stated the general rule as follows:

"The law imposes upon persons performing architectural, engineering, and other professional and skilled services the obligation to exercise a reasonable degree of care, skill and ability, which generally is taken and considered to be such a degree of care and skill as, under similar conditions and like surrounding circumstances, is ordinarily employed by their respective professions. The determination whether in a specific case the defendant [who had provided such professional or skilled services] will be held liable to a third person not in privity is a matter of policy and involves the balancing of various factors, among which are the extent to which the transaction was intended to affect the plaintiff, the foreseeability of harm to him, the degree of certainty that the plaintiff suffered injury, the closeness of the connection between the defendant's conduct and the injury suffered, the moral blame attached to the defendant's conduct, and the policy of preventing future harm."

In applying the general rule to the facts before it, the Court pointed out that although the purchasers were not specifically identified to the architect as potential purchasers of the building, the evidence indicated that the architect did know that potential purchasers of the property might rely on his report. The Court said:

"We are satisfied that the report by the (architect) was intended to affect a limited class of third parties such as the (plaintiffs) and that such third parties might foreseeably have sustained damages attributable to the negligent performance of its services. It follows that the trial court erred in granting summary judgment based upon lack of privity and foreseeable injury to the (plaintiffs)."

In a dissenting opinion, a minority of the Court compared the architect's inspection and report to an unaudited and informal financial or professional report which would not normally subject the professional to liability to third parties. The minority argued that an informal "walk-through" inspection and "general evaluation" resembles an "unaudited non-certified unofficial type report or opinion" and from which liability should not flow. The dissent further pointed out that the report disclosed that there were cracks appearing in the building and consequently the purchasers should have had the building more comprehensively investigated and the damages ascertained through proven engineering techniques. □

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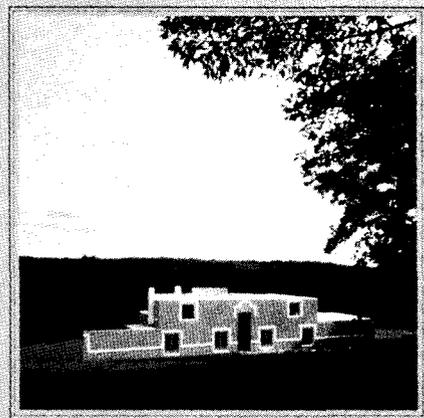
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On Stern

Books

ROBERT A.M. STERN



BUILDINGS AND PROJECTS 1965-1980

Rizzoli

Robert A.M. Stern: Buildings and Projects 1965-1980, edited by Peter Arnell and Ted Bickford. New York, Rizzoli International Publications, 1981. 256 pp., illus., cloth: \$45, paper: \$29.95.

Reviewed by William C. Miller, Associate Professor, Department of Architecture, Kansas State University, Manhattan.

Within the milieu of current discourse, historicism, which seems to have gained the status of an ideology, has become a *cause célèbre* for many as a primary source for formal expression in architecture. Given the perceived exigencies of today's practice, this position has engendered heated debate within the architectural community. The notion of incorporating historical references or quotations into a design, fragments from history's reservoir of examples, has resulted in a concern that contemporary architecture is vacillating on the precipice of becoming a "borrowed landscape of appearances." Aspects of the current historicism, such as the image of a designer leafing through history randomly selecting stylistic fragments, are being criticized by practitioner and theoretician alike for ignoring the fact that architecture is too the practical activity of building. Conversely, the use of historic precedent and paradigms that undergo transformation when confronting and accommodating the particular and practical demands of site, client, program, and technology, is of course a common and traditional approach to architectural design.

[Books continued on page 146]

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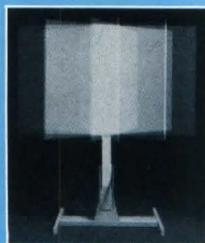


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Books continued from page 145

This is not the first time during the post-1945 period in America that such issues and concerns have surfaced and come under scrutiny; and ironically for very similar reasons. By the late 1950s, American architects sought to achieve a more spatially dynamic, formally expressive, experientially rich, and hence a more meaningful and stylistically diverse architecture than represented by the then current state of Modernism. Impetus was provided, in part, by a renewed interest in the knowledge and lessons of history, a desire for a more tactile and corporeal tectonic, and a concern for the situational and habitual in architectural design rather than the ideal and utopian. The work of Kahn, Rudolph, Johnson, and Saarinen attested to an erosion of the canonical as-tringencies of post-war Modernism with its emphasis on formal abstraction and technical minima. While maintaining certain Modernist sensibilities, primarily that of building as *objet-type*, these architects explored a richer and more diverse set of sources and precedents for architectural expression and order than those afforded by Modernism. Their search established a foundation for the formal and theoretical endeavors of the next generation of American architects; including Charles Moore and Robert Venturi, among others, who have profoundly influenced current debate and directions.

During the past decade, Robert A.M. Stern has assumed a visible and provocative posture within the context of contemporary discourse and practice, being simultaneously architect, educator, critic, and sometimes historian of the Modern movement. Building upon the foundation provided by Kahn and Rudolph and the work and ideas of Venturi and Moore, Stern has brought his own sensibilities to the forefront through his architecture and writings. His interest in history—most especially in 19th-Century English and American architecture—his vociferous assessments of the reductive aspects of Modernism, and his preeminence as an exponent of historicism and stylistic freedom, has led many to consider Stern, correctly or incorrectly, a “polemicist and *agent provocateur* of the Post-Modern movement.” Thus, the publication of *Robert A.M. Stern: Buildings and Projects 1965–1980* provides an insightful glance into the architecture of its controversial subject.

Stern's participation in the arena of architectural ideology and theory began in 1965 as editor of the Yale architectural journal, *Perspecta 9/10*. In that issue he published excerpts from Venturi's upcoming “gentle manifesto,” *Complexity and Contradiction in Architecture*, along with essays by Kahn and Moore. That Stern, at the time, considered these essays to be “independent manifestations” of a common and emergent set of architectural themes was as insightful as it was controversial. Next, as program director for the Architectural League of New York, he organized and wrote the catalog for the prophetic exhibition, *40 Under 40: an Exhibition of Young Talent in Architecture*. Held in 1966, this show featured a number of “undiscovered” young architects: Eisenman, Gwathmey, Hardy, Graves, Meier, Moore, Lyndon, Polshek, Tigerman, and Venturi, not to mention Stern himself, were among the more currently familiar names exhibited. Since then, Stern has continued his active engagement in theoretical and critical discourse through his books (e.g., *George Howe: Towards a Modern American Architecture* and *New Directions in American Architecture*), numerous articles and essays, and lectures.

Stern's architecture has proved controversial too. While his earliest buildings paid homage to Venturi's buildings and ideas, over a 15-year practice his designs have embraced and been embraced by a number of historical influences, sources, and references. Moving through acknowledged debts to Sir Edwin Lutyens and American Shingle Style architecture to a current interest in Classicism, Stern unapologetically assumes the role of an “exponent of stylistic freedom” in his approach to design. From the Venturi-inspired Wiseman house of the 1960s, to the baronial mannerism of the Lang residence (early 1970s), to the recent classically appointed Shingle Style Brooks residential complex in East Hampton, and the Regency Style residence in King's Point, we witness works based [Books continued on page 148]

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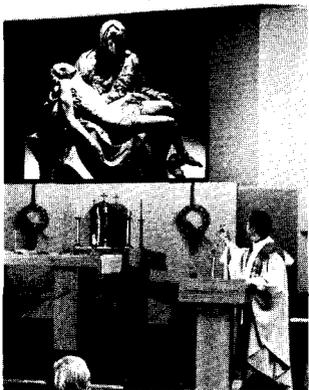
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Books continued from page 146

upon historic precedent for their order and expression, while also incorporating eclectic elements and allusions.

Always thought-provoking in intention, Stern's architecture is often simultaneously elegant yet maladroit, exuberant yet pragmatic, and conventional yet whimsical in its execution. These contradictory qualities are manifest, in part, by Stern's multiple roles as architect, educator, and critic. "Like all such marked men," noted Vincent Scully in *The Shingle Style Today, or the Historian's Revenge*, "Stern often cannot help appearing rather heavy-handed in artistic execution, since he is openly responding to influences of which he has to be all too consciously aware. He cannot make believe they are not there, as many less burdened artists are perfectly able to do." While Stern's design abilities have matured significantly since Scully's comment of 1973, his buildings can still be littered with an admixture of referential elements; the recently completed Cohn residence in Llewellyn Park, with its surfeit of historical quotations, being an exemplar.

Robert A.M. Stern: Buildings and Projects 1965-1980 includes over 60 chronologically arranged and excellently illustrated works representing the vicissitudes of Stern's practice. Accompanying these works is an essay by and an interview with Stern, a chronological list of buildings and projects, biographical data, and a bibliography. But current interest in Stern's architecture is not solely witnessed in the publication of *Buildings and Projects*, for his work is being exhibited internationally as well as domestically, and a more modest monograph—entitled *Robert Stern*—has been published by Academy Editions and *Architectural Design*.

While *Buildings and Projects* superbly presents the more interesting examples of Stern's *oeuvre*, there is a lack of critical analysis or commentary in the accompanying essays. One would anticipate, given Stern's posture as critic and ideologist, that the written pieces would be of critical significance. Such is not the case, for they are safe and noncontroversial, seemingly inconsequential, in content. These pieces neither establish a context within which to assess meaningfully Stern's work and ideas, nor elaborate on his particular penchant for selecting 19th-Century English and American domestic architecture as a primary source for his own work, nor even qualify his reasons for selecting the particular historical references and quotations found in his work. One fears this omission will foster a view of Stern as merely being interested in pursuing the development of a modern eclecticism rather than investigating the more essential knowledge regarding the purpose and order of architecture. In addition, much of the written accompaniment in both the two new monographs are reprints of previous publications; even the project descriptions for both volumes are the same. This seems to be an unfortunate exigency resulting from today's publishers' haste to put current and popular material before the fickle book-consuming architectural community. Thus at one level, *Buildings and Projects* has more the semblance of a promotional brochure rather than a critical presentation of an important and provocative architect's works and ideas.

But in the final analysis it is the work chosen for presentation in *Buildings and Projects* that proves important; for it provides a more significant view of Stern's abilities than has previously been afforded us. In his search for stylistic freedom, Stern's buildings have vacillated in quality and resolution during his practice. In the earlier work especially, his designs incorporated a variety of isolated or disjointed historic fragments that did not seem to be organized into a coherent architectural system. Yet in his more recent projects, the use of history, or historicism, seems to consume the entire design, creating well-developed ensembles. These works are truly eclectic in the 19th-Century sense, while projecting a "character," control, and repose lacking in the earlier more disjointed examples. It will be interesting to see what direction Stern's architectural maturity will take. At its best then, the work indicates that we do not have to fear history and the precedents it provides, but need only fear ourselves if we use it superficially. □

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"The Magic and Physics of Light" |
| Paul Marantz
"Looking Backward" | Bill Warren, Al Hart, David Krallo, Heinz Stell, Paul Wasdyke, Peter Bleasby, Russ Little, Steve Tuminiello
"Light Sources for the 80's" |
| Sonny Sonnenfeld, Ken Palius, Peter Howard
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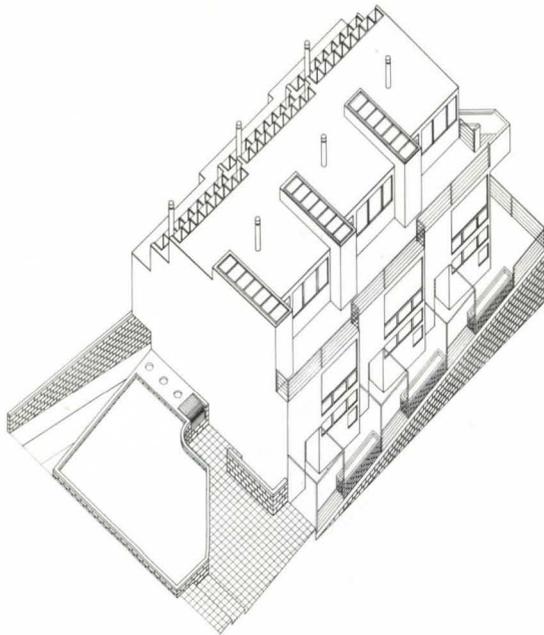
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Coming next month



Condominiums, Santa Monica, Ca, by A Design Group.

L.A. and Miami are the special locales of the residential buildings featured in the March P/A. Two apartment complexes in Los Angeles show how the dingbat tradition of low-rise units there can be upgraded with a lot of imagination, supplied by a couple of previously unpublished firms. A pair of detached, narrow-lot houses in Miami show how the tropical lushness can be sustained at townhouse densities. From each city, an expansive house expresses the character of the place in unexpected ways.

Memphis is the site of the remarkable Mud Island recreation development, which includes a scaled-down, walk-along model of the Lower Mississippi, overlooking the real thing.

Montreal is the location of the Interior Design feature of the month, a floor of law offices with physical reminders of barristers' haunts of earlier days.

Building diagnosis is the subject of the March Technics feature. As we work increasingly with existing buildings, the accurate evaluation of their physical condition becomes ever more crucial. This article will cover both the equipment and the procedures recommended for judging the dependability of structural and nonstructural parts.

P/A in April will add a discussion of conservation—of water, power, and air quality—to coverage of energy-conscious design readers have come to expect in our April issues. Eight new buildings will demonstrate the latest accomplishments in energy-efficient architecture.

P/A in March... Housing and houses

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Furniture, rugs, and accessories designed by Charles Rennie Mackintosh are being reproduced in Spain under the supervision of Roger Billcliffe, chairman of the Charles Rennie Mackintosh Society. The 12 works currently in production include silver-painted furniture that was originally designed for the Willow Tea Rooms; rugs, candlesticks, tables, and chairs designed for Hill House; a chair and a table from the Chinese Room of the Ingram Street Tea Rooms; and an upholstered

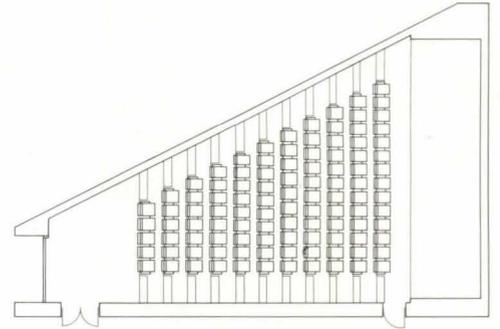
armchair made for the Dug Out Tea Room. Hardwoods have inlays of mother-of-pearl, ivory, glass, and metal. Furniture of the Twentieth Century. *Circle 217 on reader service card*

Literature

The 1982-83 Directory of the National Council of Acoustical Consultants lists the organization's 85 members worldwide. It includes advice on selecting a consultant and provides information about the services each member offers: architectural and industrial acoustics, environmental impact assessment and community noise studies, testing and management, seminars, expert witness testimony, and product development. For a copy, send check or money order for \$5 to cover postage and handling to National Council of Acoustical Consultants, P.O. Box 359, 66 Morris Ave., Springfield, NJ 07081.

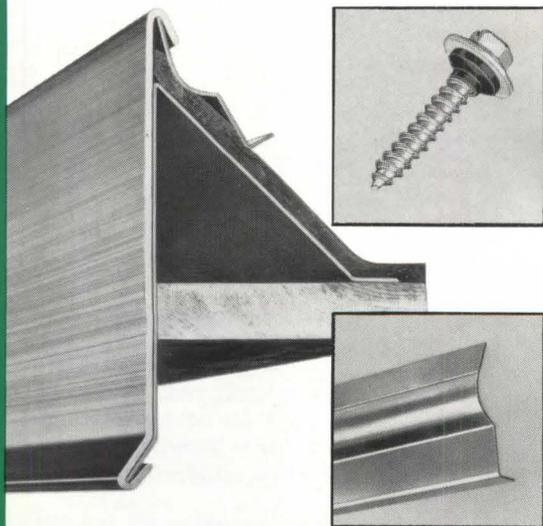
'Halls for Music Performance: Two Decades of Experience, 1962-1982,' published by the Acoustical Society of America, is a compilation of drawings and photographs of recently completed halls for music performance. Originally displayed in a poster session at the 103rd meeting of the society in Chicago last April, illustrations of 87 halls appear in the book along with data on each facility. Send orders, accompanied by a money order for \$15 payable to the Society, to Mrs. Betty H. Goodfriend, Acoustical Society of America, 335 E. 45 St., New York, NY 10017.

Noise Control Manual, Fourth Edition, for acoustical consultants, architects, and design engineers, discusses reduction of noise in industrial, commercial, and institutional buildings. This 40-page edition has a new section about controlling reverberant sound in auditoriums, gymnasiums, stores, and commercial buildings. It includes data on sound-absorbing materials, sound-attenuation materials, ducts, and duct liners. Owens-Corning Fiberglas Corp. *Circle 218 on reader service card*



'Public Assembly Spaces' is a design manual to assist in the planning of assembly areas having fixed, self-rising seats. It discusses seating arrangements, theater forms, and comfort considerations such as seat width, visibility, row spacing, and floor design. There are examples of assembly spaces and data on theater form, number of seats, seat and row spacing, stage elevation, and floor design. JG Furniture Systems. *Circle 219 on reader service card*
[Literature continued on page 158]

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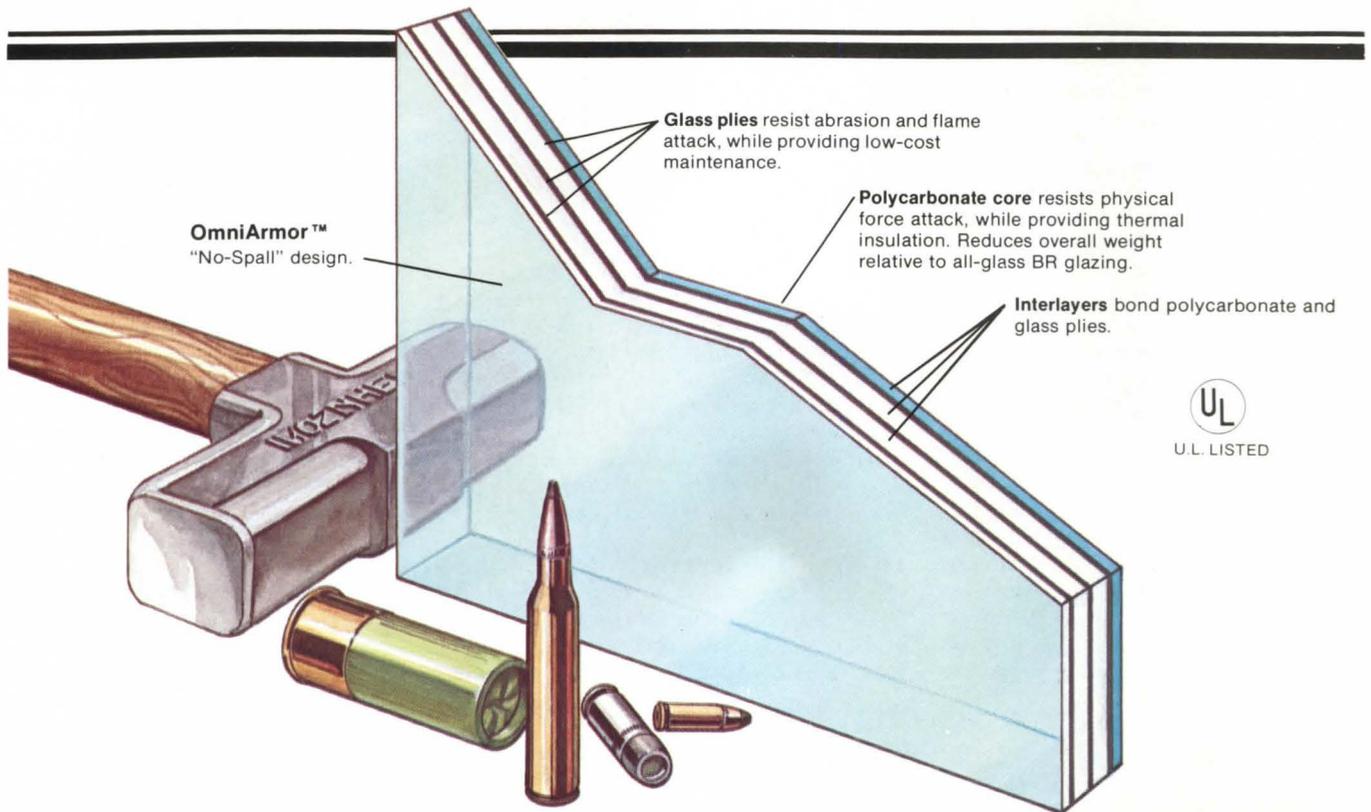
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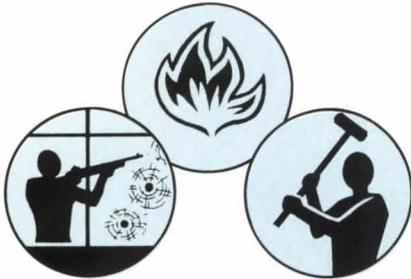
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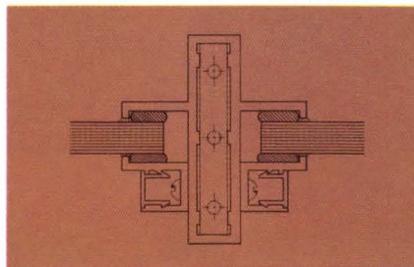
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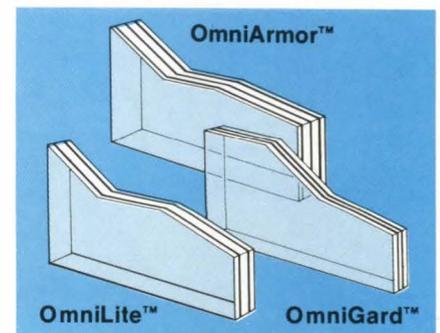


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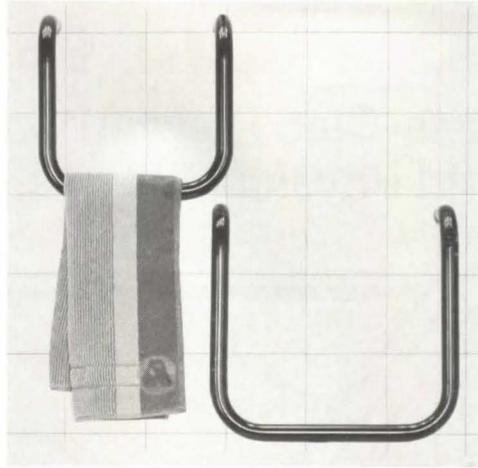
Literature continued from page 156

Roofing aggregate life cycle costing is a free service of Limestone Products. The report takes into account aggregate coverage, reflectivity, and cost, as well as amount of insulation, cost of electricity, and building location. From information supplied on the Lime Crest® Data Sheet™, the company can supply the real roofing aggregate cost for a particular building. Limestone Products Corp. Circle 220 on reader service card

Access flooring accommodates HVAC ducting, water pipes, and electrical and telephone cables and provides the flexibility to expand or rearrange office facilities. An eight-page color brochure describes a system that consists of welded steel panels with a 1-in. composite core that offers strength and low sound resonance. It provides insulation to both heat and cold for greater worker comfort. The surface is finished with high-pressure plastic laminate in several colors and patterns or with carpet in a wide choice of colors. C-TEC, Inc. Circle 221 on reader service card

Builders Bathware catalog offers several styles of wood and metal items such as towel bars and rings, soap dishes, brush and tumbler holders, tissue roll holders, and switchplate and outlet covers. The 44-page catalog also includes accessories for hotel/motel and public washrooms, including tissue dispensers, towel shelves, soap dispensers, paper

towel dispensers and waste receptacles, ashtrays and urns, and safety grab bars. Franklin Brass Manufacturing Co. Circle 222 on reader service card



Tubotondo metal bathroom accessories illustrated and described in a six-page color brochure include towel and tissue roll holders, shelf brackets with plexiglass shelves, hooks, and mirrors. Finishes are a choice of enamel colors or polished chromium, with special-order finishes of polished brass, French gold, and polished bronze. Watercolors. Circle 223 on reader service card

Hi Tech 100 percent vinyl flooring in raised circles and squares is illustrated in a six-page color brochure. Circles, large and small squares, and rectangles can be used alone or in combinations. Colors

available are Almond, Raisin, Black Pearl, and Tender Taupe. The brochure offers a sample chip portfolio. GMT/Go-Met-Tile Associates, Inc. Circle 224 on reader service card

NEC wall chart for recessed lighting explains the new National Electrical Code for recessed incandescent fixtures and describes the correct fixtures for specific applications. A tool for architects, contractors, lighting consultants, and interior designers, the chart points out the dangers of overlampping and shows housings and trim that comply with the code. Fixtures are shown for insulated ceilings, noninsulated ceilings, and suspended ceilings. Halo Lighting Div., McGraw-Edison Co. Circle 225 on reader service card

'27 Ideas Worth Knowing' is a 16-page brochure that provides 27 examples of how Inryco's systems and components have been used in design and construction. They range from special floor decks for a highrise to preinsulated wall panels for arctic pipeline workers' housing to steel framing for retirement housing. Inryco, Inc. Circle 226 on reader service card

Interroof™ roofing systems for flat roofs, terraces, underground parking facilities, and similar installations are described in a 12-page brochure. A chart provides typical physical properties and there are drawings of construction details. Specifications are [Literature continued on page 160]

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For more information consult Sweet's or contact Bob Graboski, Manville Building Materials Corporation, Ken-Caryl Ranch, Denver, Colorado 80217, (303) 978-2228. These felts are produced by Johns-Manville Sales Corporation and marketed by *Manville Building Materials Corporation*.

Manville

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Literature continued from page 158

included for ballasted or unballasted new or reroofing work. IPW Interplastic, Div. of Semperit of America, Inc. Circle 227 on reader service card

Catalist 12, a condensed 44-page catalog, covers the company's current collection of seating. It includes tubular-metal-framed, wood-framed, and upholstered chairs; secretarial, drafting, and executive office chairs; stacking, counter-height, and bar chairs. Model numbers, specifications, and photographs are provided for each item, along with information about finishes and fabrics. Loewenstein, Inc. Circle 228 on reader service card

Building materials

Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

Atlantis on Brickell, Miami, Fl (p. 99). Architect: *Arquitectonica International Corporation, Coral Gables, Fl.* Glass: PPG Industries. Automatic sliding doors: Glas-salum. Quarry tile: Sunstone. Carpet: Harbinger. Waterproofing membranes: Tremco Mfg. Co. Insulation: National Cellulose Corp. Paint: Sherwin-Williams. Lobby furniture: Atelier International Ltd. Marble: Gallo Marble. Elevators: Dover Corporation. Lighting: Kim Lighting, Lightolier, Halls. Air-

conditioning units: Westinghouse. Appliances: General Electric. Saunas: Amerex Corp. Toilet partitions: American Sanitary Partition Company.

The Babylon, Miami, Fl (p. 106). Architect: *Arquitectonica International Corporation, Coral Gables, Fl.* Aluminum and glass sliding doors: Keller Industries. Quarry tile: Sunstone. Railings: Imperial Railings, Inc. Bathroom fixtures: American-Standard.

Banque Worms, New York (p. 116). Architect: *Rivkin/Weisman P.C. Architects, New York.* Ground-face concrete block: Plasticrete. Paint: Benjamin Moore, Fuller O'Brien. Ceilings: Armstrong, Simplex. Doors: Acme. Carpet: Clodan Carpets. Ceramic tile: Nemo Tile. Vinyl flooring: Lonfloor, Mercer, Burke, Kencove. Lighting: Edison Price, Lightolier, Neo-Ray, NL. Furniture: Sunar, Storwal, ICF, Vecta, Intrex, Thonet, Laminates Unlimited. Cabinetwork: Masterpiece Woodworking. Accessories: McDonald, Smith Metal Arts, TSAO, Atelier International, Artemide, Luco, Alisco. Solar shades: Finetre. Upholstery fabric: Sunar. Kitchen: St. Charles. Security system: Wells Fargo. Trading desk: Descience/SGS Furniture. Signage: Letterama. Hardware: Schlage, Dor-O-Matic, Quality, Richards-Wilcox, Grant. Architectural woodwork: Addalia.

Pendleton Junior High School, Pendleton, Or (p. 120). Architect: *Martin/Soderstrom/Matteson Architects PC, Port-*

land, Or. Glu-Lam beams: DucoLam, Inc. Steel columns: Mercer Industries. Plywood: Potlatch Corp. Ribbed metal siding: ASC Pacific. Aluminum windows: Viking Industries. Skylights: Cemcel Corp. Doors: (custom hollow metal) Grand Metal; (interior) Weyerhaeuser Co.; (frames) Grand Metal; (exterior overhead) Atlas Door Corp. Flooring: Azrock, Armstrong. Carpet: Lee. Ceiling, wall panels: Conwed. Roofing: ASC Pacific, Carlisle Tire & Rubber. Insulation: Owens-Corning Fiberglas. Wall/floor tile: Dallas Tile. Gymnasium flooring: Robbins, Inc., CPL Corp. Floor underlayment: Gyp-Crete Corp. Movable partition: Modern Fold. Paint: Sherwin-Williams. Hardware: Stanley, Schlage, LCN, Von Duprin. Food service: Northwest Hotel Supply. Lockers: PENCO Products, Inc. Bleachers: Universal Bleacher Co. Exterior signage: Nelson/Harkins Industries. Solar collectors: Soloron Corp. Stair treads: Flex Co. Handrails: Mercer Industries. Lighting: ITT, Peerless, Lithonia, Holophane, Marco. Plumbing: Kohler, Bradley, Sloan. Toilet partitions: All American Metal Corp. Toilet accessories: Bobrick. Water fountains: Kohler. Automatic fire sprinklers: Central Sprinkler Corp. Water heaters: A.O. Smith. Electric duct heaters: Valley Industries. Fan units: Brod & McClung-Pace Co. Controls: Barber-Colman. Laminated plastic casework: Lemons Millwork. Shop dust collector: Sternvent Co. Curtains: Stagecraft Industries. Vinyl wallcovering: (Victrex) L.E. Carpenter.

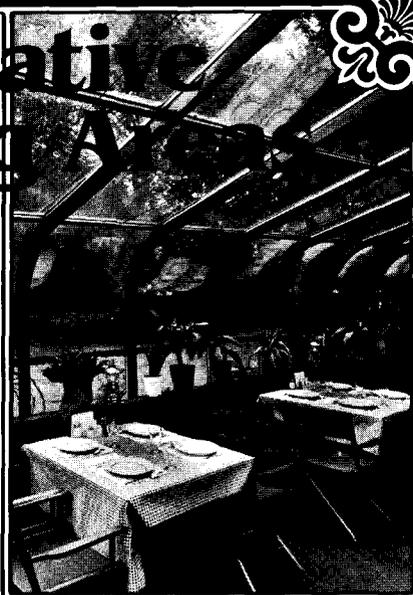
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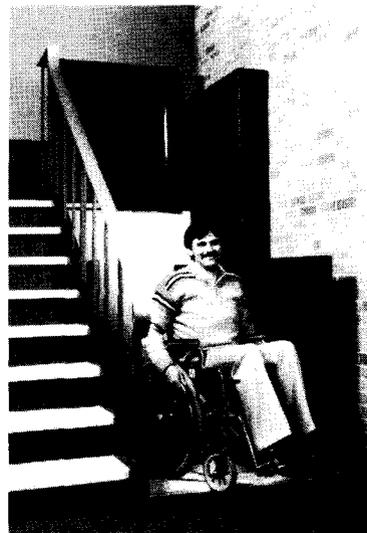
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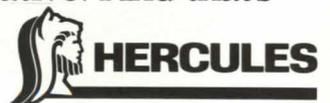
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MANAGEMENT PERSONAL TIME

MONTHLY SECTION ON TRAVEL AND PERSONAL INTERESTS

BUSINESS IS THE MAIN COURSE

BY JAMES E. BRAHAM

Outside the heavy oaken doors of the stately but relatively inconspicuous five-story brownstone on Sixth Ave., downtown Pittsburgh seems bent on going straight to hell. The area is being torn asunder to make way for a subway system many question as a boondoggle, and merchants are wondering where the shoppers went.

Inside the Duquesne Club, however, it's business as usual.

Anybody who's anybody in Pittsburgh business belongs here and, as the club noted with excusable vanity when it celebrated its 100th anniversary in 1981, "more agreements and contracts have been signed and more business discussed over lunch in the Duquesne Club than at almost any other club anywhere else in the world."

Just about every major city has an exclusive, private businessmen's

club, always one of the most influential power centers. Pittsburgh's is one of the larger clubs, with 2,600 members, of whom around 1,600 are classed as active, or residents. They are, typically, vice presidents and above in the big companies—or heads of smaller firms—along with lawyers and accountants, mainly partners of the major firms.

Lunchtime. Clubs such as the Duquesne were founded as a place for businessmen to meet over lunch and to entertain in the evenings. They have become, says James W. Wilcock, current club president and former chairman of Pittsburgh's Joy Mfg. Co., "a home away from home. When someone says let's meet for lunch, you just automatically think of the Duquesne Club."

The same can be said of such other longtime traditions as the Chicago

Club, the Union Club in Cleveland, the Union League Club of Philadelphia, the Pacific Union Club (known affectionately by its members as the "P.U.") in San Francisco, the California Club in Los Angeles, and the Metropolitan Club in Washington.

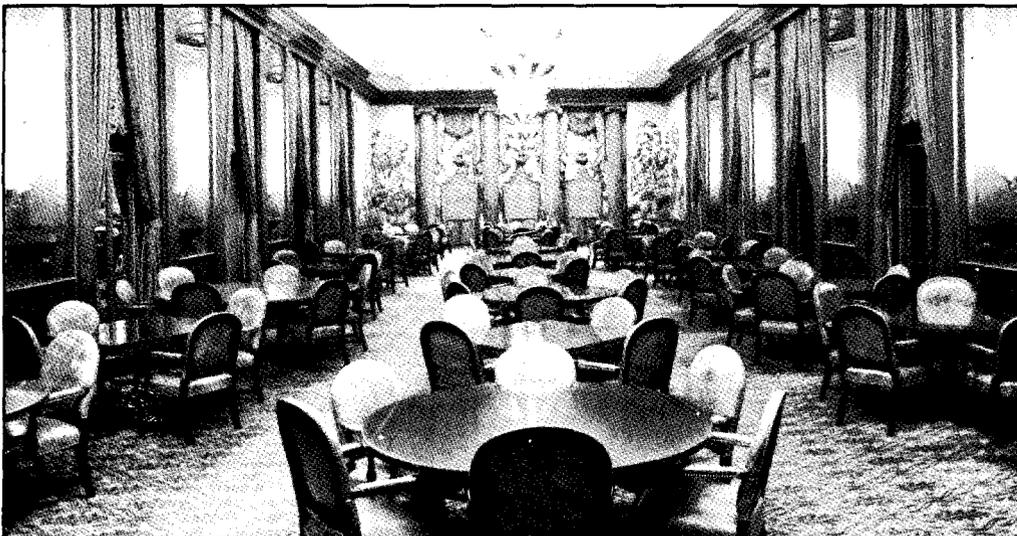
In New York there are so many clubs that no single one dominates. There's room at the top for the Metropolitan, the Union, the Links, and the Union League. The Links is the most exclusive, but it's so small that its members are nearly all big-name CEOs. With 2,000 members—including 1,000 residents—the Union League probably comes closest to being *the* businessmen's club in Manhattan, classed by one observer as "more for executive vice presidents." Links members generally also belong to the Union League, and perhaps one or two other Manhattan clubs.

There is a social pecking order in all

of these clubs, as well as a certain stuffiness. A guest at Cleveland's Union Club went away thinking it was "a hell of a nice place to be buried." A Pittsburgh sportswriter once said of the Duquesne Club, "you can sit in the lobby and listen to the members' arteries harden."

As clubs gradually drop some of the old membership barriers, that image is fading . . . but slowly. "These clubs are all based on snobbery, really," notes one New York executive.

You're expected. "I kind of hate this class-



With seating for 220, the main dining room is the largest of 23 Duquesne Club dining rooms.

distinction business but you're pretty well expected to be a member," says Jerry McAfee, retired chairman of Gulf Oil Corp. and last year's president of the Duquesne Club. He lists the club's chief advantages this way:

"One, it's the best place to eat in Pittsburgh; it always has been and it still is. Two, it's very conveniently located, for any business or social function. Three is the prestige it enjoys; any affairs there you *know* are going to be top-drawer. Four is the opportunity for casual, no-big-deal contact with the other people who make up the business community in Pittsburgh."

When Mr. McAfee became a vice president of Gulf in 1955, he became a Duquesne Clubber. At that career level, "membership in the Duquesne Club is one of the perks that go with the promotion," he explains. "It's a company-sponsored thing in most cases. Now that I'm no longer with the company, I'm maintaining my membership on an individual basis."

Among these leading, exclusive clubs the Duquesne is different. It doesn't disguise the fact that it's a businessmen's club—despite its being listed as a "social" club. It has corporate suites—33 of them, listed in individual members' names but belonging really to the big Pittsburgh companies.

Since 1980 it has permitted female members and, while there are still only three of them, the impact has resulted in men now bringing women as guests to the club much more frequently. And, while not seeking publicity, it is—under the guidance of new and younger manager Melvin D. Rex—less reticent than most to discuss its operation.

At all of these clubs the prospective member does not apply, of course. He must be proposed by a member, seconded by another, and have references from several others. The Duquesne Club typically requires five members' support, but the Pacific Union requires supporting letters from at least 12 members.

Year's wait. This entire process of letters, interviews, reviews, posting of names on the club bulletin board, and so on, adds up to a typical waiting period of at least a year—"a year of Mickey Mouse stuff," one Chicago Clubber recalls.

The Pacific Union (one of the smaller clubs with only 925 members, 725 of them residents) reports a waiting list of three years, and the Metropolitan Club in Washington

claims its wait is six years.

Turnover is low, just as it is among club employees. Cleveland's Union Club elected 40 new members last year while maintaining its resident total at the 850 limit.

While many private businessmen's clubs are struggling financially, these premier clubs have few worries. Asked about an occasional deficit, a Union Clubber in Cleveland simply smiled and said, "That's never any problem. They just raise the dues."

Those expenses, usually paid by a member's company, are an initiation fee of \$5,000 and annual dues of \$1,320 at the Union Club in Cleveland; \$4,000 initiation and \$860 dues at the Duquesne; and \$2,000 initiation and \$1,200 dues at the Chicago Club.

New York's many clubs compete more for members and thus have a lower price structure. The Union League charges \$1,400 each for initia-

tion and dues, the Union Club \$950 for each; and the ultraexclusive Links is a "steal" at a \$500 initiation and \$750 annual dues.

Ego trip. For these outlays, club members expect—and receive—the ultimate in comfort, convenience, and service, without needing cash. It never fails to impress new members when they're addressed by name on their first day at the club. "Everyone greets you by name. It's a big ego thing," Duquesne Club's Mr. Wilcock admits, "but it's nice."

At the Duquesne Mr. Rex encourages new members to try out the various dining rooms and find one in which they'll be "most comfortable." Besides the corporate suites, the club has 23 dining rooms, with the main one seating around 220 patrons.

Different rooms have different menus, and the Duquesne Club re-

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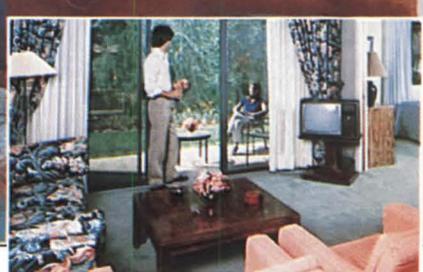
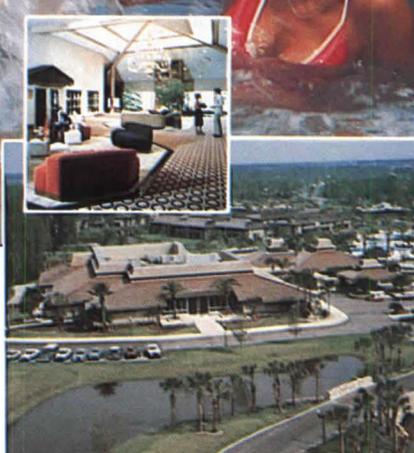
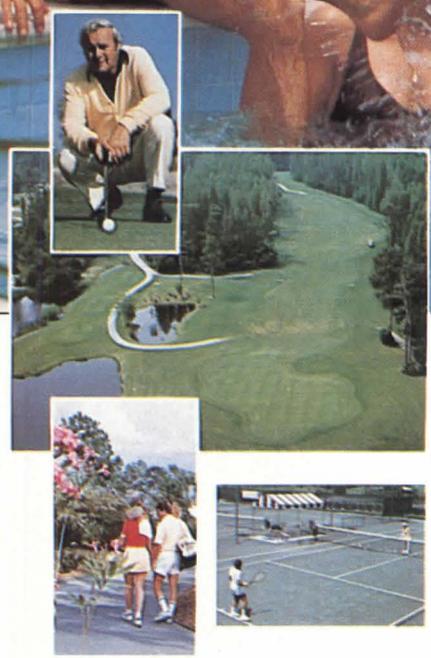
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vises them frequently, producing them in its own print shop. The club serves an average of nearly 1,000 meals daily—about 700 lunches, 200-250 dinners, and 50-100 breakfasts.

The prices are usually less than those of first-class restaurants, and the food is superb.

"Everything is hinged around consistency," Mr. Wilcock says. "You can order the same dish every week for ten years and it will taste the same every time." A fried fish filet called Virginia Spot is one of the favorite Duquesne dishes, and its absence from the menus for a brief period last fall created what Mr. Rex jokingly calls "one of the major crises of the year."

"Where's the Spots?" members asked daily, and he had to explain that a storm along the East Coast had prevented fishermen from going out. (Everything is served fresh at the club.)

No papers. Although business is usually the main course when one dines at any of these clubs, taking business papers or a briefcase along is not permitted in the "public" dining rooms. In some clubs this is a house rule; in others it's an unwritten taboo. The many private dining rooms are the places for formal business.

Arthur E. Earley, chairman of Mel-drum & Fewsmith Inc., a Cleveland advertising agency, frequently uses the private dining rooms in the Union Club "for business lunches with clients and for internal meetings, when I want to talk privately with the top operating officers of the agency. We can transact business while having lunch and it saves a great deal of time."

Mr. Earley also uses the Union Club to keep abreast of what else is happening around town. "There are no other [similar] clubs downtown," he says. "We are really a small community, and a large percentage of the Union Club members are also active on boards of various organizations (arts, charity, etc.). So you are pretty apt to go there at lunchtime and be able to touch base for a minute or two with several people with whom you share a specific interest. It offers a communications opportunity that I

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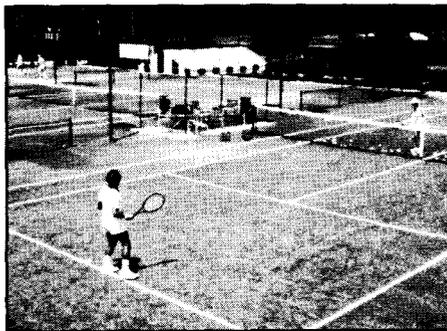
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find very valuable and timesaving."

Says another Cleveland executive: "If you want to have a meeting and you say let's meet at the Union Club, you usually don't get any turndowns. That's why people belong."

"The main attraction is that . . . the civic and business leaders of the community [are members]," says Edward B. Brandon, vice chairman of Cleveland's National City Bank.

"They belong because their friends belong," confirms Mark Stanley, manager of the Pacific Union Club. "It's a prestige thing."

These "full-service" clubs are quite similar in appearance. A canopy, staircase, and doorman out front. Dark mahogany, gleaming brass, and deep, rich carpeting throughout the interior. Overstuffed chairs, fireplaces, and forbidding portraits of the club founders grace the reading rooms and libraries. In addition to all of the dining rooms and bars, each with its own distinct decor, there's usually a cigar stand, billiards room (frequented mainly by retirees during midday),

MANAGEMENT PERSONAL TIME

barber shop, health club (with perhaps a few squash courts), and bedrooms for overnight use by members or guests.

The Duquesne Club has 41 bedrooms; the Union League in New York has 65. The 33 corporate suites—sitting room, dining room, bath, and bar—are unique to the Duquesne Club. Says Mr. Rex: "They afford the members the ultimate in privacy—for breakfast, lunch, and dinner meetings—as well as a place to relax and freshen up." All decorated differently by large corporations, the suites are leased according to size; the prices range from \$450 to \$1,800 a month. They are used primarily to entertain visiting VIPs.

Reciprocity. Many of these clubs have reciprocal agreements with other leading clubs, so that members may use the others' facilities while visiting. The Duquesne Club and Cleveland's Union Club have so far resisted this arrangement. Says Mr. Wilcock, the Duquesne Club's president, "This has come up before but the board feels that we just don't know the people coming in."

The members at all of these clubs are still predominantly white, Anglo-Saxon, Protestant, and male. But the membership barriers are gradually falling, and women represent the most visible change. While the Duquesne Club permits female members, most of the other clubs are opening up more areas to women guests. Cleveland's Union Club, for example, now allows women to enter the front, rather than the side, door. At the Duquesne Club, Mr. Wilcock points out, "women can go anywhere—except to the men's room and the men's bar. You've got to have some place that's sacred." ■

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By MIKE HENSON

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The ball looks and feels like an ordinary ball, so there's no way a player can tell if he's competing with one. Even the name on the ball is a secret. A spokesman says "Yes, it is illegal when playing under U.S.G.A. rules, but more money is probably changing hands with this little white devil than all the tournament purses put together."

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Mike Henson is the author of *Secrets to the Short Game*.



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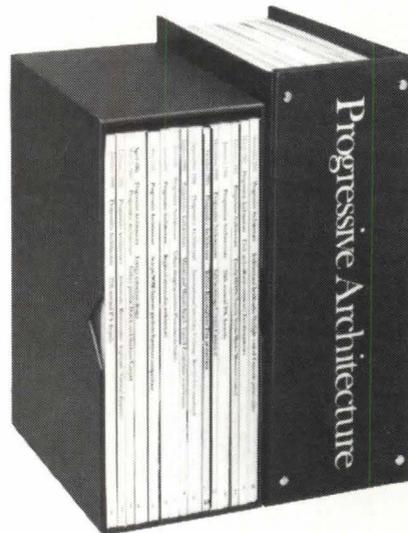
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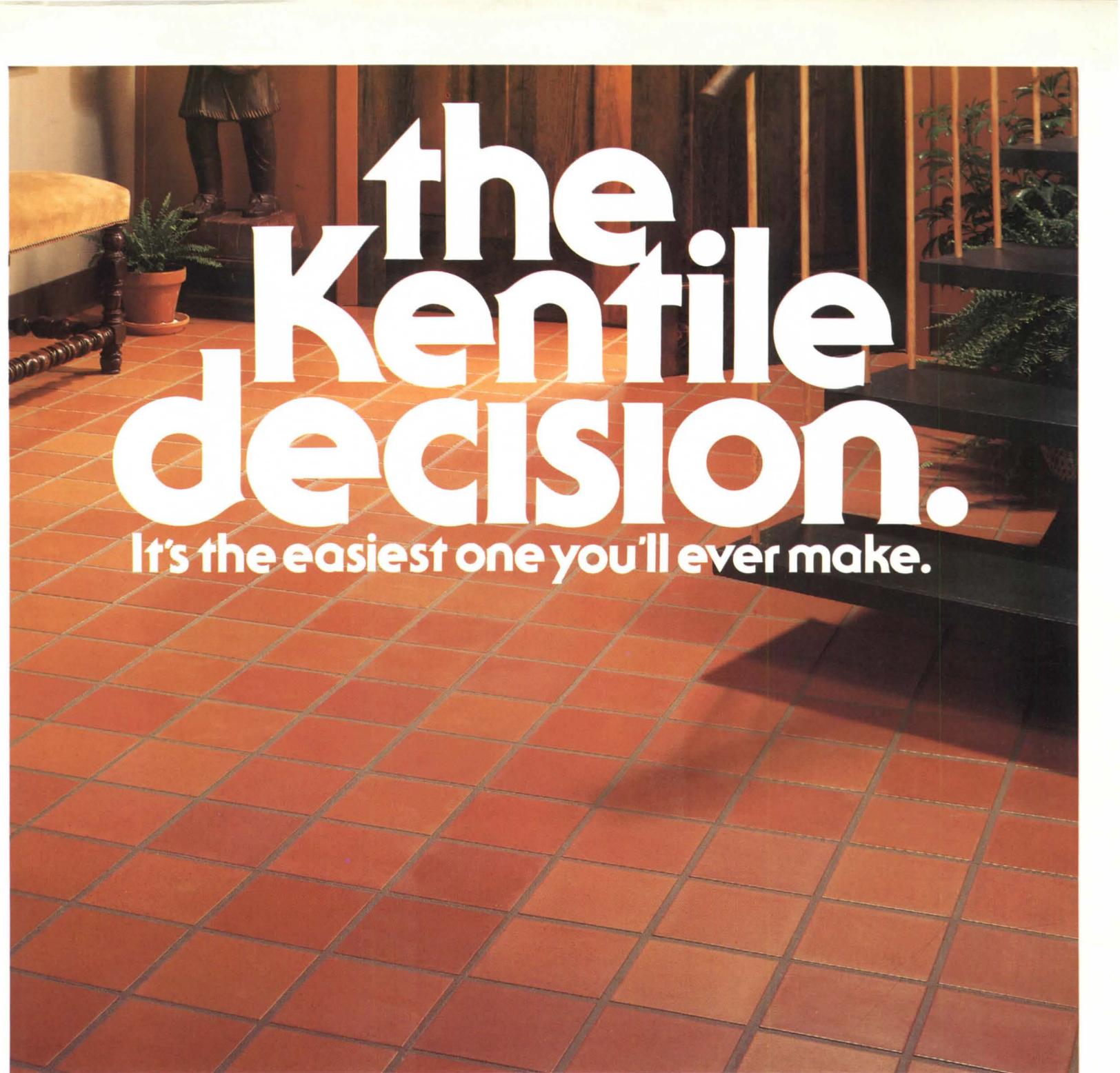
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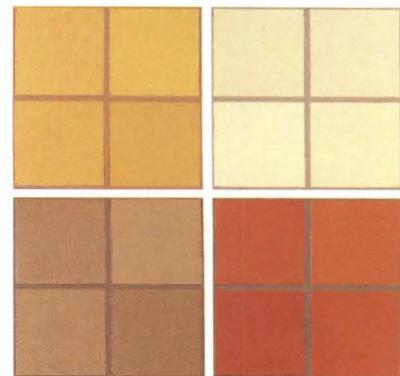
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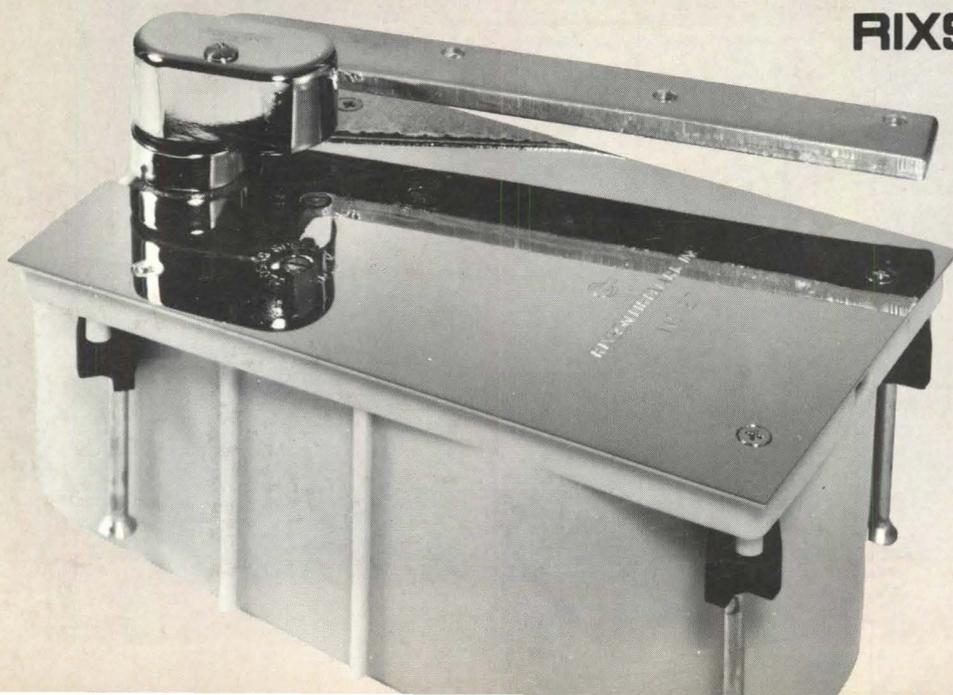
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