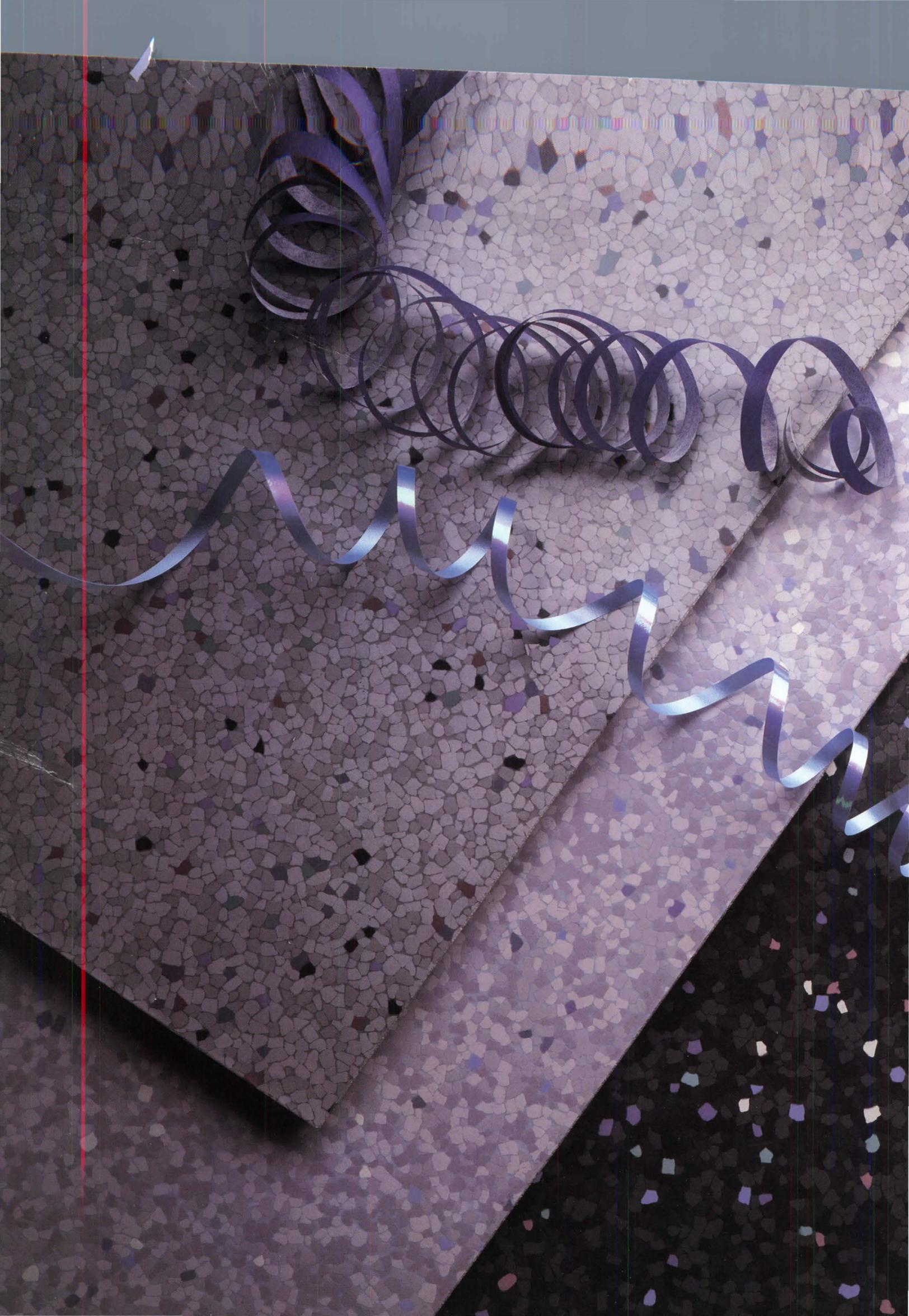


Progressive Architecture

M A Y 1 9 8 8





The background of the advertisement is a dark, speckled vinyl floor. The speckles are in various colors, including purple, blue, green, and red. Several colorful streamers (blue, purple, green, and red) are scattered across the floor, some in loops and some in long, wavy lines. The streamers are positioned in the upper right and middle sections of the image.

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Progressive Architecture (ISSN 0033-0752) is published monthly, except semimonthly in October, by Reinhold Publishing, A Division of Penton Publishing, 1100 Superior Ave., Cleveland, OH 44114; Philip H. Hubbard, Jr., President; Robert J. Osborn, Vice-President; Penton: Thomas L. Dempsey, Chairman; Sal F. Marino, President; James K. Gillam, N.N. Goodman, Jr., Paul Rolnick, Executive Vice-Presidents. Executive and editorial offices, 600 Summer St., P.O. Box 1361, Stamford, CT 06904 (203-348-7531). FAX 203 348 4023

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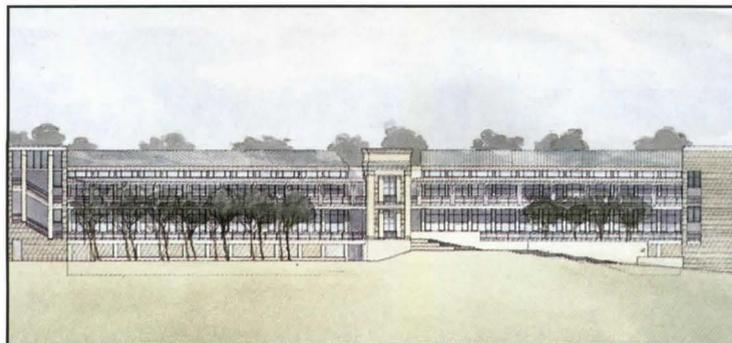
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The United Gulf Bank in Bahrain, by Skidmore, Owings & Merrill, responds to the culture and climate of the place in a freshly Modern way. *Thomas Fisher*
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In an effort to demonstrate that bigness doesn't preclude innovation, Vitra International, one of Europe's largest producers of office seating, has commissioned works from internationally known architects, designers, and artists. *Pilar Viladas*
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- 94 **Through the Looking Glass**
Although an apparently completed Paris landmark for over a year, the Arab World Institute—designed by Jean Nouvel, Gilbert Lezenes, Pierre Soria, and Architecture Studio—opened only this spring. Its interiors are shown here for the first time in the U.S. press. *Marie Christine Loriers*

TECHNICS

- 98 **The Ultimate Office Chair**
In the search for perfection in office seating, designers look for ways to incorporate ergonomics in subtle, but self-evident, ways. *Vernon Mays*

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Cover
Detail of United Gulf Bank, Bahrain, by SOM (p. 65).
Photo: Nick Merrick, Hedrich-Blessing.



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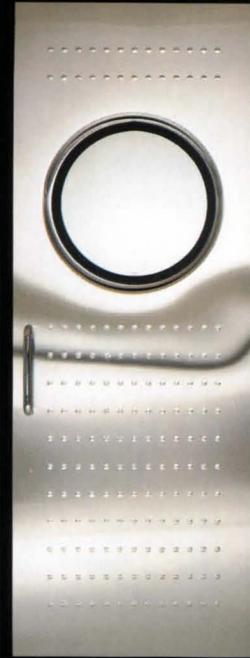
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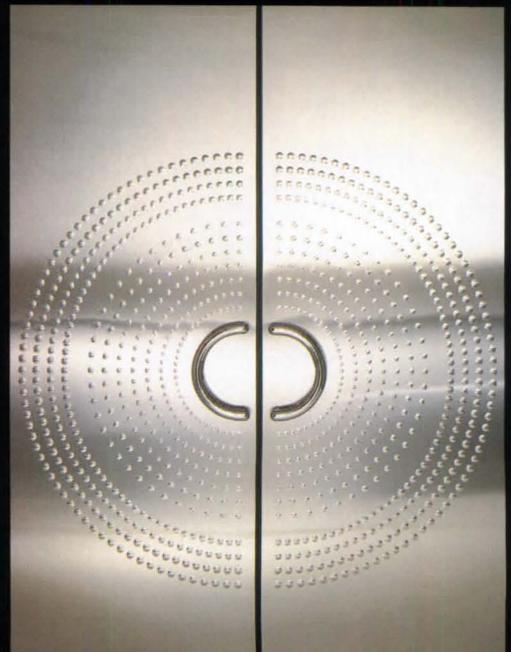
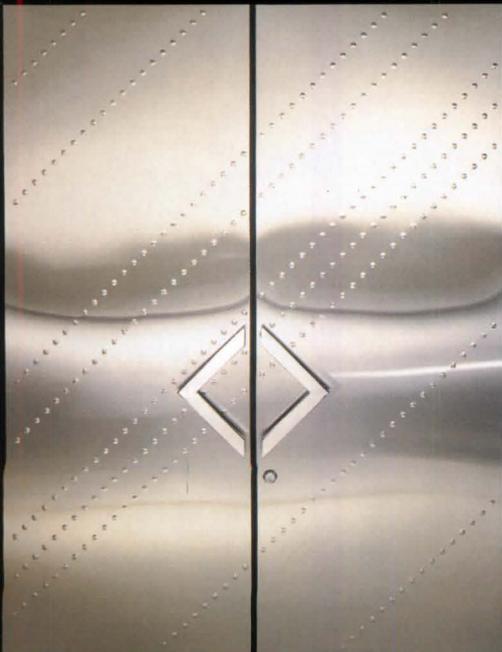


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AIA Visits the Apple

When the AIA convenes in New York this spring, the experience of the metropolis will be competing for attention with scheduled events.

THIS month, the AIA brings its annual convention to New York, for the first time since 1967. The institute was scheduled to convene in the Big Apple back in 1985, but construction delays on the new Convention Center caused hundreds of meetings to be postponed—in one of the mega-blunders that seem all too typical of New York. (Now, although badly located and short on amenities, the hall is open and looking so good that it is earning I.M. Pei & Partners another AIA Honor Award.)

To a greater extent than members of most organizations, AIA convention-goers find the experience of the host city a real professional benefit—and a major inducement to attend. Various of the oddly related components of the convention program draw certain members, of course: Voting for officers, resolutions, etc., draws the institute politicians; the recipients of various honors are more or less obligated to appear; the array of continuing education seminars attracts many members; and the special interest groups that meet before and during the main event have committed followings—the women, the students, the minority members, the fellows, the members of certain national committees. But notwithstanding all these official reasons to attend, I suspect that the majority of convention-goers choose to go largely on the basis of the meeting place and how the convention program promises to exploit the local attractions.

It is interesting that last year's convention in Orlando was held in June, after schools were out, to encourage architects to bring their kids to Disney World; and there was apparently the largest number of kids ever to join the convention fun. It was hard to tell whether making the family welcome reinforced or undermined the official part of the program. In New York, the distractions will be of other kinds: People will play hooky to dine and shop and stroll through old neighborhoods and visit buildings they want to see. AIA convention planners, of course, try to harness these urges, incorporating major works of architecture into their plans. The Host Chapter Party will be in the Winter Garden of the not-quite-finished World Financial Center; the investiture of fellows will take place in the Cathedral of St. John the Divine; the McGraw-Hill party will showcase the IDCNY in Queens. There will be tours to a remarkable diversity of sites in the city and surrounding suburbs.

Every time the AIA meets in a major metropolis, its attractions are competing with the scheduled sessions, the seminars, the exhibits, and the official parties. In many ways, the ideal AIA convention city is a small, manageable one with enough architectural pleasures to satisfy the attendees during a short visit, but not so many distractions that they're tempted to defect from scheduled events. San Antonio (1986) was ideal, with a number of choice examples of architecture and planning, along with plenty of good food and some outstanding hotels, all conveniently close together.

Among the attractions New York can offer that a smaller city could not is a wide variety of architectural exhibitions in some of its many museums and other showplaces (*P/A News Report*, p. 31)—which will, of course, worsen the competition for every attending member's hours. One of these shows, the Ten on Ten exhibition put on by the New York Chapter AIA at their home in the Urban Center (which is well worth a visit in itself) promises some guidance on what to see in the city. Ten local journalists (including me) were each asked to choose ten works of architecture that exemplify New York in the 1980s. Some of my choices would be easy to visit along the way (the renovated New York Public Library or the RCA Building illuminated by night) and some will be the sites of convention events (World Financial Center, IDCNY). The show as a whole should suggest many worthwhile sidetrips.

Inevitably, convention-goers will also see the troubling side of New York as well. Even those who choose not to visit a low-income neighborhood or ride a subway will observe litter and graffiti and the homeless huddled in doorways. By now, many of the visitors may be used to seeing such sad signs in their own cities as well, but that does not make them any less embarrassing.

Let's hope, anyway, that when the AIA visitors leave for home they take away some constructive memories of this unique city. Let's hope that they know what to attend and what to skip and where to go when they're on their own in New York. ■

John Morris Dixon



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Views

Preservation Easements

I read with interest in "Pencil Points" (March issue, p. 38) that Unity Temple in Oak Park, Illinois, "has become the first religious building in the United States to be protected under a preservation easement." While this is good news, it is inaccurate insofar as the Society for the Preservation of New England Antiquities (SPNEA) has long held interior and exterior preservation easements on Boston's Old West Church (built in 1806) and Charles Street Meeting House (built 1807).

The Stewardship Program of SPNEA currently administers preservation restrictions on 36 properties encompassing a variety of building types.

Brian Pfeiffer

*Associate Director of Stewardship Society for the Preservation of New England Antiquities
Boston*

Prestressed Concrete Successes

We took great interest in Raymond DiPasquale's discussion of the need for careful detailing of precast/prestressed concrete elements ("Failures: Prestressed Concrete," March issue, p. 67). The Prestressed Concrete Institute is enthusiastically supportive of any effort to

increase the awareness of the proper design of precast/prestressed concrete structure. Nevertheless, we're concerned that the article's tone—to say nothing of its rather unfortunate headline—may have left the impression in some readers' minds that structural failures such as those described are commonplace, or that the proper design of precast/prestressed concrete structures is inordinately difficult.

We're proud of the fact that precast/prestressed concrete structural design has come a long way in the decades since many of the buildings Mr. DiPasquale describes were built. Today, thanks in part to research sponsored by PCI, the movements of prestressed concrete elements are well understood, and strategies for dealing effectively with these forces have been established for many years. Because these standards have been set, structural failure of precast/prestressed concrete members is extremely rare. Architects can specify precast/prestressed concrete without feeling that they are in any way compromising the safety or load-bearing capability of a structure.

While the proper detailing of precast/prestressed concrete

elements has become a relatively routine matter, Mr. DiPasquale's article calls attention to a very important point: It is crucial that the architect or engineer consult with a precaster early in the design stage of a project. The precaster's engineering staff can serve as a valuable resource for information on the detailing of connections, bearing pads, etc., and can suggest ways that the designer can make the most of the inherent efficiencies of precast/prestressed concrete.

As Mr. DiPasquale points out, precast/prestressed concrete is a very viable building material which opens the door to entirely new structural and aesthetic achievements. We trust that the growing number of architects who are using the material are not discouraged by the negative implications of this article.

*Thomas B. Battles, AIA
President, Prestressed Concrete Institute
Chicago*

Photo Credits Omitted

The model photos that illustrated the article on Michael Graves's designs for the Disney Dolphin and Disney Swan Hotels (March P/A, pp. 37 and 39) should have been credited to William Taylor.

Urban Design Credits

The only aspect of the Battery Park City guidelines (March P/A, pp. 86–93) that Alexander Cooper and Stanton Eckstut worked on jointly was the project's master plan. Cooper was responsible for the project's commercial guidelines; and Eckstut, for the residential guidelines for the South Residential Area that includes Rector Place.

The authorship for the Hunter's Point development plan (March P/A, p. 82) was Beyer Blinder Belle and Gruzen Samton Steinglass (not The Gruzen Partnership).

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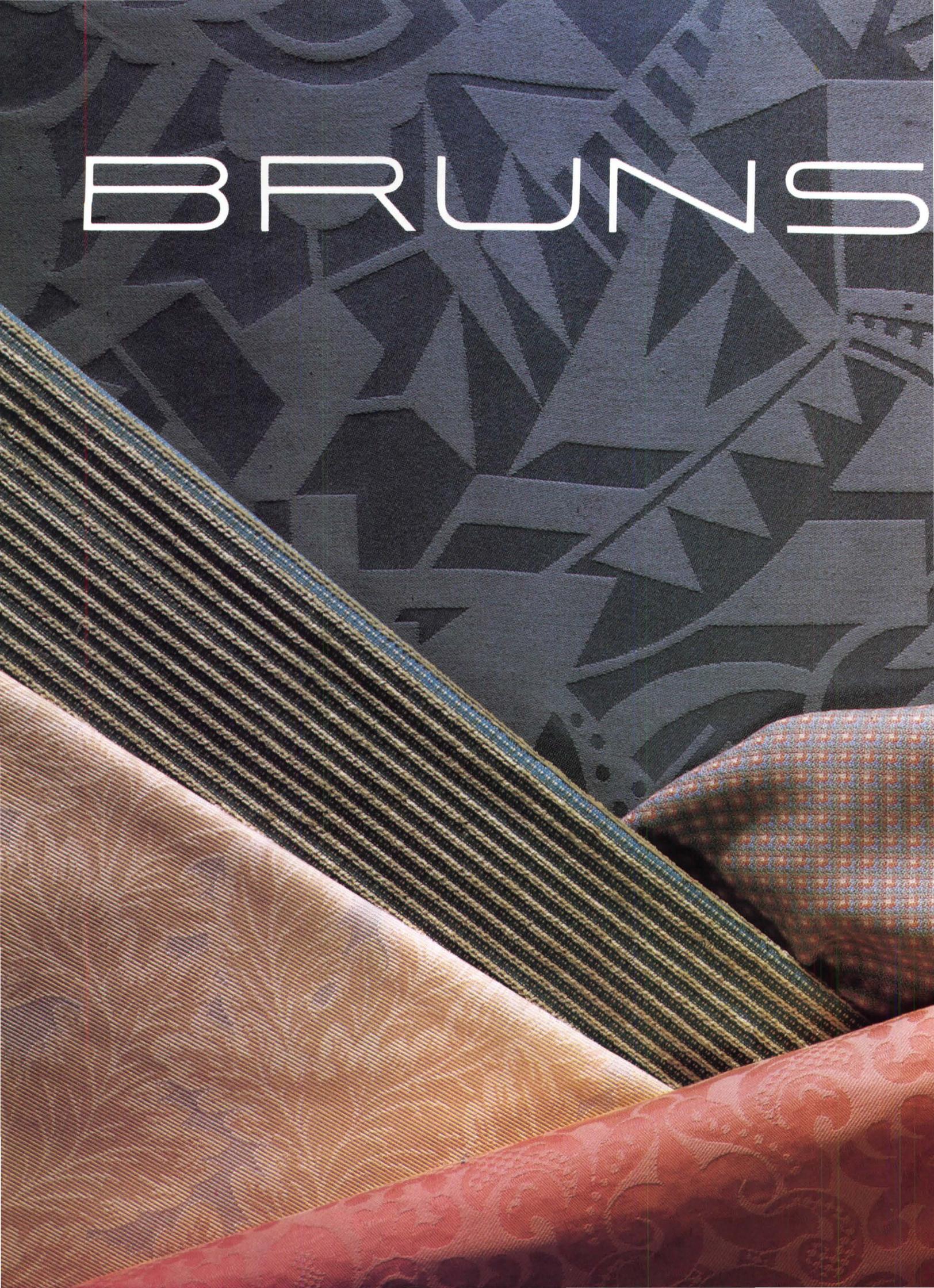
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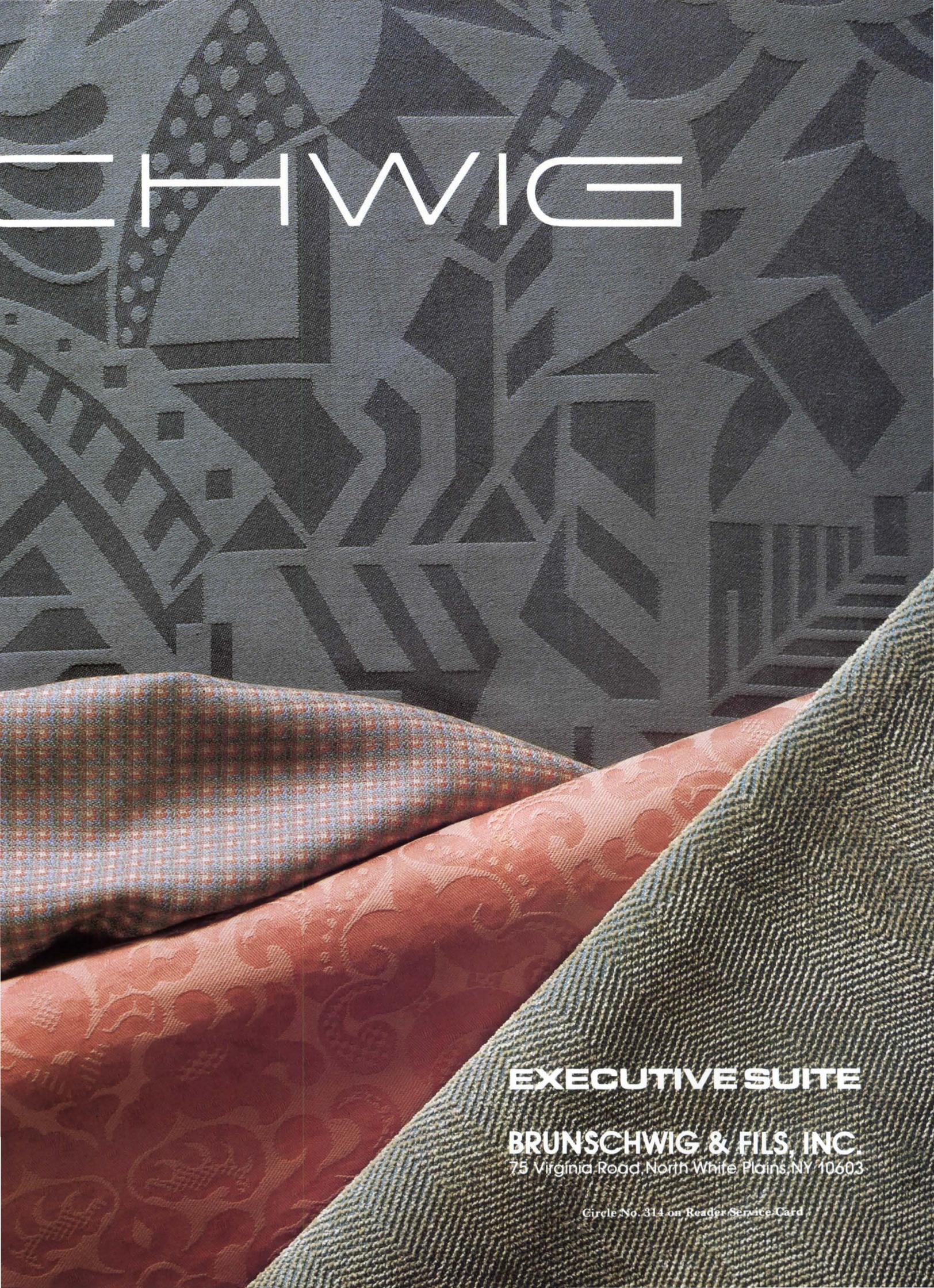


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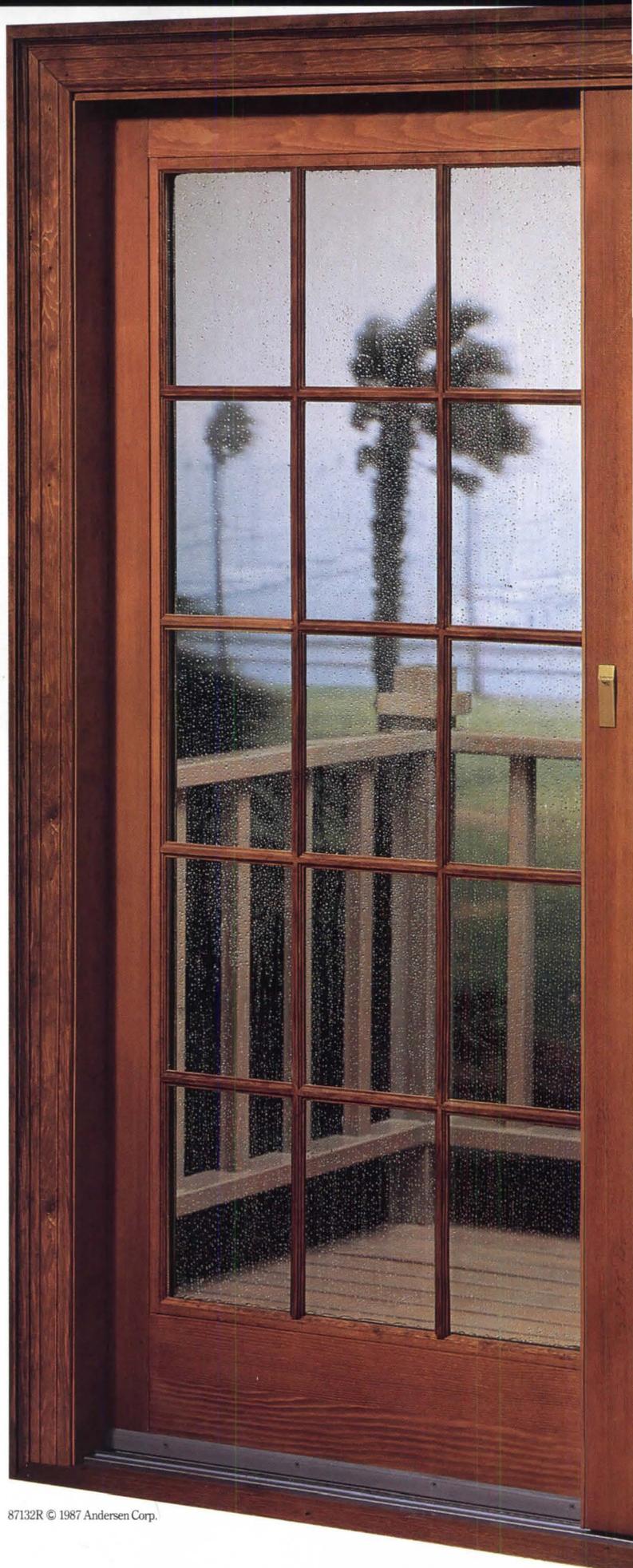


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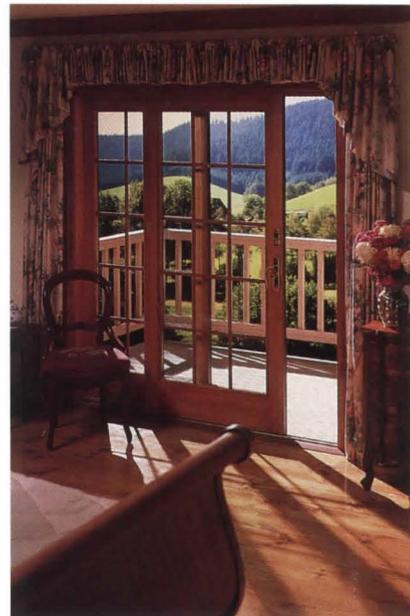
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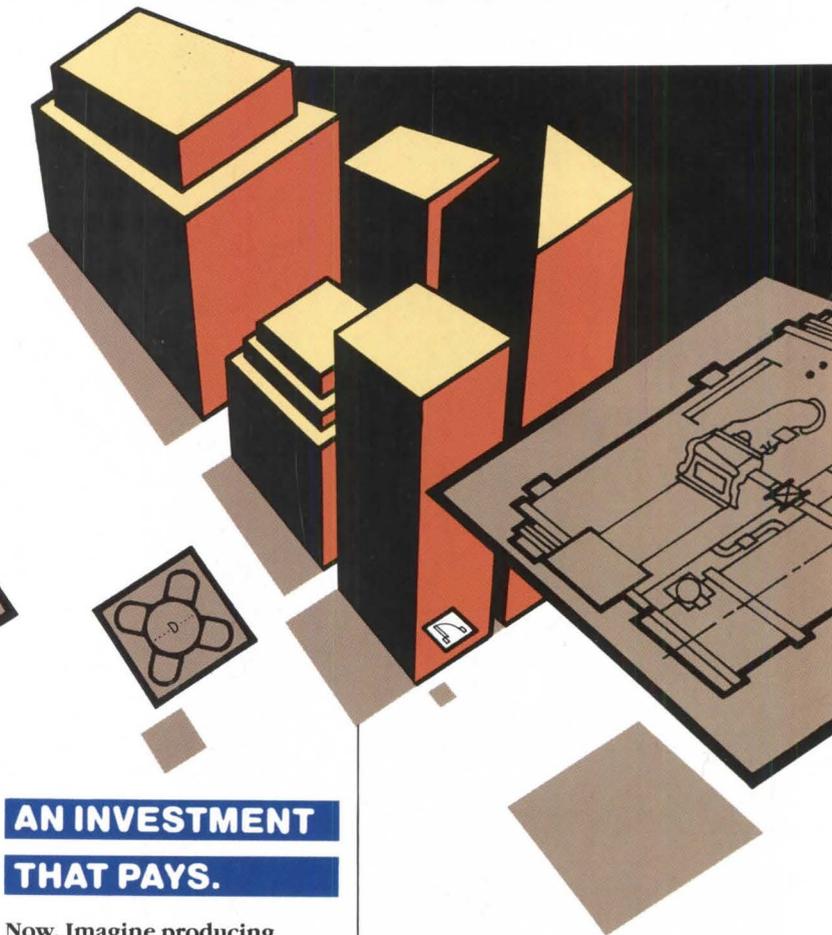
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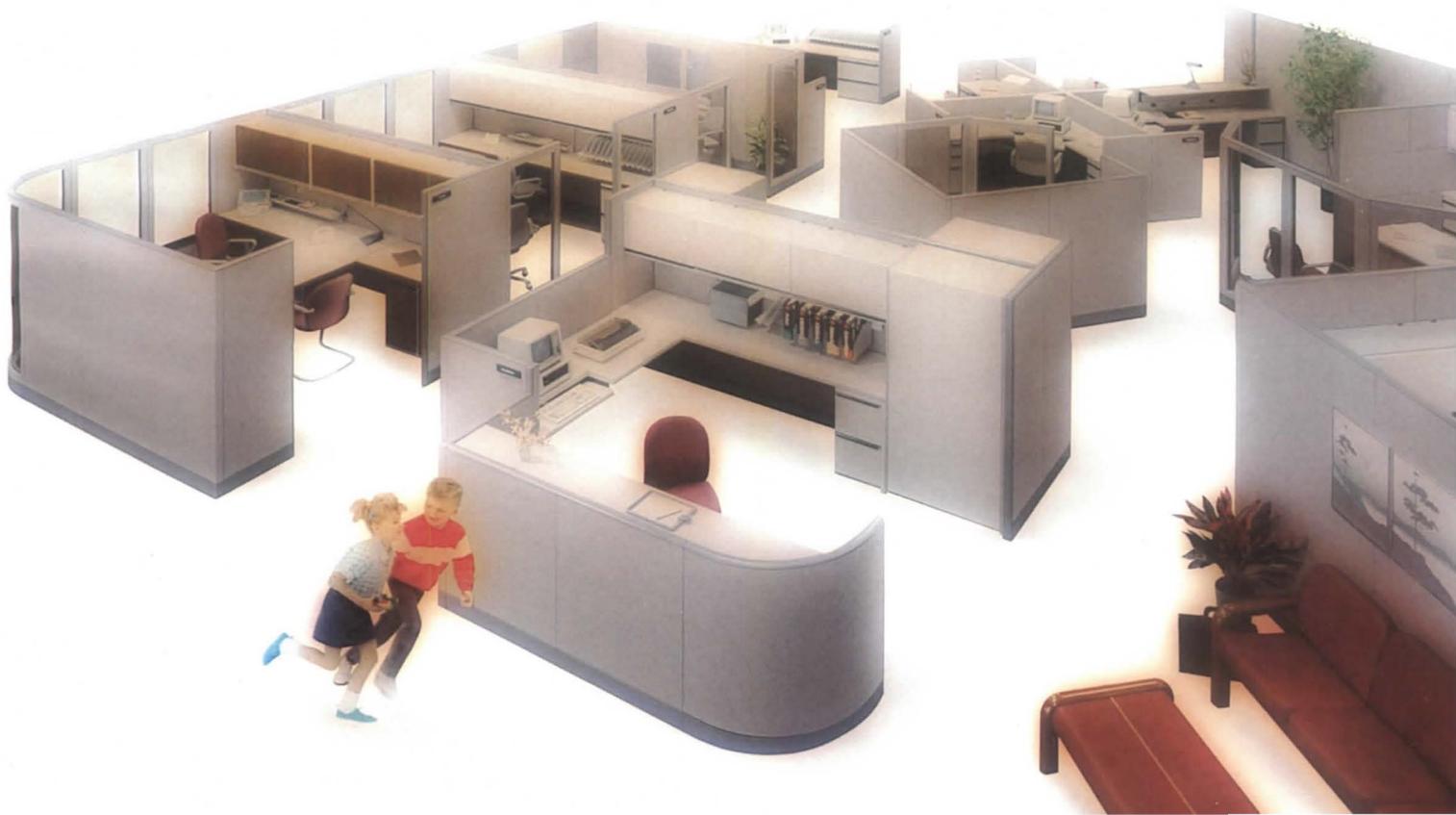
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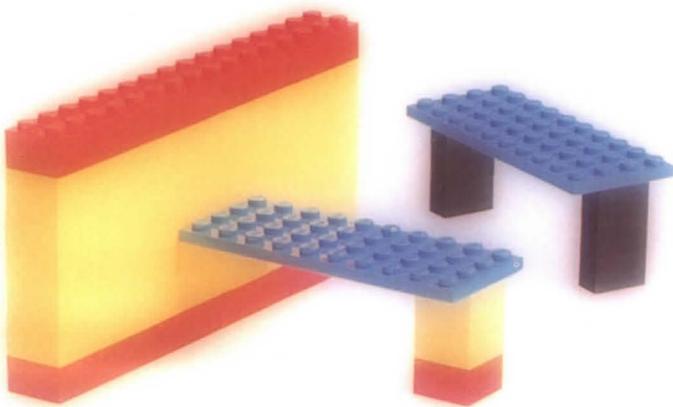
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Design Freedom

The Camarilla office center was originally designed with a steel roof and tilt-up concrete walls, much like many other low-rise commercial structures in the Waco, Texas, area.

But Jess Williams, project architect for HOK, Inc., abandoned the standard approach because the developer was looking for generous window areas to increase interior visibility and attract potential tenants.

The answer is a roof system designed with parallel chord trusses and pre-framed wood wall components. All lumber is Southern Pine.

The dimensions of the 19,280 square-foot building are 241 × 80.

Trusses have 2 × 4 No. 2 Dense Southern Pine lumber chords and 2 × 4 webs. They're on 24-inch centers and span up to 40 feet.

Windows are 5 feet high, 4½ feet wide and are arranged in a perimeter band that dominates the design.

Pre-manufactured wall sections use 2 × 6 Southern Pine lumber.



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The reason is clear: The cost of the wood building turned out to be

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The cost of trusses and roof deck was \$38,500 including materials and labor. The wall system was \$39,100 for materials and labor.

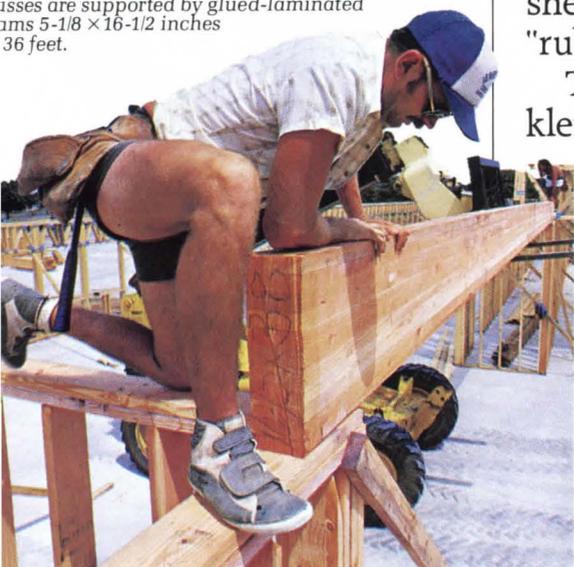
Developer Gary Hancock of Camarilla Development Company said, "This is an excellent office building and we're planning to build several more."

Aesthetically, the building is doing what Hancock hoped it would. Waco is overbuilt in terms of office space; the wood system gives Camarilla Development a competitive edge for faster leasing in a tough market.

3. Time
The structure was completed six weeks ahead of schedule.

Wall and roof framing were completed in only 17 days. The

trusses are supported by glued-laminated columns 5-1/8 x 16-1/2 inches x 36 feet.



entire structure was completed in less than 16 weeks, rather than the scheduled 22 weeks.

Sound design and careful scheduling helped save time. So did the component fabricator, Trussway Dallas. Trussway supplied the roof trusses and pre-manufactured the wall components.

The finished roof is 3/4-inch plywood decking covered by insulated



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sheathing and Firestone's "rubber roof" surface.

The entire building is sprinklered — Hancock said the \$30,000 sprinkler system pays for itself in less than 36 months because of lower insurance premiums.

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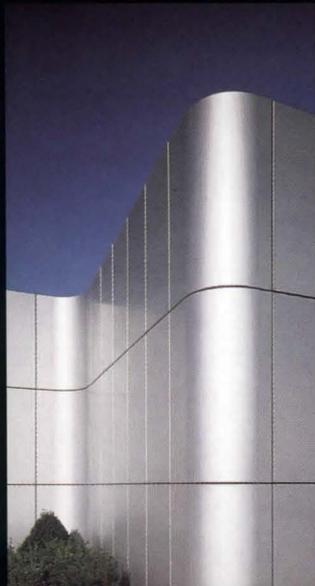


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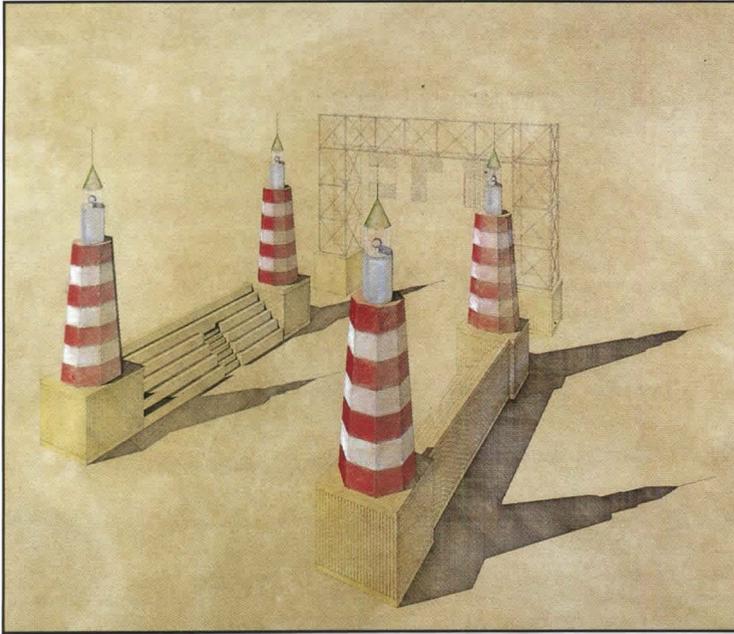
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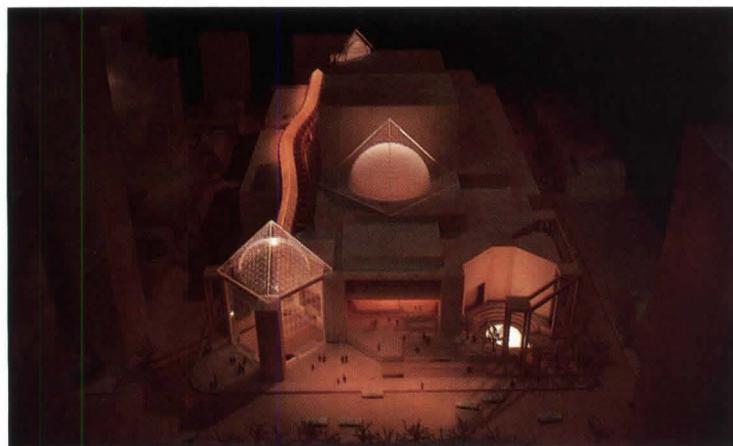
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Three projects by Aldo Rossi are shown in progress, page 33. Shown above is Rossi's arch design for Galveston, Texas, to be completed next month.

Safdie Wins Toronto Opera

Moshe Safdie has been awarded the commission to design a \$230-million, 2000-seat Opera Ballet House in Toronto following a controversial selection process that was part design exercise, part popularity contest. Safdie's competition down the stretch consisted of Barton Myers Archi-
(continued on page 24)



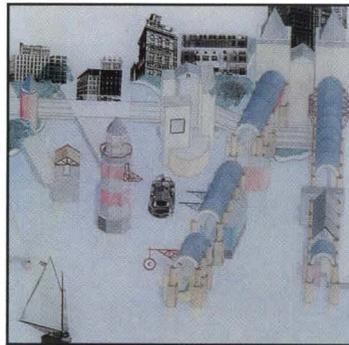
Safdie's premiated design for Toronto Ballet Opera House.

West Side Waterfront

Nobody knows what's going to happen to the four derelict miles of New York West Side waterfront, but the Municipal Art Society of New York wants people to think about it.

The Society, with a grant from the National Endowment for the Arts, sponsored "Wanted: A Waterfront for New York; A Competition for Ideas," which invited anyone—from master planners to poets—to offer a scheme for a site along the Hudson River that includes 66 acres of land and 77 of piers. This huge chunk of public property running from Battery Park City to West 44th Street was assembled for Westway, the \$3 billion freeway/park/real estate development brought down by the striped bass in June 1985.

More than 400 entrants met
(continued on page 26)



Pagnamenta/Torriani West Side design, one of six winners.



Javits Center: Honor Award winner and site of 1988 AIA Convention.

AIA Honors: Soup to Nuts

As diverse a collection in style as in program, the 15 winners of the 1988 Honor Awards from the American Institute of Architects cut a cross section through a certain stratum of contemporary American architecture. From Gwathmey Siegel to SOM to Murphy/Jahn, the names are known and respected. Most if not all of the winners will be familiar to readers of American
(continued on page 23)

AIA New York: Shows in Town

Architects attending the AIA Convention this month in Manhattan may want to spend an extra day or two museum-hopping. Never have so many shows on architecture and design run concurrently in New York. (See Calendar, p. 41, for full details on these and other exhibitions.)

Organized by historian Robert Jensen, whose book *Ornamentalism* put Postmodernism on the coffee tables of America, "Architectural Art: Affirming the Design Relationship" ties in directly to the convention theme of Art in Architecture. On view at the American Craft Museum in Midtown, the ambitious endeavor, which is cosponsored by the AIA with support from Haworth, includes lectures and tours of in situ art works.
(continued on page 24)

Laura Rosen

Steve Rosenthal

Pencil Points

Richard Meier has been awarded the 1988 Gold Medal of the Royal Institute of British Architects.

I.M. Pei has been awarded the Medal of the French Legion of Honor for his work on the Louvre Museum, which opens to the public this November.

Steven Holl of Steven Holl Architect, New York, and Peter Pran of the New York office of Ellerbe Associates have been selected to design an addition to the 1960 School of Architecture and Landscape Architecture at the University of Minnesota. Among those also competing for the commission were Machado Silvetti and Mitchell/Giurgola.

Peter Eisenman, New York, in association with Lorenz & Williams, Cincinnati, has been chosen to design a \$20.8-million expansion and renovation of the College of Design, Architecture, Art & Planning at the University of Cincinnati.

Cambridge Seven Architects have been commissioned to design a new biosciences and bioengineering research laboratory at Rice University.

John Hejduk, dean of the School of Architecture at Cooper Union, New York, will receive the 1988 Topaz Medallion for Excellence in Architectural Education from the AIA and the Association of Collegiate Schools of Architecture.

The Jerde Partnership, Los Angeles, has been chosen by developers Rouse & Associates as master planners for Penn's Landing in Philadelphia. The mixed-use development on the Delaware River will include office, residential units, retail, and hotels.

Gottfried Böhm, Cologne; Frank Gehry, Los Angeles; Hans Hollein, Vienna; and James Stirling, London, are the four finalists selected for the Walt Disney Concert Hall in Los Angeles.

Jones & Kirkland, Toronto, architects of the Mississauga City Hall (P/A, Aug. 1987, pp. 69–79) have split up to form separate offices as Edward Jones Architects and Michael Kirkland Architect.

“Decon” Talks at the Tate

On the one side there was Jacques Derrida (or rather a video of the French philosopher who was absent due to illness) and his formidably elusive notion of “Deconstruction,” a term whose definition includes its own displacement. As Derrida himself said, “Each time Deconstruction speaks through a single voice, it’s wrong. It’s not deconstruction anymore.”

On the other side, there was Mark Wigley, ex-student of Derrida and curator with Philip Johnson of the forthcoming show “Deconstructivist Architecture,” at the Museum of Modern Art in New York which will feature Peter Eisenman, Bernard Tschumi, Daniel Libeskind, Frank Gehry, Coop Himmelblau, the Office of Metropolitan Architecture, and Zaha Hadid.

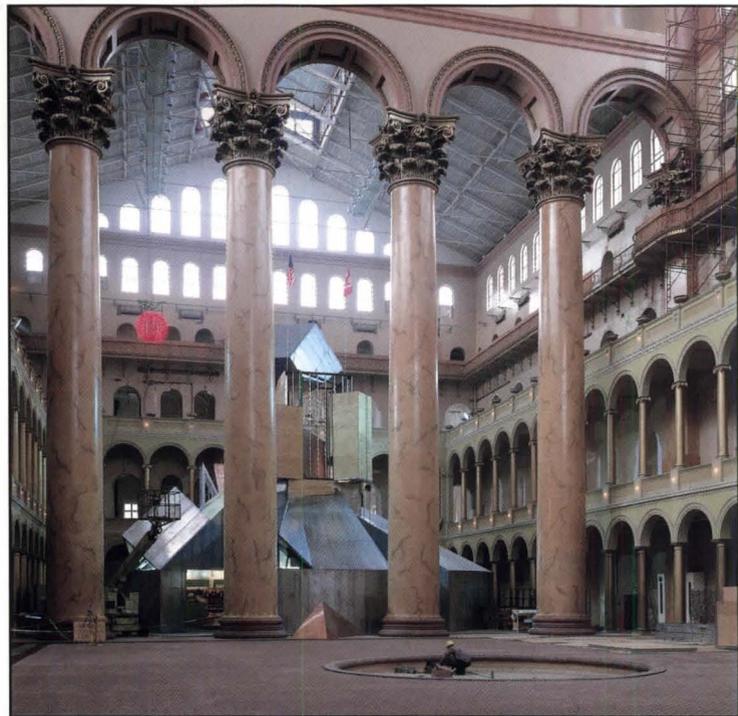
Were we, then, assembled at the Tate Gallery for a day-long symposium on “Deconstructivism” to recognize the work of these architects as the practice that ratifies the theory? The symposium voices conflicted. Eisenman declared roundly that “in fact, when I work I do not deconstruct.” Tschumi also considered “deconstruction” an *a priori* characteristic of a world already exploded by information.

Philosopher Christopher Norris began by asking Derrida, “Can there be such a thing as deconstructivist art or architecture?” Derrida replied, “At first I thought, no, it was a displaced discourse. Later I concluded that the most efficient way of putting through a deconstructivist discourse was art and architecture. Deconstruction . . . means putting into question architecture itself. Once one has questioned the hegemony of ‘function,’ ‘dwelling,’ one must reinscribe them. Deconstruction isn’t just forgetting the past.”

In fact, as art historians Catherine Cooke and Robert Rosenblum pointed out, these architects could be said to be repeating the past in following a tradition of the disjunctive that extends from the Mannerists to the Modernists. As such—and regardless of whether or not this work indeed corresponds to Derrida’s definition of deconstruction—“Decon” looks likely to become an antidote to the “Zelig” syndrome of polite contextualism that afflicts much Post-Modern architecture.

Brian Hatton

The author teaches at the Architectural Association.



Gehry's installation for “Sheet Metal” (above and below).

Frank Gehry at the Building Museum

Architect Frank Gehry's several sheet-metal installations in the Great Hall of the National Building Museum were completed, at last, early this spring. Not surprisingly, perhaps, given the ambitious and complicated nature of Gehry's design, the construction took two months longer than anticipated. Consequently, the wonderful exhibit on the architectural uses of sheet metal housed within Gehry's towering geometric structures opened in January amidst the din and debris of ongoing construction. “Sheet Metal Craftsmanship:

Progress in Building” marks the 100th birthday of the Sheet Metal Workers International Association, who sponsored it in conjunction with the Sheet Metal and Air Conditioning Contractors' National Association and the National Training Fund.

Gehry's structures are an homage to sheet metal, clearly inspired by the gargantuan proportions of the Pension Building. For the first time in anyone's memory, one full end of the hall (nearly 15 stories tall) seems filled by the wacky, 65-foot-tall intersecting plywood shapes clad in terne metal and copper.

The curvilinear forms of some reportedly gave initial pause to



Photos: Paul Mann © ESTO

the volunteer sheet metal workers building them, many of whom were not accustomed to shaping compound curves and seams. But the workers grew enthusiastic as the installation took form, and the resulting craftsmanship is striking. The structures work exceptionally well as settings for this fine display of sheet-metal items ranging from utilitarian skylight frames to decorative ornate finials, which remains on view at the NBM at least until next September. Exhibit curator and assistant museum director David Chase reports that attempts are now being made to find a permanent home for them, but acknowledges that dismantling will be difficult at best. Besides, one wonders, where else could an indoor space of sufficient dimensions be found?

The typically vast and somewhat dispiriting emptiness of the Great Hall prompts the further question: Why not just leave them there? They could work as well for other NBM shows, and as usable sculptures in the space, their attractiveness could prove to be enduring.

But, says Chase, "the space may have other commitments." He doesn't necessarily mean forthcoming museum shows (in any case, there's plenty of floor space left over for any exhibit that could conceivably be planned). Rather, he refers to the Pension Building's second life as the traditional site for presidential inaugural balls, a function it has served since 1885. The next inaugural in 1989 is unlikely to prove an exception.

Whichever presidential candidate has reason to celebrate next January, he ought to be encouraged to do so in the shadow of these formidable, interesting structures. **Thomas Vonier** ■

Honor Awards (continued from page 21) architectural magazines; seven of the 15 have been featured in P/A.

If this year's jury had an axe to grind, it's not apparent in their carefully balanced selections. Those who take issue with the very Post-Modern Tegel Harbor Housing by Moore Ruble Yudell can take refuge in Eisenman Robertson's "deconstructivist" housing project for the same city, West Berlin. I.M. Pei's Jacob Javits Center in New York gets its due, but so does its polar opposite, Frank Gehry's Guest House in Minnesota. Three museums, a contextual aquarium, a restored concert hall, a Modern school library and a Post-Modern dormitory, a house and a



AIA Honor Award winners: *The Menil Collection* . . .



and the *Monterey Bay Aquarium*.

high-rise office building round out the list.

"The 1988 AIA Honor Awards submissions were of a higher standard of excellence than has been seen for some time," asserted jury chairman William Turnbull, Jr., of MLTW/Turnbull Associates, San Francisco. "The jury worried at great length that these buildings would be seen as literal models for the future of architecture, rather than as meritorious individual artistic achievements, which was the spirit in which they were selected," he added, anticipating potential criticisms of the winners' circle.

The 15 winners, selected from 512 entries, are, in alphabetical order by architect: IBA Social Housing, Berlin, by Eisenman Robertson Architects, New York, with Groetzbach, Plessow & Ehlers, Berlin (P/A, March 1987, pp. 81-87); Monterey Bay Aquarium, Monterey, Calif., by Esherrick Homsey Dodge & Davis, San Francisco; Guest House, Wayzata, Minn., by Frank O. Gehry & Associates, Venice, Calif., with Meyer, Scherer & Rockcastle, Minneapolis (P/A, Dec. 1987, pp. 60-67); Library and Science Building at Westover School, Middlebury, Conn., by Gwathmey Siegel & Associates, New York; Residence in the Dominican Republic, by Hugh Newell Jacobsen, Washington, D.C.; Tegel Harbor Housing, West Berlin, by Moore Ruble Yudell, Santa Monica, Calif. (P/A, Oct. 1987, pp. 71-77); Kate Mantilini Restaurant, Beverly Hills, by Morphosis, Santa Monica (P/A, Oct. 1987, pp. 88-93); 8522, Culver City, Calif., by Eric Owen Moss with Jay Vanos;

United Airlines Terminal I Complex, O'Hare International Airport, Chicago, by Murphy/Jahn, Chicago (P/A, Nov. 1987, pp. 96-105); Jacob K. Javits Convention Center, New York, by I.M. Pei & Partners, New York, with Lewis, Turner Partnership, Rockville Center, N.Y. (P/A, June 1986, p. 23); The Menil Collection, Houston, by Piano + Fitzgerald, Houston (P/A, May 1987, pp. 89-97); Carnegie Hall Restoration, New York, by James Stewart Polshek & Partners, New York (P/A, Feb. 1987, pp. 23-24); The High Museum at Georgia-Pacific Center, Atlanta, by Scogin Elam & Bray Architects (formerly Parker & Scogin), Atlanta; United Gulf Bank, Manama, Bahrain, by Skidmore, Owings & Merrill, Chicago (see p. 65); and Feinberg Hall, Princeton University, Princeton, N.J., by Tod Williams Billie Tsien & Associates, New York.

In addition to chairman Turnbull, the 1988 Honor Awards jury members were W.G. Clark of Clark & Menefee Architects, Charleston; Mildred Friedman, design curator of Walker Art Center, Minneapolis; Paul A. Kennon, Jr., of Caudill Rowlett Scott/Sirrine, Houston; William Morgan of William Morgan Architects, Jacksonville; Laurie D. Olin of Hanna/Olin, Philadelphia, landscape architects; John T. Regan, Dean of the School of Architecture at the University of Miami, Miami; John Vinci of the Office of John Vinci, Chicago; and Melanie White, architecture student at Mississippi State University.

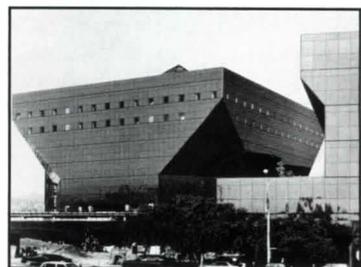
The Honor Awards will be presented at the AIA Convention this month in New York. ■

West Week '88: Fun in the Sun

For the nearly 35,000 people who packed the Pacific Design Center in Los Angeles last month, West Week offered not only new furnishings and showroom design, but also an impressive program of events.

The biggest new showroom was AllSteel's, a 15,000-sq-ft space designed by Orlando Diaz-Azcuy and Gensler Associates. Its stainless steel wall panels looked sleek, corporate, and expensive. Michael Tolleson's remodeling of the Stendig showroom into two spaces (one for sister company Charvoz Seating) featured a wall of bold, projecting forms and rugged, inexpensive materials. And over in the not-quite-complete green PDC expansion, the best temporary showroom was Vecta's, where Michael Rotondi of Morphosis encased chairs in a series of boxes made of fiberglass panels, wood, and metal.

The seminars and lectures drew standing-room-only

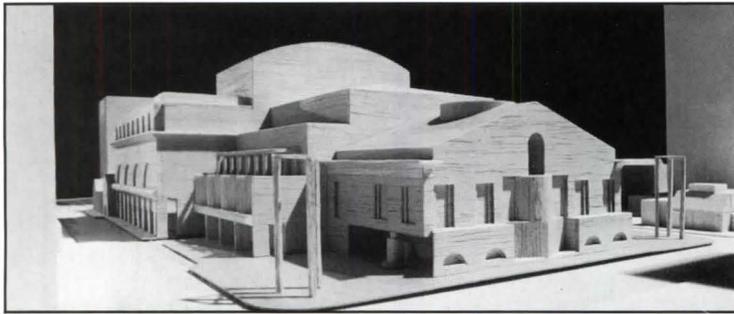


New for West Week: PDC expansion.

crowds, as usual. Astronaut Joseph Allen and designer Michael Kalil talked about outer space, while architect Gae Aulenti discussed her earthbound (and controversial) Musée d'Orsay in Paris. Architect Richard Rogers showed, among many other projects, Lloyd's of London, and the PDC's own Cesar Pelli engaged in a friendly but spirited one-on-one with Frank Gehry. The last day of the conference began with Benoit Mandelbrot's talk on his discovery of fractals, a form of geometry that constitutes a major breakthrough in the field. The day ended with the customary party, which this year was more appropriately termed a happening. In addition to a dazzling fireworks display, artist June Wayne was launched into the air with helium balloons to videotape the crowds below; the picture was then to be projected onto a giant screen in the PDC's plaza. It didn't work out quite that way, but no one seemed to mind a bit. **Pilar Viladas** ■



Toronto Ballet design by Barton Myers and Payne McKenna Blumberg.



Stirling, Wilford's design for Toronto Ballet.

Safdie (continued from page 21)

lects, in association with Kuwbara Payne McKenna Blumberg; and James Stirling, Michael Wilford & Associates with the Lyric Theatre Venture, a consortium of local architects.

The Ballet Opera House Corporation, made up of members of the boards of the National Ballet of Canada and the Canadian Opera Company, went about choosing an architect without having secured either a site for the proposed facility or the necessary funds for construction. The government of Ontario had offered a downtown site in 1984, and it was this chunk of land that was addressed in the competition. But the city of Toronto wants the site for housing, and the new government of the province, while it funded the search for an architect, is unlikely to surrender the valuable real estate to the Ballet Opera Corporation.

The Corporation also failed at first to name a single architect to the selection committee. Thanks to adverse criticism, architects Essy Baniassad, Jeremy Dixon, Macy DuBois, and Phyllis Lambert were eventually invited aboard. They joined eight representatives of the ballet and opera companies. Only 49 firms—as compared with 246 in the Mississauga City Hall competition—applied for the job; of these, 15 were joint ventures with architects outside Canada.

Finalists were required to

spend three weeks in consultation with the companies for purposes of developing “design synergy”; they were given two more weeks to come up with a scheme in the form of a sketchbook and block model.

Although Stirling was considered the man to beat by both Safdie and Myers, Safdie carried the day with striking models and bonhomie. “What I had going for me was the relationship that evolved with the members of the companies,” he said. All three architects exceeded the design requirements and a fee of \$25,000 by far.

Safdie's models show a marked resemblance to his National Gallery in Ottawa, which is now nearing completion, and the opera ballet site changes, however, he's prepared to “put all my drawings in a drawer and start afresh.” The commission is for him a double first: his first building for the performing arts and his first building in Toronto, where he is opening a permanent office.

“I see a shift of my professional activities into Canada from the U.S.,” said Safdie, alluding to the cancellation of his Coliseum Center in New York, a project now in the hands of David Childs at SOM (P/A, Feb. 1987, p. 23). In Canada, however, Safdie apparently can't lose. **Adele Freedman**

The author is architecture critic for The Globe and Mail in Toronto.



Helena Hernmarck, tapestry after plan of Chicago, from “Architectural Art.”

AIA New York (continued from page 21)

The New York Chapter is also sponsoring “Ten on Ten” (scheduled to open May 10 for six weeks), an exhibition of works selected by ten architecture critics who were asked to pick designs illustrating new directions in New York architecture in the 1980s. The critics are Stanley Abercrombie, Kurt Andersen, John Morris Dixon, Brendan Gill, Joseph Giovannini, Paul Goldberger, Mildred Schmetz, Michael Sorkin, Suzanne Stephens, and Carter Wiseman.

Models, drawings, and photographs depicting the nine so-called “Grands Projets” that have reshaped the city of Paris over the past ten years (P/A, July 1987, pp. 98–99) will be on view at the old United States Custom House on Bowling Green in Lower Manhattan.

American competitions of the past 25 years are the subject of “The Experimental Tradition: 25 Years of American Architecture Competitions” at the National Academy of Design. Curated by Helene Lipstadt for the Architectural League, the show considers winners and losers.

On the Upper East Side near the National Academy, the Cooper-Hewitt is hosting “The Art That Is Life,” a comprehensive examination of the arts and crafts movement in America (P/A, May 1987, p. 32).

A modest but significant show at the PaineWebber Gallery on Sixth Avenue dovetails nicely with a convention subtopic, affordable housing. “Reweaving the Urban Fabric” presents both American and foreign examples of infill housing.

Finally, designs for the Brooklyn Museum Master Plan Competition, won by Arata Isozaki and James S. Polshek, are on view at the Museum.

Only the Museum of Modern Art missed the convention boat: its controversial show “Deconstructivist Architecture” doesn't open until June.

Daralice D. Boles

The Pizza Pantheon (and F.L. Wright)

Does too much pizza warp the mind? Those who attended the Frank Lloyd Wright symposium held March 25–27 at the Domino's Pizza headquarters in Ann Arbor, Michigan, had the chance to judge for themselves. Jointly sponsored by Domino's and the University of Michigan College of Architecture and Urban Planning, the conference was entitled “Preserving Wright's Heritage,” a theme inspired by Thomas S. Monaghan, owner of Domino's Pizza and the world's largest collection of Wright artifacts (P/A, Nov. 1987, pp. 118–123).

Other weekend events included the opening of the Frank Lloyd Wright Museum and new offices of the National Center for the Study of Frank Lloyd Wright, housed for the present in an office building on the Domino's campus, and the presentation of a matching grant of \$25,000 to the University of Southern California for emergency restoration of Wright's Samuel Freeman house in Los Angeles. Yet these serious purposes were undermined by the efforts of more than one speaker to justify and promote the personal and frequently quirky enterprises of the symposium's wealthy sponsor, Monaghan.

In his remarks at the first plenary session, Monaghan rejected criticism leveled at him and his many projects in the local and national press. He expressed particular annoyance at the Ann Arbor township planning commission for refusing to waive restrictions barring hotel usage in the recently unveiled “leaning tower of pizza,” designed for the corporate headquarters by Gunnar Birkerts. “Tons of great architecture have been lost in this country because of planning commissions,” he inveighed, praising Houston as an ideal environment for development.

In a spirited impromptu response, keynote speaker Brendan Gill, architecture critic for the *New Yorker*, rebutted Monaghan's remarks. The 70 million square feet of vacant office space in Houston, he offered, bears its own testimony to unrestricted development. In his prepared remarks, Gill commented on the irony of the symposium theme itself. “Throughout his career, Wright always mocked the past,” he reminded the audience, suggesting that Wright's competitive urge to be the newest of the new “led to a lack of respect for preservation.” Nevertheless,

(continued on page 26)

Bob Schimer/Hedrich-Blessing

Photos: Fiona Spalding-Smith

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Wright (continued from page 24)

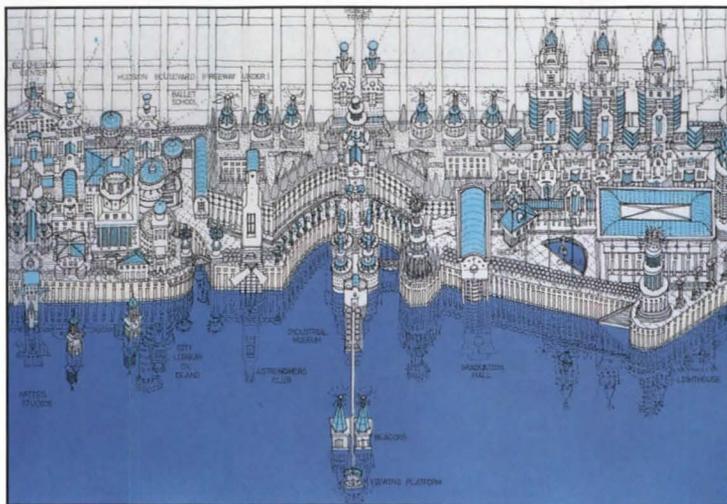
Gill called the effort of preserving Wright's legacy "an agreeably contradictory purpose."

That purpose was developed later by such historians and preservationists as Anatole Senkevitch, David De Long, David Hanks, and R. Craig Miller, who discussed variously the inadequacy of current National Park Service preservation policies and ethical guidelines for Wright collectors.

By far the most startling event of the symposium was the announcement of the Domino's Pizza "Top 30 Architects" Friday evening. A selection committee comprising Ted Pappas, president of the AIA; Mildred Schertz, editor of *Architectural Record*; Aarno Ruusuvuori, Director of the Museum of Finnish Architecture; and Toshio Nakamura, Editor of *A+U* (who participated by wire) was imported to Ann Arbor and each reportedly given a substantial honorarium to provide Monaghan with a ranked list of the world's top 30 architects (from Domino's "thirty-minute delivery" guarantee, said Monaghan). Prospective homeowners who buy land in The Settlement, an exclusive subdivision that Monaghan is developing in Ann Arbor, will be required to select an architect from the approved 30 to design their \$1-million-and-up estates. But, like a top 30 tunes chart, the list will be changed in succeeding years by the selection committee, whose members—except for the revolving President of the AIA—have three-year terms. Only one woman, Gae Aulenti, was canonized in the Pizza Pantheon, joining the likes of Tadao Ando, Jean Nouvel, and Paul Rudolph.

In the context of this symposium, the creation of such a list raised large ethical questions about the private sponsorship of professional and scholarly activities normally conducted for disinterested motives. If Monaghan wants to be a patron of authentic Wright scholarship, he should establish an endowed museum and research institute at the University of Michigan, and then allow it to determine its own agenda independent of the interests of Domino's Pizza, his private speculative building projects or other commercial ventures. No matter how you slice it, too much pizza causes architectural indigestion. **Robert Benson** ■

Robert Benson teaches architectural history, theory, and criticism in the Department of Architecture at Miami University in Oxford, Ohio, and is a contributing editor of Inland Architect.



Glasgow Urban Workshop waterfront design, one of six winners.

West Side (continued from page 21) the competition's December 1987 deadline, and the jury, headed by architect Henry N. Cobb, chose 26 finalists, whose ideas ranged from "don't build" polemics and campgrounds to vast projects and glass cliffs and steel towers, presented in lead, ink, and videotape.

By sparking a vivid debate on waterfront design, the competition met the Society's first objective. A well-attended exhibition of winning entries held early this year was only the beginning. One hundred to 200 entries will be shown at New York's Fashion Institute of Technology this summer (June 22–July 30). There will be concurrent symposiums on the waterfront, organized by a committee including Albert Butzel, the leading attorney for the National Resource Defense Council in their fight against Westway; David Childs, a design partner with Skidmore, Owings & Merrill, New York; and Ross Sandler, New York's Commissioner of Transportation.

In addition, a half-hour video is planned, and there are tentative exhibition plans for Europe. Virginia Dajani of the Municipal Art Society, who ran the competition, notes that not only the quantity, but also the quality of public discussion has improved from a year ago, when it seemed that "there were only two camps—developers who wanted to build 200 buildings 70 stories high, and people who wanted only parks with esplanade."

But can all this talk be turned to action? The strategy of holding a competition to provoke public interest has worked for the Society before. The MAS-sponsored 1984 Times Tower Site Competition (P/A, Oct. 1984, p. 23) had at least an indirect influence on subsequent architectural guidelines pro-

posed for the district's redevelopment by the Urban Development Corporation and may have been a key influence in saving the Times Tower itself from demolition.

This time around, the Society may well realize a second objective: seeing to it that the site is developed according to a master plan. The potential masters of this plan—including representatives of New York's Community Boards, the City Planning Commission, the UDC, and the Governor's office—reviewed the entries at length. Gary Hack, an urban designer with Carr/Lynch Associates, Cambridge, Mass., and professional advisor for the competition, believes that the mayor and governor are "inching their way to a public entity" that would take responsibility for a master plan. For now, however, the only plan is the January 1987 report of an ad hoc body—the Joint West Side Task Force—which called for a six-lane waterfront boulevard.

Raymond W. Gastil ■

The author is an architect with Robert A.M. Stern Architects, New York.

Reyner Banham: 1922–1988

British critic Peter Reyner Banham died on March 19 at the age of 66. Banham moved to the States in 1976, teaching at the State University of New York at Buffalo and the University of California at Santa Cruz. His first book, *Theory and Design in the First Machine Age* (1960), became an influential work of architectural theory, while *The Architecture of the Well-Tempered Environment* (1969) was one of the first histories to emphasize technology. His 1971 book *Los Angeles: The Architecture of the Four Ecologies* also broke new ground, mixing architectural, social, and cultural history. ■

Museum Design Discussed in Houston

Pontus Hulten, director of the Palazzo Grassi museum in Venice and the first director of both the Centre Pompidou and the Museum of Contemporary Art, Los Angeles, set an appropriately relaxed and ruminative tone in his keynote speech for "The Museum: Art and Architecture." The symposium was sponsored in late March by the Rice Design Alliance and the Museum of Fine Arts, Houston, and held in the museum's auditorium, which is part of the 1974 addition designed by Ludwig Mies van der Rohe.

Hulten reminded the audience of 370 design professionals and museum personnel from the U.S. and Canada that museums are "highly charged, intense institutions," which are at the same time civic symbols, laboratories of participatory democracy, and "very erotic places." They present, Hulten said, "the most difficult problem that an architect can get dragged into." At best, Hulten concluded, "they are like a collective work of art, which is a contradiction."

But difficulties were hardly the focus of the leisurely tour of new museums worldwide presented the next day by a stellar lineup of international architects and critics.

Hans Hollein, the Viennese Pritzker Laureate, presented built and in-construction designs and a number of projects, ranging from a small experimental museum with paintings mounted on a vertical turntable, to the Museum of Modern Art nearing completion in Frankfurt.

Arata Isozaki's presentation centered on his design with James Stewart Polshek & Partners for the planned \$220-million expansion of the Brooklyn Museum. Architects McKim, Mead & White employed a composite of the five Classical orders for their 1893 façades, said Isozaki, who plans to go one better by creating a skin for the addition that would similarly unite the "orders" of 20th-Century architecture, which he defined as "frame, grid," and "complete flushness of skin."

Next up was Charles Moore, FAIA, who presented recently completed buildings for the Hood Museum at Dartmouth College and the Williams College Museum of Art as examples of his attempts to make architecture that "begins with paying

(continued on page 28)

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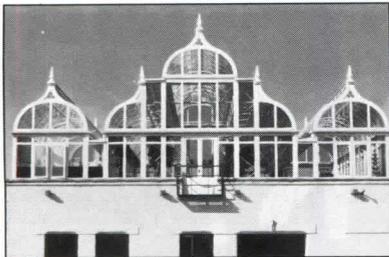
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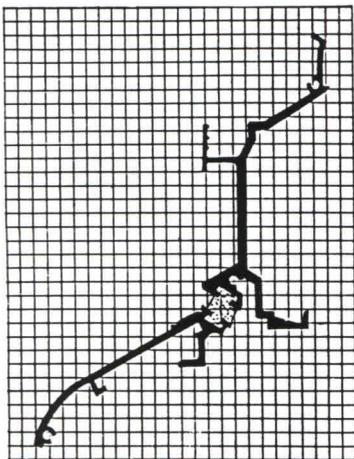
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Museums (continued from page 26) attention to the dreams and images of the users of the buildings and translates them into images that mean something to the people for which the building is built."

Those who left the morning session wondering why some of the other architects with well-known, recent museum commissions had not come—Richard Meier, Venturi, Rauch & Scott Brown, and James Stirling, for example—got the answer in the afternoon.

John Walsh, director of the J. Paul Getty Museum in Los Angeles, presented models and drawings of his institution by Richard Meier. Scholar Joseph Rykwert, who said that even the best-designed museum, "involves an element of trudge," took a detour to ancient Alexandria for a discussion of the first museum—"a propaganda machine, there solely to glorify the dynasty." Today, Rykwert said, "the museum is no longer a place of instruction, but a place of cult—quasi, if not wholly, religious in nature."

Critic Stanislaus von Moos, author of a recent monograph on the work of Venturi, Rauch & Scott Brown, ended the presentations with a critique of James Stirling's Stuz Museum in Munich (1985), comparing the strategies employed to those used by Venturi in the Allen Museum addition at Oberlin College (1973) and the Franklin Court in Philadelphia (1972). Along the way, Moos reported the illuminating fact that in West Germany, museums now draw more patrons than do sports stadiums.

This explosion of interest, mirrored in the United States, explains why the boom in museum construction continues. Indeed, Houston MFA director Peter Marzio said that his institution is contemplating an expansion program that would more than triple the museum's current size. "That's one of the reasons we wanted to have this symposium," Marzio said.

A sad note was sounded by many of the speakers, mourning the death of architecture critic Peter Reyner Banham, who was to have taken part in the symposium but died the week before. "Peter would have contradicted what I'm going to say," Joseph Rykwert said in a brief tribute at the beginning of his talk. "I am sorry that he isn't here to do so."

Joel Warren Barna

The author is the editor of Texas Architect.

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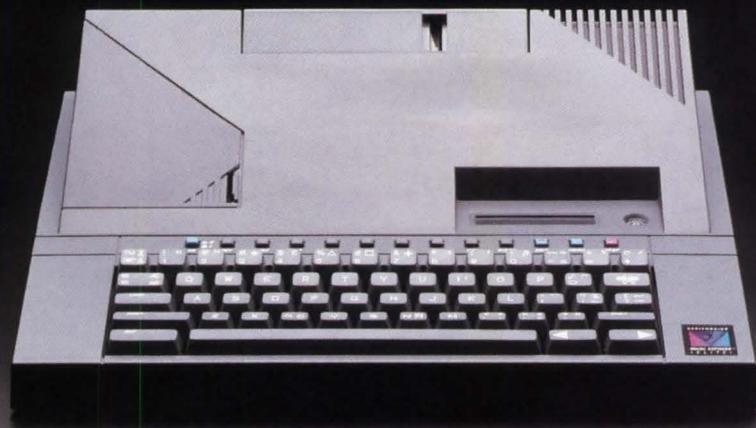
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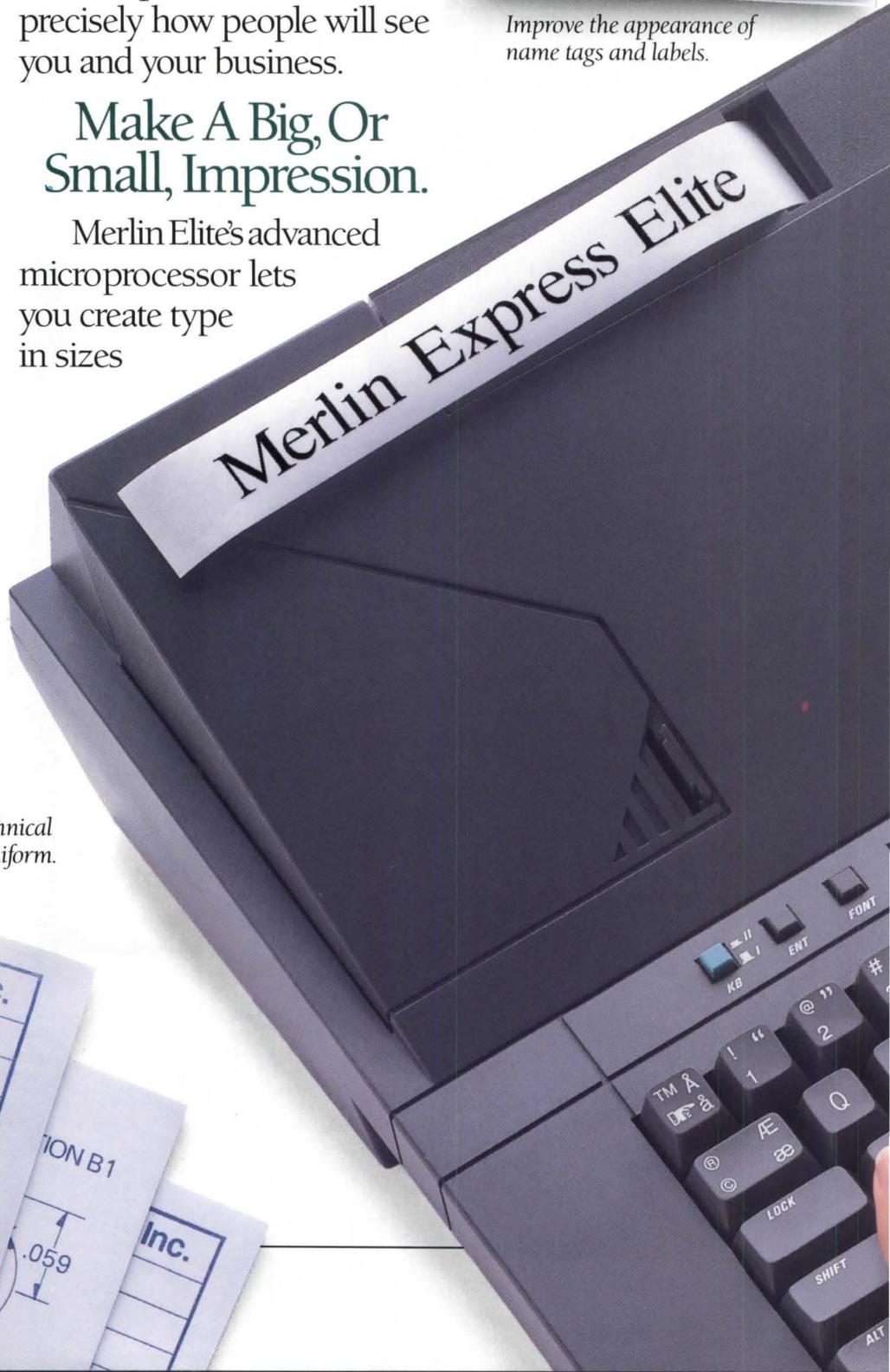
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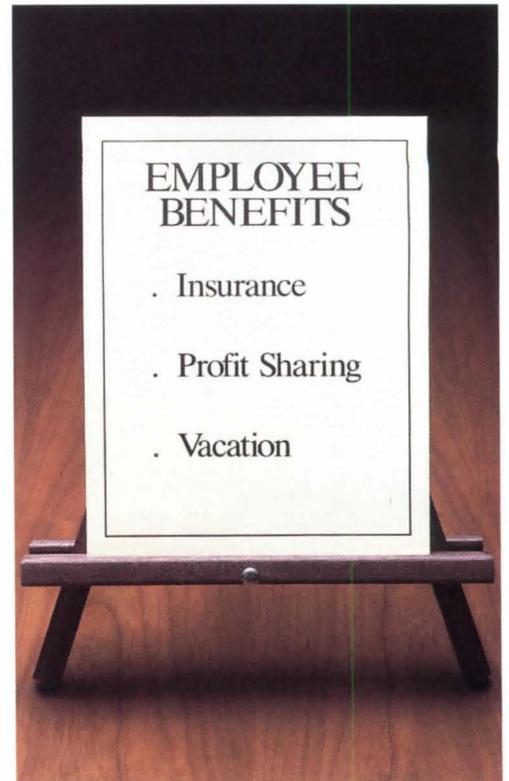
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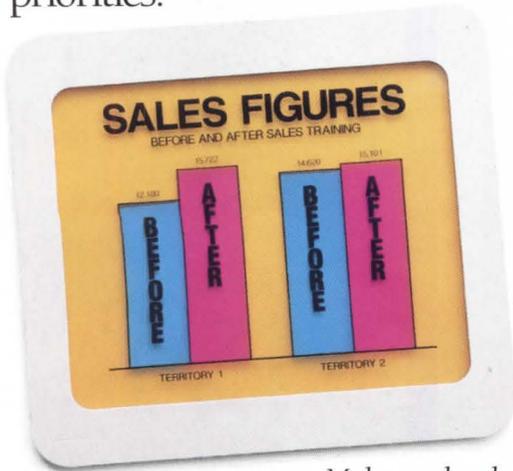
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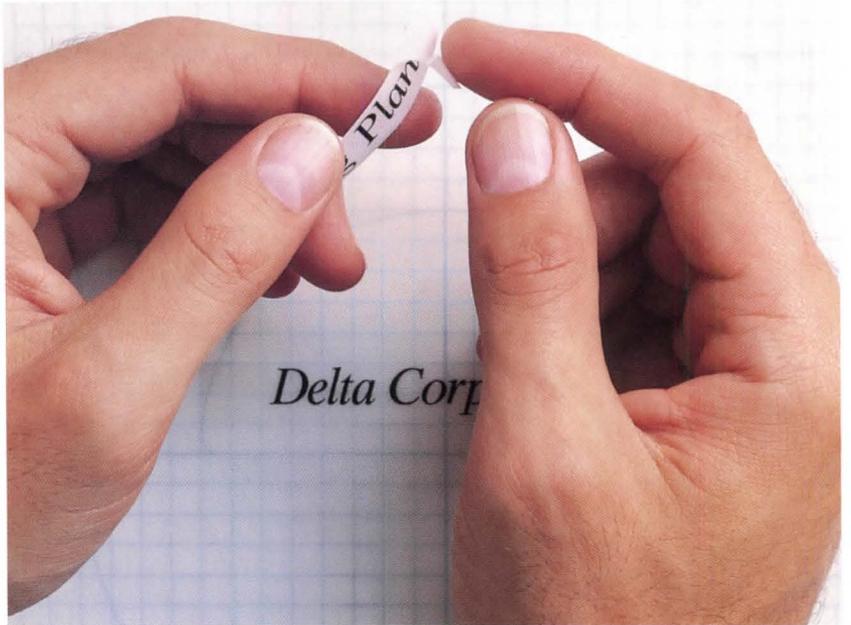
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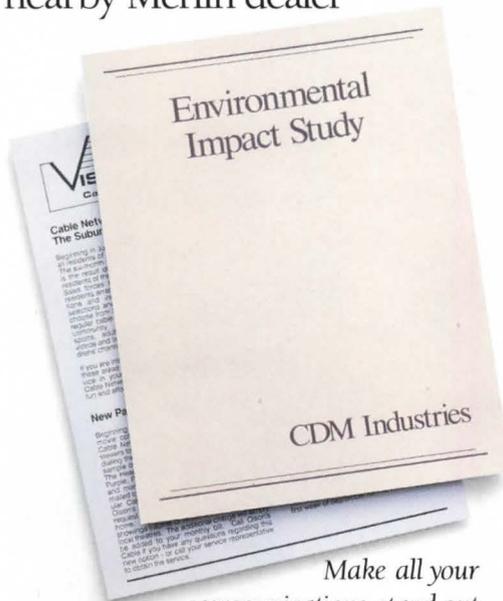
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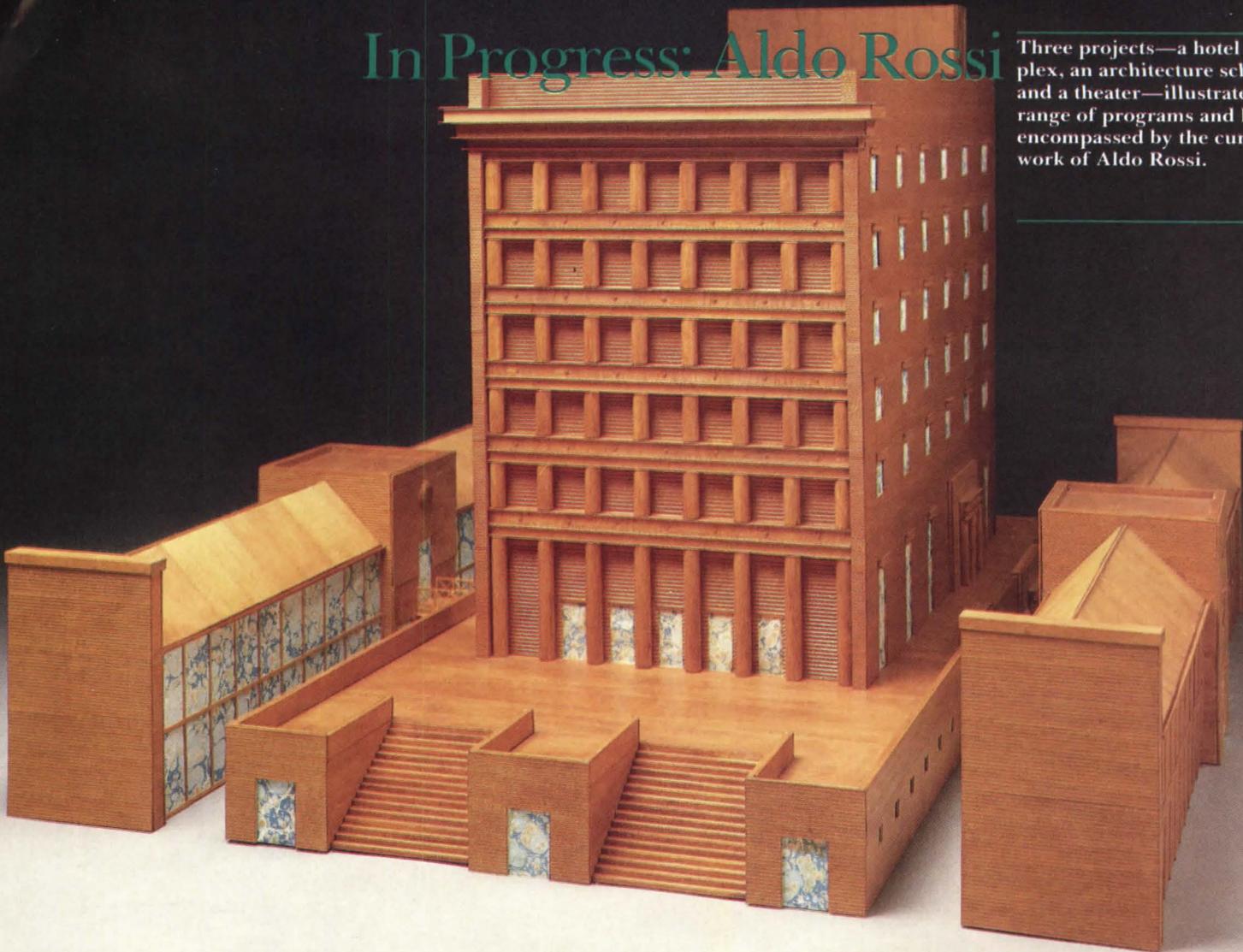
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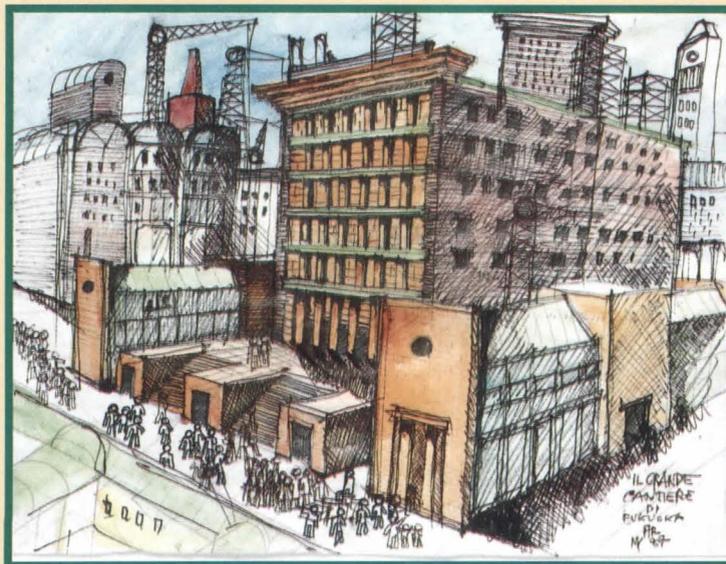
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In Progress: Aldo Rossi

Three projects—a hotel complex, an architecture school, and a theater—illustrate the range of programs and locales encompassed by the current work of Aldo Rossi.

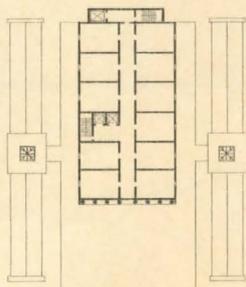


With seven buildings completed in Europe in the past two years, and ten more on the way in the U.S. and abroad, Aldo Rossi no longer has to contend with the criticism that most of his architecture is on paper. Demand for the Italian architect's work has grown to the extent that Rossi has opened a small satellite office in New York, where two of the projects published here—one in Japan, the other in Miami—were developed. The stateside office also has completed the design of a temporary amphitheater planned for construction this summer in Toronto. And even though it's Rossi's work-on-paper that will be exhibited for sale this month and next at Los Angeles's Kirsten Kiser Gallery, the prospect of his building in North America means a ready chance to see firsthand the work of an architect whose influence, for many, has been limited to writings, drawings, and photographs.

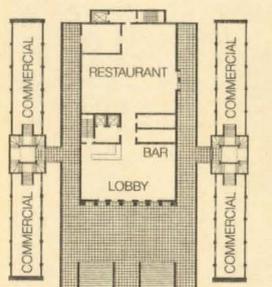


Hotel and Restaurant Complex, Fukuoka, Japan. Architects: Aldo Rossi, Milan; Dan Sekkei, Tokyo. Groundbreaking took place in April for this 65,000-square-foot building, designed as the focal point of waterfront redevelopment. The project seeks to upgrade the image of a neighborhood notorious for its nightlife. The eight-story hotel rests on a single-story base, which will house a discotheque, bar, and several restaurants. One enters the hotel by ascending a monumental stair and crossing a stone piazza. Red stone, engaged columns, and green steel lintels dominate the imposing façade, which echoes the form and rhythm of a conventional building front despite its absence of windows. The hotel's side walls will be constructed of brick and articulated only by the rhythm of room windows. Simple floor plans provide a broad canvas for the embellishment of Japanese interior designers who, according to Rossi, will give personality to the individual spaces. Completion is expected in Spring 1989.

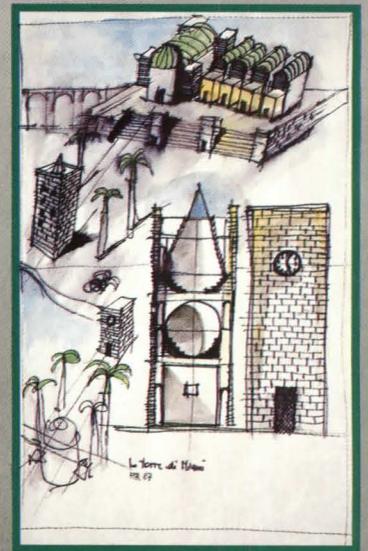
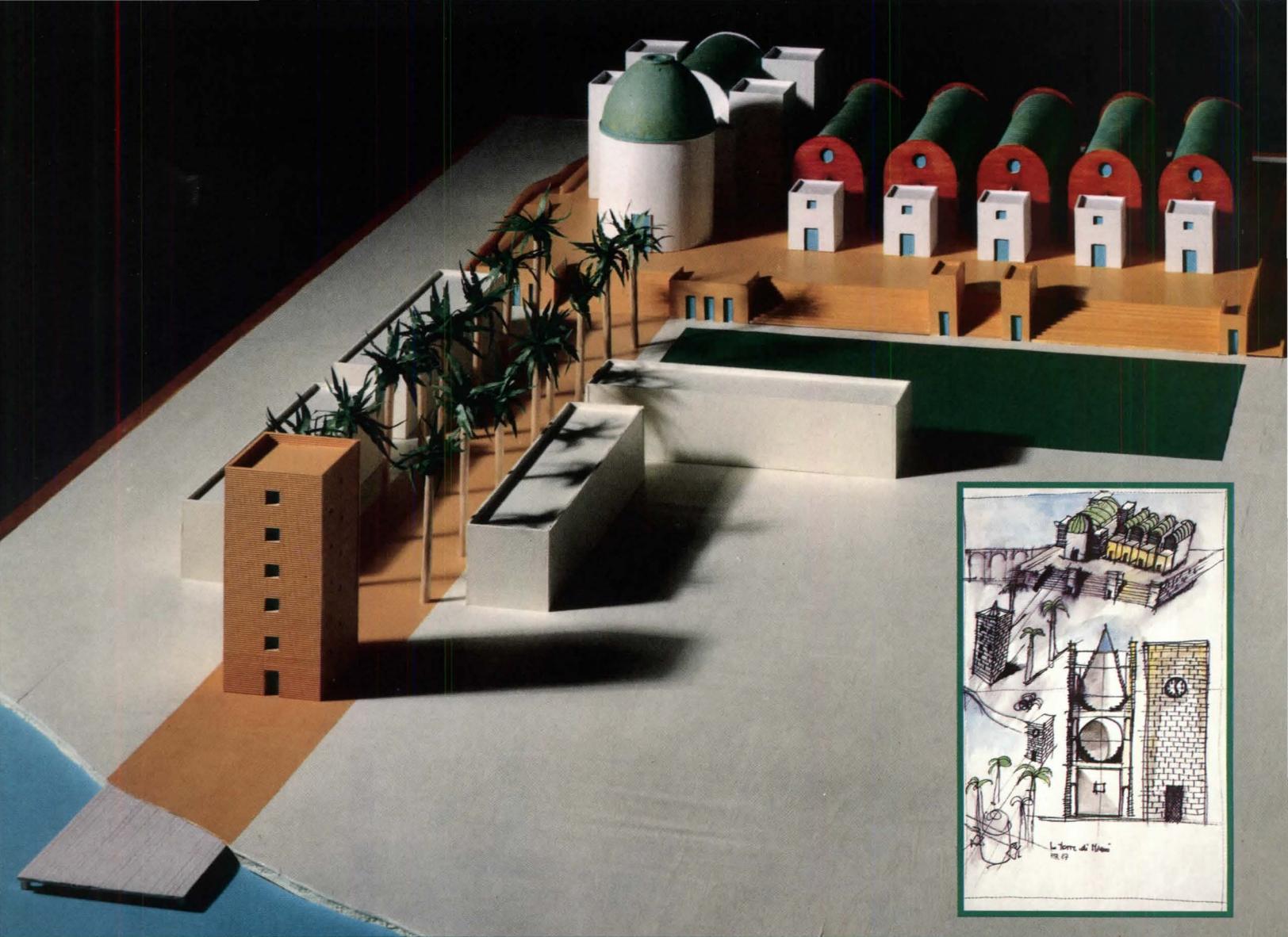
(continued on page 34)



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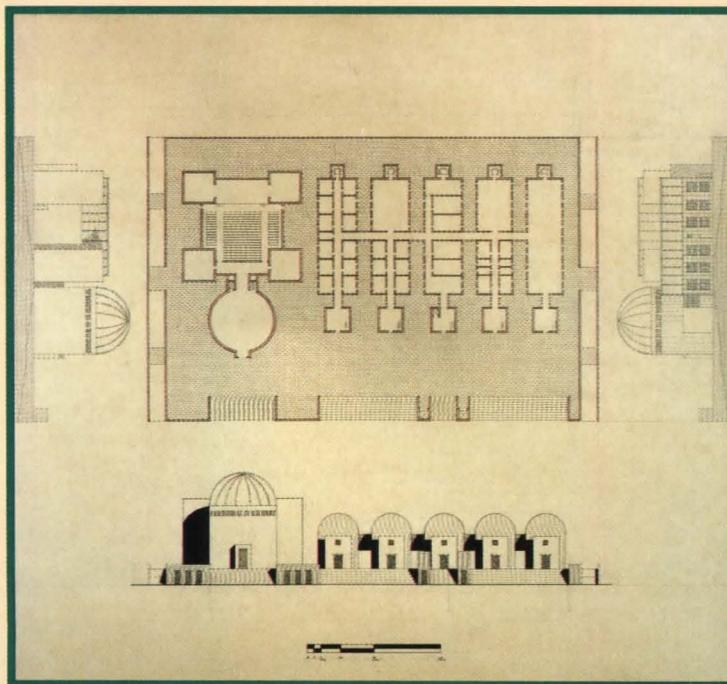
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Ned Matura

In Progress (continued from page 33)
School of Architecture, University of Miami, Miami, Fla. Architects: Aldo Rossi and Studio di Architettura, New York. This major expansion addresses what Rossi defines as the campus's main fault: the absence of a center or prominent landmark. The new buildings, dominated by a rotunda and vaulted auditorium, form a tiny city atop a sweeping base. This base—an "acropolis," in Rossi's words—rises above the campus's flat site. Placing university facilities, rather than parking, beneath the acropolis brings the amount of new space to about 90,000 square feet. Five small buildings will house a library, administrative offices, and support facilities. In the current scheme, still in design development, a palm-lined walk links the complex with a tower (planned as meeting/jury rooms) that sits on the edge of an existing lake. Recent changes to the project include a new conical space at the top of the rectangular tower (see inset, above). Classrooms will occupy four existing buildings along the walkway.

(continued on page 36)





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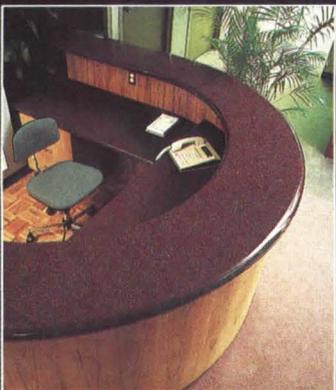
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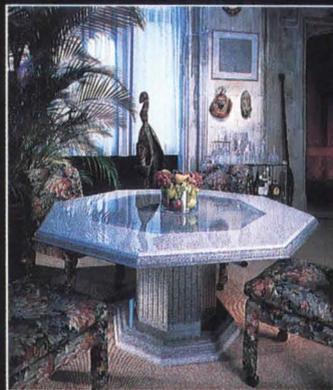
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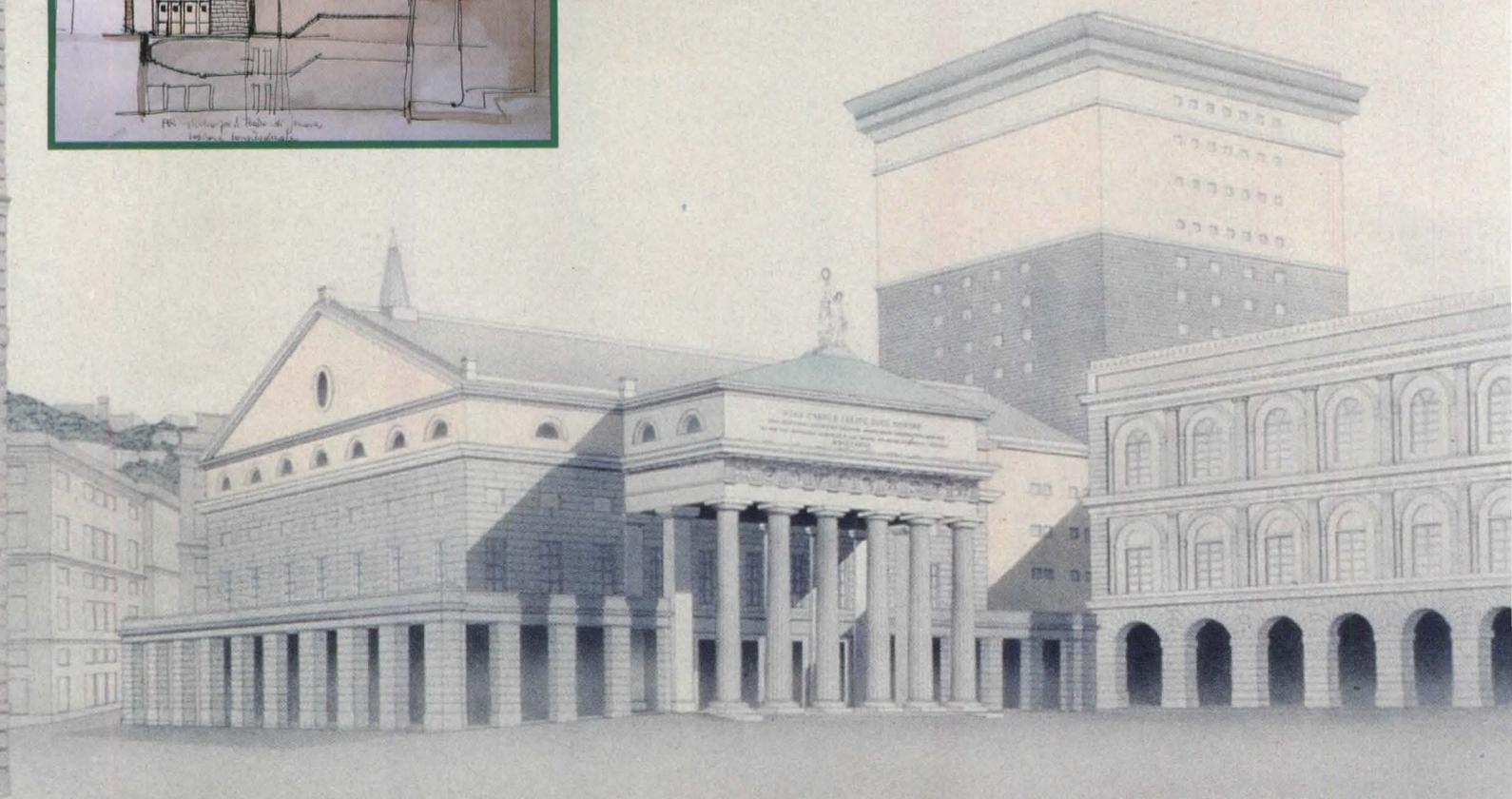
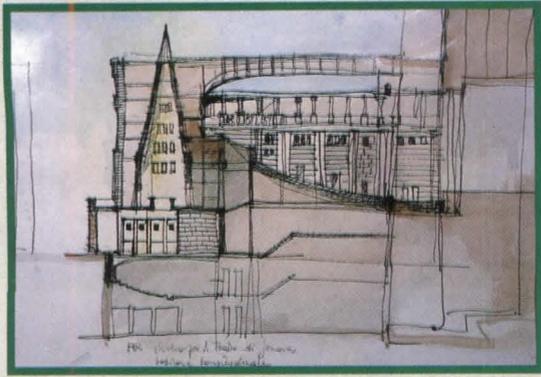


Octagonal Table, Plexability, New York
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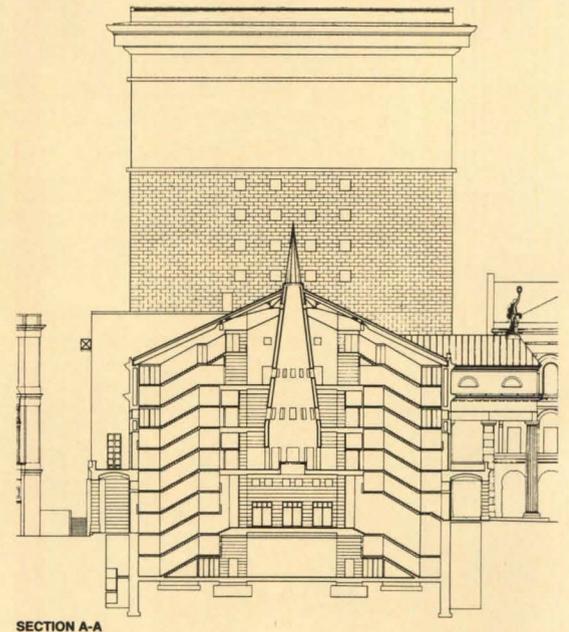
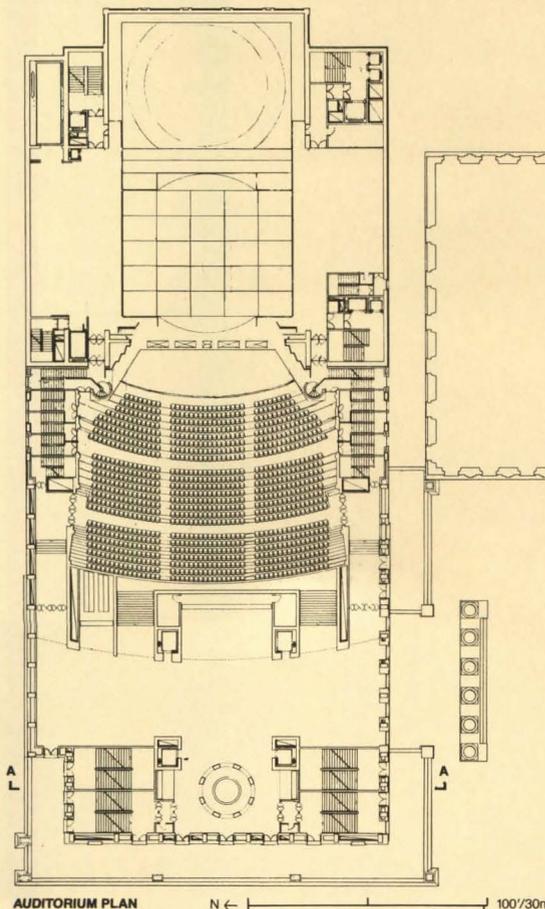


Marotta Residence, New Jersey
Designed by We-Add, New Jersey

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In Progress (continued from page 34)
Carlo Felice Theater, Genoa, Italy. Architects: Aldo Rossi, Milan; Ignazia Gardella, Genoa; A. Sibilla, Genoa; and Fabio Reinhart, Lugano. Winner of a 1982 competition, this scheme was controversial for its proposal to re-create—on the exterior, at least—the original design of Barabino's theater, virtually destroyed during World War II. Rossi defended his choice to reconstruct the old façade, rather than create a new one, as necessary to record a critical period in Genoa's history: its emergence as a middle-class city. The project encompasses the rebuilding of the Neoclassical exterior, creation of a new 2000-seat theater inside, and enlargement of the stage tower. A conical opening cuts through the building to bring light down to an entrance court, a public space that is recessed into the building. A large, towerlike mass houses the fly-loft and backstage areas. Construction began last October; completion is projected for 1990.
Vernon Mays



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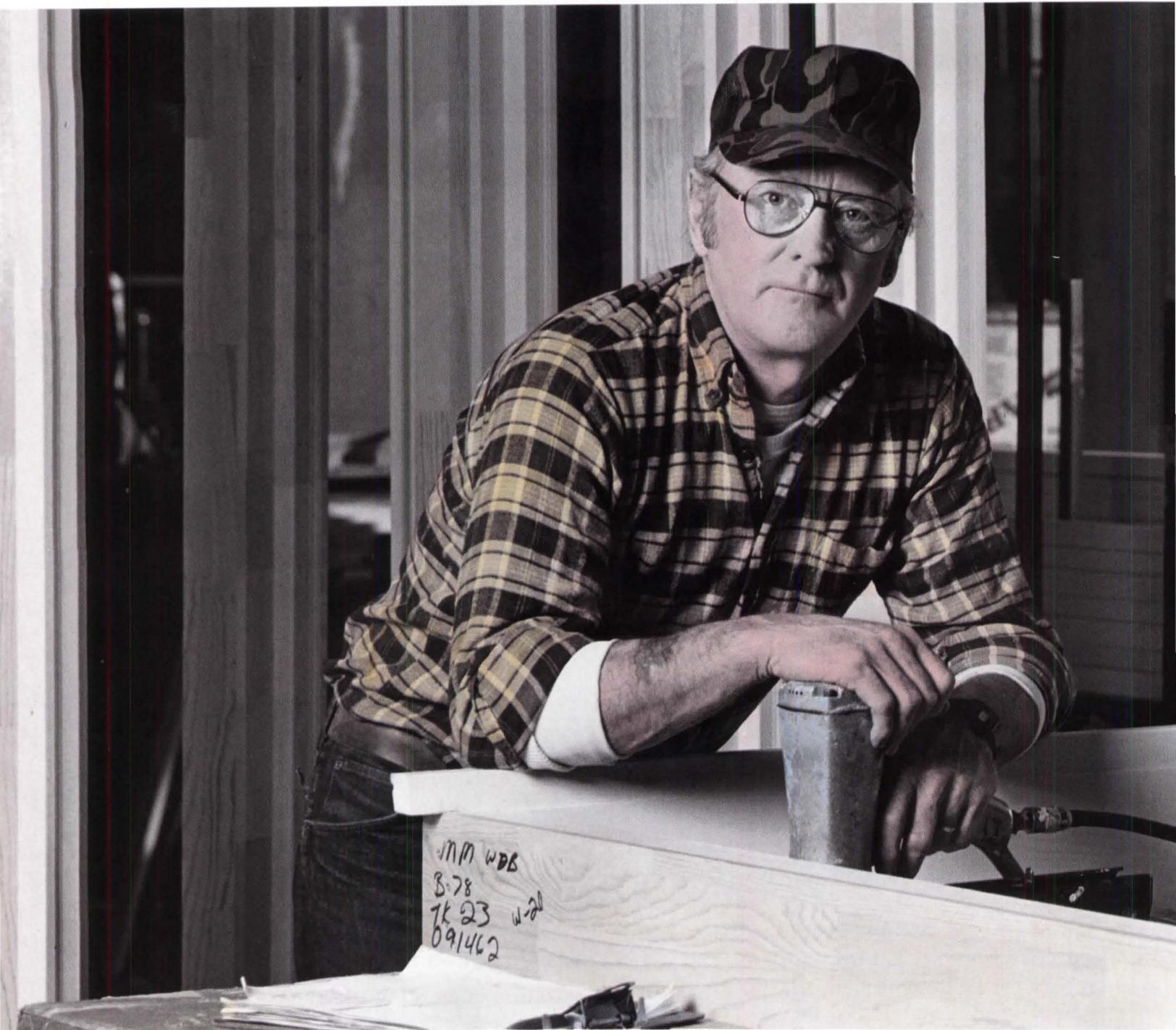


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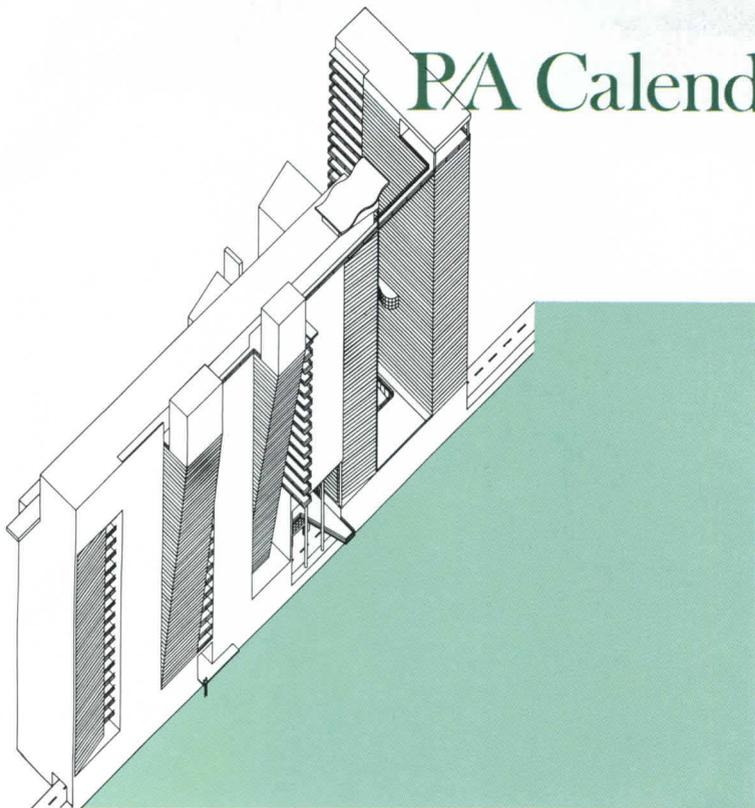


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Rem Koolhaas design in "Deconstructivist Architecture," June 23.

Exhibitions

Through May 15

Versailles: The View from Sweden, Drawings from the National Museum and the Royal Palace, Stockholm. Cooper-Hewitt, New York.

Through May 21

Bernard Tschumi: Recent projects. Max Protetch Gallery, New York.

Through May 21

Otto Wagner: Drawings. Museum of Art and Archeology, Emory University, Atlanta.

Through May 25

The Grands Projets, Paris 1979–1989. United States Customs House, New York.

Through May 26

Judith Turner, Architectural Photography. Bertha Urdang Gallery, New York.

Through May 27

Reweaving the Urban Fabric: International Approaches to Infill Housing. PaineWebber Art Gallery, New York.

Through June 7

Designs for Independent Living. Museum of Modern Art, New York.

Through June 10

"What Could Have Been: Unbuilt Architecture of the 80s." Museum of Modern Art at Griffin Towers, Santa Ana, Calif. Also, **July 19–October 23** Cooper-Hewitt Museum, New York.

Through June 19

Frank Lloyd Wright and the Johnson Wax Buildings: Creating a Corporate Cathedral. High

Museum of Art, Atlanta. Also, **July 16–September 11**, Walker Art Center, Minneapolis. (See P/A, April 1986, p. 27.)

Through June 19

Friedrich Kiesler, Visionär: 1890–1965. Museum Moderner Kunst, Vienna.

Through June 25

Aldo Rossi. Kirsten Kiser Gallery, Los Angeles.

Through June 25

The Bauhaus: Masters and Students. Barry Friedman Gallery, New York.

Through June 26

The Art that is Life: The Arts and Crafts Movement in America 1875–1920. Cooper-Hewitt Museum, New York. (See P/A, May 1987, p. 32.)

Through July 4

A New Brooklyn Museum: The Master Plan Competition. Brooklyn Museum, Brooklyn, N.Y.

Through July 10

The Rise and Fall of New York: Building and Unbuilding in Manhattan. New York Historical Society, New York.

Through July 10

The Long Island Country House, 1870–1930. The Parish Art Museum, Southampton, N.Y.

Through July 15

Artistic Houses: Lavish Interiors of Nineteenth-Century New York. New York Historical Society, New York.

Through July 31

The Experimental Tradition, 25 Years of American Architecture Competitions: 1960–1985. National Academy of Design, New York.

Through August 14

Interlacing: The Elemental Fabric, curated by Jack Lenor Larsen. The Textile Museum, Washington, D.C.

Through August 31

Sheet Metal Craftsmanship: Progress in Building. National Building Museum, Washington, D.C. (See p. 22.)

Through August 31

James W. Rouse Retrospective. National Building Museum, Washington, D.C.

Through September 4

Architectural Art: Affirming the Design Relationship. American Craft Museum, New York.

May 26–July 31

The Architecture of Richard Morris Hunt. Los Angeles County Museum of Art, Los Angeles. (See P/A, May 1986, p. 28.)

June 23–August 30

Deconstructivist Architecture. The Museum of Modern Art, New York.

Competitions

June 15

Application deadline, 1989–90 Fulbright Scholar Awards for work in Australia, India, and Latin America. Contact Council for International Exchange of Scholars, 11 Dupont Circle, N.W., Washington, D.C. 20036-1257 (202) 939-5403.

June 15

Submission deadline, Second International Work Space Competition 1988. Contact Work Space Design Competition, LIMN Co., 821 Sansome St., San Francisco, Calif. 94111 (415) 397-7471.

June 30

Submission deadline, Quaternario 88, an international award for technology in architecture. Contact The Director, Planning Research Center, Faculty of Architecture, University of Sydney, 2006, Sydney, N.S.W., Australia.

Conferences

May 15–18

AIANYC '88: American Institute of Architects National Convention, New York. Contact: Convention Department, AIA, 1735 New York Ave., N.W., Washington, D.C. 20006 (202) 626-0000.

May 15–18

International Facilities Exposition, International Design Center New York, Long Island City, N.Y. Contact IDCNY, 20–30 Thompson Ave., Long Island City, N.Y. 11101 (212) 593-3450.

June 12–17

The Cutting Edge: 1988 International Design Conference, Aspen, Colo. Contact IDCA, P.O. Box 664, Aspen, Colo. 81612 (303) 925-2257 or call Alexia Lalli (212) 206-8816.

June 14–17

NEOCON 20, Merchandise Mart, Chicago. Contact NEOCON 20, 470 The Merchandise Mart, Chicago, Ill. 60654 (312) 527-4141. (See pp. 110–166.)

June 24–26

32nd Annual CSI Convention and Exhibit, Convention Center, Washington, D.C. Contact Construction Specification Institute, 601 Madison St., Alexandria, Va. 22314 (703) 684-0300.

July 17–20

CTDA/AATMCA International Ceramic Tile Exposition, Moscone Center, San Francisco. Contact Ceramic Tile Distributors Association, 15 Salt Creek Lane, Suite 422, Hinsdale, Ill. 60521 (312) 655-3270.



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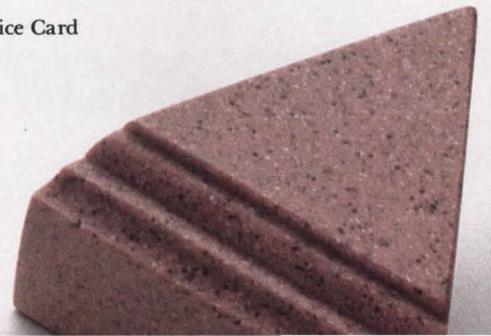
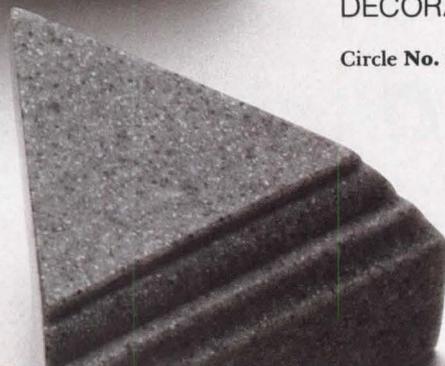
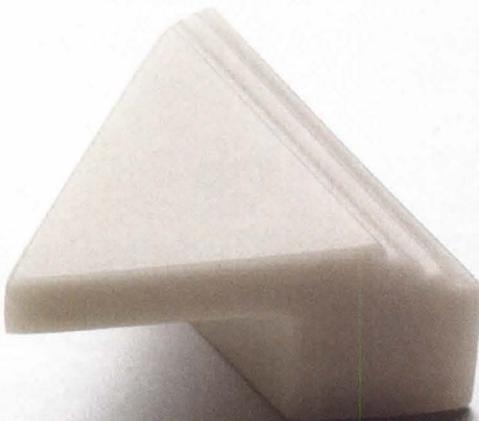
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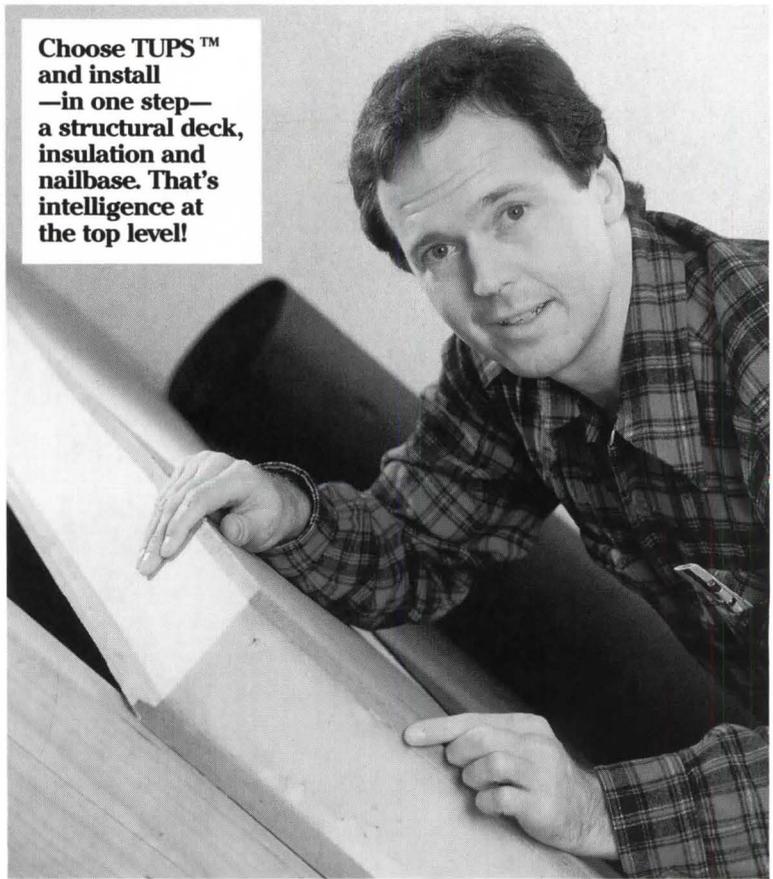
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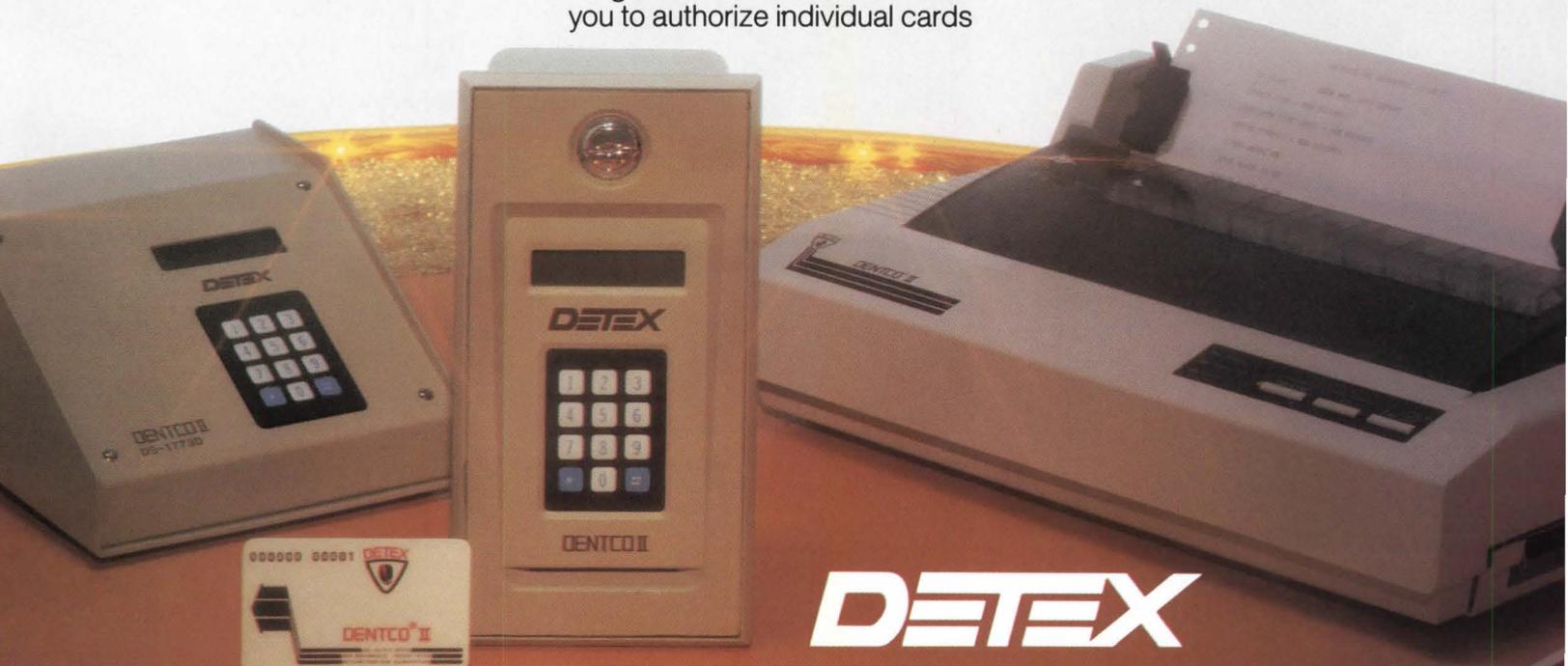
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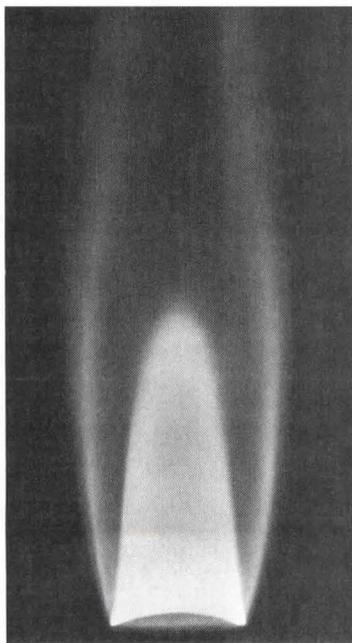
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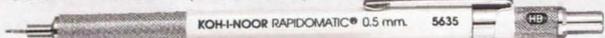
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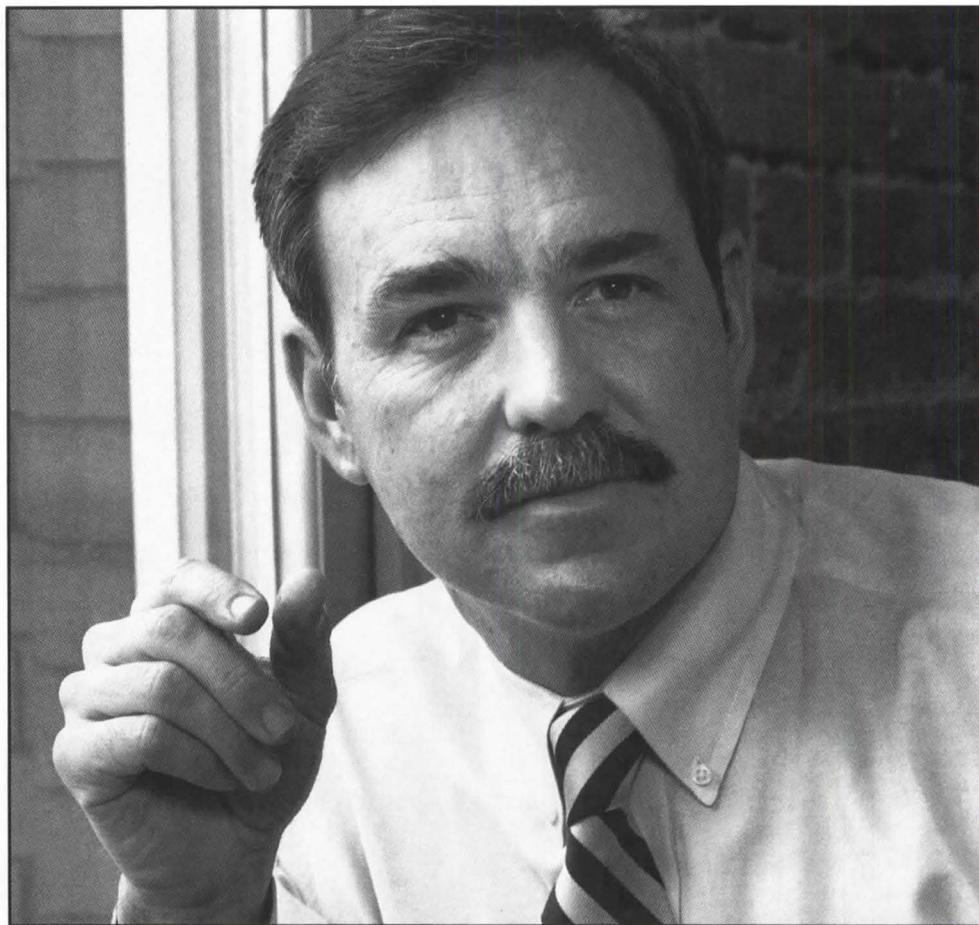


“ The DPIC education program has caused us to do continuing education, at the most basic contract level, that we probably wouldn't have gotten around to doing as a whole group. There may have been a person here or there that would have been enthusiastic about it, but their premium credit program requires all partners and technical staff to participate and take the exams. So, without the program, I think it would have been unlikely we would have gotten 100% participation. But because it is required, we do get it. In fact, we are considering making the DPIC tests, including reading the book, a requirement for all staff.

I can't imagine anybody not participating in the educational program, because of the cost savings aspect of it. I mean, let alone the fact that it can help your practice.

I think we've saved on the order of \$30,000 over two or three years. We've found DPIC's premiums, with and without the education program, to be generally competitive, so we do regard it as a savings.

You might find another carrier that could provide the same insurance for that net amount. But I think DPIC has been conscientious, in not saying, 'OK, we'll lower our price and forget about the educational program,' and I think that speaks well for them. ”



Jack Corgan is a principal of Corgan Associates Architects, a 65-person firm based in Dallas, Texas. He is also a former Assistant Professor of Architecture at Oklahoma State University. We value our relationship with his firm, and thank him for his willingness to talk to you about us.

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Products: The Architect Consumer

When it comes to building products, many architects have only a vague awareness of the effort required to produce, market, and distribute the bricks, carpet, windows, and thousands of other products they consume. Architects shop in a supermarket of product advertisements and sales representatives, specify from a menu of manufacturer catalogs, and have a feast spread before them at their construction sites—but they seldom enter the kitchen. A better understanding of the organization, activities, and concerns of the building product industry would enable architects to design with and specify building materials more astutely and effectively, and would strengthen their ability to lead the design and construction process.

Architects frequently identify three principal members of the design and construction team—owners, architects, and contractors—but overlook the building product industry. While building product manufacturers may not be prime contractors on typical architectural projects, they still play a vital role in the building process and have a significant relationship with all three principals of the owner/architect/contractor triad.

Producers have a direct and contractual relationship with contractors, selling them materials and products and providing them with training, credit, and other types of support. Producers can also have contractual relationships with building owners, especially on projects involving maintenance or rebuilding. But even in architecturally specified work, producers may still have direct relationships with owners. Many developers now list preferred building material vendors as part of their corporate building standards or procurement programs, often the result of manufacturers having established relationships with owners. And since many of

(continued on page 54)

Specifications: Show Business

The 32nd annual convention and exhibit of the Construction Specifications Institute (Washington, D.C. Convention Center, June 24–26) will be the largest nonresidential construction products show in the U.S., with over 8000 visitors expected. The planned events include technical seminars, product marketing sessions, and business meetings for CSI members.

Why should an architect or specifier who is not involved in CSI pay the \$135 advance registration fee (\$270 at the door) and spend up to four hours on each of the three exhibition days inspecting the 930 or more product displays? There are many reasons.

For one thing, it is a good place to see new products and to find

(continued on page 54)

Law: Arbitration and Mediation

Statistics published by the American Institute of Architects show that as many as 44 percent of insured architects might report a claim against them in any one year. This situation reflects a severe problem in architectural practice, but one that is faced by many other individuals and professions in a society that has become increasingly litigious over the past two decades. One of the effects of this proliferation of legal action is a heavy burden on the court system, where delays in the resolution of disputes can extend into years. This presents a problem for anyone who would like to reach a settlement quickly to avoid prolonged anxiety in the face of a lawsuit, and can be particularly acute in construction-related cases where disputes causing a suspension of work during construction can lead to massive expense and delays in completion.

For this reason, the process of arbitration offers a useful alternative to the court system. It can provide a fast, inexpensive reso-

(continued on page 56)

Products: Michael Chusid looks at the building products industry.

Specifications: Walter Rosenfeld discusses the value of products shows.

Law: Robert Greenstreet evaluates arbitration and mediation procedures.

Practice Points

Mergers and takeovers in the building products industry are making news on the nation's business pages: Kelso & Co. recently won a bidding war with Black & Decker for American Standard; Paris-based Saint-Gobain is seeking to buy the 43 percent of CertainTeed it doesn't already own; Koppers is fighting a hostile takeover attempt by British investor Brian Beazer; and Texas-based Desert Partners is attempting a hostile takeover of USG.

Housing starts rose 8.9 percent in February, according to the Commerce Department, calming fears that the October stock market collapse had done in the housing market. The gain, the largest in over a year, followed declines of 15.8 percent in December and 1.9 percent in January.

A "three-tier network" of A/E firms is emerging, says the LePatner Report. The trend of mergers and acquisitions among firms, they say, will result in (a) large, multi-office conglomerates; (b) highly specialized "niche" firms; and (c) small, local, general practice firms.

Growing foreign competition in building materials is a trend to watch, reports the National Institute of Building Sciences. Its study indicates that imports of construction materials rose 11 percent last year, while exports rose only 5 percent.

Office workers have an average of 300 square feet in personal work space, 50 square feet more than five years ago, says the Building Owners and Managers Association (BOMA). Even at that rate, it will take a while to fill the 1.5 billion square feet of North American office space that BOMA says is now vacant.

Products (continued from page 53)
the building product manufacturers' warranty obligations pass directly to the building owners, producers can also have relationships with owners that survive the final punch lists.

Architects and Products

The relationship of the building product industry to the architectural profession is more complex. Just as a painter can be known for the palette of colors with which he creates his art, so too is an architect dependent on the palette of building materials available to him. The range of materials available today is larger than it has ever been. This is primarily the result of manufacturers, driven by competition, having to continually create and exploit new technology, respond to and stimulate market demand, and develop and promote new products and markets.

Where once an architect was limited to locally available materials, today the palette of building materials comes from manufacturers around the world. Instead of building with raw or semi-finished materials, we assemble buildings from components that are shop fabricated and finished. Master builders with a personal knowledge of all building materials and methods are an endangered species; designers and builders must now rely on manufacturers' product data sheets, shop drawings, installation instructions, field training and supervision, and off-site fabrication. Many building products require such specialized experience or knowledge that they can only be detailed or installed by the manufacturer. The building product industry today is more than just a material supplier; it plays an integral role in detailing, engineering, and constructing systems, sub-assemblies, and entire buildings.

After developing new technology and products, the building product industry must then introduce it to the rest of the construction industry. Through advertising, promotion, sales, and service, manufacturers must inform and educate designers and builders and provide technical assistance and support to users. The front line in that effort is the legion of building product salesmen and manufacturer's representatives, who act as consultants to architects.

The building product industry also influences architectural style and taste through advertising and marketing. Which came first, for example: the current design trend towards stone-ve-

neer curtain walls or the development of new types of curtain wall systems and the technology to cut thin stone?

In a profession that turns out more graduates each year than can be routinely absorbed, architecturally trained students are finding that the building product industry is a major source of satisfying career opportunities. Positions in building product sales, product development, contract administration, and management await talented individuals who can speak the language of architecture.

There is not a standard way by which we can accurately measure the output of the building product industry. But it is clear that more than construction jobs are at stake when economic indicators point to an increase or decrease in construction. From the forests and mines where raw materials are extracted, and the refineries and mills where basic materials are produced, to the factories and shops where products and systems are fabricated, the building product industry is responsible for a significant part of the gross national product.

By becoming more familiar with the building product industry, architects can become better informed consumers and more effective practitioners, able to call upon and utilize the resources of the building product industry. **Michael T. Chusid** ■

The author is an architectural specifications consultant and a technical and marketing consultant to building product manufacturers.

Specifications (continued from p. 53)
new sources of materials for use in buildings. A major show is always an excellent occasion for producers to introduce new items because the opportunity for event-related publicity as well as large, immediate exposure are both there. While new

products do not always survive and prosper in today's tough marketplace, this is a chance to examine them early-on and ask the necessary questions.

Also, the real product is on display, not just a photo or a drawing to look at, giving architects a chance to feel, see, and touch it right there. Except for the architect working in a larger office located in a metropolitan area, manufacturers' sales representatives (if there are any in the region) probably do not visit very often or bring products with them. If it's only data that is wanted, there is also plenty of that available at the booths for examination. To get on the manufacturer's mailing list, one has only to present the plastic credit-card-type identification badge issued to each participant.

Furthermore, it is a lot easier to compare products of different manufacturers when they are only a few (hundred) yards away at nearby booths. That is hard to do back at the office without a lot of arrangement and manufacturer cooperation. And, since not all products are marketed everywhere in the U.S., this is one of the few occasions when it is possible to get some ideas about what is being done elsewhere in the country—not so easy to find out staying home.

For sole practitioners and others from smaller offices, perhaps the most valuable part is the opportunity to talk to manufacturers' representatives one-on-one. That is a two-way street, because the manufacturer, while answering informed questions from the specifier about the product, gets valuable feedback on how the products work, what features are attractive, and what problems result from their use. Both parties benefit from that sort of exchange.

Clearly the CSI national show is not the only one in the world. The AIA, and many CSI chap-

ters have similar, though smaller, product shows well worth attending for the same reasons. The recent success of the professionally managed Boston Society of Architects' regional show and seminars (300 exhibits, 5000 attending), which drew from the entire Northeast, is a case in point.

International Shows

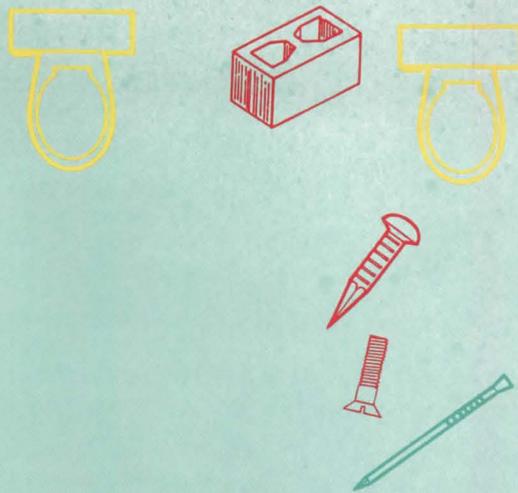
More Americans may now be attending international product shows, whether or not they have work overseas. Construction products, like so many other aspects of life nowadays, are increasingly becoming internationalized, with products being designed or fabricated in more than one country. Styles and materials travel easily these days across national boundaries and around the globe.

Among the best-known and most successful international shows are the biennial British "Interbuild" (contact Building Trades Exhibitions Ltd., 11 Manchester Square, London W1M 5AB) and the French "Batimat" (contact Promosalons, International Trade Exhibitions in France, Inc., 8 West 40th Street, Suite 1505, New York, NY 10018). Both most recently took place last Fall and will next appear in 1989 in Birmingham, England, and in Paris. Both are very large and cater to an international clientele from a solid domestic base in their own countries. The two shows are usually about ten days apart so that exhibits can appear at both.

Interbuild 1987 filled five large, interconnected buildings with some 1400 booths and had an attendance of over 143,000. Among the most interesting events at Interbuild are the trades competitions in which teams of apprentices vie for honors in building roofs or masonry walls at the show from drawings designed to test their skills. Unique to Interbuild, though not to the world outside, the sight of real workmanship at a show is a welcome refreshment after a long day looking at computers, data sheets, and disembodied products. The big advantage of Birmingham (in addition to its proximity to London by train) is the lack of a language barrier. The show presents many familiar products as well as some that have yet to be tried on this side of the Atlantic.

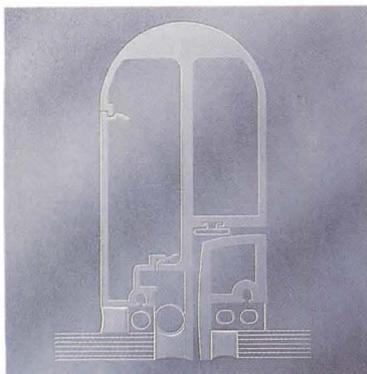
Batimat takes place at the mammoth exposition center near Paris's Porte de Versailles. Seven large buildings (the largest having three complete exhibition

(continued on page 56)



C R Y S T A L I N E

Entrance and Framing System

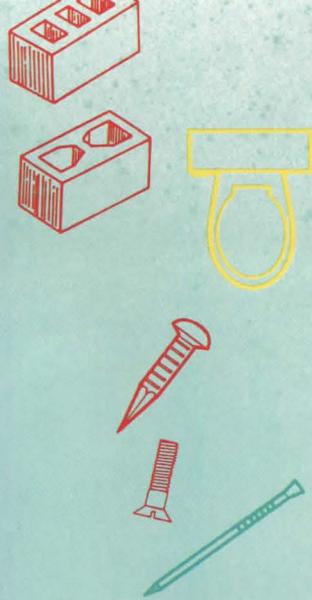


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Specifications (continued from p. 54) floors), over 3500 exhibits, and half a million visitors from all over the world, must make this the biggest show of its kind anywhere. The products, like those in England, come from a variety of common market countries and beyond, with Africa and North America among those represented. Visitors' badges are coded to indicate the language spoken, but it's clearly an advantage to know French. Many new products and designs introduced in Paris later turn up in the U.S. French names such as Porcher or Villeroy and Boch are just now becoming familiar here while others, like Rhone-Poulenc, have been in American specifications for a while. There are extensive areas devoted to ceramic tile from European countries and whole floors of plumbing fixtures and fittings, as well as other building materials. An eighth building houses a semi-independent show, "Interclima" devoted to heating, ventilating, and air conditioning equipment. It is quite enough to wear out the most intrepid product show junkie from any part of the construction industry.

These regional, national, and international exhibitions do not really replace professional and trade magazines, product literature, catalogs, or even local product shows; rather, they complement and supplement such information sources at a different scale. Even after electronic product data bases are fully developed and available, the need for the first-hand experience of product shows will probably remain, not only for the reasons mentioned above, but also because of the social need for personal relationships, and for human communication about careers, personalities, and new products. It's all a part of selecting and specifying construction materials in this last part of the twentieth century.

Walter Rosenfeld ■

The author is a consultant in construction specifications and project management in Newton, MA. He is currently president of the Boston chapter of CSI.

Law (continued from page 53)

lution to disputes, since hearings presided over by an arbitrator with specific expertise in the area in question can be held privately and informally at a convenient location. Limited appeal against the arbitrator's decision can also prevent a long, drawn-out dispute. Arbitration has become well established in the construction field, and is written into many standard forms of

contract (for example, the AIA documents A201, A401, B141) as an alternative, or at least a prelude, to litigation. Hearings can theoretically be established quickly and the contract may even provide for continuation of the project while the dispute is settled (AIA Document A201-1987, Article 4.5), thus minimizing delays in completion.

However, the system has some problems. Despite the potentially informal nature of the process, parties can still utilize the services of attorneys. A number of lawyers have even become arbitrators, so that under their influence, a hearing may be carried out very much along the lines of a normal court case, utilizing standard court procedures and adhering strictly to the rules of evidence. Timing may also be a problem. If each party decides to bring attorneys and expert witnesses into the arbitration, finding convenient dates may be difficult, particularly if the hearing extends over a number of days. An arbitration recently completed by this author took over three years to complete, primarily because of the problems of establishing satisfactory times for all parties to meet and of unforeseen cancellations caused by other engagements.

If an arbitration involves a number of players, its cost will also be affected. With fees likely to start at \$75 per hour, lawyers and expert witnesses can be costly, and the fees of the arbitration panel must be added. Arbitrators only serve the first day of hearing without charge, and thereafter are paid at a rate established by the American Arbitration Association. The parties also must bear the costs of a stenographic record if desired, and the rental of the hearing room, both costs that do not usually occur in litigation. In the arbitration case previously mentioned, the final costs accrued to over \$300,000 on a \$750,000 initial dispute.

Although arbitration may precede the courts as a means of resolution, the lack of an appeal mechanism may mean that the losing party will take the case to court anyway, thus prolonging the dispute even further. This may happen with particularly litigious parties, or if one side feels that the arbitrator did not properly assess the case. Some critics of the process feel that arbitrators who are not legally trained may not have the ability to adequately resolve highly complex disputes. Because an arbitrator's award may be set aside by the courts for refusing to hear evidence, cautious arbitrators often hear anything that the parties wish to present for fear of opening themselves to such charges, thus extending the time of hearing considerably.

These problems, which mostly occur on large, complex cases, do not invalidate arbitration as a means of resolving disputes in the construction industry. Many arbitrations are carried out expeditiously and efficiently. Standardized schemes, such as the Home Owner Warranty program implemented by the American Arbitration Association, are excellent vehicles for speedy completion of disputes. Hearings usually take place in the home of the claimant and take several hours at the most to complete. Awards are then made within 20 days from the close of the proceedings. On balance, the use of arbitration in many construction-related areas is advisable and can provide a satisfactory alternative to litigation. Architects are usually well advised to seek an arbitration clause in their contracts and to recommend such arrangements in the signed agreements between their clients and contractors. Since standard forms of contract usually incorporate an arbitration agreement, clients should be dissuaded from striking these clauses prior to signing.

Although arbitration is an alternative to going to court, the process is fundamentally the same. In both systems, disputing parties place their case before an independent third party who assesses the facts and issues a decision. The parties effectively bind themselves to that decision, which in most cases leads to a winner and a loser. The finite nature of such decisions can leave at least one side aggrieved and ruin the relationship between parties still involved in the construction of a project.

The Mediation Alternative

An alternative to both arbitra-

tion and litigation, which seeks to resolve a problem without necessarily declaring a winner, is the mediation process. Here, two parties voluntarily sit down with an independent mediator who discusses the dispute and tries to find a solution that is acceptable to both sides. The mediator's solution is non-binding, and either side might decide at the completion of the meeting to resolve the dispute through the more conventional channels of litigation or arbitration.

Despite the wholly voluntary basis of the process, the American Arbitration Association, which has initiated a mediation program, reports considerable success. They report that 42 percent of their recent cases resulted in a settlement and were processed in an average of 90 days. They also estimate that there was an approximate saving of \$2,000 in legal expenses in each case. Similarly D.P.I.C., a major American insurer, claims that 80 percent of a group of 350 claims filed went to mediation, of which 72 percent were successfully settled. By enabling parties to determine their own settlement, mediation increases the chances of contractual relationships being maintained and of amicable solutions being reached.

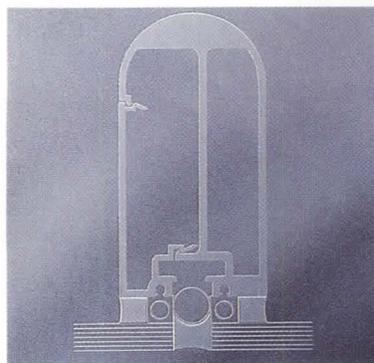
Fairly recently, the American Institute of Architects has furthered its efforts to control liability by working with the American Consulting Engineers Council, the American Society of Civil Engineers, and the National Realty Committee to establish a mediation procedure in the construction industry. The program, called the Construction Mediation Service, is a pilot project that is being administered by the Center for Dispute Settlement. It is being offered in the Washington metropolitan area and, if successful, should provide the impetus for a nationwide mediation program in the construction field, bringing immense relief to an architectural profession beleaguered with litigation. If the previous records are anything to go by, mediation could have a greater potential for success than the broader-ranging, more ambitious, but ultimately less achievable goals of tort reform and limitation of liability, because it resolves problems before they enter the formal dispute stage.

Robert Greenstreet ■

The author is an Associate Professor at the School of Architecture & Urban Planning at the University of Wisconsin-Milwaukee and Chair of the Department of Architecture.

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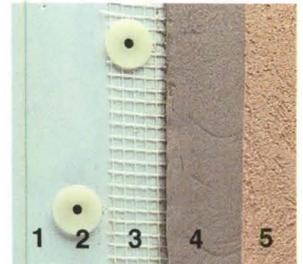
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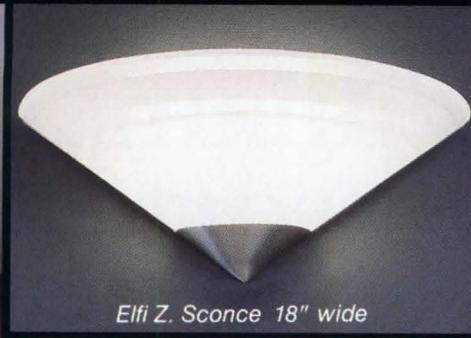
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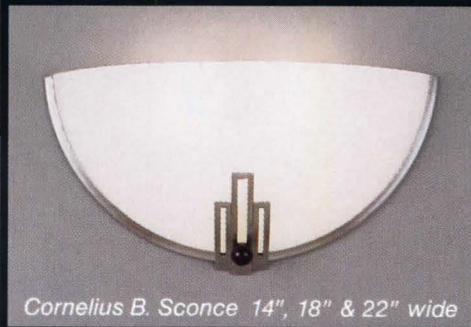
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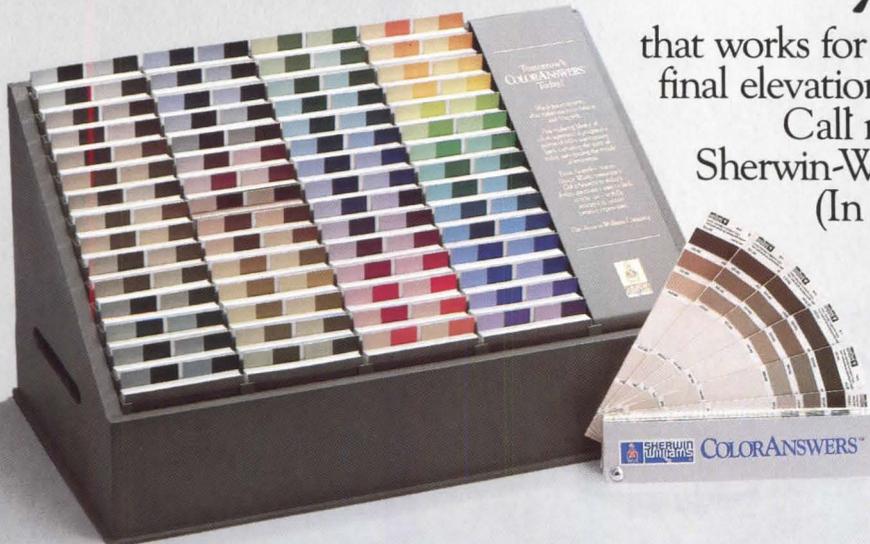
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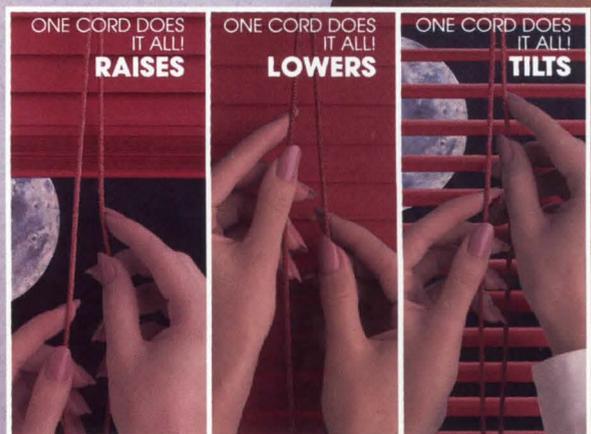
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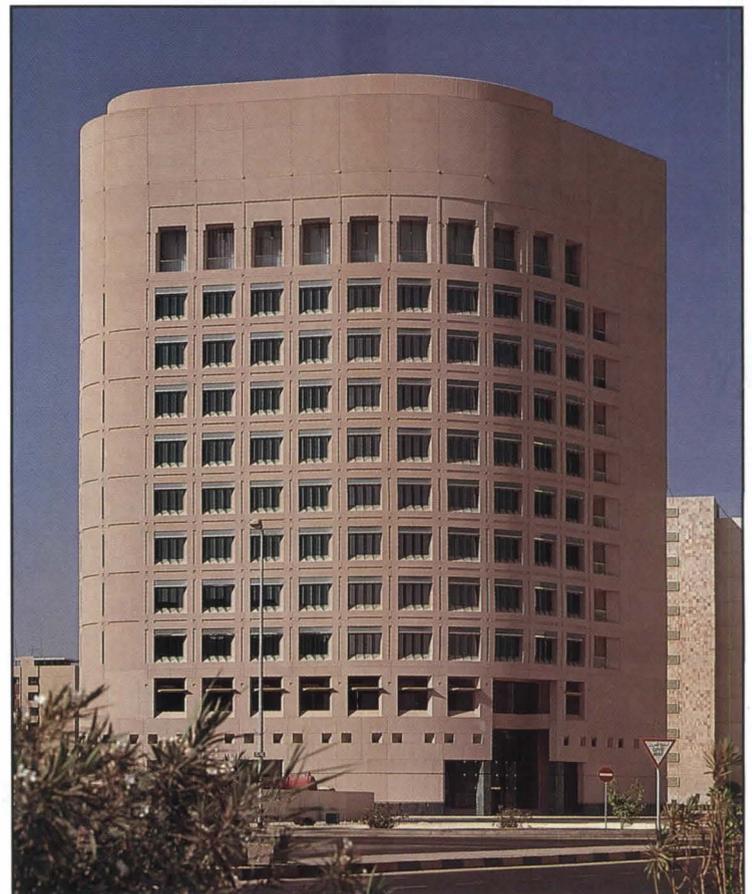
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A Bow to Bahrain

A citation winner in the P/A Awards program, the United Gulf Bank in Bahrain by Skidmore, Owings & Merrill demonstrates that Modernism can respond sensitively to both climate and culture.



Southwest front of United Gulf Bank (above); drawing of atrium (left).

Critique

REVOLUTIONS tend to throw out the good with the bad, and the recent revolt against Modern architecture is no exception. The unresponsiveness of much Modern architecture to its physical context and local culture has been widely—and rightly—rejected. But the now prevalent idea that Modern architecture must be anticontextual is mistaken. Indeed, some contextual buildings have lapsed into their own empty formalism, employing the styles of traditional structures while missing the principles upon which the indigenous architecture is based.

The United Gulf Bank in Bahrain, designed by the Chicago office of Skidmore, Owings & Merrill shows what a truly contextual architecture can entail. The building doesn't resemble the low-rise, courtyard structures that compose Bahrain's traditional architecture. Nor does it resemble recent Bahrainian architecture, which often uses historic styles as a kind of appliqué. The United Gulf Bank is forthrightly Modern and yet directly influenced by the color, form, organization, structure, and detailing of vernacular buildings. By abstracting the principles of that traditional work rather than mimicking its outward appearance, the architects have created a building that is a part of its place.

They also have created a building that is very much a part of Late Modern architecture. The wall that wraps the building's front, for example, echoes the screen walls in Mitchell/Giurgola's work or the billboard fronts in the work of Venturi, Rauch & Scott Brown. And projects by Alvar Aalto or Kallmann, McKinnell & Wood are recalled by the asymmetrical curve and radiating plan.

What follows is a description of the building and the process of its design by Adrian Smith, the Design Partner at SOM responsible for the building. From his comments emerges a design method that draws from the indigenous architecture, not particular stylistic motifs, but lessons in adaptation to the climate and culture that are then reinterpreted in new forms and materials. It is a method that begins to resolve the conflict between Modernism and contextualism, between abstraction and tradition. And it is a method that, as the United Gulf Bank shows, can produce some stunning architecture.

Thomas Fisher

The Country

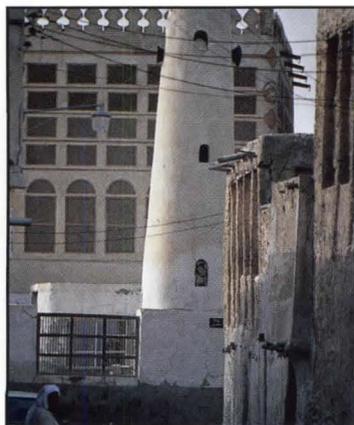
Bahrain is an island about five miles from the east coast of Saudi Arabia. A resort area in ancient times, Bahrain is still used as a holiday spot because the country, after being colonized by the English, became much more lenient than other Arab states.



The pearl industry was once very strong in Bahrain, although there is hardly any of that anymore. The same is becoming true of its oil industry. The English discovered oil there around 1925, making Bahrain the first Arab country to pump oil, but its reserves are now being depleted. Most of what the Bahrainians have to do with the oil industry now consists of refineries and things of that sort. In recent years, as Beirut has fallen apart, the country has become the Arab world's banking center.

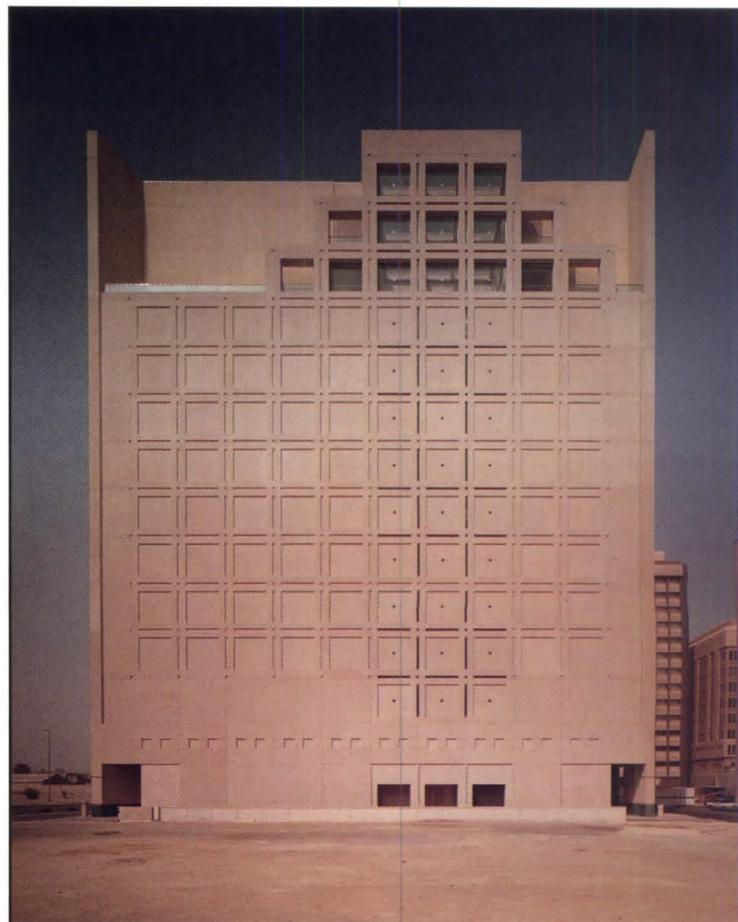


What sticks in your memory about the place is the color of the landscape and the intensity of the climate. The sea, for example, is not blue, but a beautiful light green, and the desert is light tan in color. The climate is very hot and dusty. There are few zoning ordinances in Bahrain, but one of them requires that every new building have a public arcade to protect people from the sun.



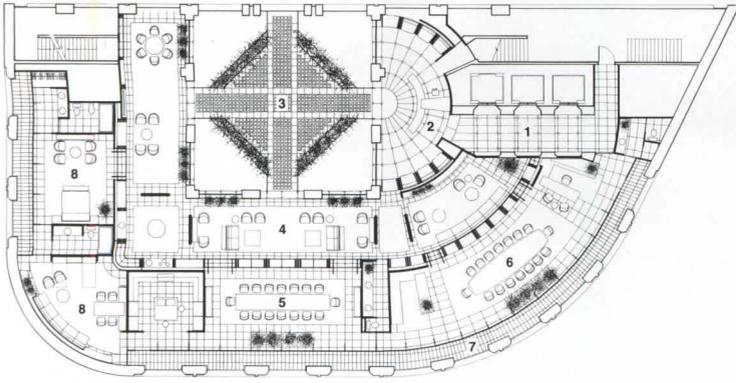
The United Gulf Bank stands in a new diplomatic district in Manama, Bahrain's capital city (facing page). Many of the surrounding buildings have traditional architectural motifs simply applied to their façades. The United Gulf Bank, in contrast, responds to its context in more substantial ways. Because of the intense heat of Bahrain, the building provides a deeply shaded arcade, recessed balconies, and glass fins and light shelves to reduce heat gain

and increase daylight in the offices (above). The exposed structure and stepped skyline of many traditional buildings are recalled in the bank's rear wall (below). The main organizing element of the building is the curved wall that wraps three sides of the structure and serves to hide rooftop equipment.

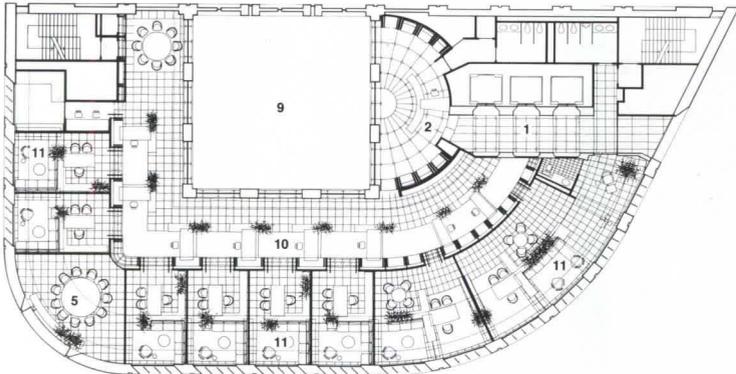




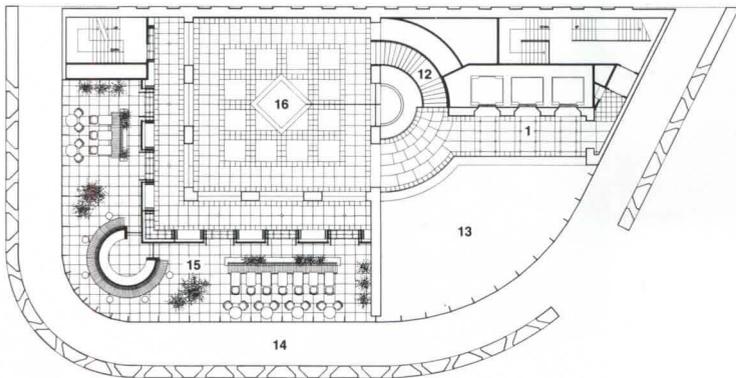
**P/A Awards Update
United Gulf Bank**



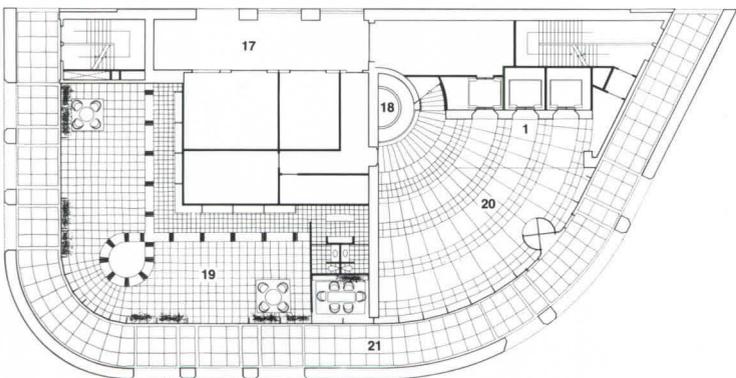
TENTH FLOOR PLAN



NINTH FLOOR PLAN



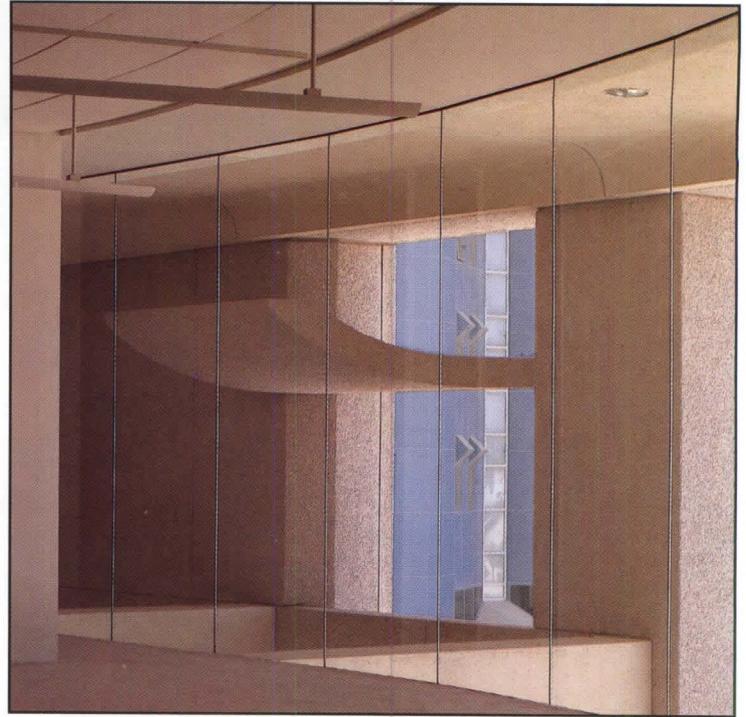
MEZZANINE PLAN



GROUND FLOOR PLAN

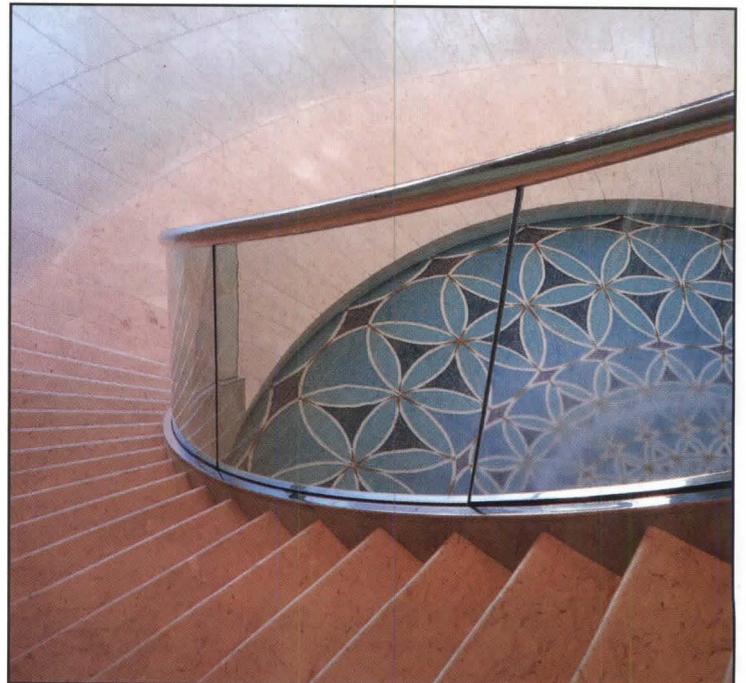
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|-----------------------------|--------------------------|
| 1 ELEVATORS | 11 EXECUTIVE OFFICES |
| 2 RECEPTION | 12 STAIR TO LOBBY |
| 3 BRIDGE OVER ATRIUM | 13 OPEN TO LOBBY BELOW |
| 4 LOUNGE | 14 OPEN TO ARCADE BELOW |
| 5 CONFERENCE ROOM | 15 EMPLOYEE DINING |
| 6 BOARD ROOM | 16 FIRST FLOOR OF ATRIUM |
| 7 BALCONY | 17 SERVICE ENTRY |
| 8 BANK CHAIRMAN'S APARTMENT | 18 POOL |
| 9 ATRIUM | 19 RETAIL |
| 10 SECRETARIAL AREA | 20 LOBBY |
| | 21 PUBLIC ARCADE |



The ground-floor arcade (facing page), mandated by code, is mostly enclosed to protect people from the sun. The large openings in the arcade occur opposite the entrances to the bank and the shops. Smaller square openings occur near the ground (which also contain concealed lamps for night lighting) and at the mezzanine level; these openings are angled or flared in plan to modulate the daylight in the arcade. Projecting light shelves (above)

help illuminate the ceiling of the arcade and the first office level, with its floor-to-ceiling glass. The typical office interior has fabric-covered ceilings and indirect fluorescent fixtures. The lobby features a stair that gives access to the atrium and that curves around a pool that has a tile pattern similar to the intricate patterns of Bahrainian weavings.





The Contextual Influence

There is a small enclave of historic buildings in Bahrain. The people, however, maintain many aspects of traditional life, even though the country is otherwise very modern. We responded to that context, not directly, but very indirectly, retaining it as a kind of memory in the building.

The traditional architecture, for example, typically has a post-and-beam structure that is expressed on the exteriors of buildings, with infill panels of stuccoed masonry or carved screens. That grid-like system extends up to the top surface of the buildings, where there are often sleeping porches that act as ventilation devices, keeping people cool at night. We recalled this post-and-beam architecture in the bank's expressed structural grid, which is most apparent in the atrium and on the back, alley side of the building.



Because of the intense heat of the place, the older buildings in Bahrain have thick stuccoed walls; small, punched openings; and recessed wood screens. Even the historic streets, especially those used for markets, have wood latticework overhead that is often covered with fabric to provide shade. The traditional architecture also has covered courtyards.

The memory of those things in our building can be seen in the thick wrapper wall, with its recessed windows and balconies, and in the atrium, which is organized as a series of stacked, three-story courtyards to break down the scale of the building and to create spaces comparable to those in traditional houses.

The bridges that span the atrium have glass block floors and, like the wood screens that cover the openings in the older houses, let in a diffuse natural light during the day. At night, the bridges glow from the hanging fixtures that provide both uplift and down. The square at the center of each bridge contains a small pool, like the pools that you sometimes see in the courtyards. Unfortunately, because the pools have glass bottoms, it is very easy to step in them. I've gone in three times; the photographer, twice.

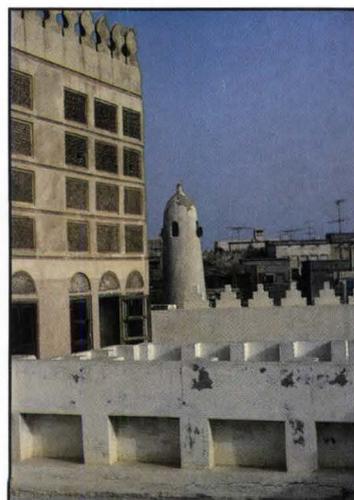
The fountain in the lobby is lined with tile in an intricate geometric pattern that recalls the marvelous geometric patterns of the bags and weavings that you find in Bahrain. Other repetitive patterns are used on the air supply and return grilles.



While the fishing and pearl industries have declined in Bahrain, people still have boats—called dhow—that they pull up on the beaches and actually live in. These boats have a distinctive shape that you can't miss when you go there. Our site, when you curved its corners, had the same shape as the back of those boats; by holding the edge of the site, the building recalls a shape that is very much a part of the Bahrainian context.



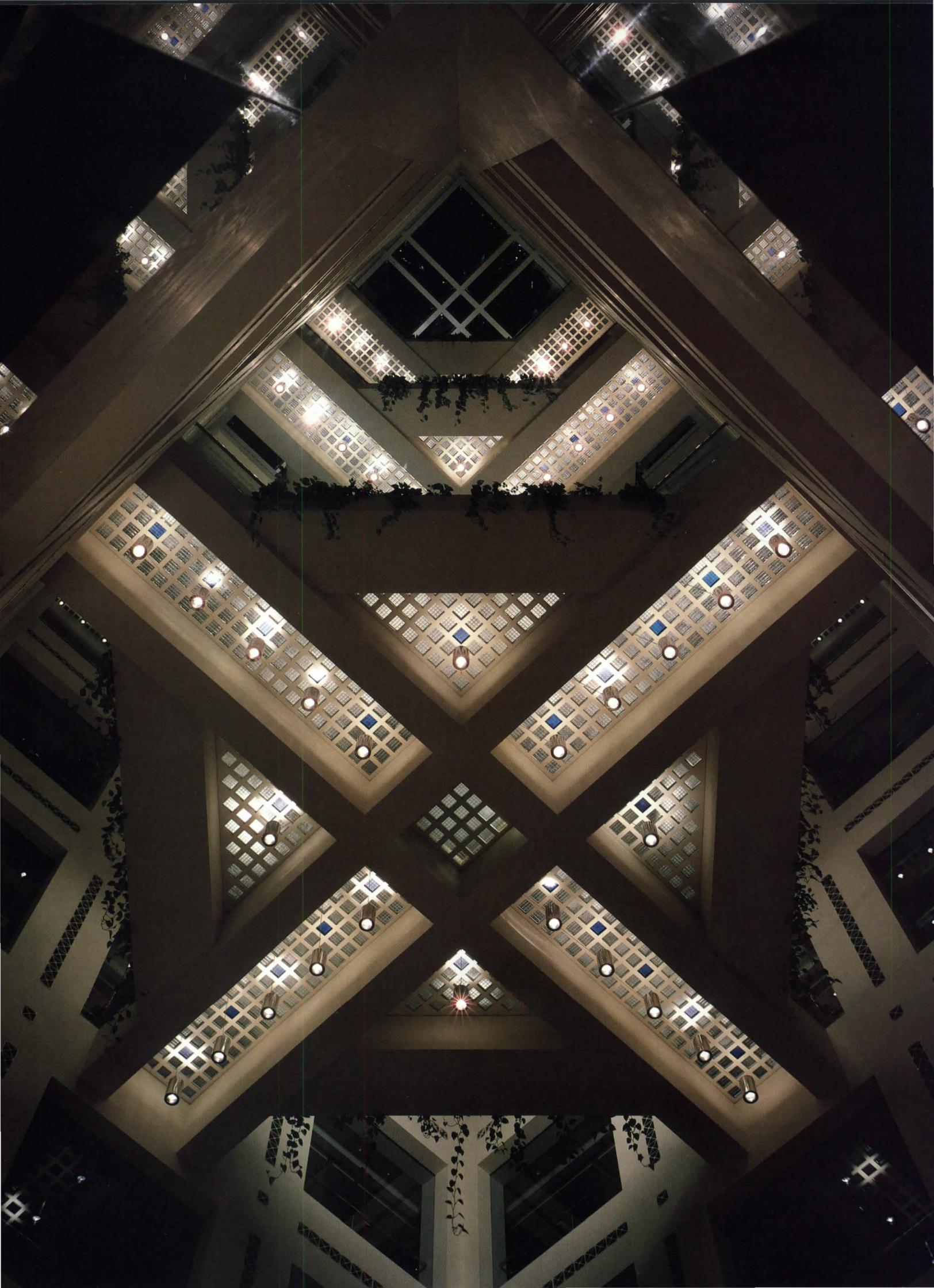
We also tried to incorporate the colors of Bahrain landscape in the building. The green Solex glass in the vertical fins, for instance, is the color of the ocean there. And, to match the color of the desert and the indigenous architecture, we used local sand in the precast concrete.



The atrium (facing page) forms the heart of the building. It is divided into three, nearly cubic volumes by bridges that have glass block floors, allowing daylight to filter into the space from skylights. Fixtures that hang below the glass block make the atrium glow at night. Each floor of the building has a small reception area (below) that overlooks the atrium. A wood dome defines the space in front of the reception desk and, like the semicircular seating in

the reception area, recalls the curved shape of the building. The offices (above) are generous in size; many have conference tables or lounge areas. The curved light scoop illuminates the coved ceiling during the day, while lamps concealed within the scoop provide lighting at night. Patterned wood panels cover the mechanical plenum.



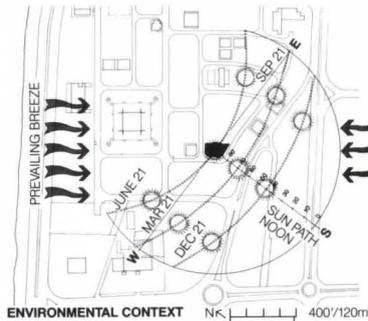


Design Development

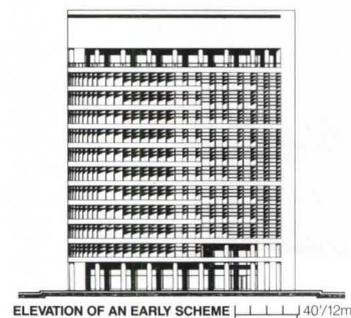
The site is in a new section of Manama (the capital city of Bahrain) in an area called the diplomatic district. Many of the buildings in the area have been designed by local architects who tend to respond to the architectural tradition of their country by applying its stylistic elements to their buildings in a very superficial way. A few clients, however, come to the U.S. for their architectural services, which may depend upon the sophistication of the clients and whether they have been here.

When the United Gulf Bank came to us, they did not want a typically American building of glass and steel; they wanted something that was rooted in indigenous Islamic architecture. We looked at several alternatives—as we always do—during the early design stages. One alternative had a symmetrically

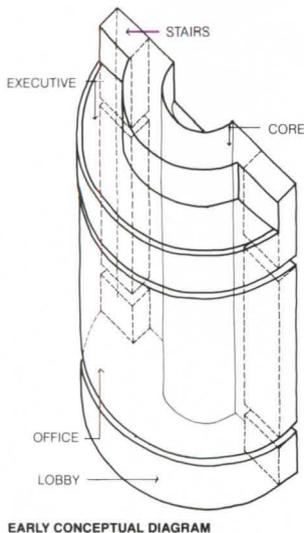
glass at the front of the light scoop would have been the brightest surface in the room, we soon determined the shape and depth of the scoop by ensuring that the glass could not be seen from any point in the room. On the interior, the cove ceiling was originally shorter to provide plenum space for ductwork, but we eventually moved the cove back to bring daylight deeper into the space.



Although we gave the recessed view windows a silver reflective insulating glass, we still had to shade it from the intense western sun. We first looked at horizontal sunshades, but didn't feel that that was right, and then went to thin vertical fins, but the client didn't like that because they would block the view. The concern with the view led us to the use of heat-absorbing glass fins that do not touch the glass wall to prevent heat transfer. Only about 11 percent of the heat from the sun now actually makes it into the building. We built a large model of a typical office and tested it under various lighting conditions because we were not absolutely sure that the daylighting scheme would work. But it does. (See Selected Details, p. 179.)



The office floors, in the early schemes, were laid out in a rectilinear fashion with a corridor running around the atrium and small rotundas at the corners. But when Pat (Patrick McConnell, an Associate Partner at SOM) got involved, he reorganized the interiors around a thick wall that follows the curve of the façade and separates the offices from secretarial areas.



curved form with an atrium and the core along the back, but when the client saw it and said that it looked like a perfume bottle, that killed that one. Other schemes had the courtyard spaces along the outside wall of the building, but we eventually rejected that because it made more sense to use the atrium to bring light into the core of the building rather than use it where we already had light. We ended up using the placement of the core and atrium in the perfume bottle scheme but with an asymmetrically curved front that more closely followed the site.

We also studied various fenestration ideas, including a Corbusian scheme with precast brise-soleil and schemes that packaged windows into double- and triple-story frames. We finally arrived at the idea of creating a wrapper wall with recessed windows.

We developed the light scoop fairly quickly. Since the flush



The bridges that divide the atrium into three-story sections (above) break down the scale of the tower, provide a place for employees to meet and relax, and recall the courtyards of similar dimensions found in traditional Bahrainian architecture. The rear wall of the building faces an alley and so is largely windowless, although the part of the atrium above adjacent buildings (facing page) is nearly all glass. This glazed volume has stepped

sides that recall the stepped battlements found in older Bahrainian structures and provide a higher ceiling for the executive lounge areas that overlook the space. The glass block bridges have central, glass-lined pools that have proven to be somewhat of a hazard. Vertical and horizontal grilles serve as the air supply and return registers and repeat the double columns and beams of the building's rear wall.

Project: United Gulf Bank, Manama, Bahrain.

Architects: Skidmore, Owings & Merrill, Chicago (Adrian Smith, Design Partner; William Drake, Project Partner; Larry Oltmans, Studio Head; William Larson, Project Manager); Pan Arab Consulting Engineers.

Client: United Gulf Bank

Site: 12,400-sq-ft site in the Diplomatic Area of Manama. The climate is characterized by extreme heat, dust, and a strong sun.

Program: provide 100,000 sq ft of space to include executive offices and boardroom, a trading room, employee dining area, and an apartment for the bank chairman.

Structural system: moment-connected steel frame on spread footings.

Major materials: precast concrete cladding; marble base; reflective, heat-absorbing, and translucent glazing; glass block floors in bridges; fabric ceilings with fluorescent uplights. (See Building Materials p. 175.)

Consultants: Skidmore, Owings & Merrill, interiors and structural; Pan Arab Consulting Engineers, mechanical; Jules Fisher & Paul Marantz, lighting.

General contractor: Shinizu Construction Company.

Costs: Not available.

Photos: Nick Merrick, Hedrich-Blessing; photos of Bahrain by Adrian Smith.



Can a big furniture company benefit from avant-garde design? Rolf Fehlbaum is doing his best to see that it happens at Vitra.

The Risk Factor

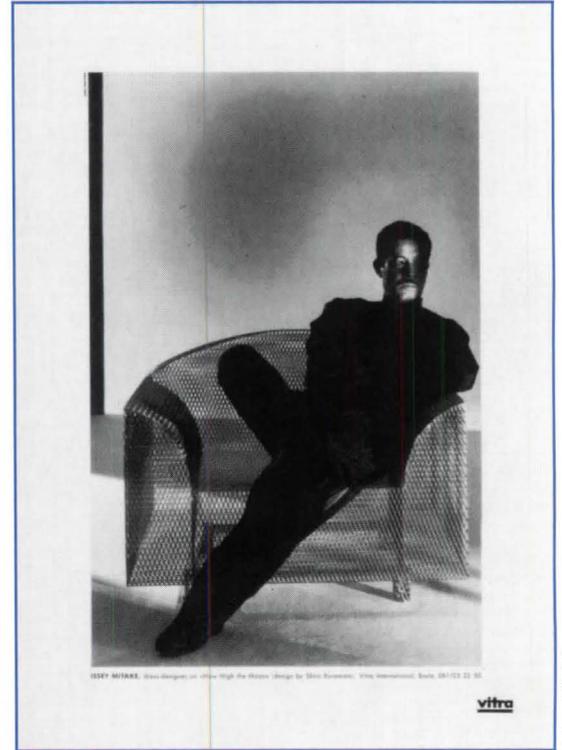
DESPITE the explosion of interest in innovative furniture design over the last few years, big manufacturers are increasingly cautious about producing anything that isn't a sure bet. Several of them have flirted (seriously or not) with bankrolling new design experiments, but even the most starry-eyed companies seem to give in to "market pressures" and give up on the avant-garde.

So why is Vitra International, one of Europe's largest producers of office seating, taking the plunge now? It is because Rolf Fehlbaum, the Swiss company's 47-year-old president, believes that you can have it all: commercial success *and* cutting-edge design. Commercial success means selling \$64 million worth of chairs (by masters like Charles Eames and Mario Bellini, themselves no strangers to innovation) last year. Honing the cutting edge is Vitra Edition, a program Fehlbaum initiated to commission limited-run, experimental furniture from an impressive list of art and design stars. The list: Ron Arad; Richard Artschwager; Scott Burton; Paolo Deganello; Frank Gehry; Shiro Kuramata; Gaetano Pesce; Denis Santachiara; and Ettore Sottsass.

And that's not all. British architect Nicholas Grimshaw designed Vitra's main factory in West Germany. Claes Oldenburg and Coosje Van Bruggen created the sculpture in front of it. Frank Gehry is at work on another factory, and a museum for the enviable collection of 20th-Century chairs that Fehlbaum has been amassing for the company. And another British architect, Eva Jiricna, is designing an office building.

Such is Vitra's seemingly swift transformation from a top-drawer but conservative chair producer into one of the most aggressive and discriminating patrons of design in the furniture industry. But in the last decade, we've seen similar undertakings, fueled by lots of money and good intentions, fizzle. What makes Rolf Fehlbaum think he can succeed where others have failed?

If environment counts for something, then Fehlbaum has a definite advantage. He grew up with contemporary design—some of the best. In the mid 1950s, Vitra, a family-owned business, became the Swiss, German, and Austrian licensee for Herman Miller, which was producing the pioneering designs of Charles Eames under the leadership of D.J. De Pree and the critical eye of George Nelson (who also designed for the company). Acting



Vitra's president, Rolf Fehlbaum (facing page), stands among a few examples from his collection of 20th-Century chairs. From left to right: Alessandro Mendini's 1978 Proust chair; a child's chair, an early effort in molded plywood by Charles and Ray Eames; a prototype of Ron Arad's 1985 Horns chair; and Gaetano Pesce's 1969 UP-5 chair of upholstered urethane foam. Vitra's recent, award-winning advertising campaign paired famous people and Vitra chairs; fashion designer Issey Miyake (above) reclines in Shiro Kuramata's How High the Moon expanded metal chair, part of the Vitra Edition program.

KODAK EPN 60

KODAK EPN 6012



EPN▷6

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EPN▷5

Paul Warchol

P/A Profile
Vitra International

as an interpreter for his parents, the teen-aged Rolf Fehlbaum got to know and idolize Charles and Ray Eames, Nelson, and Alexander Girard. Today, his furniture collection includes rare examples of these designers' work, and Fehlbaum can tell you in detail just what made their designs so important.

Fehlbaum didn't join the family business until 1976. During the 1960s and 1970s, Vitra diversified slowly, producing Verner Panton's one-piece, molded-plastic chair in 1968, and introducing the influential Vitramat ergonomic office seating by Wolfgang Müller-Deisig in 1976. One of the company's top priorities was to create an identity for Vitra beyond the Eames products for which it was so well known (and which still account for a substantial portion of sales for Vitra, now the sole European licensee for the Eames line). The "breakthrough" in this effort was Mario Bellini's line of office chairs, introduced in 1984. The chairs, with their sophisticated, anthropomorphic design, proved a wise move both for Vitra's profile and its profits.

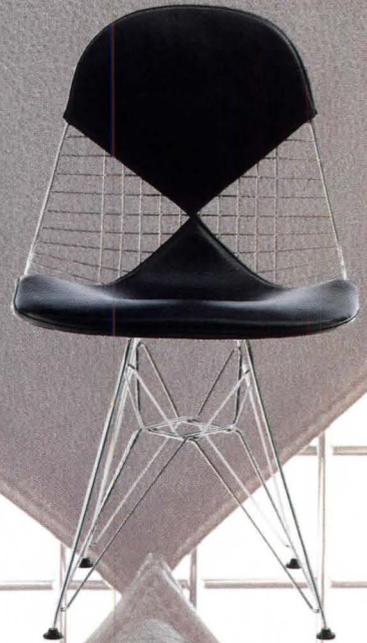
Since then, Fehlbaum's energies have been aimed at developing more products (a Bellini table line will be introduced next month at NEOCON 20, and Italian architect Antonio Citterio is at work on a new seating line), introducing Vitra Edition in a series of international exhibitions, and searching for designers with "a strong personal vision."

Vitra sounds like a one-man show, and, to a certain degree, it is, largely because of Fehlbaum's strong personal vision—and equally strong opinions. He criticizes big American manufacturers for their tendency to produce design by committee, and for their recent preoccupation with acquisitions. He hasn't much patience, however, for the smaller, "boutique" operations that assemble big-name designs for maximum press coverage. "A purely public-relations motivation dooms a company to failure," Fehlbaum argues. "Good design has to come from real feeling."

That belief, coupled with his insistence on close involvement in product development, earn him high marks with those who design for the company. Mario Bellini, no stranger to corporate clients and a sharp critic himself, calls Fehlbaum "a very special entrepreneur, who believes that design is not just an added value of a product, but is the value."

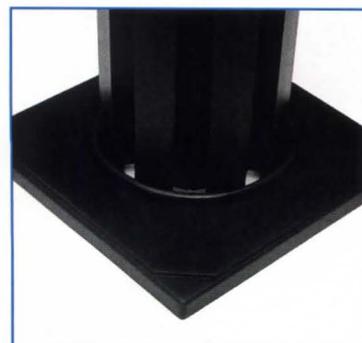
Still, the big question is: will it work? We tend to forget that Herman Miller in its golden Eames-and-Nelson age was a much smaller company than it is today. Vitra is already a big company, its success in the mainstream unquestioned. It can afford an experiment here and there, and the Edition program is one such experiment, allowing designer and manufacturer to pursue design research without casting a nervous eye at sales projections. Whether an Edition piece sells a thousand or one is not the point; nurturing new ideas is.

Interestingly, Fehlbaum wants someday to integrate the Edition into Vitra's mainstream production. At this (admittedly early) point, however, the pieces—with some notable exceptions—still emanate the rarefied air of the gallery. But Fehlbaum knows that the road from think tank to production line is a long one; you won't see him trying to sell Frank Gehry's cardboard chairs to specifiers at the next Orgatechnik. If, however, Fehlbaum can successfully integrate the spirit of true invention into mass-produced objects that both serve and humanize the workplace, then he will be making a contribution to contemporary design worthy of his idols, Eames and Nelson. *Pilar Viladas* ■



Vitra product lines

Vitra's current production in Europe includes Charles Eames pieces, such as the Aluminum Group swivel chair (facing page, top), and the Wire Chair (facing page, middle) which are marketed under the name of Vitra Classics, and for which Vitra is now the sole licensee in Europe and the Middle East. Vitramat, a pioneering line of ergonomic seating (example, facing page, bottom), designed by Wolfgang Müller-Deisig, was introduced in 1976. (In the U.S., Vitra Seating, Inc., operates as part of Stendig International, through a joint venture agreement between Vitra AG and Stendig Industries. Vitra Seating sells the Vitramat and Bellini lines in the U.S., but not the Eames pieces, which are, of course, made here by Herman Miller.) An important part of Vitra's product line is the series chairs designed by Mario Bellini and introduced in 1984. Persona (this page, top left and right) features a fully synchronized mechanism that allows the chair to adjust automatically to the sitter's movements; the only lever on the chair is for height adjustment. The chair, which Bellini conceived of in anthropomorphic terms ("it should be body-like, not machine-like") has contrasting stretch fabric at the point where the back flexes. The Figura chair (middle left and right) has a removable slip-cover and padded "belt" that, like the upholstery of Persona, can be purchased in a variety of contrasting color combinations. A third chair, Image (not shown here), is an executive "cousin" of Figura. Bellini's newest design for Vitra is the Forum line of tables (bottom left and right), which will make their American debut this June at NEOCON 20. Here, Bellini's application of architectural principles to a familiar office furniture type "fulfills basic ergonomic requirements without lapsing into schematic conformism," in the architect's words. Slender cylindrical bases or more muscular aluminum-section columns support tops in several finishes, such as the pearwood veneer with black inlay edging, Bellini's fond reference to Biedermeier furniture. The black square on the edge of the table serves as a "joint" for the edge veneer and inlay.



Photos: Courtesy Vitra International



Courtesy: Vitra International



Paul Warchol



Paul Warchol

Vitra factory, Weil-am-Rhein, West Germany

Vitra's main factory in Weil-am-Rhein, West Germany (photos this page) was designed by the British firm of Nicholas Grimshaw & Partners in 1981. This building replaced one that had been destroyed by fire, leaving the company with six months to rebuild before its loss-of-production insurance coverage ran out. Grimshaw's fast-track design for 102,220 sq ft of manufacturing space and 25,824 sq ft of offices and showroom concentrated building services in towers placed outside the building. A double-layered, composite metal skin applied to the pre-cast concrete frame allowed the factory to start production as soon as the inner layer was in place. Visitors to the factory are greeted by the sight of *Balancing Tools* (top left), a sculpture created by Claes Oldenburg and Coosje van Bruggen in honor of the 70th birthday of Rolf Fehlbaum's father. Installed in 1984, the giant pliers, hammer, and screwdriver—"Basic tools, as emblems," explains Oldenburg—create a gate that mediates between the industrial building on one side and the rolling farmland on the other. Another reference to the factory's bucolic setting is the "slightly organicized" depiction of the painted steel tools, with their "wiggly" outlines. A more personal representation for Oldenburg and van Bruggen involves the tools as symbolic reference to the three spirits of Basel (Vitra's home base)—a wild man, a gryphon, and a lion, who dance on a raft in the Rhine.

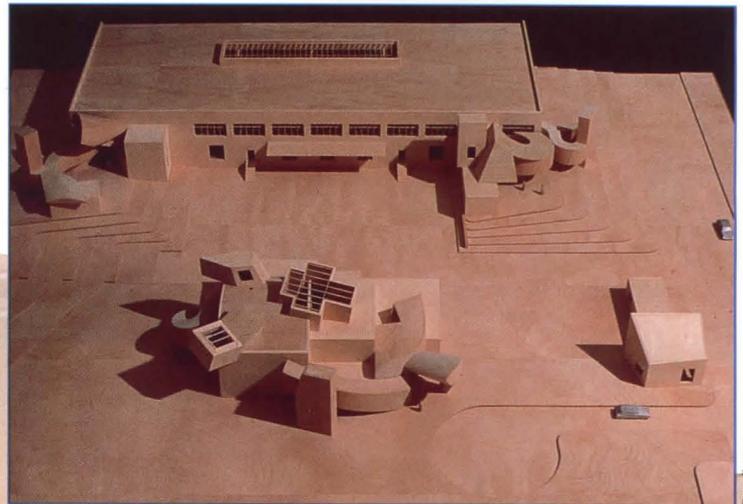
Factory expansion and chair museum, Weil-am-Rhein, West Germany.

Frank O. Gehry & Associates of Venice, Calif., designed a 100,000 sq ft new factory for Vitra, adjacent to the existing factory (site plan below), and a museum (right), to be built in honor of Rolf Fehlbaum's mother. The museum will house the ever-growing collection of 20th-Century chairs that Fehlbaum has been energetically assembling over the last few years. The plaster-clad museum, which will sit in front of the factory "like a piece of sculpture," as Gehry says, is essentially a rectilinear form with a few twists—most striking of which is a cruciform, zinc-coated skylight. A curved canopy of the same material crowns the entrance, and exit stairs are pulled away from the building, as they are in Gehry's design for the factory—a typical Gehry move that is, in this case, also a nod to the service towers in Grimshaw's building.

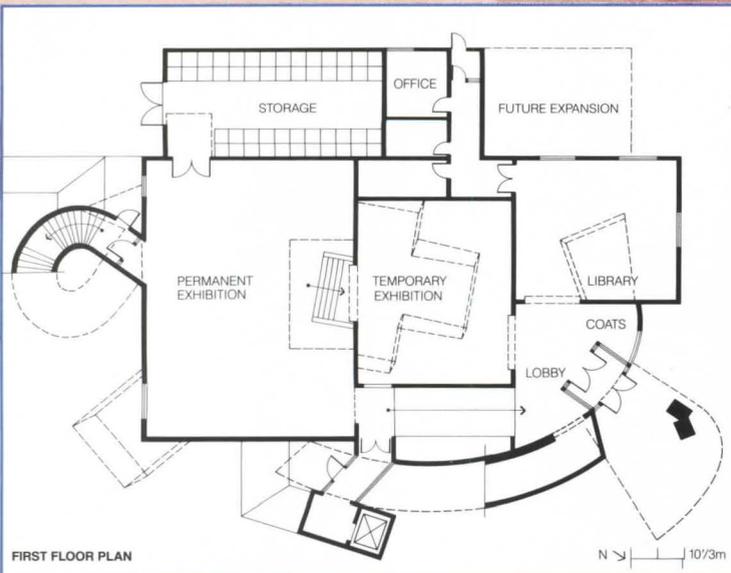
Gehry calls the Vitra project "one of the most exciting things I've worked on." He met Fehlbaum when he went to the Vitra factory to advise Claes Oldenburg and Coosje van Bruggen on the siting of *Balancing Tools*. Subsequent meetings between Gehry and Fehlbaum led to the factory/museum commission, as well as to the inclusion of one of Gehry's cardboard chairs, *Little Beaver*, in the Vitra Edition program.



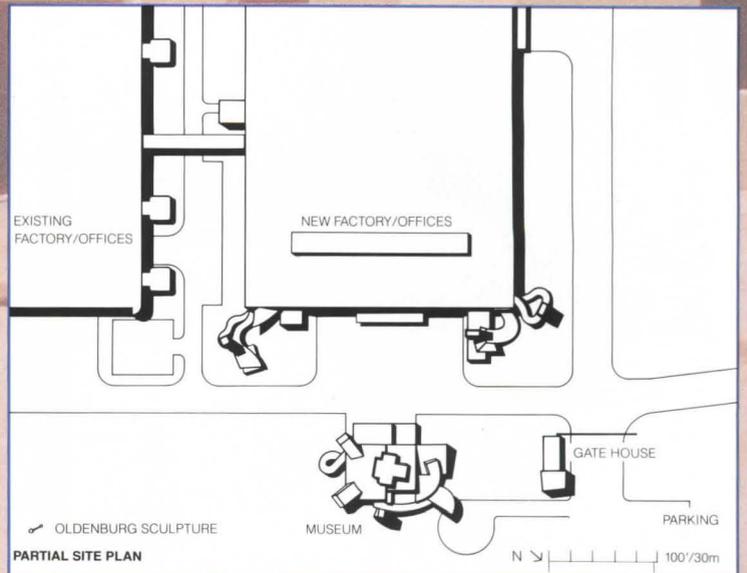
Tom Bonner



Tom Bonner



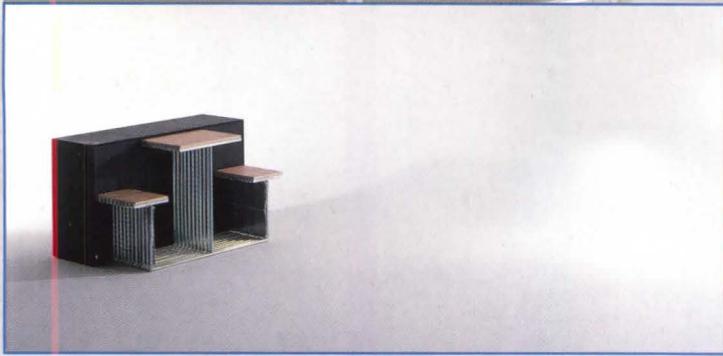
Drawing: Garry Harley



Vitra Edition

Vitra Edition is an ambitious program in which designers and artists are given the opportunity to experiment with new forms, materials, and technologies, "released from the constraints of the marketplace," in the company's words. While Vitra's considerable technical wherewithal is available to Edition designers, limited production keeps manufacturing costs manageable. And while some Edition designs will be produced in multiples, others may be one-off pieces.

The first Edition group, which made its European debut last year, is a varied one. Frankfurt designers Uwe Fischer and Klaus-Achim Heine of Ginbande created *Tabula Rasa* (1), an ingenious table that extends to a length of 15 feet.



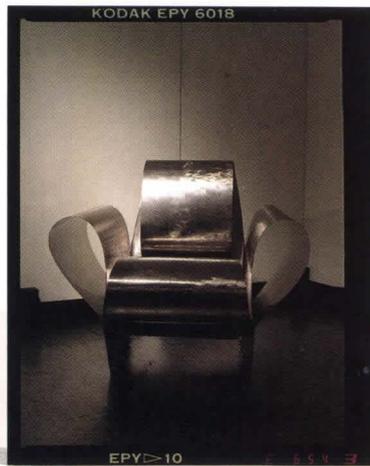
Photos: Courtesy Vitra International

Ron Arad's surprisingly comfortable Well-Tempered Chair (2) is made of sheets of tempered steel that are folded and bolted together with wing nuts. Artist Richard Artschwager's Chair/Chair (3) makes the archetypal snowshoe chair big enough for two. Milanese designer Paolo Deganello's Documenta Chair (4) is a startling juxtaposition of steel back and wicker seat. Frank Gehry's Little Beaver chair (5) is another of the architect's experiments with corrugated cardboard.

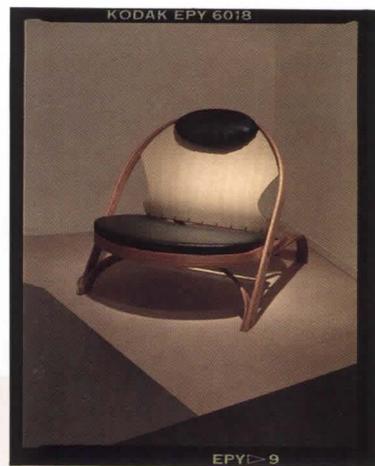
Gaetano Pesce's molded fiberglass Greene Street chair (6) has eight slender steel legs on foam feet; the facelike cut-outs in its back embody Pesce's view of a chair as a "mask" worn by the sitter. Italian designer Denis Santachiara created The Sisters (7), three deceptively ordinary-looking office chairs (only one shown here). One changes color when touched; another moves when spoken to; a third changes shape when sat upon.

Ettore Sottsass's Teodora chair (8) of plastic laminate and plexiglass is what Vitra calls his "first contribution to the subject of the chair in the language of Memphis." Scott Burton's Soft Geometric Chair (not shown) embodies his characteristic geometries in surprising fabric-covered foam.

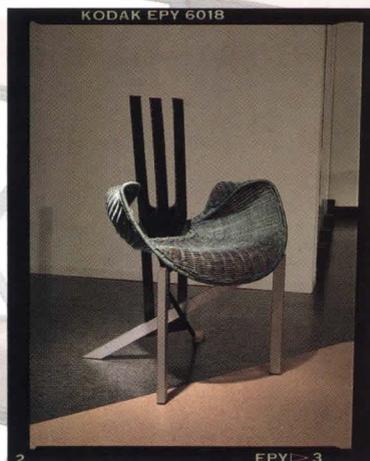
The next Edition series is in the works, with more from Ron Arad, including his steel School Chair (9), which rocks forward as well as back; Shiro Kuramata; Czech designer Borek Sipek; Alessandro Mendini; and Coop Himmelblau, among others. The Edition's U.S. premiere is scheduled for this October, at Designer's Saturday.



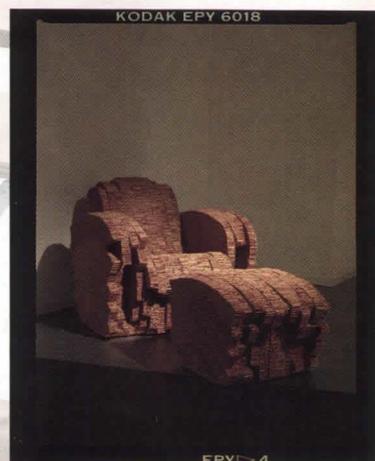
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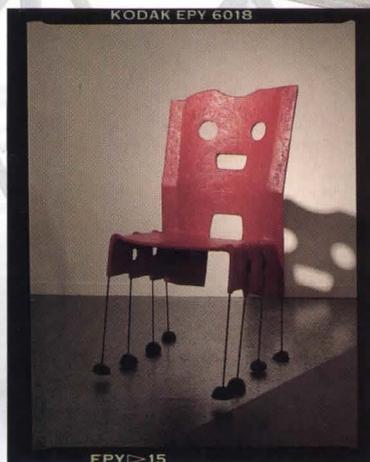
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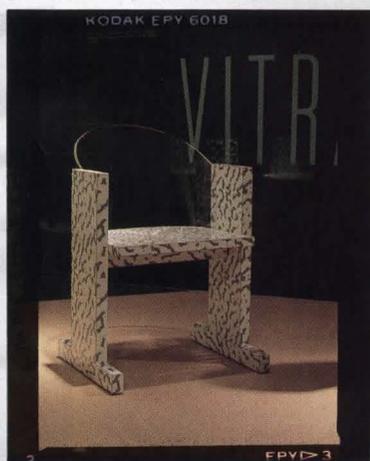
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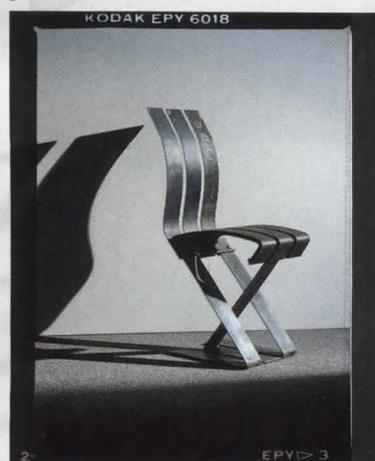
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7



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9

Photos: Hiroyuki Hirai

Paul Warchol

Natural Progressions

An entry to a natural preserve in Puerto Rico is carefully calculated to lead the visitor through a processional experience.

ON first observation, it might seem strange that architect Luis Flores of Torres Marvel Flores, San Juan, has designed the entry facilities for a natural park with such a rationalistic appearance. Given the program, one might have expected a more “user friendly” approach, the welcoming cuteness usually associated with such facilities. However, the client, the Municipality of Caguas, did not want that. The small, handsome city not far from San Juan already has abundant charm from its Spanish heritage.

Although the gateway to Turabo Park is strictly Modernist, allusion to historical precedent is not absent; in fact, such considerations were crucial to the overall conception of the facility. Because this is the entry to a vast 300-acre mountainside preserve, Flores felt the complex should have a strong presence of its own, so that it is not subsumed within the larger drama of the dynamic site. Consequently, a classical proportional system is used to intensify the articulation of bold reinforced concrete forms, which are further emphasized by strict adherence to an overall orthogonal organization.

In designing the complex, Flores says he often had historical precedents in mind. Because he thought of the facility conceptually as a temple form, the complex, sited on its own 13-acre mountainside mesa, is gently terraced, establishing a processional sequence that culminates at a fountain/pond. It is from this spot that various parts of the facility radiate in a pinwheel (but orthogonal) arrangement. There is a definite ritual/processional aspect to the plan.

Eventually, a restaurant will be developed at the top of the mountain; the chairlift to take visitors



there is already in operation, for those who wish to walk down the nature trails. In discussing the relationship to the terrain, Flores mentions Luigi Vanvitelli's great palace at Caserta, Italy, where a terraced waterway stretches over two miles from a mountaintop source. There, as at Caguas (where the procession actually begins at the parking lot), the whole is conceived as one interrelated, elongated ensemble. Caserta does not provide the only Italian historical reference, however. Mantua also comes into play when Flores “lifts” one of Giulio Romano's loggias from the Ducal Palace—there scaled for dwarfs, here, just as delightfully, for children—for the playground.

Over much of the main building, the architect has placed a large wood trellis that is supported on reinforced concrete columns and held in position by cables. Eventually this will be overgrown with lush tropical vegetation, as will much of the complex. Then it will become a truly fitting gateway to this strangely beautiful place. **David Morton** ■

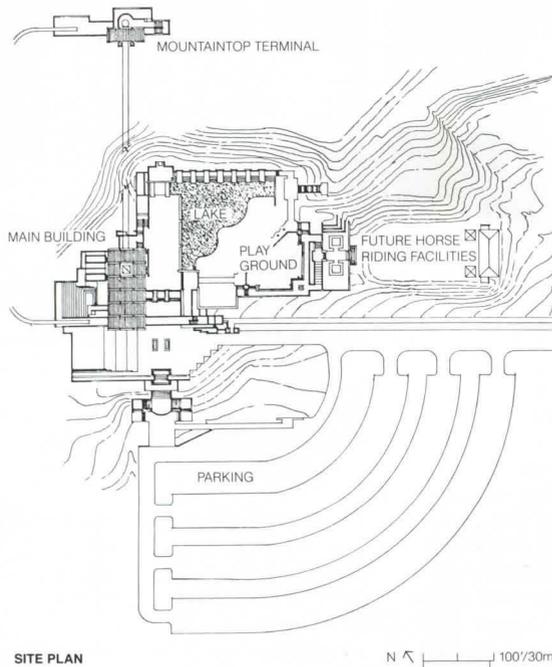
The author, formerly P/A Executive Editor, is Senior Editor at Rizzoli International Publications.



From the entrance plaza at the southwest side of the building (above), one can clearly see how the structural system of cast-in-place concrete is used very straightforwardly to emphasize the articulation of columns, "windows," and "walls." Concrete block pavers, separated for grass to grow between them, have been used to handsome effect here and elsewhere throughout the complex. In the far distance (top left in photo) is the chairlift, which takes people up the hill slope to a station from which they can walk down.

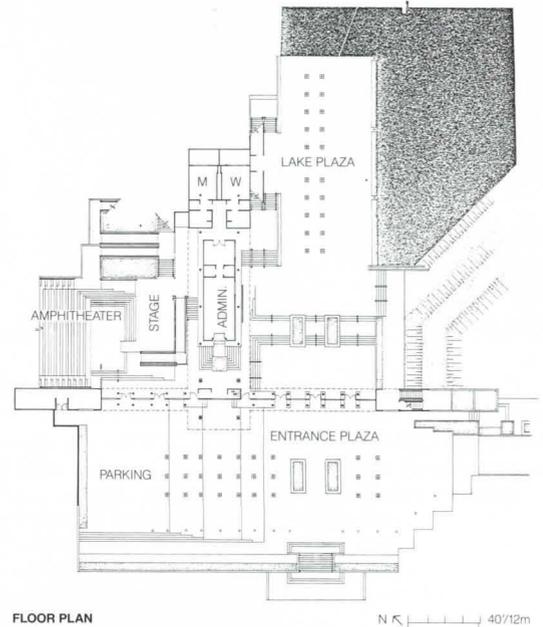
The facility, although on the side of a mountain, occupies its own 13-acre mesa site. This flat location allowed a strict orthogonal organization of the complex, which serves to place it in sharp—and flattering—contrast to its lush tropical surroundings (right).

The wood-slatted canopy over the administrative section of the building shades office and service areas (facing page) and serves as a backdrop to the amphitheater.



SITE PLAN

N  100/30m

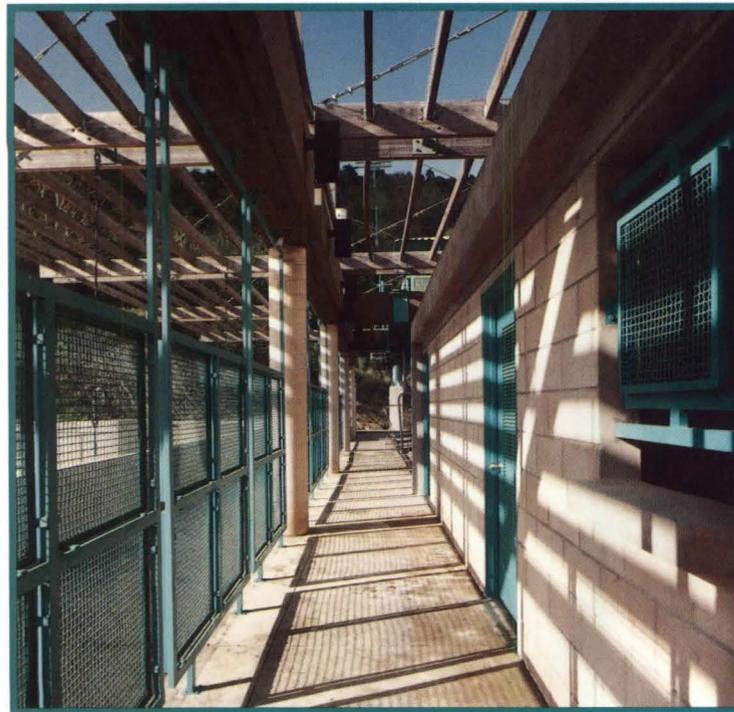


FLOOR PLAN

N  40/12m



Max Toro



Luis Flores

Just beyond the front entry area and just inside the complex (top right), one can see the beginning of the extensive system of terracing that is used to articulate different parts of the park, such as the amphitheater, the office, the playground, and the recreational area.

On the second level of the administrative section, facing out over the amphitheater (bottom left), one can see how surprisingly effective the canopy is as a sun screen.

Looking from the Lake Plaza toward the northeast, rear wall (bottom right), one sees most clearly the extensive system of terracing. Here,

such plants as papyrus and water lilies will grow in abundance. The lake comes right up to the loggia contained within the rear wall, where one will be able to step down into the water in a way that is sometimes seen in ancient temples of Egypt or India. The metaphor of the ancient temple, in fact, was a conscious one in the architect's mind.

One of the most ritualistic and odd, but thoroughly delightful areas of the entire complex is the child-scaled loggia in the playground area (top left). Of this, architect Flores says he was not oblivious to certain allusions to Italian baroque.

Project: Turabo Regional Park entry facilities, Caguas, Puerto Rico.

Architects: Torres Marvel Flores y Asociados; Luis Flores, project architect.

Client: Municipality of Caguas.

Site: a high rectangular 13-acre mesa on the southwest side of a mountain rising from 100 to 300 feet above sea level.

Program: a recreational park/playground with an amphitheater, horse riding facilities, and a chairlift to the mountaintop. The complex is designed to be closely integrated with the natural surroundings, and to act as the gateway to a 300-acre natural park.

Structural system: reinforced concrete post-and-beam bearing system

and retaining walls; columns support cable-held structural wood trellis.

Major materials: exposed concrete and concrete block walls, tubular steel and wire mesh gates and grilles, laminated wood beams, trellises, and stable roof.

Consultants: Jose Morla & Associates (phase I) and Torres Marvel Flores (phase II), structural; Rodriguez y Negron (phase I) and Pablo Rios Vega (phase II), electrical.

General contractor: Nevarez Construction.

Costs: \$1.9 million; \$50/sq ft, covered space, \$21/sq ft, open spaces.

Photos: Gil Amiaga except as noted.



UC Builds

The University of California is not only spending billions on new construction in the next decade, but is commissioning a new breed of architects and planners as well.

THE University of California is one of the largest university systems in the country. Its nine campuses—Berkeley, Davis, Irvine, Los Angeles, Riverside, Santa Barbara, Santa Cruz, San Diego, and San Francisco (a medical school only)—accommodate 140,000 students. And, for architects, it has become one of the biggest clients in the state, if not the country. Right now, the system has over \$1.5 billion worth of buildings in design or construction, and foresees spending \$400–500 million a year (including state and increasingly important non-state funding) over the next several years. One campus alone—UCLA—will have \$1 billion in the works during the next decade.

Why the sudden building boom? A combination of several factors is at work. First, student enrollment, contrary to earlier predictions, continues to increase. Not only has the college-age population within the state remained steady but an influx of superbly qualified Asian students has swelled the rolls, as have large numbers of out-of-state applicants who seek high-caliber academic programs for considerably less than the spiraling costs of many private universities. Enrollment is increasing so quickly, in fact, that there is talk of adding a new campus to the system.

This surge in the student population exacerbated an existing shortage of space. A ten-year hiatus in new construction in the 1970s left the system with inadequate facilities for both academic and housing programs, and the various campuses are now scrambling to catch up.

Not only has the pace of building changed but the kind of architects being considered for projects has changed. With the notable exception of Santa Cruz, a campus planned with the express intention of harmonizing with its lush physical environment, many other campuses were expanded during the 1950s and 1960s according to Modernist planning and design strategies that often produced mediocre buildings in placeless surroundings. In trying to restore a coherent “urban” fabric—several UC campuses resemble small cities in their size and complexity—the university’s new, energetic generation of campus architects (the people who do the selecting) is looking to an equally new generation of outside architects, who are concerned at once with traditional planning methods and more radical architectural forms.

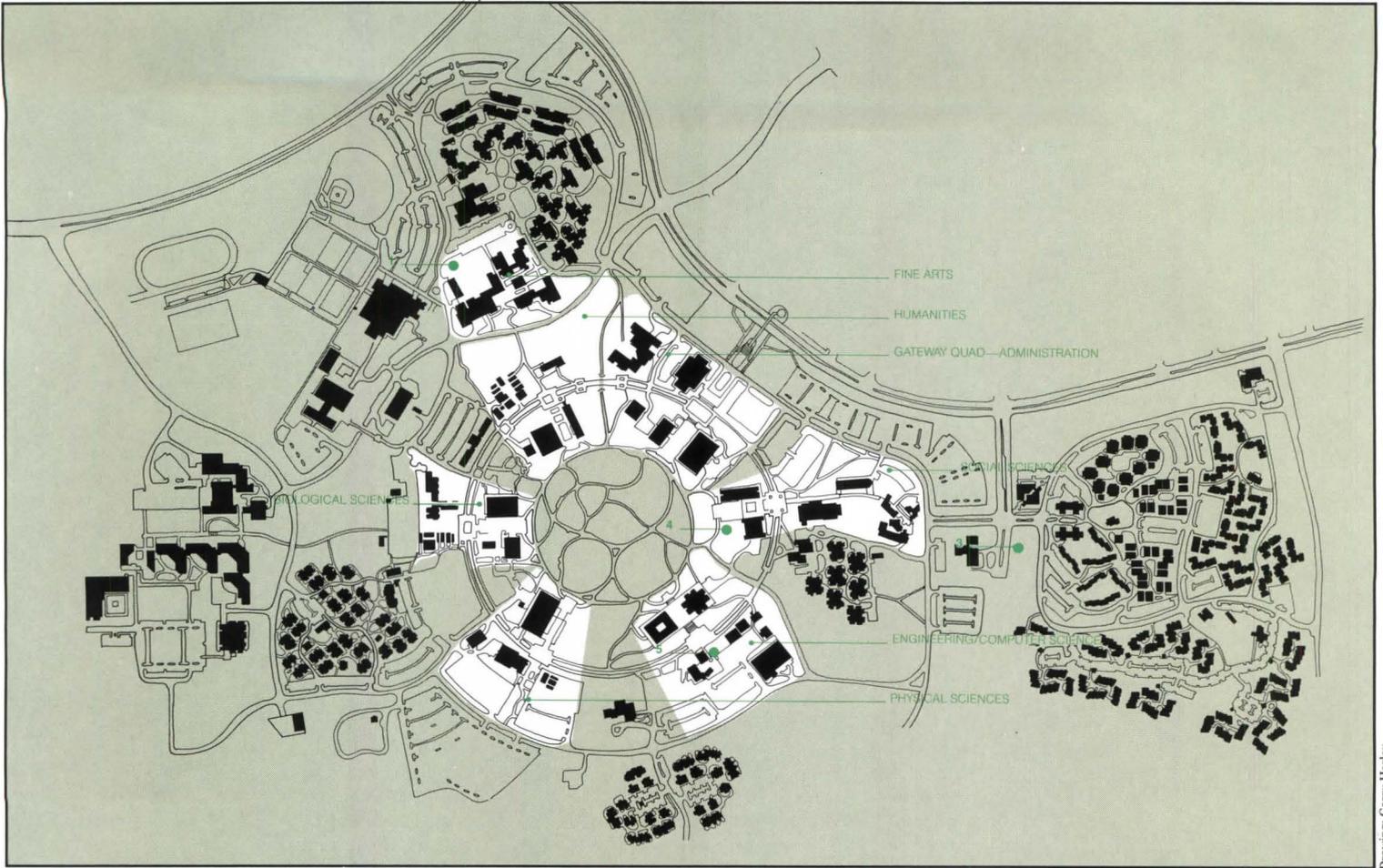
For now, this philosophical shift is visible mostly in small commissions, which are being given increasingly to smaller, younger firms. Buildings with a project cost under \$5 million do not require design approval by the state’s Board of Regents; they are approved by the system’s Office of the President. Projects under \$1 million can simply be approved by the individual campuses.

The big commissions, for such buildings as research laboratories, business schools, and science facilities, still go to relatively larger firms; clients are understandably reluctant to gamble when \$40 million and complex technical requirements are at stake. But even there, the kind of firm being chosen is changing. For example, the firms of Moore, Ruble, Yudell and Venturi, Rauch & Scott Brown—neither one of which has ever been content to promote the status quo—have major commissions at UC campuses.

These changes seem to have generated a fair amount of political turbulence within the system, a fact many architects will confirm (although none will go on record on the subject). The issue of how to balance established local firms with up-and-coming small firms or high-profile out-of-towners is a sticky one, yet it’s clear that a greater degree of design diversity is a UC goal. “The state is taking more interest in the quality and longevity of design,” says David Neuman, Associate Vice Chancellor in the Office of Physical Planning at UC Irvine. But if the home teams bristle at the sight of star firms like James Stirling, Michael Wilford & Associates, I.M. Pei & Partners, and Ricardo Legorreta on the rosters of UC’s architects, they should also be assured that the system doesn’t intend to sponsor yet another architectural beauty contest. “My first priority is not just hiring high-profile architects; it’s campus-building,” asserts Charles Warner Oakley, UCLA’s campus architect.

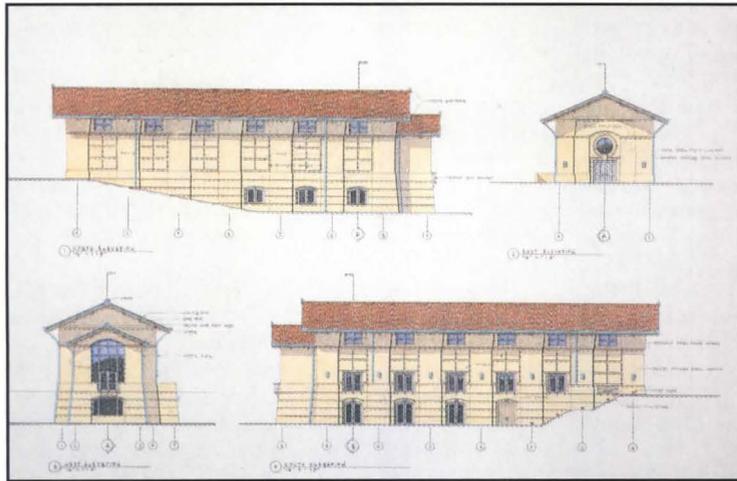
On the following pages, we illustrate a few of the dozens of new buildings now in the works at four of UC’s nine campuses—Irvine, Los Angeles, San Diego, and Santa Cruz. In presenting what we hope is a balance between large projects and small, we hope to give an indication of the range of building types and design strategies that are shaping the next phase of UC campus design.

Pilar Viladas, Susan Doubilet ■



CAMPUS PLAN, UC IRVINE

Drawing: Garry Harley

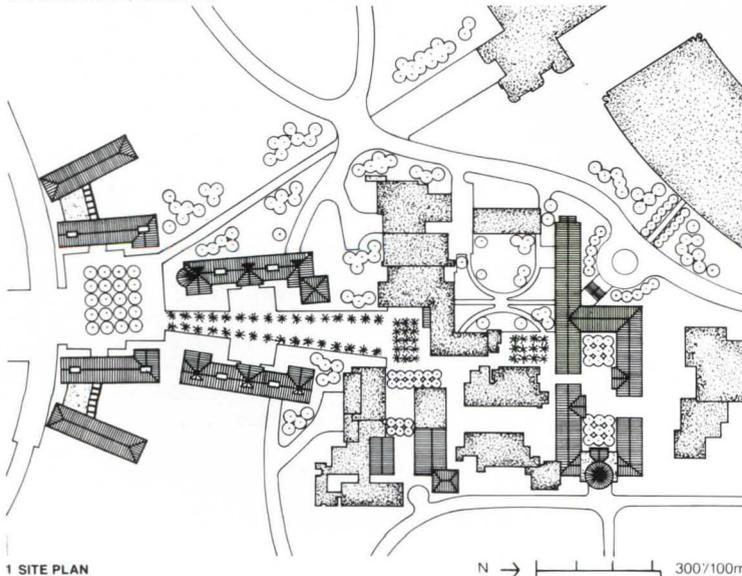


1 DANCE FACILITY, ELEVATIONS

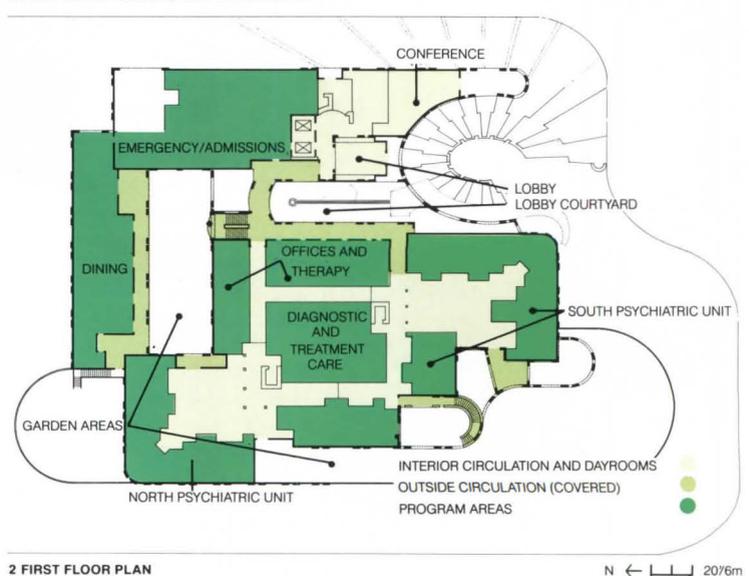


2 PSYCHIATRIC FACILITY, VIEW FROM SOUTH

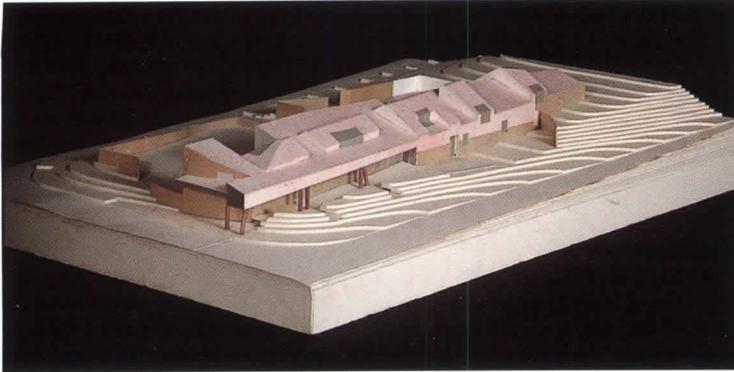
Photo: Tom Lamb, SWA Group



1 SITE PLAN

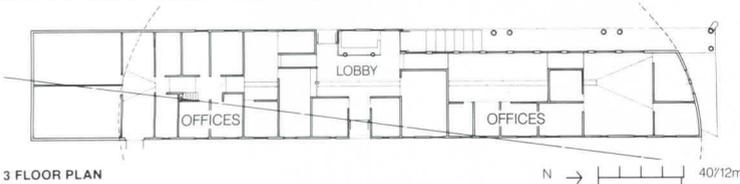


2 FIRST FLOOR PLAN



3 HOUSING OFFICE BUILDING, MODEL VIEW FROM EAST

Alex Vertikoff



3 FLOOR PLAN

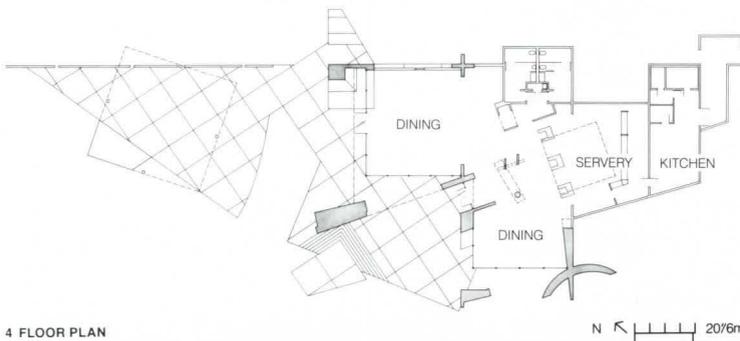


4 SATELLITE FOOD FACILITY, SOUTH ELEVATION



4 NORTH ELEVATION

Renderings: James Gellar



4 FLOOR PLAN

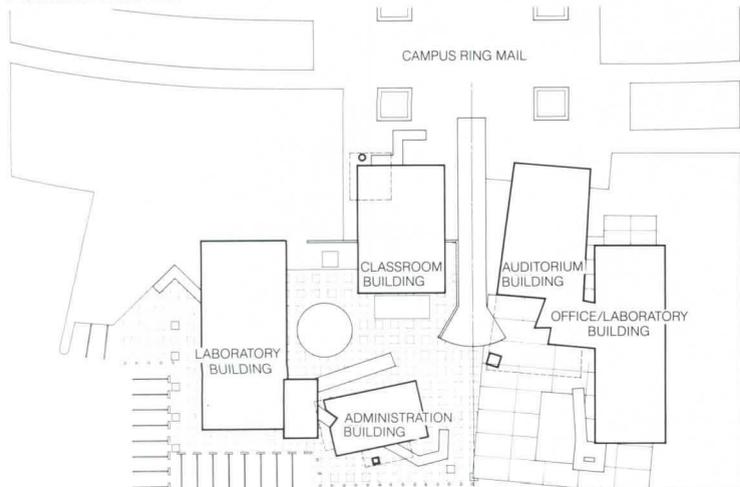


5 VIEW FROM SOUTHEAST



5 VIEW FROM NORTHWEST

Photos: Perry Andelin Blake



5 ENGINEERING CENTER, SITE PLAN

The UC Irvine campus was founded in 1964, its physical form based on a long-range development plan by Pereira Associates. Academic "malls" radiate like spokes from a central ring mall 9/10 mile in circumference; each spoke accommodates a different academic discipline. At present, the Office of Central Planning is revising the development plan, assisted by consultants that include Pereira Associates, SWA Group, and, for the spokes, Robert A.M. Stern, Frank O. Gehry, Moore Ruble Yudell, and others. The primary aim is to humanize the original monolithic forms, and to develop an identifiable character for each mall. Undergraduate housing facilities will form infill among the spokes. Circulation patterns, including entrances to the campus, are being revised. Projects worth about \$350 million are planned at this time. Among them are:

1. **Dance Facility.** Architects: Robert A.M. Stern Architects, New York, with the Lee/Naegle Partnership, Dana Point, Calif. Completion date: Spring 1989. Construction costs: \$1.2 million. This 8600-sq-ft facility is the first phase of the expansion of the University's Fine Arts Complex, the master plan of which was prepared by Stern with SWA Group, Laguna Beach. The Phase I structure, housing offices and rehearsal spaces, uses light metal-frame techniques to provide moderately priced open loft space. The building provides a new front door to the complex.

2. **Inpatient Psychiatric Facility.** Architects: The Ratcliff Architects, Berkeley, with Moore Ruble Yudell, Santa Monica. Completion date: early 1991. Construction costs: \$13.4 million. This three-story, 81,400-sq-ft building, clad in corrugated and smooth metal panels with stucco and tile accents, will mark the main entrance to UC Irvine's off-campus Medical Center.

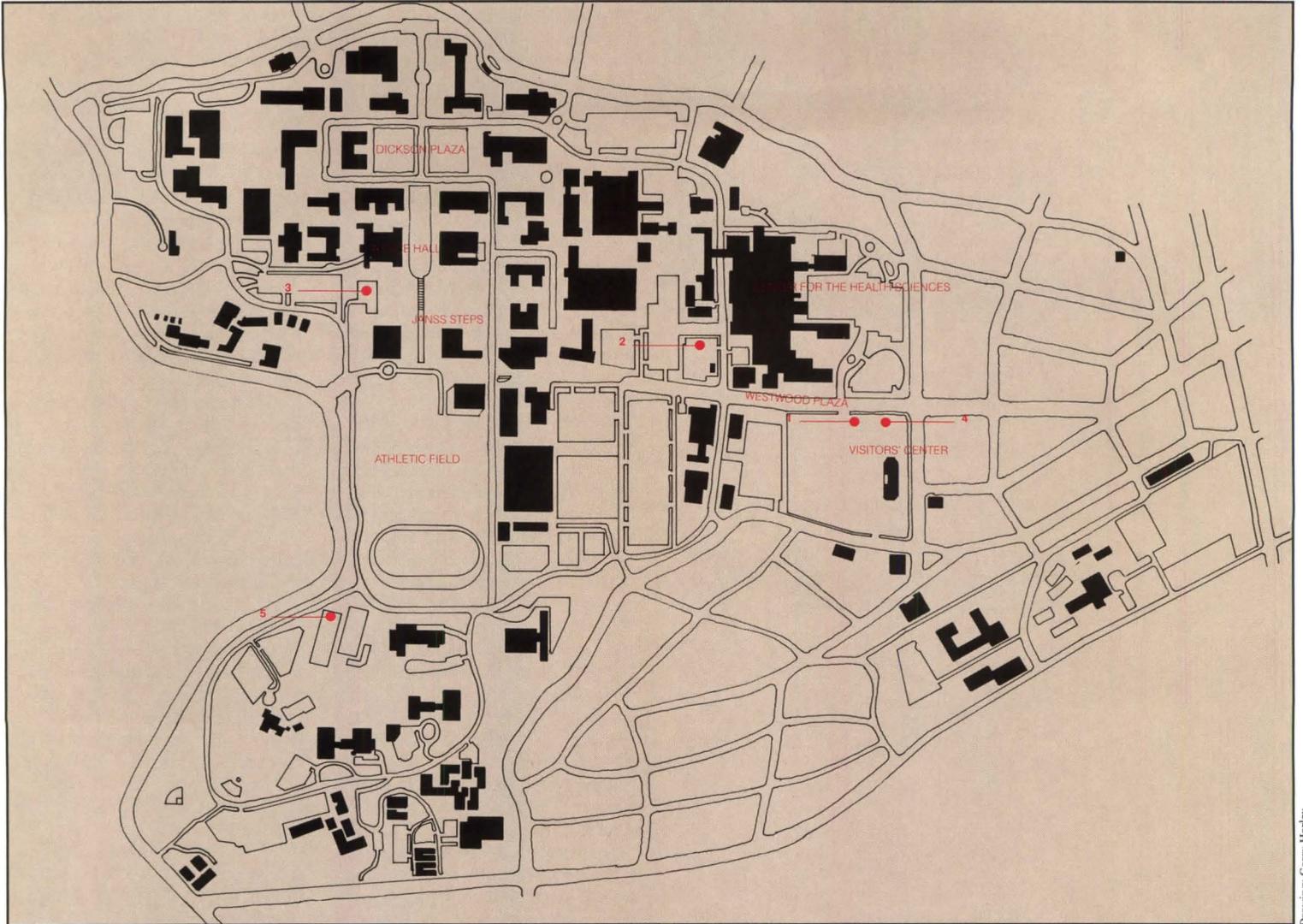
3. **Central Housing Office Building.** Architect: Eric Owen Moss, Architect, Culver City. Completion date: July 1988. Construction costs: \$650,000. This 6730-sq-ft administration building, with a concrete block base, walls of cement plaster, and roof and one wall of white-painted, red-splattered steel, is sited at a major campus entry point. Two gable-roofed volumes suggest the radial inner campus and the

orthogonal outer campus grid.

4. **Satellite Food Facility.** Design architect: Widom Wein Cohen/Rebecca L. Binder, Architecture & Planning, Los Angeles/Playa del Rey. Completion date: late 1988. Construction costs: \$980,000. This 5800-sq-ft painted steel and concrete block dining and cafeteria building, with an adjacent outdoor dining area, mediates between the park and the surrounding campus buildings through a system of radial axes.

5. **Engineering Center.** Architect: Frank O. Gehry & Associates, Venice, Calif. Completion date: Early 1989. Construction costs: \$2.6 million. This complex, phase II of the Information & Computer Sciences/Engineering Research Facility (P/A, Oct. 1986, pp. 90-97), comprises two buildings. A three-story wood-frame and structural-steel building, finished in stucco with a service core clad in painted metal siding, contains the dean's and student services offices, dry lab, and classroom space. A long, low copper-roofed brick-veneered building is a conference center.

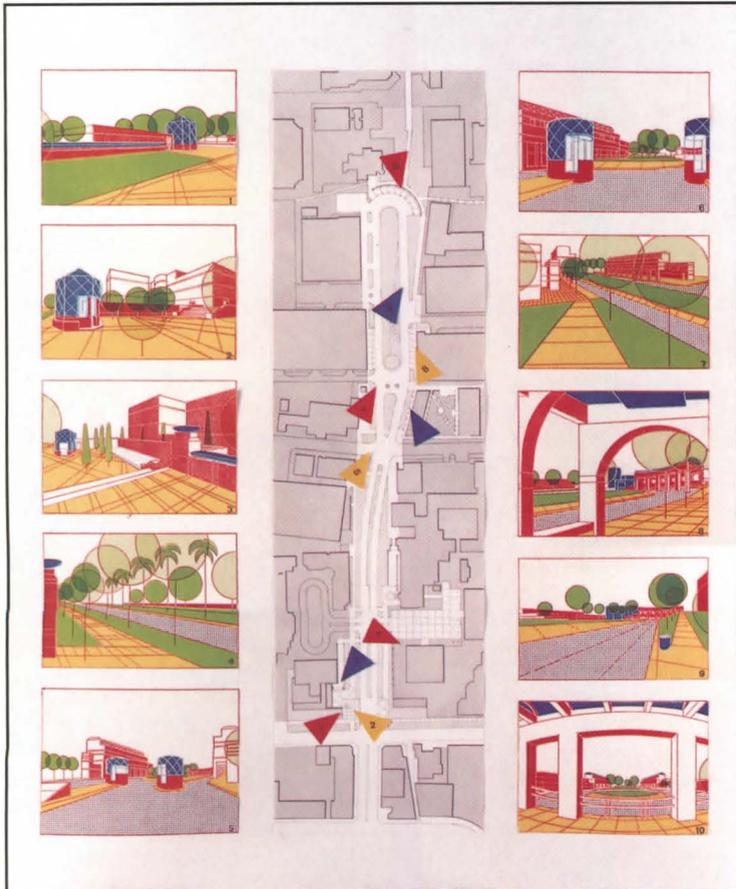
Not illustrated here, but also planned are: A \$1.3 million Student Services Building addition by Siegel, Sklarek, Diamond Architects, Los Angeles, and the \$4.6 million Graduate School of Management by Bissell Architects, Newport Beach, with Venturi, Rauch & Scott Brown, Philadelphia (both to be completed in 1988); the \$9.2 million Graduate Student Housing by Fisher-Friedman Associates, San Francisco, the \$15.9 million Unit 5 Residence Halls by Esherick Homsey Dodge & Davis, San Francisco, and the \$24.3 million Physical Sciences II, by MBT Associates, San Francisco (all three to open in 1989). The \$35.6 million Biological Sciences Unit II, by Arthur Erickson Associates, Los Angeles, will be completed in 1990. The \$25 million Science Library, by IBI Group/James Stirling, Michael Wilford Associates, London, will open in 1992. Also in the works is the UC Irvine Main Street (P/A, Jan. 1988, pp. 125-127), by Pereira Associates, Los Angeles. And Phase III of the University Extension Facility and Alumni House, by Charles Moore, Urban Innovations Group, Los Angeles, is now under consideration.



CAMPUS PLAN, UCLA

N ← 300/100m

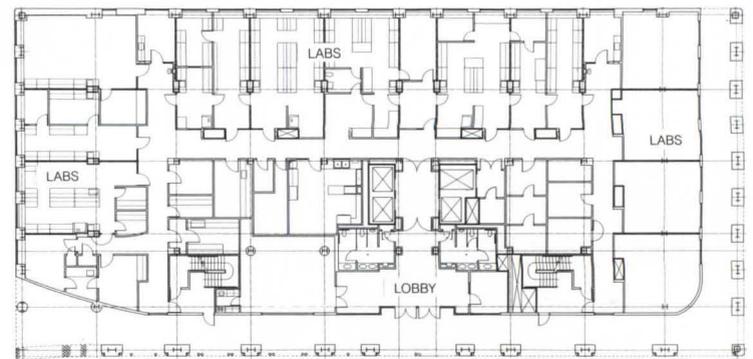
Drawing: Garry Hartley



1 UCLA GATEWAY, SITE PLAN AND PERSPECTIVES

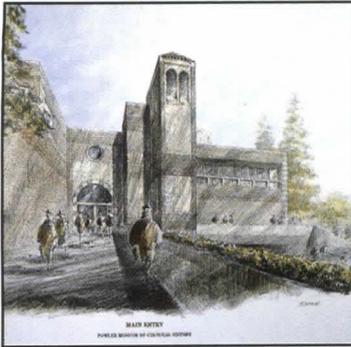


2 MEDICAL RESEARCH LAB, PERSPECTIVE FROM WEST



2 FIRST FLOOR PLAN

N ← 20/6m



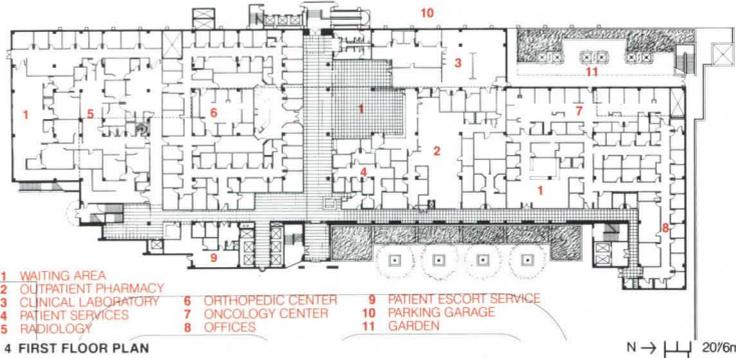
3 FOWLER MUSEUM, VIEW FROM WEST



3 SECOND FLOOR PLAN



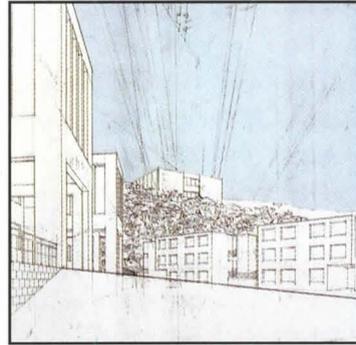
4 OUTPATIENT CARE CENTER, MODEL VIEW FROM EAST



4 FIRST FLOOR PLAN



5 MYERS HOUSING



5 PREDOCK HOUSING



5 NORTHWEST HOUSING/PARKING, SITE PLAN

UCLA, which was founded in 1919, moved to its present Westwood campus in 1929. Its original master plan, by George W. Kelham, was an axial Beaux-Arts scheme with Italian Romanesque-style buildings by Kelham and Allison & Allison, who replaced Kelham as supervising architects in 1935. From 1948 to 1968, Wurdeman and Becket (later Welton Becket, now Elberbe Becket) served this role. After World War II, Modernist architectural and planning principles produced a preponderance of banal and insensitive buildings on the 411-acre campus, which now accommodates 30,000 students. By the early 1980s, UCLA had evolved from a "commuter" school into a major research institution; this change, coupled with an increasing scarcity of new building sites, focused greater attention on design as a key campus issue. Among the \$300 million worth of buildings now in design or construction are:

- 1. UCLA Gateway, Phase I.** Architects: Hodgetts & Fung, Santa Monica. Completion date: December 1989. Construction costs: \$1.7 million. This project uses landscape and architectural elements to restore the original campus texture to the main, Westwood entrance. A green-sward, marked by information kiosks, extends into Westwood, and formal steps and fountains give focus to a series of courtyards.
- 2. Medical Research Laboratory Building.** Architects: Venturi, Rauch & Scott Brown, Inc., Philadelphia, in association with Payette Associates, Inc., Boston. Completion date: March 1991. Construction costs: \$35 million. This seven-story, 155,000-sq-ft building, clad in horizontal bands of limestone, cast stone, and patterned red brick, with porcelain-enamel-clad plenums at the roof line, contains laboratories and offices.
- 3. Fowler Museum of Cultural History.** Design architect: Arnold C. Savrann, Los Angeles. Executive architect: John Carl Warnecke & Associates. Completion date: March 1989. Construction costs: \$15 million. This three-level, 95,500-sq-ft museum, clad in brick and cast stone and housing UCLA's collection of ethnic and ancient art, responds stylistically to the adjacent traditional campus buildings.
- 4. Outpatient Care Center.**

Architects: Mitchell/Giurgola Architects, New York, with Daniel, Mann, Johnson & Mendenhall, Los Angeles. Completion date: June 1990. Construction costs: \$56 million. This 360,000-sq-ft clinic, part of the Ambulatory Care Complex whose site plan and parking structure were designed by Ross-Wou International/MBT, Los Angeles, shares a corner site opposite the Medical Center with two other planned medical buildings.

- 5. Northwest Housing/Parking, Phase I.** Executive architect: Gensler & Associates, Los Angeles. Design team: Barton Myers Associates, Los Angeles, team leader; Antoine Predock Architect, Albuquerque; Esherick, Homsey, Dodge & Davis, San Francisco. Completion date: Summer 1991. Construction costs: \$45 million. 1260 students and 10 faculty families are housed in three lowrise blocks (by Myers, EHDD, and Predock, respectively); each block is a series of houses around a courtyard. The project also includes a parking structure and a commons building with dining hall and conference center, by Myers; and a convenience store/cafe, an auditorium, an Office of Residential Life, and a faculty residence by Predock.

Not illustrated here are: The \$10 million Doris Stein Pavilion, by Ellerbe Becket, Santa Monica; the \$38 million School of Engineering expansion, by Leo R. Daly with KDG, Los Angeles; the \$1.2 million Central Ticket Office by Appleton Associates, Venice (all to open in 1989); the \$6 million Law School Addition by A.C. Martin & Associates, Los Angeles; the \$11 million Mental Health Center (Ambulatory Care Complex), by Kurt Meyer Partners, Los Angeles (both of which will open in 1990); and the \$28 million Chemistry and Biological Science Addition by Anshen & Allen, Beverly Hills (set to open in 1991).

New projects include: The \$50 million, 280,000-sq-ft Anderson Graduate School of Management, by Harry N. Cobb of I.M. Pei & Partners with Leidenfrost/Horowitz & Associates, Los Angeles; and the \$9 million, 55,000-sq-ft International Center, by Ricardo Legorreta, Mexico City, with Leason Pomeroy & Associates, Los Angeles.



CAMPUS PLAN, UC SAN DIEGO

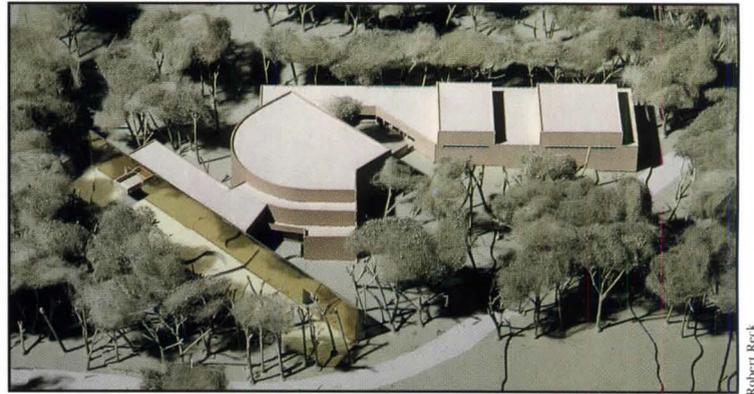
N ← 300/100m

Drawing: Garry Harley



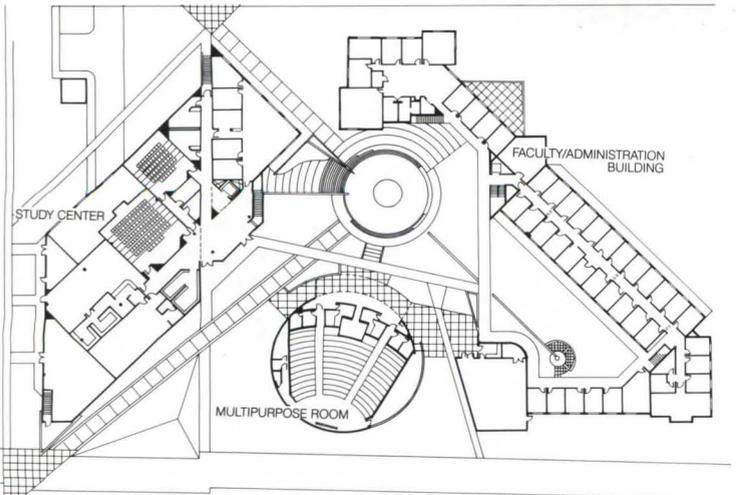
Douglas Symes

1 SCHOOL OF INTERNATIONAL RELATIONS, MODEL FROM SOUTHEAST



Robert Reck

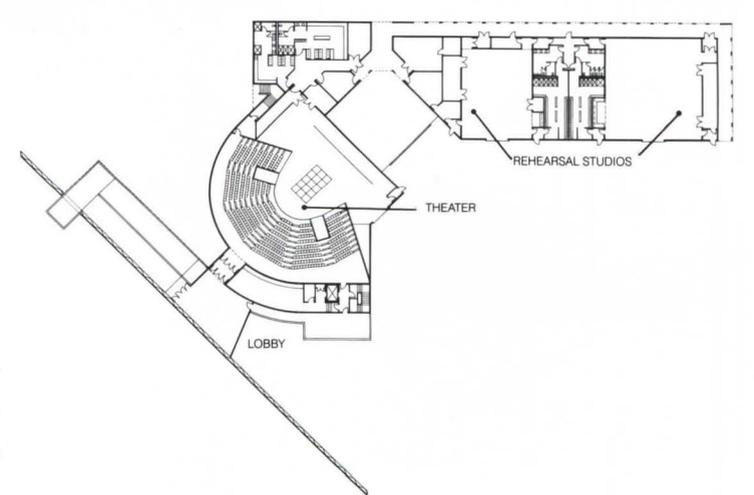
2 FORUM THEATER, MODEL VIEW FROM SOUTH



1 SECOND FLOOR PLAN

N → 40/12m

Drawing: Garry Harley

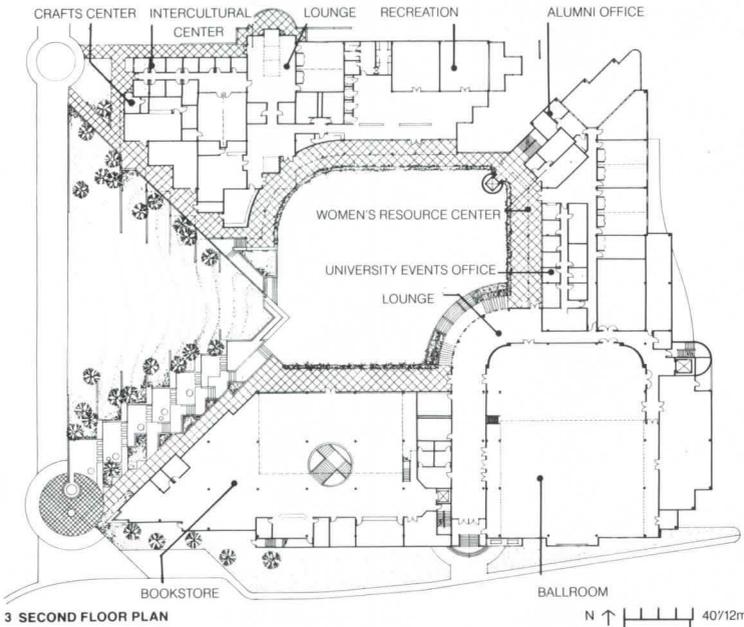


2 MAIN FLOOR PLAN

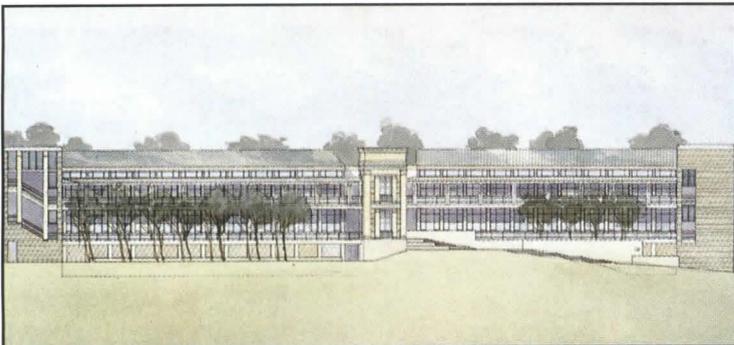
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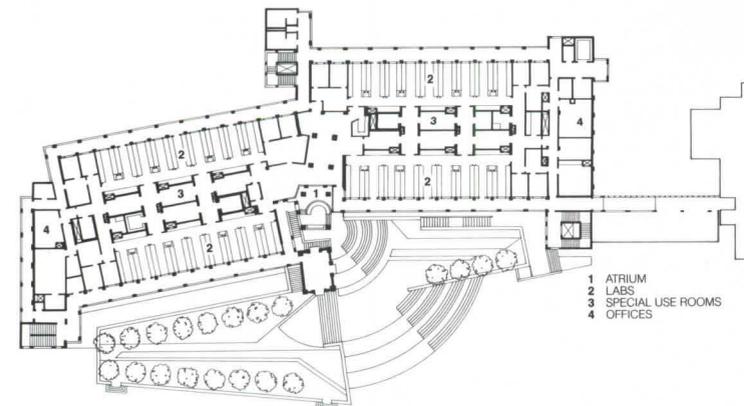
3 PRICE STUDENT CENTER, MODEL FROM NORTH



3 SECOND FLOOR PLAN



4 MOLECULAR BIOLOGY FACILITY, EAST ELEVATION



4 MAIN FLOOR PLAN

Peter Niquies

Drawing: Carry Hanley

UC San Diego, founded in 1912, was established on its present campus only 25 years ago. After substantial growth in the 1960s and a go-slow period in the 1970s, UCSD began a major expansion project in the 1980s, like the other UC campuses in response to the state's recognition of baby boom needs. Unlike some of the older campuses, UCSD had room to grow. A long-range plan was drawn up, but this was only a general roadmap, indicating where academic needs were to be met on the campus. Recently, SOM San Francisco and retiring Dean Richard Bender of UC Berkeley's School of Architecture were commissioned to prepare a master plan. Projects now in the design stage are being informally reviewed for compliance with the principles of the not quite complete master plan. Currently, projects costing about \$150 million are under construction, and others amounting to \$250 million are in the planning stages. Only a portion of these funds are state provided. Among the planned projects are:

1. Graduate School of International Relations and Pacific Studies. Architects: Clark Beck Associates, San Diego; Kaplan/McLaughlin/Diaz, San Francisco, design. Occupancy date: Late summer 1989. Construction costs: \$7.2 million. UC's first school of international relations, and the first U.S. school focused on Pacific studies, this 64,000-sq-ft complex is composed of three stucco (possibly stone) buildings around a plaza. It will house the special study center, teaching and research space, faculty and administrative offices, a library, and a multipurpose meeting space.

2. UCSD Forum Theater. Architect: Antoine Predock Architect, Albuquerque, in association with CLEO Architects, San Diego. Completion date: May 1990. Construction costs: \$3.5 million. The second theater in a complex of three performance, rehearsal, and teaching facilities shared by the University of California at San Diego and the La Jolla Playhouse, this 30,000-sq-ft building will contain a 400-seat thrust-stage theater and two rehearsal studios. Theatergoers will enter the concrete masonry building by passing through a mirrored glass wall off a clearing in the

eucalyptus forest.

3. Price Center. Architects: Kaplan/McLaughlin/Diaz, San Francisco. Associated architects: Austin Hansen Fehlman Group, San Diego. Completion date: early 1989. Construction costs: \$13.7 million. This two-building, 160,000-sq-ft student center, clad in Jerusalem stone, was programmed in response to a student survey. It will house a bookstore, ballroom, movie theater, offices, meeting rooms, and recreation facilities, with food service facilities that will open onto a 30,000-sq-ft central plaza.

4. Molecular Biology Research Facility Unit II, UCSD Howard Hughes Medical Institute. Architects: Moore Ruble Yudell Architects and Planners, Santa Monica. Associated architects: Ratcliff Architects, Berkeley. Completion date: May 1989. Construction costs: \$8.5 million. This 80,000-sq-ft building, of concrete block and glass, will contain labs connected by a central equipment corridor, a spine of special use rooms, and offices. A bridge will connect it to the existing Unit I, with which it will share animal facilities housed in the basement. A central glass-roofed atrium is planned as the social heart of the laboratory, in response to the users' request for openness and spontaneous meeting spaces.

Projects not illustrated here include: The \$31 million Engineering Building Unit I, by BSHA, Inc., San Diego; and the \$12.5 million Matthews Student Apartments by Rosen & Jones Associates, San Diego, both of which open in 1988. The \$11.8 million Third College Residence Hall and Dining Facility, by Delawie/Bretton/Wilkes Associates, San Diego, and the \$16 million Instruction and Research Facility by Liebhardt, Weston & Associates, La Jolla, will be completed in 1989. The \$31 million Central Library Addition, by BSHA, Inc., San Diego, with Gunnar Birkerts Associates, Bloomfield Hills, Mich., will be completed in 1991. The \$26.7 million Medical Center Tower Completion and Modernization, by Neptune & Thomas, San Diego, with Kaplan/McLaughlin/Diaz, San Francisco, in charge of programming, planning, and design, will open in 1992.



CAMPUS PLAN, UC SANTA CRUZ

N ↑ 300'/100m

Drawing: Garry Harley

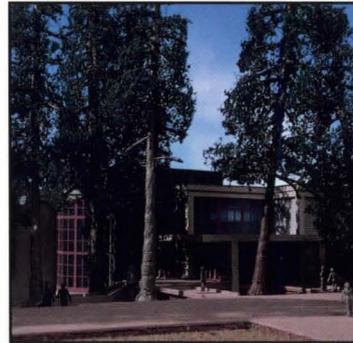


1 STUDENT CENTER, SOUTH ELEVATION



1 SECTION AA

20'/6m

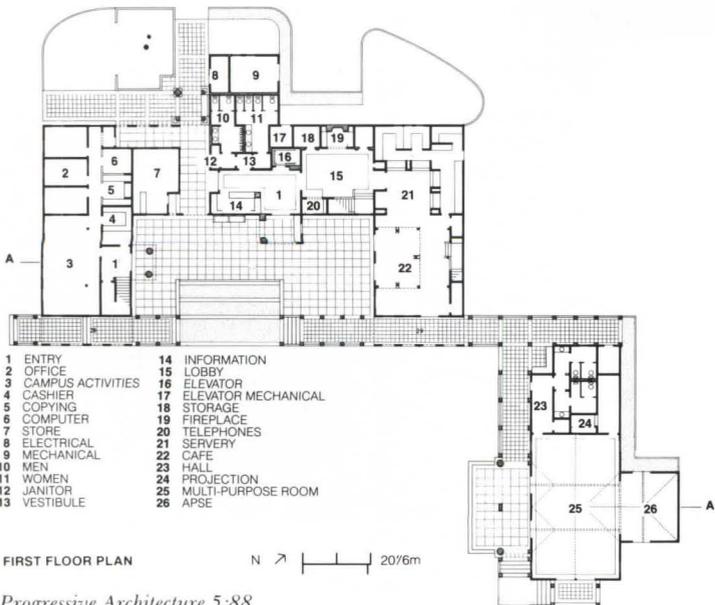


2 WEST SIDE



2 NORTH SIDE

Photos: Peter Nixures



1 FIRST FLOOR PLAN

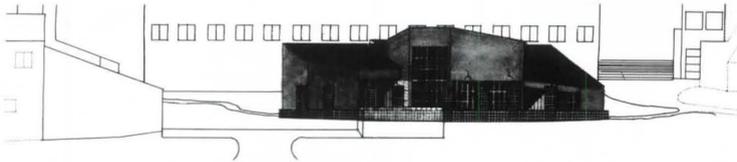
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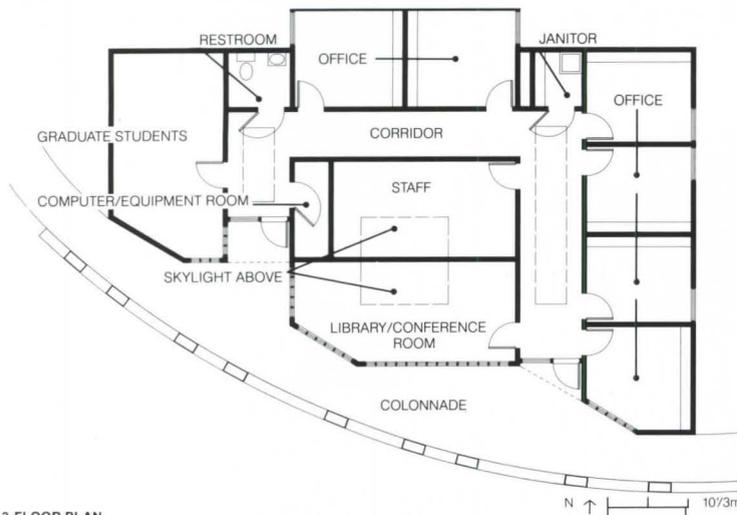
2 SCIENCE LIBRARY, MAIN FLOOR PLAN

N ↑ 20'/6m

Drawing: Garry Harley



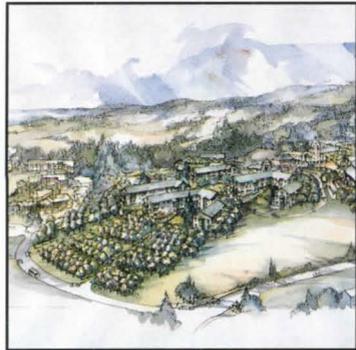
3 KRESGE FACULTY BUILDING, SOUTH ELEVATION



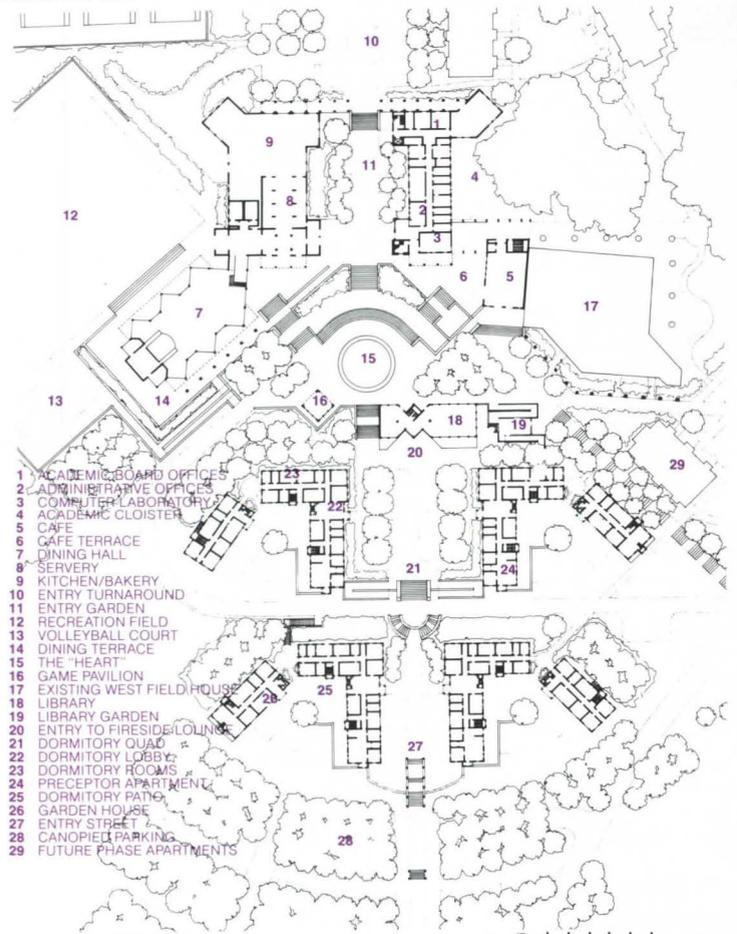
3 FLOOR PLAN



4 DORMITORY QUAD



4 VIEW FROM WEST



4 COLLEGE 8, SITE PLAN

UC Santa Cruz was established about 20 years ago. In the planning of the 2000-acre campus, The University had, and still has, as its primary goal building in harmony with the landscape. The magnificent landscape is, in any case, difficult to ignore: Its lower part is characterized by open meadows, grasslands, and rolling hills; its upper land dense with redwoods and slashed by deep north-south ravines, with breathtaking views of the coast and Monterey Bay. Landscape architect Thomas Church was instrumental in laying out the early campus, and good designers—among them Joseph Esherick for Stevenson, one of the first colleges, and Charles Moore and William Turnbull for Kresge—were carefully selected by the University. This policy of seeking imaginative architects, who will design sensitively within the landscape, is still pursued. The University is now selecting architects for new colleges and for a music and performing arts facility. The current enrollment is 9000 students, and long-range plans call for a ceiling of about 20,000 students, so as not to overwhelm the surrounding community. Projects worth \$100 million are now in construction or planning. Among them are:

1. Student Center. Architect: Fernau & Hartman, Architects, Berkeley. Completion date: Summer 1989. Construction costs: \$2 million. This 16,000-sq-ft complex comprises two buildings. The larger, a two-story wood-framed building, will house student organization offices, a cafe, conference rooms, and a small convenience store, forming a U around a paved courtyard overlooking the Great Meadow and Monterey Bay. The smaller building is a single-story multipurpose room.

2. Science Library. Architect: Esherick Homsey Dodge & Davis, San Francisco. Completion date: September 1990. Construction costs: \$10.5 million. The cast-in-place concrete library, which will form the eastern limit of a plaza on Science Hill, has a sawtooth perimeter that responds to the redwood groves. The 72,000-sq-ft building will be entered on its middle level, with open stacks for Life Sciences on the upper floor and for Physical Sciences on the lower floor.

3. Kresge College Faculty Office Building. Architects: K + CZL, San Jose. Completion date: January 1989. Construction costs: \$350,000. This 2200-sq-ft structure houses 12 faculty offices for the Dickens Project Addition, the Annex to the 1970 Kresge College (P/A, Feb. 1987, pp. 76-79), designed by Charles Moore and William Turnbull (MLTW Associates). Located in a small clearing off Kresge's main street, the one-story wood-frame building is designed to complement the existing informal architecture.

4. College 8. Architects: Simon Martin-Vegue Winkelstein Moris, San Francisco. Site planning/landscape architecture: Wallace Roberts & Todd, San Francisco. Completion date: Phase I (housing and dining), fall 1989; phase II (offices and classrooms: January 1990. Construction costs: Phase I, \$15 million. The first college to be built for Santa Cruz since the early 1970s, College 8 will provide housing for 750 students, a dining hall (for other social gatherings and teaching functions as well), offices, classrooms, and research space. The plan is organized around a large, terraced central space that acts as an organizing core. While the space is orthogonal, like traditional collegiate environments, the site plan adapts to the steeply sloping site and takes advantage of the view to the coast and Monterey Bay. Forms are diverse: Dormitories are prismatic wooden buildings with vertical siding, lattice-grid bases, and metal windows; the academic and kitchen buildings are orthogonal stucco structures with paired gables; and the dining hall is a geometric pavilion with articulated roofs, terraces, and glazed walls.

Other projects planned for the campus but not illustrated here include: The \$750,000 University Club, by Chester Bowles, Jr., San Francisco, to be completed in 1989; and the \$26 million Natural Sciences Unit 4, by Zimmer, Gunsul Frasca, Portland, Ore., to be completed in 1991.

As seen from across the Seine (below), IMA is split in two by a "fault" that runs in line with the spire of Notre Dame. The crisscrossing metal stairs and elevators of IMA's entrance hall (facing page) shape a caged, vertical space reminiscent of a rocket launching pad.

Through the Looking Glass

Ten months after the building appeared in P/A's Paris issue, the interiors of the Arab World Institute are finally done.



THE official opening of the Institut du Monde Arabe (Arab World Institute, P/A July 1987, pp. 72–79) took place in Paris this spring, almost a year behind schedule. The building has proved well worth the wait. With this crystalline structure, architects Jean Nouvel, Gilbert Lezenes, Pierre Soria, and Architecture Studio gave the Seine's left bank a monument of our times—the first perhaps since the Pompidou Center was finished in 1977. IMA is also, without a doubt, the last of its generation. The ultimate flowering of some ten years of high-tech architecture, it transcends the high-tech language it mimics to perfection and composes a discourse of the senses and emotions.

The building's curved façade, which faces the Seine, is hermetic and elusive, slipping past the pedestrian. The main entrance is located on the other side of the building, facing south. But, there is no monumental marking of this "front door"; one simply passes through the glass wall, as if to the other side of a mirror.

As in the tale by Lewis Carroll, magic lies in wait on the other side, in unexpected shifts of scale. In crossing the threshold, compressed between the smooth surfaces of floor and low ceiling, one feels squeezed, almost threatened. Then, suddenly, space explodes upward in a hall that runs the full height of the building, lined with elevators, evoking images of a rocket launching pad.

Here the contrast that defines IMA is declared: Western technology on the one hand, and on the

other the veiled lights of Arab culture. This dichotomy is confirmed in the gradual discovery of the building, which is best experienced and understood from top to bottom. The top floor with its public restaurant and private conference room reveals one of the most beautiful views of Paris. From the terrace one understands the plan of the building as a whole: the inevitability of the "fault" that splits it in line with Notre Dame's spire, and the pertinence of the square plaza that gives the glass box room to breathe.

IMA is at once a cultural center, a museum, and a library. In the public exhibition galleries, the technology of construction is exhibited and exaggerated in powerful, almost overstructured steel pylons that contrast with the light, glazed wall they support. The great volume of the library and its book tower, a Babelic spiral, are filled with a network of changing shadows projected by the south façade. And at the heart of the building lies yet another magical space—the courtyard, surrounded by walls of white marble squares so thin that light seems to rest captive within them. (See P/A, July 1987, p. 78.)

Far below, in contrast to these airy heights, lies the "hypostyle" room, an antechamber that provides access to the auditorium and temporary exhibition spaces below the entrance plaza. Here, the impression of heaviness, of mystery and shadow, is obtained by the multiplication of structure in five ranks of 25 hollow columns, which collectively create the air of a crypt or mosque.

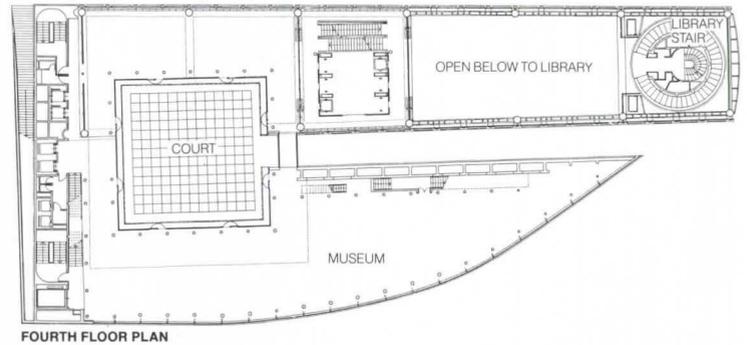
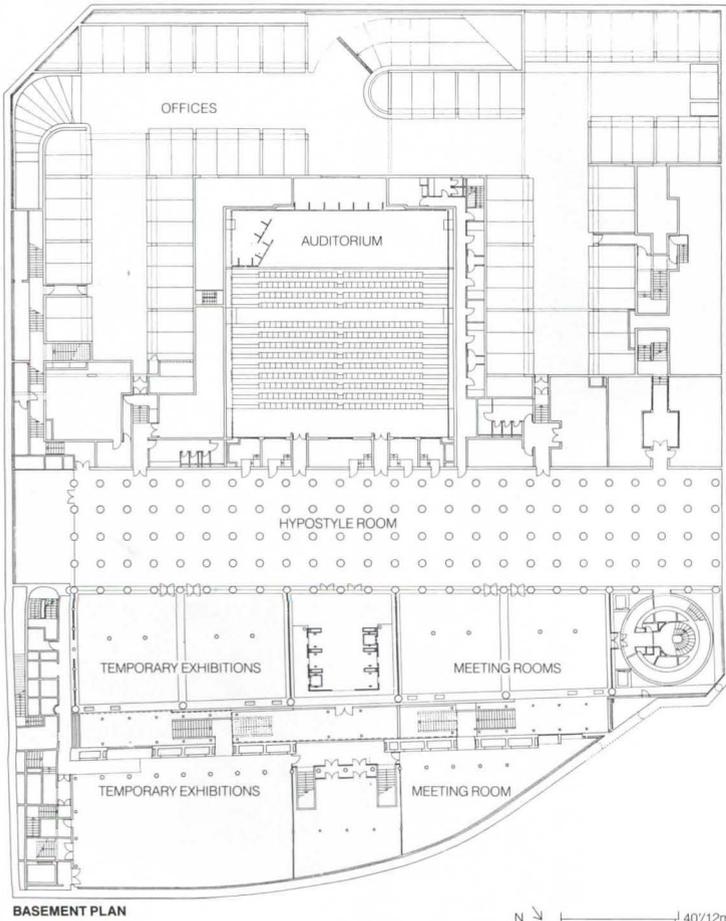
This room alone distinguishes IMA from other high-tech architecture. While the architects utilize high-tech codes to build their metaphors, IMA is more emotional transcription than direct narration. In this sense, it explores a different aesthetic, a "transmodern" style that Jean Nouvel and his partners have cultivated.

"Technology in IMA is at the service of emotion," says Nouvel. "It is put to purposes other than its own representation. In certain parts of IMA, layers that are 80 meters apart appear superimposed. When I watch the setting sun through the spiral of the book tower, I tell myself we have created a truly transparent building."

Marie Christine Lories

The author is a senior editor of *Techniques et Architecture*.





The "hypostyle" room (above) functions as a reception hall and vestibule for the adjacent auditorium, meeting rooms, and exhibition galleries (see basement plan, left). The multiplication of structural columns in this subterranean space creates the atmosphere of a tomb or mosque.

Exhibition galleries open to the Parisian public surround an open courtyard on upper floors (see plan, above). On the north side, views of the Seine and the Ile Saint-Louis form the backdrop for the double-height museum space and mezzanine (facing page, top). The exhibition cases are conceived as extensions of the architecture in metal, stone, and glass. In the southern galleries (facing page, bottom), the wall of diaphragms, which open and close like camera lenses in response to sunlight, evoke in high-tech terms the patterns of Arab screens.

BASEMENT PLAN

N ↙ | 40/12m



Project: Institut du Monde Arabe (Arab World Institute), Paris.

Architects: Jean Nouvel, Gilbert Lezenes, Pierre Soria, and Architecture Studio: Martin Robain, Jean-François Galmiche, Rodo Tisnado, Jean-François Bonne. (Jean-Jacques Raynaud, Antoinette Robain, Adeline Rispal, project architects; Pascal Debard, Jean-Louis Besnard, assistants).

Client: Institut du Monde Arabe.

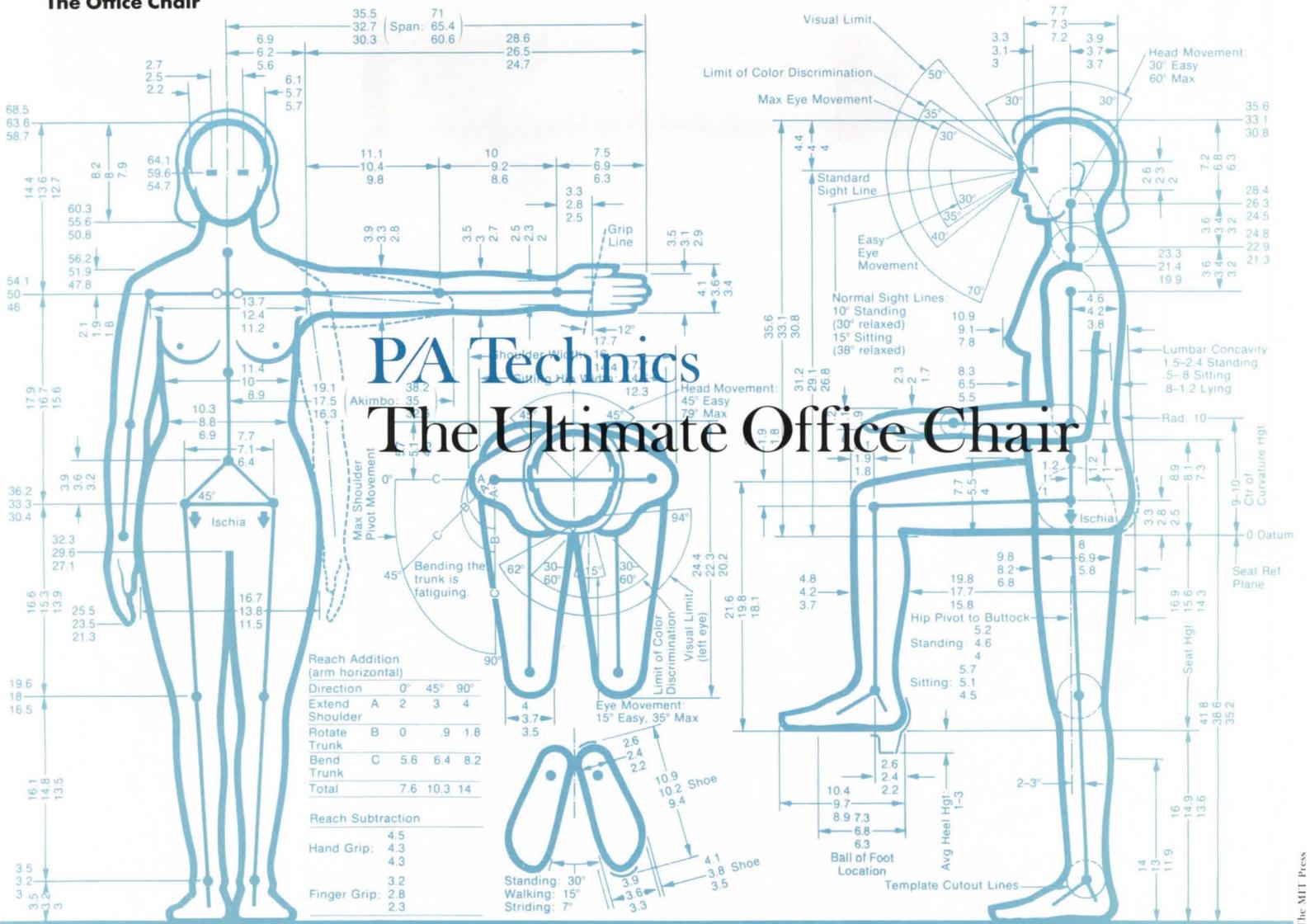
Site: narrow sliver adjacent to the Université Paris VI, Faculté des Sciences, facing the Ile Saint-Louis.

Program: 25,000 square meters of cultural center, including 4400-square-meter museum, 1900-square-meter library, 2150-square-meter offices, auditorium, conference and meeting rooms, public restaurant, and rooftop terraces.

Structural system: metal structure; curtain walls.

Major materials: aluminum, glass.
Consultants: François Seigneur, interiors; Anne Fremy, Pierre Martin Jacot, graphics; Louis Gruittet, engineering; M. Armagnac, acoustics; Jacques Le Marquet, Michel Seban, scenography; Gary John Glaser, children's room; Z.A. Zaidan, architecture; Setec, mechanical; Cabinet Casso Gaudin, security; Epsi, diaphragms. Planitec, bureau de pilotage; Socotec, bureau de controle. Cabinet Sery Bertrand, museum consultants; Licht Design, lighting for museum.

Photos: Stephane Couturier.



The evolution of office chairs has taken a turn from self-conscious ergonomics to something that feels and looks good.

MAN has been sitting for so long you would think he had perfected the chair by now. But, to listen to the cadre of professionals who dwell on matters of chair design, not so—especially when it comes to fulfilling the seating requirements of the modern office.

That's due in part to a lack of consensus about what makes a good chair. Does a correct fit to human form and movement earn top marks? Is a chair's visual appeal more important in an age when fashion often drives popular taste? Or can ergonomics and aesthetics coexist in harmony?

Even those who can agree on the goals for good office chair design often still differ on the means to achieve those goals. If anything appears clear about the direction manufacturers (and their designers) are taking, it is this: Chairs are becoming more responsive to human shape and dynamics, while appearing less self-conscious about doing it.

Designer Niels Diffrient spends countless hours in his rural Connecticut studio tackling the problem. "I like to think that the best objects reach such a state of elegance through the combination of aesthetics and performance that they achieve a higher state of refinement," Diffrient says. "One never works very well without the other."

A Difficult Legacy

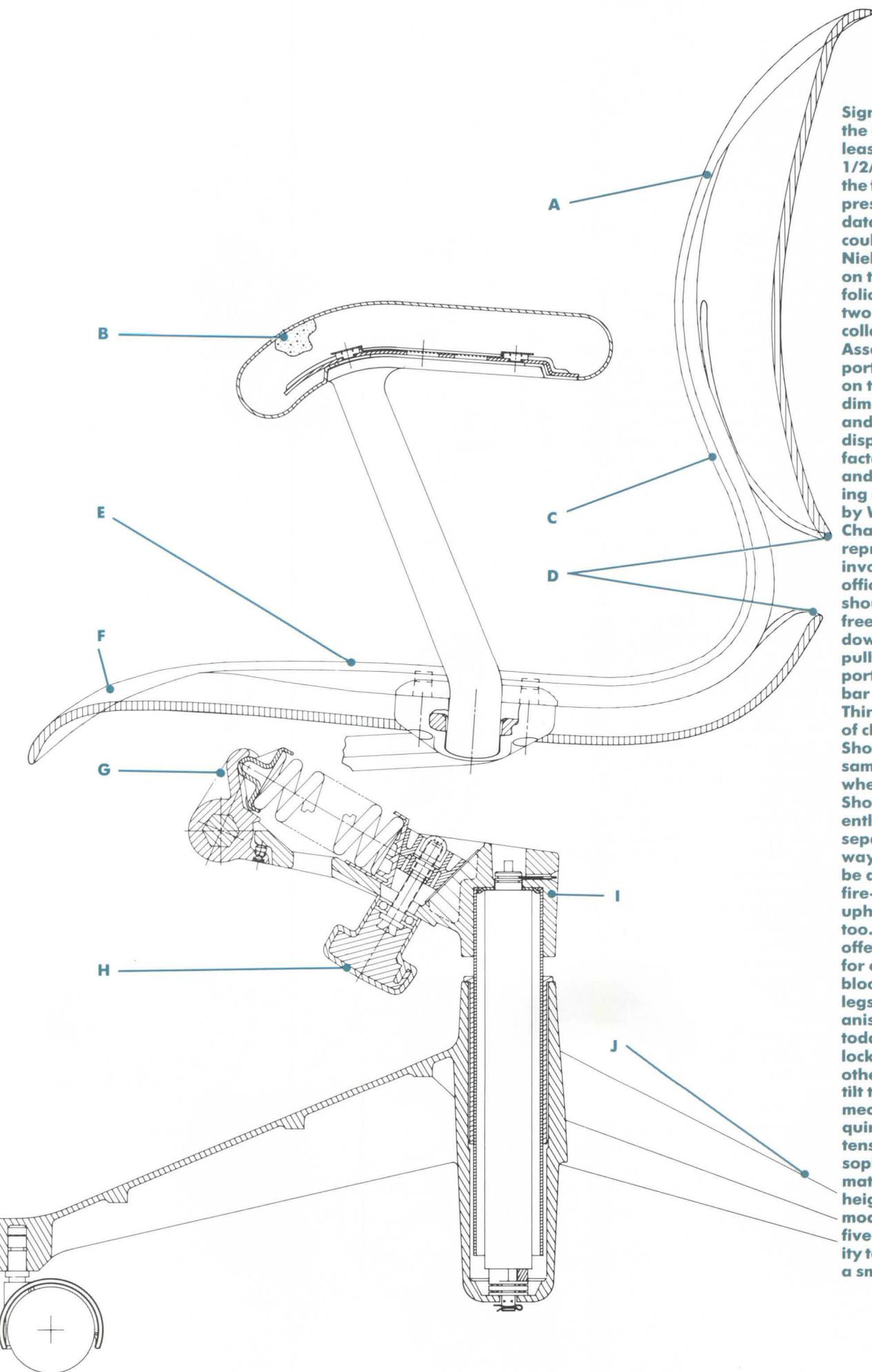
Once introduced to the sophisticated computer analyses and materials experiments that precede the manufacture of modern office chairs, the newly initiated begins to see most chairs designed before the mid-1970s as rather clunky and ill-conceived. Frank Lloyd Wright's three-wheeled chairs for the Johnson Wax headquarters, for example, are just

one example of American-designed office chairs that often were indifferent, if not belligerent, toward the notion of sitting comfortably. Products like Charles Eames's "Aluminum Group" chair of 1958 and Charles Pollack's classic swivel armchair, first produced in 1965, were notable exceptions to corporate America's standard issue.

In 1978, Diffrient's first chair with articulated movements hit the market. Response was lukewarm at best. Even though the Diffrient Executive Chair, as the model was called, was designed to support a reclining person properly, the office world wasn't ready for a chair that performed to such standards.

The demand for a high-performance office chair coincided roughly with the arrival of the computer terminal on many employees' desks. Subsequent changes in the nature of work and the workplace prompted the demand for many such chairs.

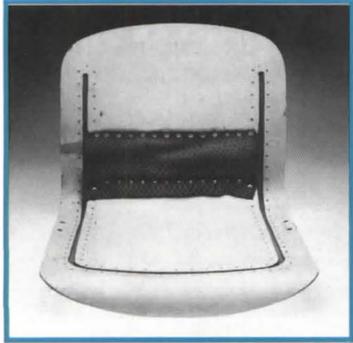
The response by the mammoth contract furniture companies and a host of smaller firms was incremental. Charles Rozier, vice-president for product development at Knoll International, identifies three stages in the office chair's evolution: "First was the application of an anthropometric approach to the office chair. These chairs either were or appeared to be shaped to accommodate the human form. The second stage involved mechanical changes—the chairs were made to move in an appropriate way. The third stage is an ongoing process. It has to do with the integration of good anthropometrics, proper dynamic behavior, and good aesthetic design. It is essentially getting away from the anatomical model, or making the chair not look like a prosthesis."



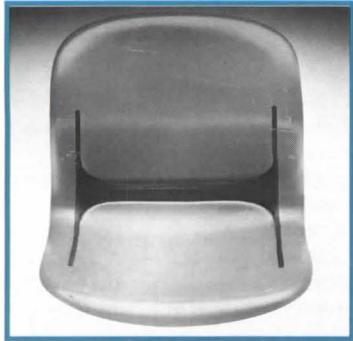
Significant in the evolution of the office chair was the release in 1974 of *Humanscale 1/2/3* (diagram, facing page), the first of a series of manuals presenting human factors data in a format designers could easily comprehend. Niels Diffrient collaborated on the *Humanscale* portfolios—later expanded by two additional releases—with colleagues at Henry Dreyfuss Associates, in New York. The portfolios offered information on topics including human dimensions, human strength and safety, seating, controls, displays, space planning, and factors regarding standing and sitting at work. This drawing of “Equa” (left), designed by William Stumpf and Don Chadwick for Herman Miller, represents the generic issues involved in making a good office chair. The chair back (A) should offer support but allow free movement. Arms curve downward (B) so chairs can pull close to desks. Good support of the lower back, or lumbar (C), helps prevent fatigue. Thinking differs on the motion of chair back versus seat (D): Should the two be fixed in the same relative position whether tilted or upright? Should they move independently? Or should they move in separate but proportionate ways? Upholstery (E) should be durable, and stain- and fire-resistant. Replaceable upholstery may be desirable too. A “waterfall front” (F) offers leg support but allows for easy movement and free blood circulation to the lower legs and feet. Knee-tilt mechanisms (G) are standard today. Some models must be locked in an upright position; others resist the tendency to tilt through a built-in “dwell mechanism.” Most chairs require adjustment of the tilt tension (H); only the most sophisticated do not. Pneumatic or mechanical seat height adjustments (I) accommodate short and tall users. A five-star base (J) adds stability to the chair while providing a smaller foundation.



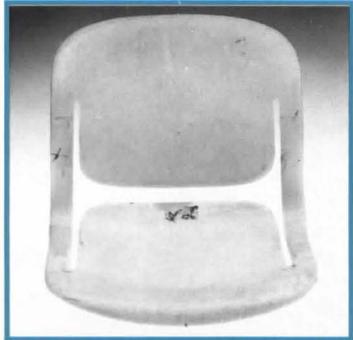
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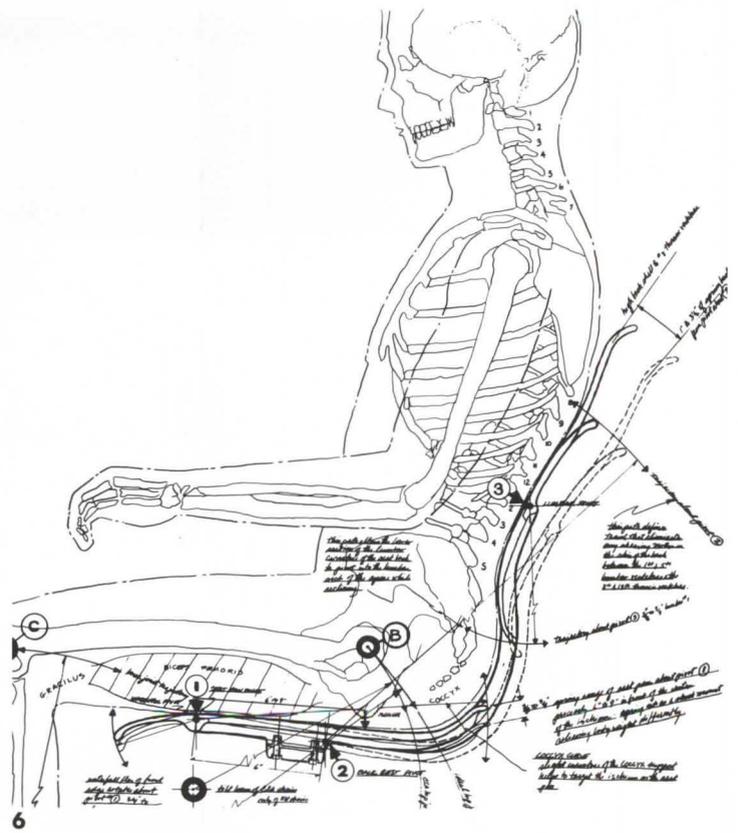
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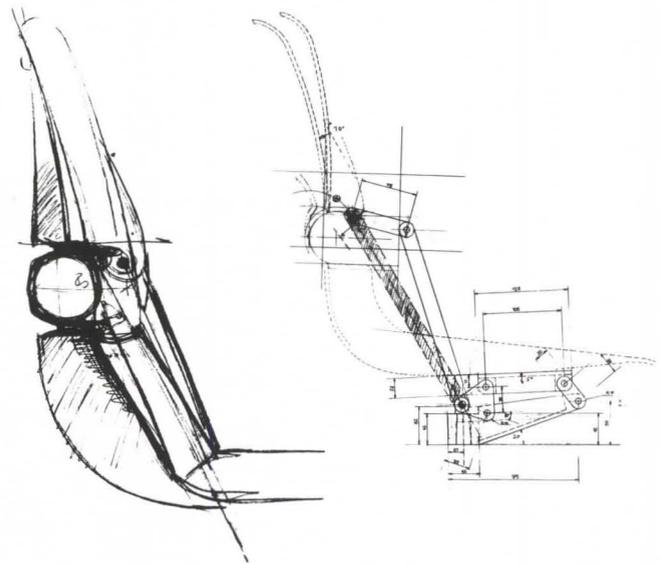
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William Stumpf's and Don Chadwick's development of the form for the "Equa" chair's shell was a lengthy, step-by-step process, parts of which are shown here. The first crude mock-up (1), hand made of glass-fiber-reinforced resin, was built to test the split shell's visual and physical capabilities. The experiment proved that the seat and back would, indeed, act independently of each other, while it also revealed the need for added strength in the side members. In the next step, the H-shaped slots were filled with a variety of elastic materials, but none of them adhered well to the shell and all of them decreased its flexibility. Spinning off of the filled slot idea, a composite shell (2) was created by bridging the gaps with a rubber-coated elastic sheet. The result was inelegant, at best, and a technical failure. Refinements in the design led to a form (3) that met the team's desire for a delicate, flowerlike shell. Ideas for partial and full upholstery were pursued beginning at this stage. In the next iteration, side members were designed for strength and the planar sections were thinned for suppleness, producing a shell that "sat right." Attention then turned to the design of an appropriate base and the invention of a production process for what, until then, had been a handmade shell. The first production technique, elastic reservoir molding, resulted in a brittle and unresilient shell (4). Two other techniques, a sheet molding compound method and preforming, yielded results that lacked flexibility, strength, and a proper appearance. Success finally came with an injection-molded shell (5), made by suspending glass fibers in a heated liquid plastic that was then injected into a heated mold. The shell passed Herman Miller's performance tests, as well as the company's demands for strength, flexibility, finish, and production efficiency.

Photos: George Heinrich



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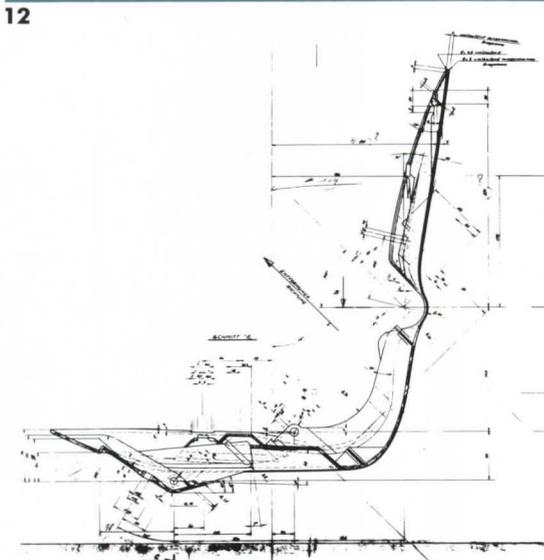
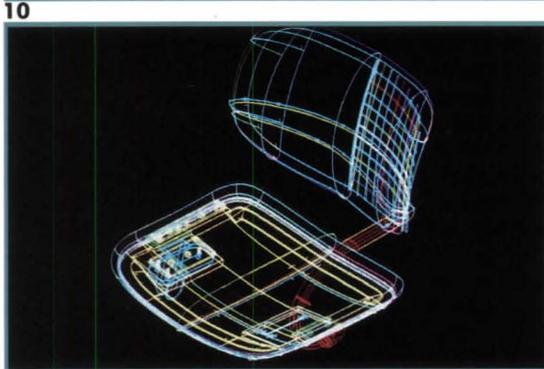
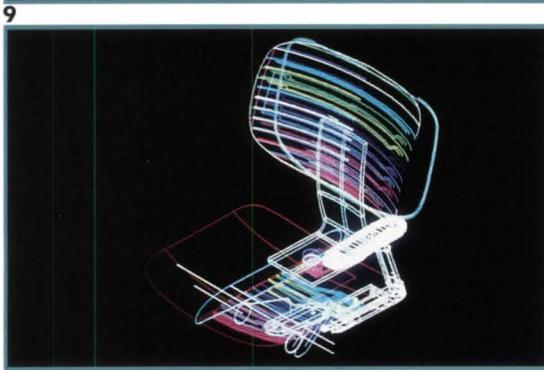
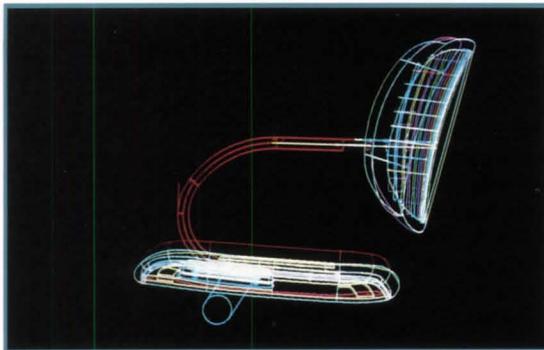


8

Studio Bellini

Warren Stroogras

A conceptual drawing (6) by William Stumpf and Don Chadwick preceding design of the "Equa" chair illustrates the ideas behind the split shell, an attempt to make the movements of the chair mesh with the trajectories of human motion. Early studies for Vitra's "Persona" chair (7) investigated placing the synchronous mechanism outside the shell, rather than inside, where it eventually was located. Design of Haworth's "Catalyst" chair included the fabrication of half-scale models sculpted from urethane foam, followed by several reviews before work began on the full-scale prototype (8). Computer drawings (9–11) generated from the full-scale prototypes were used for final tooling of "Catalyst" chair parts. The use of injection molds, as in the prototypes (12) for the basic "Equa" chair, signaled a new development in office chair manufacturing. Detailed working drawings were produced for the shell of the "Persona" chair (13), which was injection molded using a polyamide reinforced with 30 percent glass fibers.



The Rise of Mechanism

The struggle now is to make ergonomic chairs look less ergonomic. But before designers concerned themselves with hiding chair mechanisms, they were preoccupied with inventing them. For decades, a simple chair that swiveled and tilted was considered quite acceptable, even luxurious. But, designers noted, when people tilted back in these chairs their necks tended to stiffen and their feet lifted off the floor, often cutting off circulation to the lower legs and feet. The answer to the second dilemma was the so-called knee-tilt mechanism, which moved the pivot point from beneath the center of the chair to a location just behind the sitter's knee. The invention allowed people to recline while keeping their feet on the floor.

Designers also had begun to make the reclining action more natural to human movement by allowing the chair seat and back to move at different, but proportional rates. The advent of "synchronous movement" in office chairs became a common feature in many chair lines.

But as adjustments proliferated on new chairs, knobs and levers were added to control seat height, tension in the tilting mechanism, reclining position, even the location of the lumbar curve against the back. Customers often complained that chairs were laden with too much gadgetry. Employees couldn't (or wouldn't) adjust their chairs, so they ended up more uncomfortable than they might have been with a simple straight-back chair. The question arose: Were office chairs becoming too technological? "No question they were," says James Welch, president of Vecta. "Now, each year at NEOCON, I am seeing more chairs coming out that are less complicated."

In Search of Self-adjustment

All around, companies have introduced designs for chairs that work for the user without requiring much active participation. The most recent trend has been to develop chairs with shells that flex as a worker routinely bends and turns on the job. In research that eventually led to Herman Miller's "Equa" chair, designers William Stumpf and Don Chadwick pursued a one-piece shell that would strike the delicate balance between strength and flexibility. Their solution turned out to be a compromise between the form—a thin shell with an H-shaped cut-out—and a method of injection-molding a glass-reinforced thermoplastic polyester called Rynite. In their "Catalyst" chair, Haworth opted for a fiberglass-reinforced epoxy resin that, according to product manager Daniel Spaans, has the strength of steel, but flexes. (The material was adapted to chairs after being developed for Corvette automobile suspension systems, Spaans says.)

In Italy, designer Mario Bellini worked from 1979 to 1985 to produce a version of a chair that would adjust automatically to the user. Dubbed the "Persona" and manufactured in Switzerland by Vitra Seating (see pp. 74–81), it incorporates a flexible, one-piece shell that is articulated to function as a hinge.

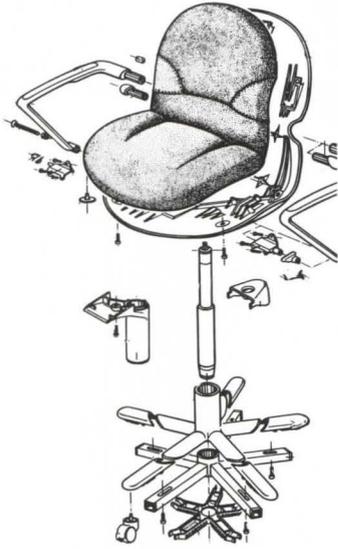
In many cases, manufacturers have committed themselves to refining chairs that are proven winners. Technicians at Haworth developed what they call a "dwell device," a mechanism that resists a chair's tendency to tilt back, without requiring the user to lock the chair in the upright position. Simply a shift in weight allows the chair to tilt back. Spaans calls the development "a move away from active ergonomics."

Most American manufacturers take pride in the fact that they meet, and often exceed, the minimum safety and performance standards of BIFMA, the Business and Institutional Furniture

Photos: Warren Smodgrass

George Heinrich

Studio Bellini



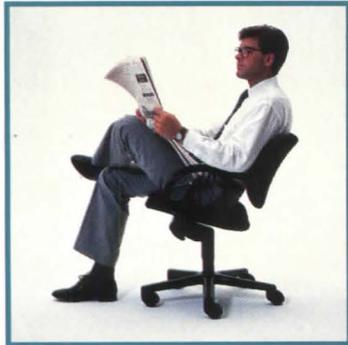
Studio Bellini

The final resolution of chair designs requires integration, and testing, of many components. An exploded drawing of "Persona" (14) shows the curved arm rests that control the synchronized movement of the chair seat and back. The "Catalyst" chair's "dwell mechanism" (15) resists the chair's tendency to tilt back, but allows tilting if the user shifts his weight. The knee-tilt action of a chair allows a user to recline (16) without lifting his feet uncomfortably off the floor or constricting blood circulation to his feet. This feature eliminates the need for a lever to lock the chair in an upright position. The one-piece polypropylene shell (17) of Steelcase's "Sensor" flexes to accommodate upper body movements, yet portions of it are reinforced with ribs to support the body's weight where support is needed most. The mechanism of "Persona" (18) was refined to operate through the tension and pressure produced by shifts in body weight. Weight on the seat, for instance, controls the counter-pressure of the back support, eliminating the need for a tilt tension knob. Safety and performance standards for office chairs originate with the Business and Institutional Furniture Manufacturer's Association, which prescribes testing procedures (19) used throughout the industry in America. A view inside the Herman Miller chair factory (20) in Zeeland, Michigan, reveals a variety of chair components.

14



15



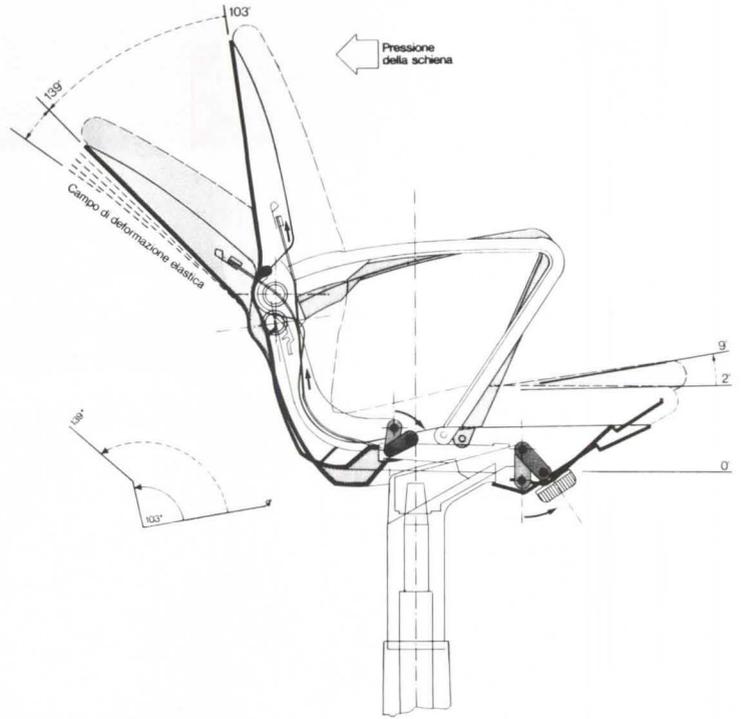
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Steelcase

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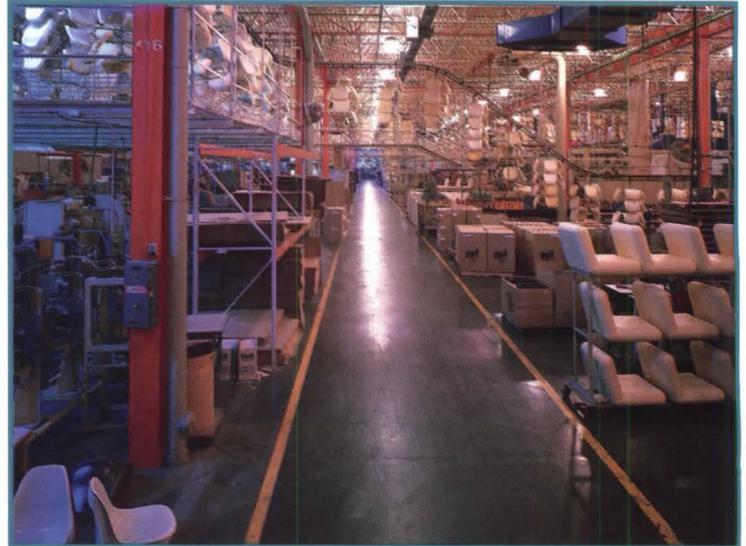


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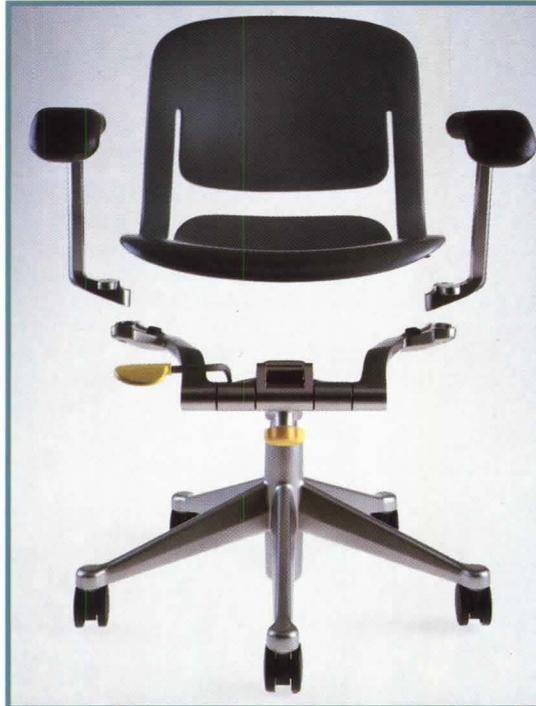
Photos: George Henrich

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At last, the manufactured chairs, shown here in various stages of disassembly for illustrative purposes. A frontal view of the "Persona" mechanism (21) shows the steel strips that guide the motion of the backrest. The "Equa" chair (22) adheres to the idea that the way objects go together should be immediately and clearly understood. The "Sensor" (23) conceals its flexible shell between an outer casing—made of plastic, as shown, or upholstered—and foam cushion. Typical of current chair designs, it has a variable-density foam cushion that is firm where support is needed, but soft where it is not—on the chair edges, for example.



21



22



23

Manufacturer's Association. Yet, while the BIFMA standards are voluntary within the industry—not prescriptive to the degree of European national standards, particularly West Germany's—the rationale that more generic standards will produce more innovation in the end product isn't borne out by what leaves the assembly line. "American design is very centrist, so mass-market oriented," Stumpf says. In fact, many European standards, such as the five-star base, have become the norm in American-made seating. And not to everyone's liking: "I think it's a minimal improvement in terms of function, and a great disservice in terms of aesthetics," says designer Richard Schultz, who has done chairs for both Stow & Davis and Domore.

New Directions

So, as the chair continues to evolve, what next? Improvements in foam cushions have come about by adopting injection-molding processes and discarding built-up methods, a change that also allows more sculptural freedom in the foam's shape. But there is more work to be done here, especially in experiments with varying foam densities to improve comfort levels. Upholstery fabrics, too, are the focus of scrutiny. While advances in fire safety, durability, and stain resistance have been made, the search continues for fabrics with ideal breathing qualities.

But, when most office-chair designers talk about their ongoing work, the theme of human behavior repeatedly crops up. "What the La-Z-Boy is to television, the task chair is to the computer," says Stumpf, referring to the class of office chair that seems to be getting the hardest look these days. Stumpf's own time-lapse studies of office workers identified five distinct working positions people adopt at their desks. That constant motion is partly attributable to our lot as animate beings, but also due to the discomfort or confining nature of many office chairs.

With increasing frequency, designers tout the benefits of reclining while working, though some solutions take the idea far beyond others. "Sitting upright is an unnatural thing for the human body," says Warren Snodgrass, president of Design Technology in Mill Valley, California, and a designer for Haworth. "It puts tremendous pressure on the lower spine, and the way to relieve that is to recline. People are more effective when they are comfortable."

So don't be surprised if new models begin to recline a bit more or come with coordinated foot pillows (Stumpf, in fact, already has designed one). Existing chair lines, too, are being refined to improve mechanisms and enhance comfort. But the practice of periodic upgrading, in Stumpf's words, is a lesson American manufacturers have been slow to learn. As successful models of that approach, Stumpf points to foreign firms such as Honda, Nikon, and Mercedes-Benz—all of which refine products in subtle ways without introducing splashy new lines each year. The idea is worth considering. And if office chairs begin to perform like BMWs, who's to argue with the results?

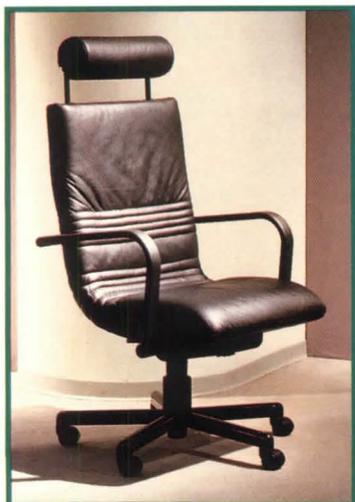
Vernon Mays

Vitra

George Henrich

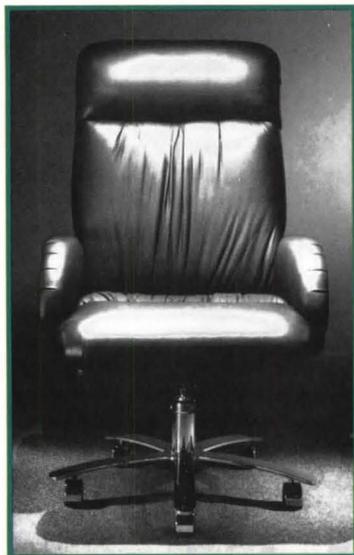
Steelcase

Technics-Related Products



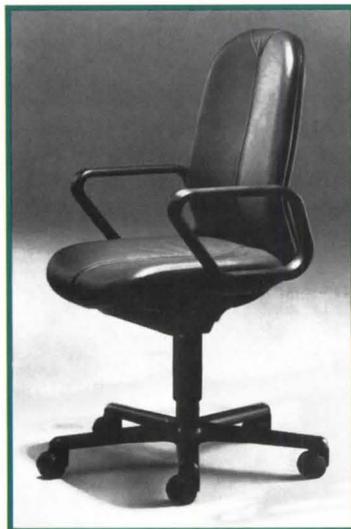
Physio-Class Seating employs a chair shell of semi-rigid molded plastic that flexes with upper body movement. Without special controls, it provides support through normal postural changes. The chairs can be fixed to accommodate those who work at screens or in other capacities where the body leans forward. The chair's tilt control is designed to keep the user's feet on the floor during movement, thus reducing stress on legs and knees. VOKO U.S., Inc.

Circle 444 on reader service card



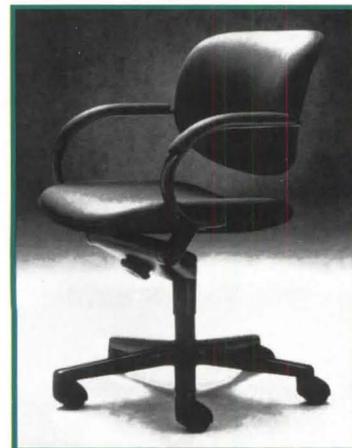
The Northern Comfort executive chair—available with a high, medium, or low back—features generously cushioned back, seat, and armrests. The swivel-tilt base comes in neutral stainless steel, Brutone bronze, or Rich-low bronze. Brueton.

Circle 447 on reader service card



Connex seating is based on the principle that improved heat dissipation can improve user productivity. The seat and back shells have perforated inner linings, and outer vents are integrated into the exterior shells. Another distinctive detail is the recessed triangle and stripe seat pattern which may be specified in matching or contrasting colors. Kimball.

Circle 449 on reader service card



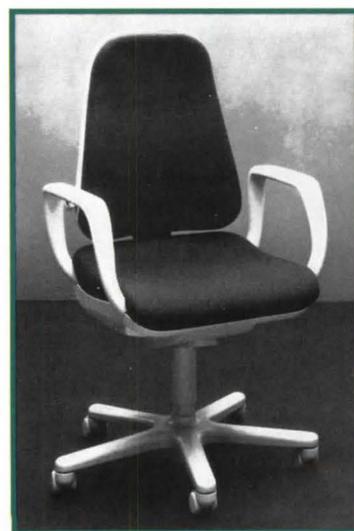
The Catalyst series by Warren Snodgrass features four chair types for four specific office functions, visually linked by details such as its cantilevered chair control and distinctive arm. The chair's unique knee-tilt mechanism allows the back to remain upright unless the user's weight is transferred on the seat plane. Haworth.

Circle 457 on reader service card



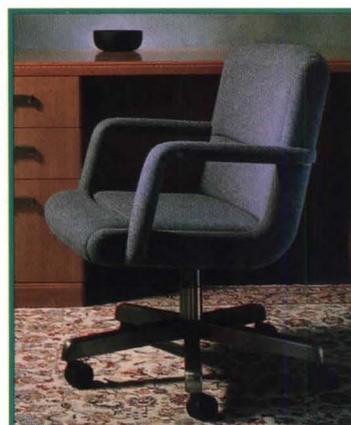
Stackable upholstered chairs with contoured backs and seats provide comfortable yet space-saving seating for meetings and other special applications. They can also be used as side chairs. Available with or without arms, the chair frames come in chrome or in 23 colors. TAB Products.

Circle 445 on reader service card



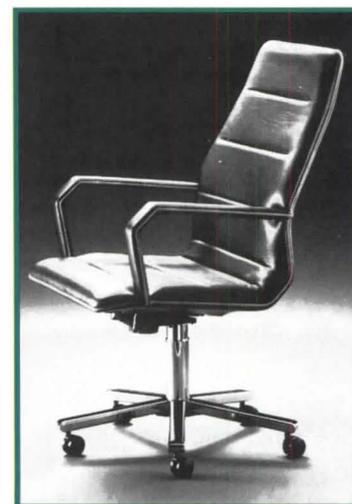
The Synchrono series of seating contains 13 different models, ranging from a mechanical swivel-tilt version to an executive model. Standard features include cast aluminum base and controls, pneumatic height adjustment, and a lumbar adjustment mechanism. United Chair.

Circle 458 on reader service card



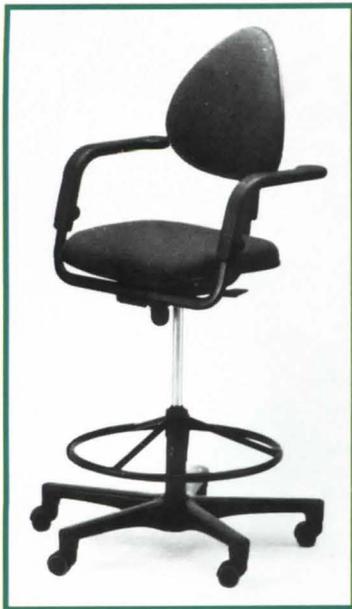
Paradigm seating, designed by Dick Schultz, includes three management models based on the same essential shape, with options such as high or low backs, upholstered or metal arms, and three kinds of base finishes. Armless task stools and secretarial chairs are also available. Stow & Davis.

Circle 450 on reader service card



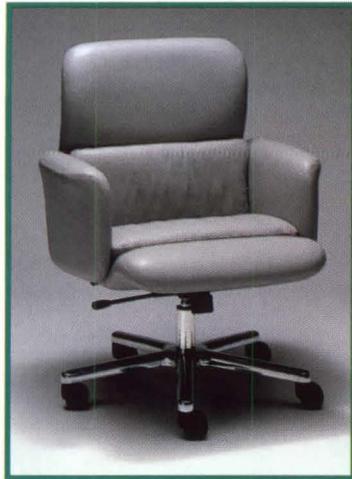
The Exel Executive chair is part of a line of thin-profile seating that combines wood construction with ergonomic function. The chairs, which come in executive, management, and guest models, are designed for those above the 95th percentile in body size. The distinctive angled arm allows easier access to work surfaces. Gunlocke.

Circle 452 on reader service card



The Ergo chair utilizes a tear-drop back design to allow a maximum amount of upper body movement. Features include pneumatic seat height adjustment, backrest height and angle adjustment, seat depth adjustment, and optional armrests and footrests. Bases are available in cast aluminum or molded polyurethane. Mayline.

Circle 454 on reader service card



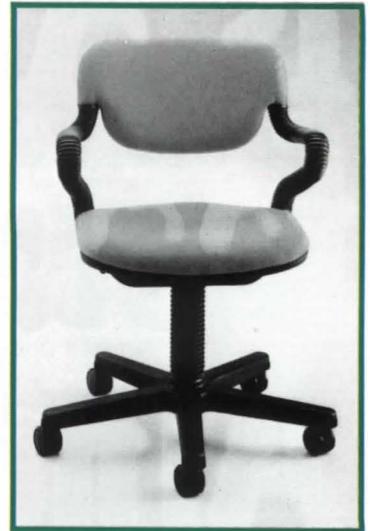
The 634 Montara Executive Chair features a modestly scaled, ergonomically contoured design. Base finish options include textured black, polished aluminum, or painted finish. The 634 has a 36–39-inch back height, while the similar 633 model has a 32–35-inch back height. Metropolitan Furniture.

Circle 455 on reader service card



The Advanced Diffrient Seating Series includes workstation, management, and executive chairs, in addition to a multiple seating series. A 12-page brochure discusses the available options and ergonomic features in each portion of this formally integrated collection by designer Niels Diffrient. Knoll International.

Circle 453 on reader service card



The Vertebra Systems Chair is a task chair designed to save space while retaining a large seating area. Its seat and backrest width is 18½ inches. Designed by Emilio Ambasz and Giancarlo Piretti, the chair comes in pedestal base or side chair models, with or without arms. Krueger.

Circle 446 on reader service card

(See Technics, The Office Chair, p. 98.)

(Advertisement)

Small Company's New Golf Ball Flies Too Far; Could Obsolete Many Golf Courses

Pro Hits 400-Yard Tee Shots During Test Round
Want To Shoot An Eagle or Two?

By Mike Henson

MERIDEN, CT — A small golf company in Connecticut has created a new, super ball that flies like a U-2, putts with the steady roll of a cue ball and bites the green on approach shots like a dropped cat. But don't look for it on weekend TV. Long-hitting pros could make a joke out of some of golf's finest courses with it. One pro who tested the ball drove it 400 yards, reaching the green on all but the longest par-fours. Scientific tests by an independent lab using a hitting machine prove the ball out-distances all major brands dramatically.

The ball's extraordinary distance comes partly from a revolutionary new dimple design that keeps the ball aloft longer. But there's also a secret change in the core that makes it rise faster off the clubhead. Another change reduces air drag. The result is a ball that gains altitude quickly, then sails like a glider. None of the changes is noticeable in the ball itself.

Despite this extraordinary performance the company has a problem. A spokesman put it this way: "In golf you need endorsements and TV publicity. This is what gets you in the pro shops and stores where 95% of all golf products are sold. Unless the pros use your ball on TV, you're virtually locked out of these outlets.

TV advertising is too expensive to buy on your own, at least for us.

"Now, you've seen how far this ball can fly. Can you imagine a pro using it on TV and eagle-ing par-fours? It would turn the course into a par-three, and real men don't play par-three's. This new fly-power forces us to sell it without relying on pros or pro-shops. One way is to sell it direct from our plant. That way we can keep the name printed on the ball a secret that only a buyer would know. There's more to golf than tournaments, you know."

The company guarantees a golfer a prompt refund if the new ball doesn't cut five to ten strokes off his or her average score. Simply return the balls — new or used — to the address below. "No one else would dare do that," boasted the company's director.

If you would like an eagle or two, here's your best chance yet. Write your name and address and "Code Name S" (the ball's R&D name) on a piece of paper and send it along with a check (or your credit card number and expiration date) to National Golf Center (Dept. H-709), 500 S. Broad St., Meriden, CT 06450. Or phone 203-238-2712, 8-8 Eastern time. No P.O. boxes, all shipments are UPS. One dozen "S" balls cost \$21.95 (plus \$1.95 shipping), two to five dozen are only \$19.50 each, six dozen are only \$99.00. You save \$43.00 ordering six. Shipping is free on two or more dozen. Specify white or Hi-Vision yellow.

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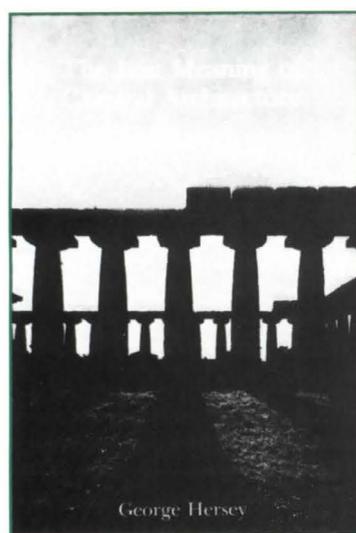
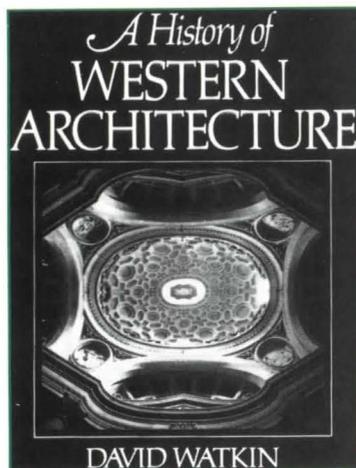
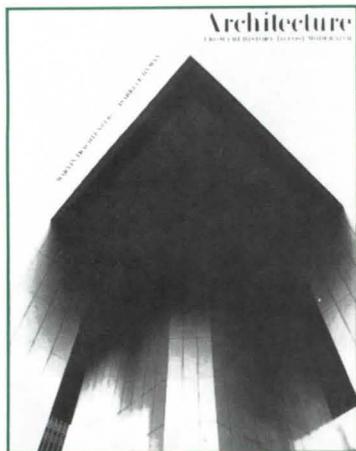
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Architecture from Prehistory to Post-Modernism: The Western Tradition by Marvin Trachtenberg and Isabelle Hyman. Harry N. Abrams, New York, 1986. 606 pp., \$49.50.

The Lost Meaning of Classical Architecture by George Hersey. MIT Press, 1988. 201 pp., illus., \$20.00 cloth, \$9.95 paper.

A History of Western Architecture by David Watkin. Thames and Hudson, New York, 1986. 591 pp., \$45.00.



New Histories

Twenty-five years ago at the American Academy in Rome, the prize winners would groan because they had to draw a capital or two; today they like nothing better. The history of architecture has been revived, not only to help students select the best capital, but to justify its application to skyscrapers and wineries.

Nicolaus Pevsner, whose *Outline of European Architecture* was the only survey of Western architecture worth reading during the heyday of Modernism, skipped over everything before Romanesque, because for him the history of architecture was "primarily a history of man shaping space." More attentive to the past, the new rash of historians have not been as sure of their standards. The author of the first of the histories to appear in the last few years, Spiro Kostof (see P/A, Sept. 1985, p. 235) espouses the faith common in the late 1960s that architecture includes the entire "built environment." Mere style has to share the text with social, economic, literary, and figurative aspects; Western architecture, with the rest of the world. Instead of the Modernists' space, structure, and function, "ritual" becomes the key to architectural value, but is left evocatively undefined. The result is a book where the space of Hagia Sophia or Chartres is barely described, Brunelleschi is lumped under the "Edges of Medievalism," and the Villa Savoye slips by in two sentences. The best parts of the book are those on cities, landscapes, and prehistory—that is to say, on the areas outside of architectural history proper.

The most radical of the new texts, by the polemical anti-Modernist David Watkin, takes the opposite tack. He prefers "to emphasize the continuous validity and vitality of the Classical language of architecture." Thus he starts his history of Western architecture not with Mesopotamia or Egypt, but with Greece. Gothic architecture is an "exper-

(continued on page 108)

Classical Roots

Architects well versed in Classicism consider that architecture as akin to a language, one with syntactical rules as strict and as necessary as grammar is to the writer. George Hersey's *The Lost Meaning of Classical Architecture*, then, is an etymological guide—both metaphorically and literally—to the language of Classicism. Hersey examines the origins of the orders and their components, looking not only at the functional and symbolic meanings of the components themselves but also at their names. Through a careful analysis of Greek language, he uncovers alternate meanings for these names (an *echinus*, for example, is revealed to be not only part of a Doric capital but also a neck vertebra, a wide-mouthed jar, and a sea urchin). This exploration of the subtleties of the written and spoken language yields a greater understanding of the origins of the architectural language, or at least, as Hersey points out, of the way the Greeks viewed their architecture.

One of the book's most interesting chapters reminds us that Classical ornament represents the rather gory trappings of sacrifice and of battle. The etymology of the word *triglyph*, he says, suggests a thighbone chopped into threes and wrapped in fat, with the guttae beneath representing drops of sacred body fluid dripping off. Whether or not this iconography was an original part of temple design, though, Hersey asserts that "the ancients . . . at a certain point, saw their temples as assemblages of the materials used in sacrifice." Also, as we see in later chapters, the architects of the Renaissance, relying on Vitruvius's texts, saw and understood Classical architecture in much the same way. It is only in modern times that the "meaning" has become "lost," says Hersey, and yet the language is still in use, albeit without the wide etymological understanding this book seeks to provide.

Mark Alden Branch ■

Paris 1979–1989 ed. by Sabine Fachard. Rizzoli, 1988. 192 pp., illus., \$37.50 paper. This volume looks at the current public building projects in Paris, the *grands projets*, shown mostly in renderings, models, and construction photos. The text includes essays by and interviews with the architects and planners of each project.

Professional Liability of Architects and Engineers by Harrison Streeter. John Wiley & Sons, 1988. 273 pp., \$39.95. Originally conceived as a textbook, this book is of value to students and architects alike because of its explanation of liability, dispute resolution, and insurance. Thirty-two case studies are included.

Frank Lloyd Wright In the Realm of Ideas ed. by B. Pfeiffer and G. Nordland. So. Illinois U. Press, 1988. 208 pp., illus., \$42.50 cloth, \$24.95 paper. The book version of the nationally touring exhibition (see P/A, Mar. 1988, p. 37) contains photos and drawings of Wright's work, quotes from his writings, and essays on various aspects of his career.

Great Engineers ed. by Derek Walker. St. Martin's Press, 1987. 288 pp., illus., \$69.50. From the Crystal Palace to the Hongkong Bank, with railroads, tunnels, and bridges in between, this large, glossy volume pays tribute to the engineering and engineers of the 19th and 20th Centuries.

Theater Technology by George C. Izenour. McGraw Hill, 1988. 552 pp., illus., \$195.00. Theater Technology is packed with the fruits of Izenour's years of experience as a theater consultant. Conceived as a companion piece to his 1977 *Theater Design*, this book focuses on technical problems such as lighting, flying systems, and transport devices.

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(continued from page 107)

iment" and "a break with the past": It appears to embarrass him as much as it does the Post-Modernists who think Classicism should be obligatory. A vast chapter is devoted to such masterpieces of 18th-Century Classicism as the Amalienborg Palace in Copenhagen by Eigtved. Watkin spends most of his words on description, but is visually negligent nonetheless: He gets captions wrong (reproducing the

tionary radicalism is the rejection of history in favor of timeless tradition, like that of Egyptian or Chinese art; yet he is unable to face the consequences of his own ideology, which would replace history by a theology of architecture.

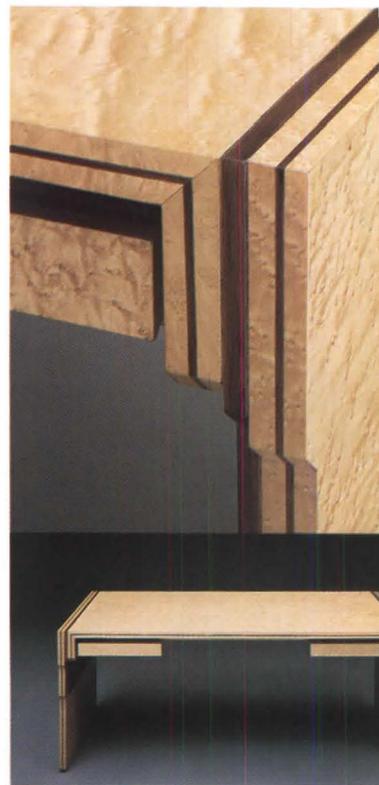
Marvin Trachtenberg and Isabelle Hyman have written the most orthodox of the new histories, and therefore the most successful. Theirs is "preeminently a history of monumental

Hyman, and the introduction and prehistoric architecture, which are the work of both) vies with the best of Scully, Krautheimer, Summerson, Wittkower, or Pevsner in conveying information and insight charged with the love of great architecture, as in the paragraphs on the Colosseum, Hagia Sophia, Syon House, and above all, the Paris Opera. The photographs in color and black and white, many of them by Trachtenberg, are

the development of a Modern style, subordinating the discourses and ideologies and the public reception which gave meaning to the forms. Gaudi is thus lumped with the German Expressionists because of their "biomorphic" forms, though they have little else in common; and monumental displays of form, such as Dudok's Town Hall in Hilversum or Saarinen's TWA terminal, are given more play than the housing and town

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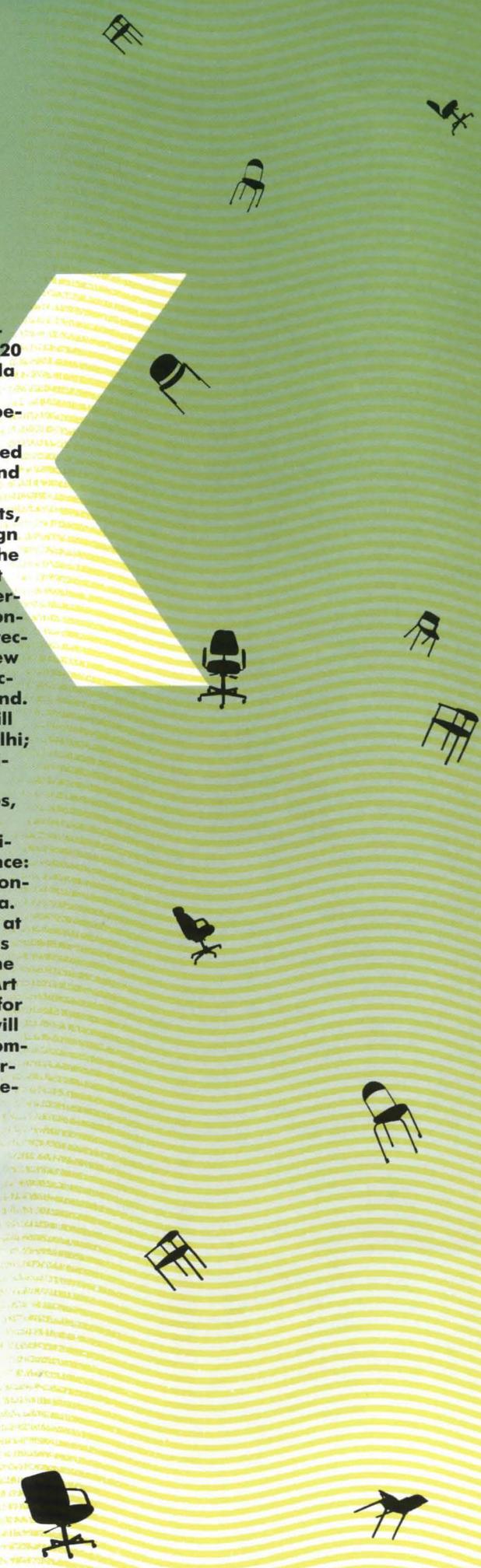
X

Tuesday June 14 through Friday, June 17, marks the 20th anniversary of the international contract furnishings market and congress on environmental design. NEOCON[®] 20 will open Monday night, June 13 with a Gala Celebration at the Chicago Hilton & Towers commemorating the first 20 years. Other special happenings include the opening of the Merchandise Mart's new Third Floor, designed by Booth/Hansen & Associates, Chicago, and a pedestrian bridge by Murphy/Jahn.

Of the many events of interest to architects, several seminars will focus on current design philosophies and emerging ideas around the world. Zaha Hadid, Fumihiko Maki, Helmut Jahn, and Balkrishna Doshi will join an international panel to discuss the quality and consistency of new movements in today's architecture. In addition, the AIA will introduce its new program to develop insights on the architectural profession in the year 2000 and beyond. Finally, the Chicago Architectural Award will be presented to: Balkrishna Doshi, New Delhi; Romaldo Giurgola, Mitchell/Giurgola Architects, Philadelphia and New York; and Fumihiko Maki, Fumihiko Maki & Associates, Tokyo.

The Fourth Annual Conference of the Institute of Business Designers, "Design Excellence: The Business of Process," will take place Monday, June 13, at the Holiday Inn, Mart Plaza.

Many design-related exhibits can be seen at Chicago's museums and galleries. Of note is "The Modern Movement: Selections from the Permanent Collection," presented by The Art Institute. Also, at The Graham Foundation for Advanced Study in the Fine Arts, Formica will display winning designs from their recent competition "From Table to Tablescape." The ArchiCenter will host the traveling exhibit, "Re-making America: New Uses, Old Places."



Seminars and Workshops

Tuesday, June 14



Dr. Kenneth Blanchard

8:30 A.M. Keynote Address

Dr. Kenneth Blanchard, author, *The One Minute Manager*. Presented at the Chicago Theatre by *Contract* magazine and *Facilities Design and Management* magazine.

10:00 A.M. Designer's Informium

"Forecast for the Future in Color and Style." Janice Hall, ASID, Senior Stylist, Allied Fibers.

12:00 P.M. Luncheon

Contract Furnishings Council Luncheon, second floor conference center, Merchandise Mart. Contact 312/321-0563 for ticket information.



Stanley Tigerman

2:30 P.M. Workshop

"Style and Substance: The Blueprint for Excellence." Panel: Alessandro Mendini, Alchimia, Milan; and Stanley Tigerman, Tigerman Fugman McCurry, Chicago. Moderator: Sonja J. Roberts, IBD, IBD Program Chairperson.

4:30 P.M. Workshop

"The Art of Negotiation." Herb Cohen, author, *You Can Negotiate Anything*. Sponsored by the Contract Furnishings Forum and the Contract Furnishings Council. Mart Plaza Hotel, Grand Ballroom.

5:30 P.M. Reception

NEOCON® 20 Industry Reception. Sponsored by E.I. DuPont de Nemours Co. Open to all registrants. Holiday Inn Mart Plaza, 15th Floor Atrium.

9:00 P.M. Midnight Affair

The Institute of Business Designers Midnight Affair, Chicago's Navy Pier. Contact 312/467-1950 for tickets.

Wednesday, June 15



Patricia Conway

8:30 A.M. Keynote Address

"The Current Design Dilemma." Panel: Patricia Conway, Kohn Pedersen Fox Conway Associates, New York; Margo Grant, Gensler & Associates, New York; Carol Groh, GN Associates, New York; Paul Haigh, Haigh Space, New York; Richard Hayden, Swanke Hayden Connell Architects, New York; Eva Jiricna, Eva Jiricna Architects, London; Francisco Kripacz, Arthur Erickson Architects, Los Angeles; Eva Maddox, Eva Maddox Associates, Chicago; Charles Pfister, Charles Pfister Associates, San Francisco; and Donald D. Powell, Powell-Kleinschmidt, Chicago. Moderator: Peter Blake, architect, professor of architecture, Catholic University, Washington, D.C. Presented by *Interior Design Magazine* at the Auditorium Theatre.



Paul Haigh



Eva Maddox

10:30 A.M. Workshop

"The Culture of Design: A World Perspective." Panel: Richard Linington, President, IFI, London; Jean Pinton, Chairman, IFI, Nice; Hanne Hjort, President-elect, IFI, Bergen; Grete Smedal, Treasurer, IFI, Bergen; Luis Corbella, Resources Council, IFI, Madrid; and Norman DeHaan, Professional Practice, IFI, Chicago. Moderator: Charles Gandy, FASID, President, American Society of Interior Designers, Atlanta.



Charles Pfister



Grete Smedal

2:30 P.M. Workshop

"Merchandising Interiors: Image-making Environments as Art and Product Communication." Panel: Eva Jiricna, Eva Jiricna Architects, London; and Eva Maddox, Eva Maddox Associates, Chicago. Moderator: Lise Lawson, IBD, National IBD conference Co-Chairperson.

5:30 P.M. Reception

"Celebrate Chicago." Hosted by the Illinois Chapter/ASID and Allied-Signal at the Chicago Historical Society. Contact 312/467-5080 for tickets.

Thursday, June 16



Tom Brokaw

8:30 A.M. Keynote Address

Panel discussion on the role of leadership in American business and the impact of the upcoming presidential election. Panel: to be announced. Moderator: Tom Brokaw, anchor of the NBC Nightly News, New York. Presented by *Business Week* magazine at the Chicago Theatre.

11:00 A.M. Awards Presentation

NEOCON® 20 Excellence of Showroom Design Competition and ASID/Joel Polsky Prize Presentation. Sponsored by the American Institute of Interior Designers and *Interior Design* magazine at The Merchandise Mart Second Floor Conference Center. Contact 212/944-9220 for tickets.



Balkrishna V. Doshi

2:30 P.M. Workshop

"AIA Vision 2000 Presentation." Introduction of a new program to develop insights about the architectural profession in the year 2000 and beyond. Panel to be announced.



Fumihiko Maki

4:30 P.M. Awards Presentation

Chicago Architecture Awards Presentation. Recipients/Speakers: Balkrishna V. Doshi, New Delhi; Fumihiko Maki, Fumihiko Maki & Associates, Tokyo; and Romaldo Giurgola*, Mitchell/Giurgola Architects, New York and Philadelphia. Presented by the Illinois Council of the American Institute of Architects and *Architectural Record* magazine.

Friday, June 17



Zaha Hadid



Prof. Josef-Paul Kleihues



Alessandro Mendini



Helmut Jahn

9:00 A.M. Keynote Address

"The International Symposium on Modern Architecture V." Panel: Balkrishna V. Doshi, New Delhi; Zaha Hadid, Studio 9, London; Hans Hollein*, Hans Hollein Architect, Vienna; Josef-Paul Kleihues, Kleihues Architect, Berlin; Rem Koolhaas*, Office of Metropolitan Architecture, Rotterdam; Fumihiko Maki, Fumihiko Maki & Associates, Tokyo; Alessandro Mendini, Alchimia, Milan; Helmut Jahn, Murphy/Jahn, Chicago; William Pedersen, Kohn Pedersen Fox Associates, New York; Stanley Tigerman, Tigerman Fugman McCurry, Chicago. Moderator: to be announced. Civic Opera House.

11:30 A.M. Presentation

Participants in the Modern Architecture Symposium present their work. Panel: Zaha Hadid, Studio 9, London; Alessandro Mendini, Alchimia, Milan; Hans Hollein*, Hans Hollein Architects, Vienna; and William Pedersen, Kohn Pedersen Fox Associates, New York.

1:30 P.M. Presentation

Participants in the Modern Architecture Symposium present their work. Panel: Rem Koolhaas*, Office of Metropolitan Architecture, Rotterdam; Helmut Jahn, Murphy/Jahn, Chicago; and Josef-Paul Kleihues, Kleihues Architect, Berlin.

*Participation not confirmed.
Seminar Locations to be announced.

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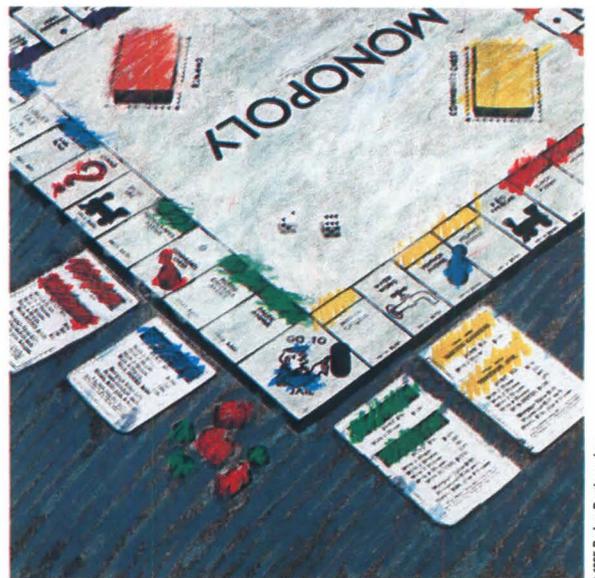
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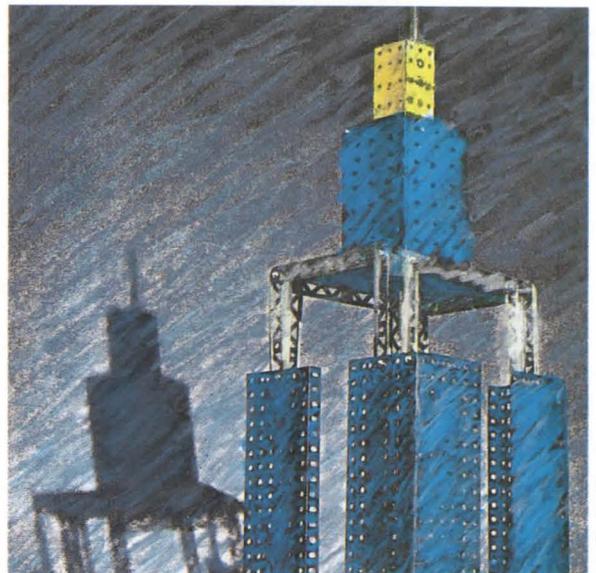
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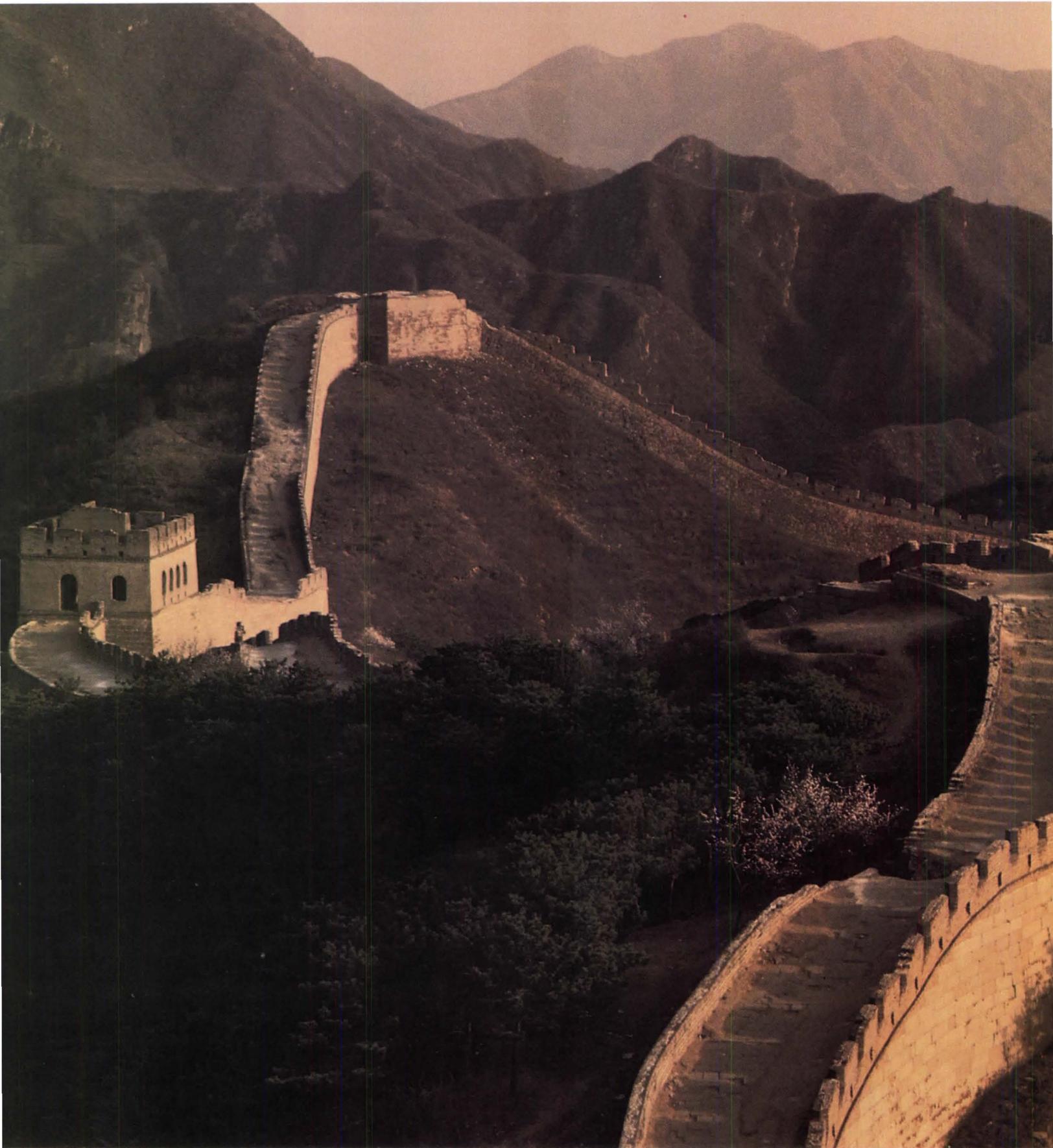
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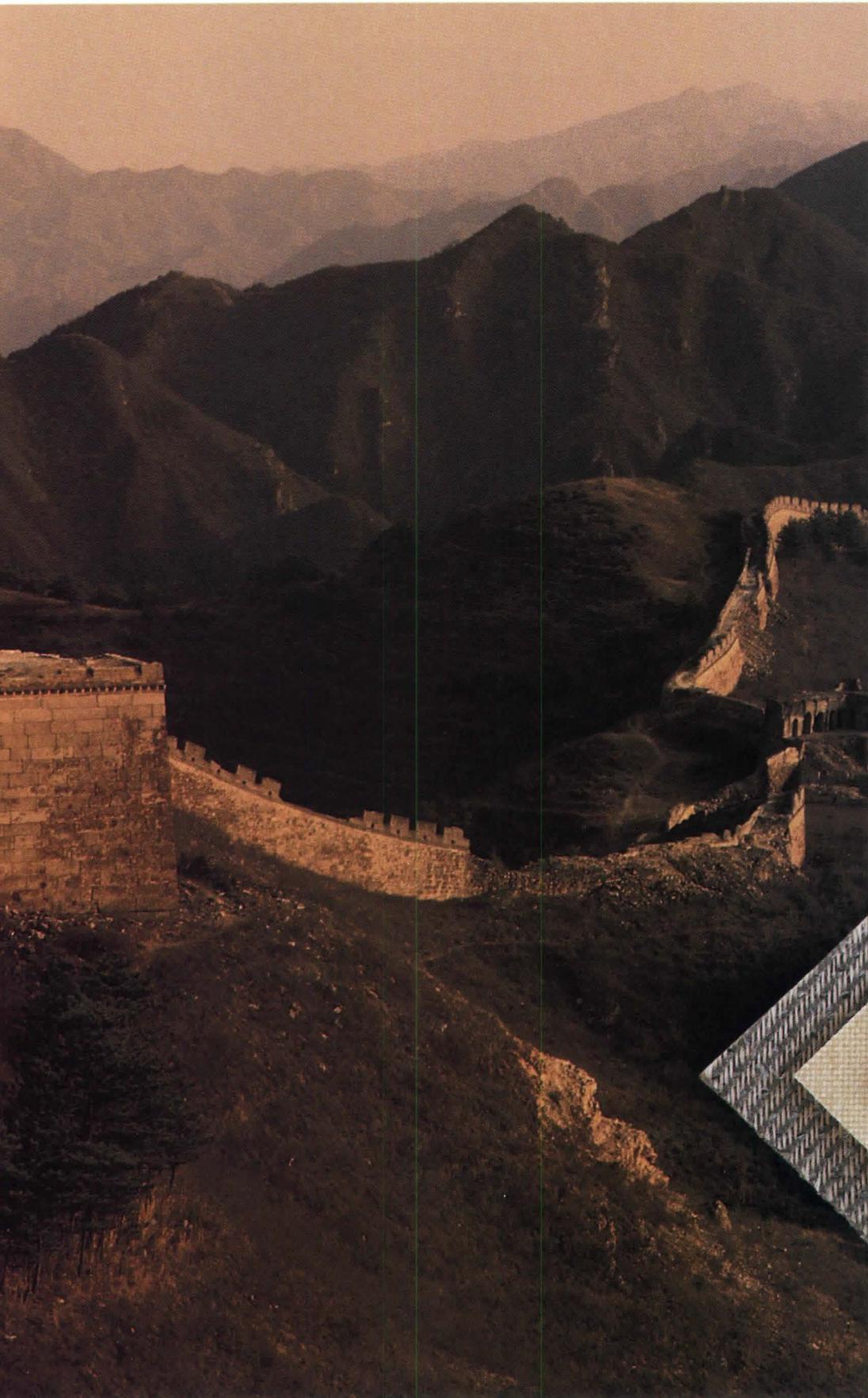
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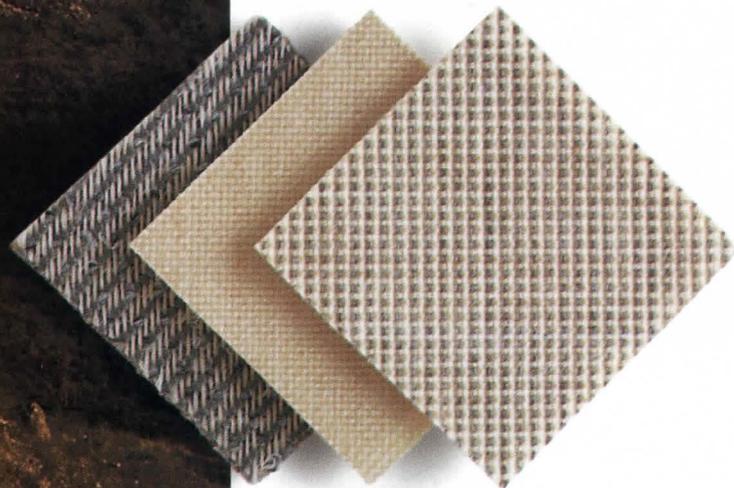
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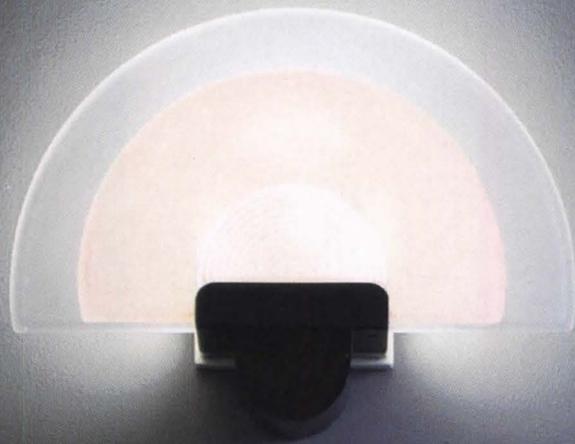
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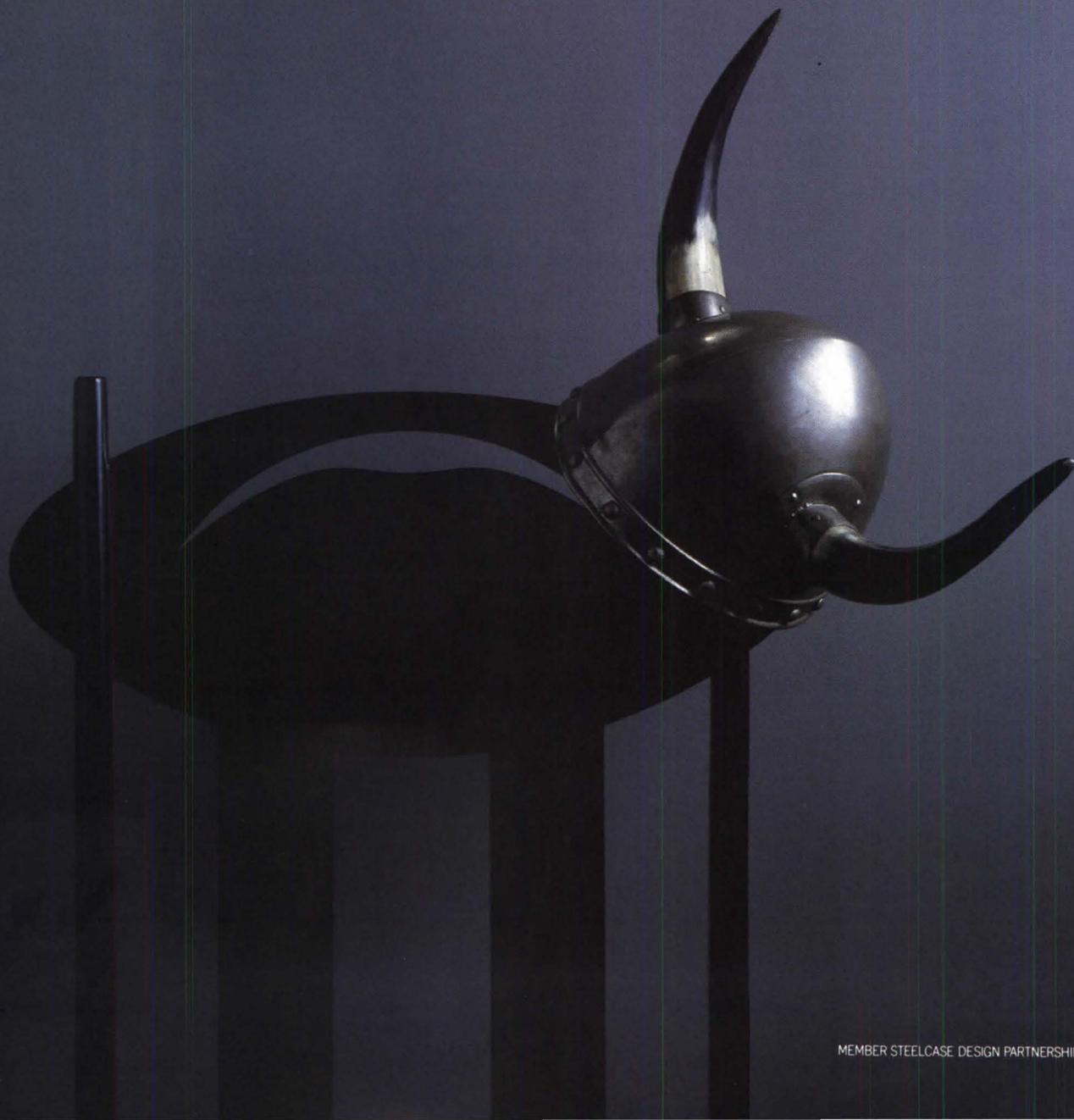
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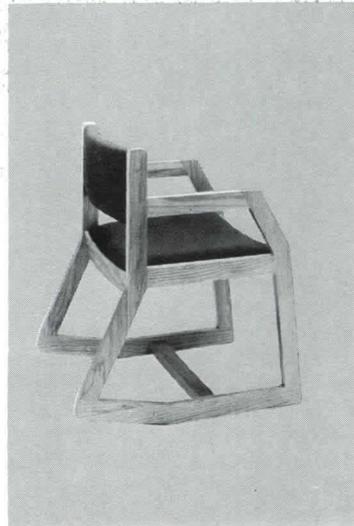
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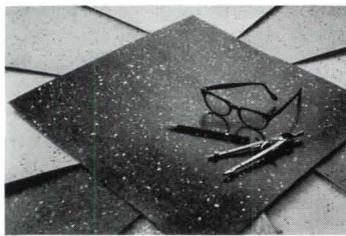
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Conrad Marini designed the Cubo Sofa collection with variations in seam finishes and cushion detailing to offer design options. The series includes a 43-inch-deep chair, a two- and three-seat sofa.

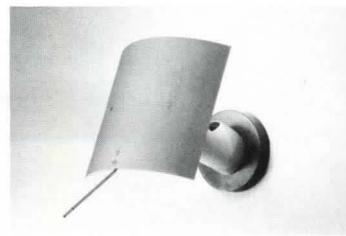
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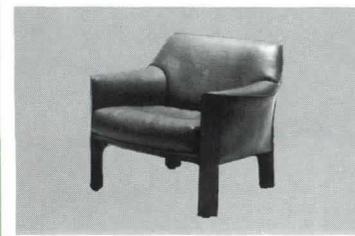
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Artemide

Antonio Citterio's Enea wall lamp may be specified in anodized aluminum or a black finish. It is constructed of anodized aluminum and resin and is 18 centimeters wide.

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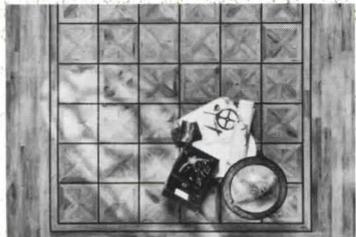
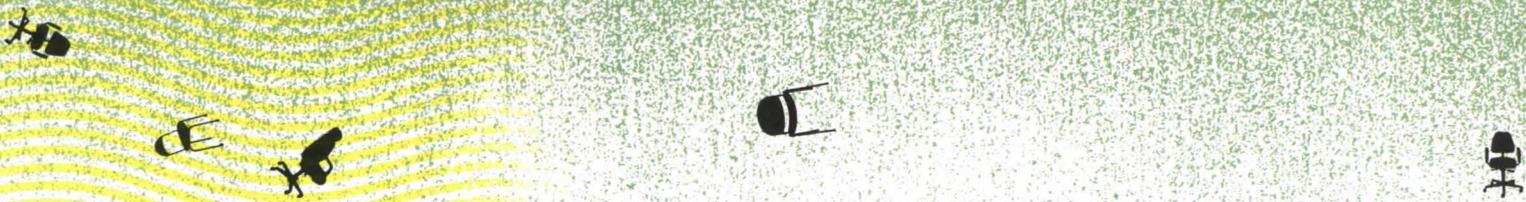


Atelier International

The Cab Armchair and Two-Seat Sofa complement other models in the Cab Seating collection designed by architect Mario Bellini. Each piece offers removable, down-filled seat cushions and may be specified in black, natural, or red leather.

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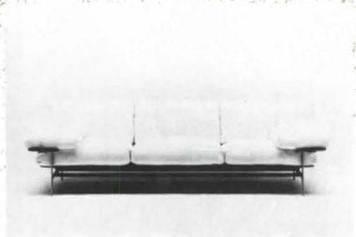
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Teak, a new wood color addition to the Luxury Vinyl Tile collection, comes in four shapes, offering a selection of inlaid wood parquet patterns, border features, and contrasting strips.

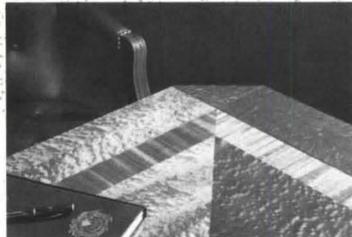
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B & B Italia

Antonio Citterio and Paolo Nava of Milan designed the Diesis Sofa. Upholstery options for the cushions and armrests include a range of fabrics and leathers.

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Baker Executive Office

Desks, credenzas, lounge and desk seating, and tables compose the Pfister Collection, designed by Charles Pfister.

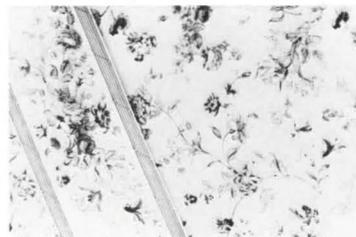
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Gretchen Bellinger

A wool jacquard, Buzz Buzz™ features a stylized bee motif on a wool satin ground. The fabric expands the new Stars, B's, and Fleur de Lis™ collection and may be custom colored.

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Louis W. Bowen

Normande, a handprinted wallcovering from the Volume XXVII Collection, features a floral vine design of roses, petunias, jonquils, pansies, carnations, tulips, and geraniums.

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Brayton International

The Merano casegoods collection is designed for executive, middle management, and clerical office applications. The metal reveal can be specified in chrome, black, red, polished brass, or antique bronze.

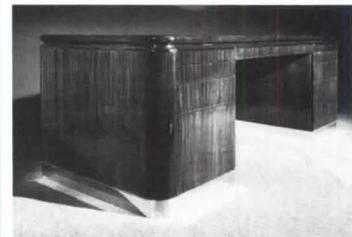
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Brickel

Designed by Bentley-La Rosa-Salasky, the Metal and Wood Table Group comprises sofa, end, small conference, coffee, and occasional tables with shaped hardwood edges.

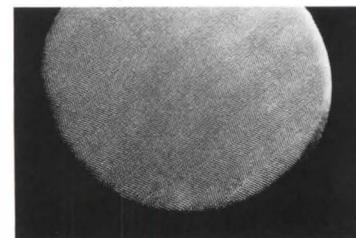
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Brueton

Distinguished by a sculptured, double-tiered radius edge separated by a polished stainless steel reveal, designer Stanley Jay Friedman's Radial Desk is available in 14 different wood choices.

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Brunschwig & Fils

Part of the Executive Suite collection, Lambert Chenille uses 100 percent linen pile on an all-cotton backing to create a soft herringbone design. The fabric is 55 inches wide and is offered in four colorways.

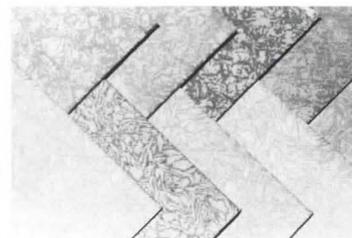
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Manuel Canovas

A jacquard floral with a peony motif, Pivoines is a rayon-cotton blend and 51 inches wide. Produced in France, the design is offered in three colors.

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Carnegie Fabrics

Liege and Bruges are two jacquard designs from the new Fabric Wallcoverings collection consisting of 36 patterns in 200 colorways.

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Modular carpet systems by Lees in over 200 colors and patterns. Photography: Fred Schenk. © 1986 Burlington Industries, Inc.



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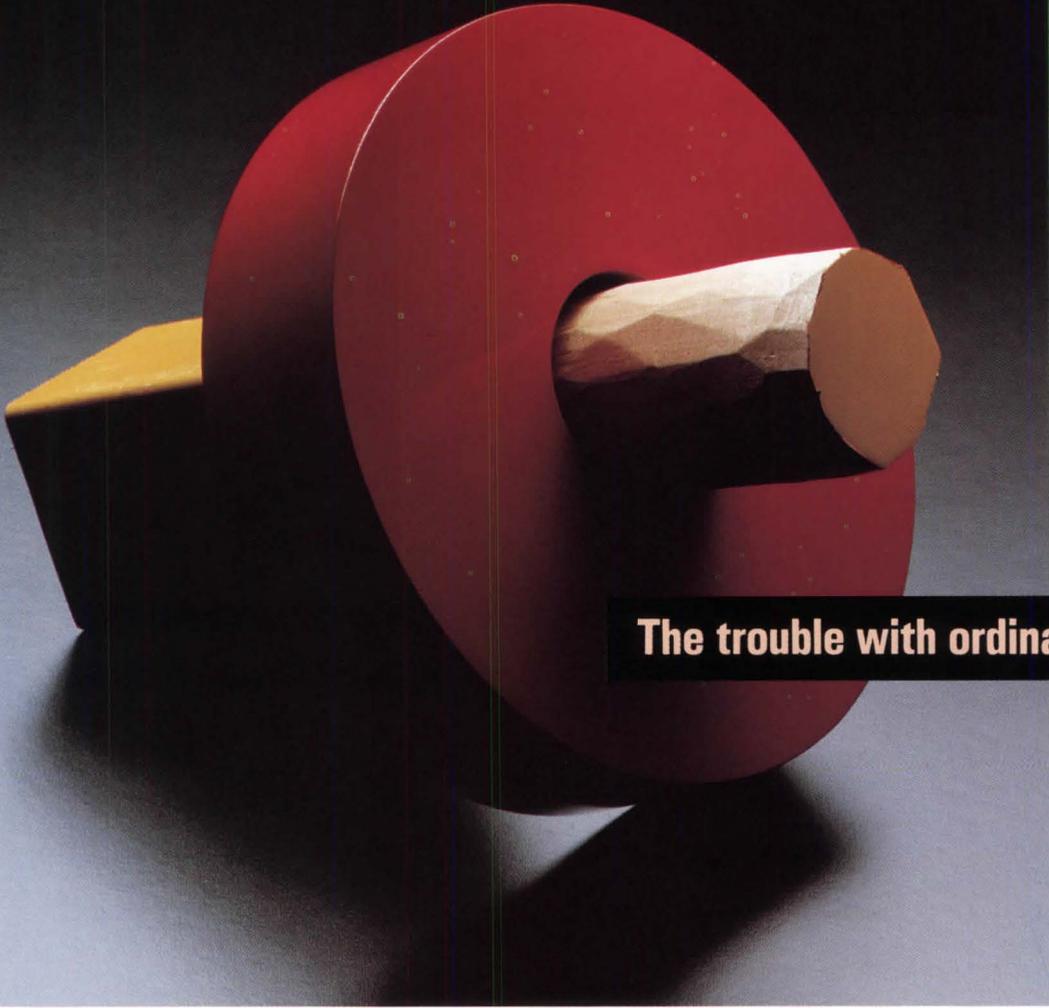
For brochures, test data, specifications, call toll free 800/523-5647. From within Pennsylvania, call collect 215/666-9426.

Lees Commercial Carpet Company



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The trouble with ordinary furniture systems.

Your client wants one design statement throughout the office—on a tight budget. You know that's practically impossible, but...

Or, your client wants to merge three divisions into one and install a furniture system with a high-profile design statement—but keep all existing furniture. You can visualize the aesthetic disaster, but...

Or, your client thinks that by just putting a hot new look into a cold old building, you can transform it into a silk purse. You know better, but...

So you compromise, compromise, compromise.

No longer.

Introducing new **Elective Elements**.[®]

A furniture system that gives you literally thousands of combinations to play with. A choice of wood or non-wood components. A list

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of surface materials that includes eighty-three fabric selections, eleven wood veneers, six laminates, and eight paint colors. Even the option of radial or rectilinear top caps and worksurface edges. Not to mention sophisticated wire and cable management. The result: unheard-of design flexibility.

The job of specification, installation, and reconfiguration is a cinch—in the Steelcase tradition. Also

worth noting: the price spread between wood and non-wood components means your clients can afford to use new **Elective Elements** top to bottom, front to back.

No trouble.



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Whatever the problems your interior environment poses, DuPont Antron can weather them all. DuPont Antron nylon is specifically designed for tough conditions. It gives the best protection against crushing and matting. And it handles soil and stains like no other carpet fiber can.

What's more, Antron handles all your design needs, too. By offering the widest range of colors, textures, and styles, Antron can help you find precisely what you want.

Maybe that's why so many architects and designers put their trust in Antron. And why they've made Antron the number one specified carpet fiber in the country.

Find out more about the DuPont Antron family of fibers in the DuPont Antron Specifiers Guide. For your free copy, call 1-800-448-9835.

THE ANSWERS COME EASY WITH ANTRON[®]



Circle No. 330

on location....

Lario incorporates classic notions with contemporary scale and substance. Designed by Burkhard Vogtherr, Lario is the sort of disciplined design that endorses simplification. The curved line of Lario's back with its harmonious transition into the armrests creates one unified form, dynamically characterized by a distinct welt detail and uncompromising handcrafted quality. Available in a chair, two-seat, or three-seat sofa, Lario offers timeless elegance when upholstered in Brayton hand selected European leather. Lario...a contemporary classic.

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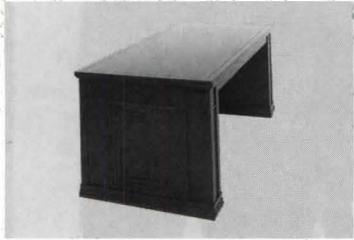
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Circle No. 313 on Reader Service Card



XX

NEOCON®



Dunbar

Complementing the Enloe/Summers collection of executive casegoods, the 2201 Table Desk is constructed of cherry wood and features a diamond-shaped back.

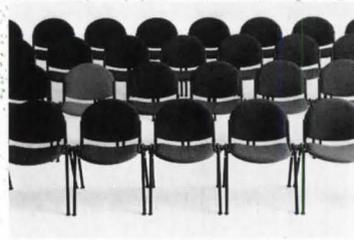
Circle 131 on reader service card



Executive Office Concepts

The Bentley Group of modular casegoods is available in a variety of wood and hardware finishes. Pedestals can be ganged side by side and specified in four depths, desks are offered in seven sizes and ten configurations.

Circle 132 on reader service card



Fixtures Furniture

Romo, a new stacking and ganging chair, is offered in upholstered, wood, and perforated steel selections. Arms, tablets, and a range of accessories complement the chair.

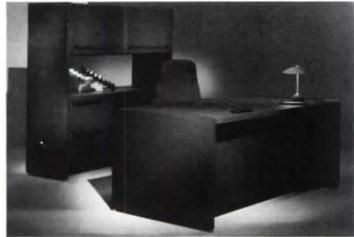
Circle 133 on reader service card



Forms + Surfaces

Barrel Vault luminous skylights are constructed of prefabricated and prefinished components that can fit net openings widths of 6', 8', 10', and 12'. Custom sizes, arcs, and framing member colors may be requested.

Circle 134 on reader service card



GF

A complete display of the Stratum Desk System including the open plan panel system, a new fabrics and finish program, metal top caps, and low-voltage electrical raceways will be featured.

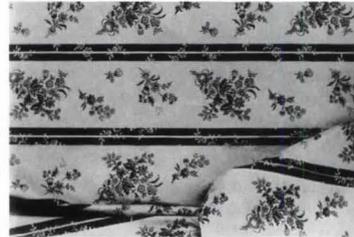
Circle 135 on reader service card



Geiger International

The Jugendstil Collection reflects Viennese Modernist designs through the use of black, red, and natural mahogany wood finishes. Arabesque marbles, black granites, chrome, and brass accents may be selected.

Circle 136 on reader service card



Greeff Fabrics

Part of the Liseres and Stripes collection, Gavotte is a decorative lisere fabric with twilled satin stripes on a ground design of brocade ribbons and flowers.

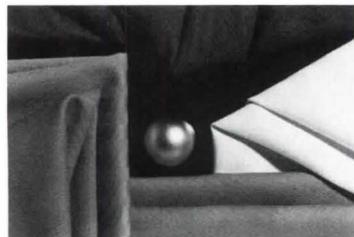
Circle 137 on reader service card



Gunlocke

The Estro line, an addition to the Geva Collection of modular casegoods, includes worksurfaces, modesty panels, vertical storage units, pedestals, and credenzas.

Circle 138 on reader service card



HBF Textiles

Introduced at Designer's Saturday and designed by Orlando Diaz-Azcuy, Studio Cloth and Palladio, both 100 percent wool textiles, are offered in a choice of nine neutral colorations.

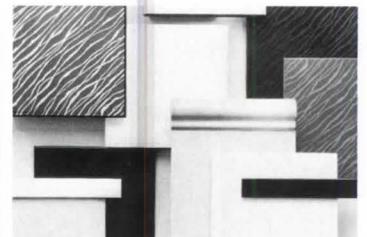
Circle 139 on reader service card



Harter Contract

Introduced in 1987 and designed by Australians Edward Alexander and Peter Robinson, the Wallaby Collection offers managerial seating and a compatible guest chair.

Circle 140 on reader service card



Hastings Tile & Il Bagno

Serie Valentina is a collection of 8" x 8" patterned and solid ceramic wall tiles from Italy.

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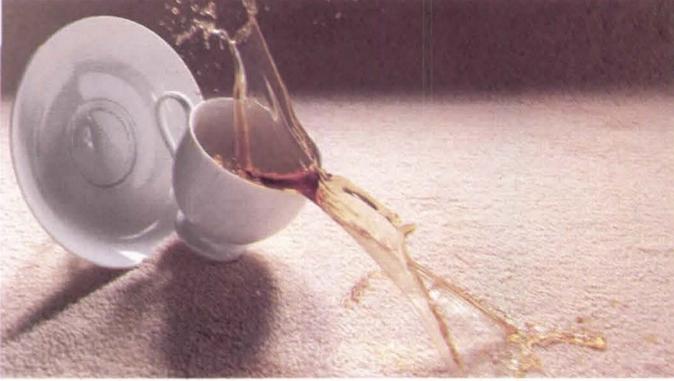
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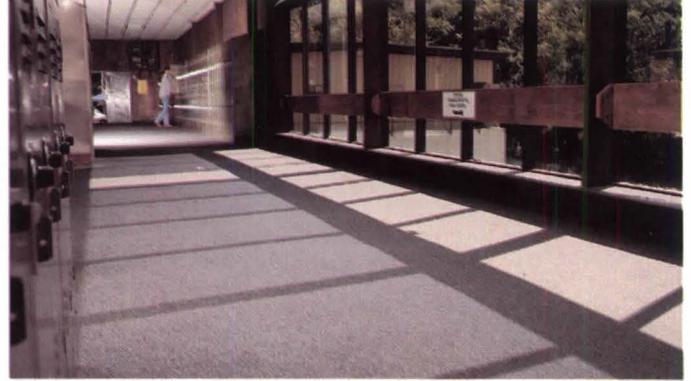
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A Beautiful Way to Make Small Change

Some radical changes happen in a flash: Dr. Jekyll gulps a potion and turns into Mr. Hyde. Clark Kent ducks into a phone booth and Superman emerges. Cinderella tries on a shoe and lives happily ever after.

Changes in the office environment are usually not so dramatic. Alice's office was perfect for her, but Alice doesn't work here anymore. Shirley's work surface is the right height for typing, but her job no longer requires typing. Tim needs another paper organizer for collating. Marketing needs a better way to display reports. Customer service wants acoustical surfaces at phoning height. The new supervisor wants a window.

The beauty of Ethospace interiors is that it lets you make those changes – the kind of changes you make most often. Panel systems let you make panel-sized changes. So does Ethospace, but there are no panels to change. The unique Ethospace frame-and-tile walls accommodate changes on *your* terms. (Many personal changes, like moving or replacing wall-hung tools, can be made by the user himself. Herself. Yourself.) And these changes can be made without affecting any other offices – even those on the other side of the wall. So you can give Alice, Tim, Shirley, marketing and customer service exactly what they need right now. And whatever they will need forever after. Happily.



BEAUTY SECRET

Moderate changes are sometimes the most urgent ones, and the hardest to make. You can easily make changes within work stations, with Ethospace, because of its frame-and-tile walls. This welded steel frame is designed to accept an assortment of modular tiles that may be functional or decorative, or both. It comes equipped with slots at one-inch increments, so components can be hung at precisely the right height. Power is optional and can be conveniently added to any frame at any time. And since the center of the frame is hollow, wiring can be moved to where you want it.

XX

NEOCON®



Haworth

The Places™ program of worksurface options provides new solutions for office interiors through a range of elements.

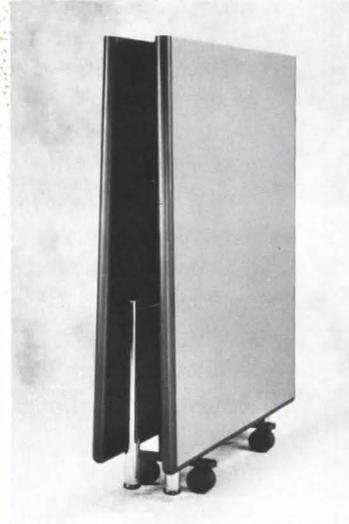
Circle 142 on reader service card



Helikon

Transitions, a modular casegoods system that offers four edge details, is available in mahogany, cherry, walnut, and select cherry veneers. The collection includes desks, wardrobes, credenzas, tables, and other office components.

Circle 143 on reader service card



Howe

The Concorde folding conference table folds down to 14 inches wide and 6½ feet high from 4' x 4'. Rectangular tables are offered in four sizes, boat-shaped tables in two sizes.

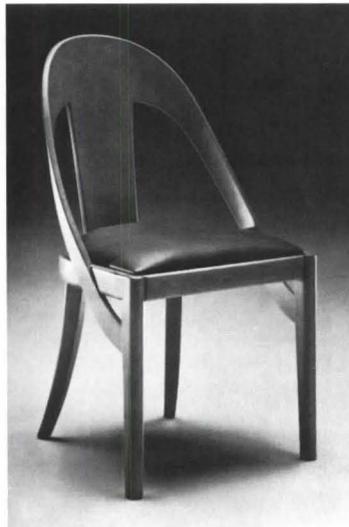
Circle 144 on reader service card



ICF

Consisting of an aniline frame, offered in a black or tea stained finish, with a similar seat—available with a yellow or violet stained finish—the beechwood Trattoria chair was designed by Vico Magistretti.

Circle 145 on reader service card



Interna Designs

Featuring a sweeping curved back for structural support, Adam D. Tihany's beechwood Bice chair is produced in Italy by Trocader.

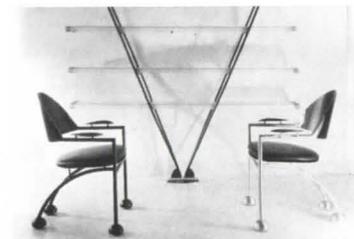
Circle 146 on reader service card



Intrex Furniture

A collection of conference/dining, occasional, and accessory tables in a choice of ten marble and nine granite tops may be specified with contrasting support pedestals and top frames in 28 colors.

Circle 147 on reader service card



JG Furniture Systems

Fabricated of tubular steel with spun steel feet covering the casters, Ronald Cecil Sportes' Chair with Pod Feet is part of his French Furnishings Collection. Tinted black ash arm caps match the seat.

Circle 148 on reader service card



Kimball

Recessed brass drawer/door pulls and a beveled edge treatment with a horizontal veinline accent the double pedestal desks, table desks, credenzas, bookcases, and other executive elements of the 5800 Series of casegoods.

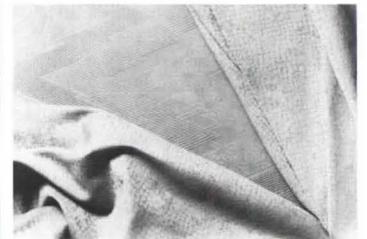
Circle 149 on reader service card



Kinetics

Designed for conference area and workstation installations, the new 400/600 pedestal table offers many color, veneer, and edge-treatment options and round or square tops.

Circle 150 on reader service card

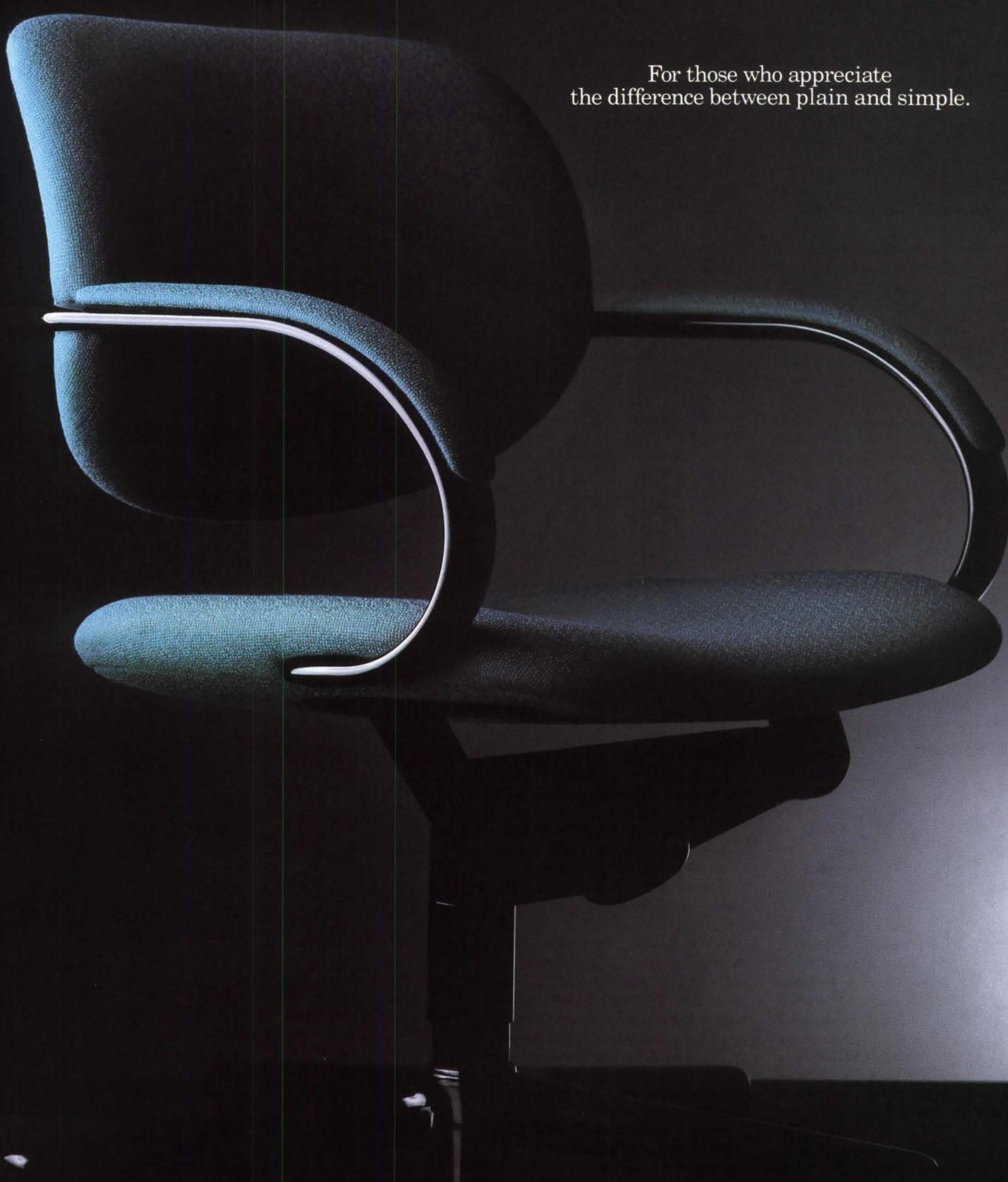


Kirk-Brummel

Chevrons and Chinchester are new coordinating patterns. Both English fabrics are 100 percent cotton and 54 inches wide.

Circle 151 on reader service card





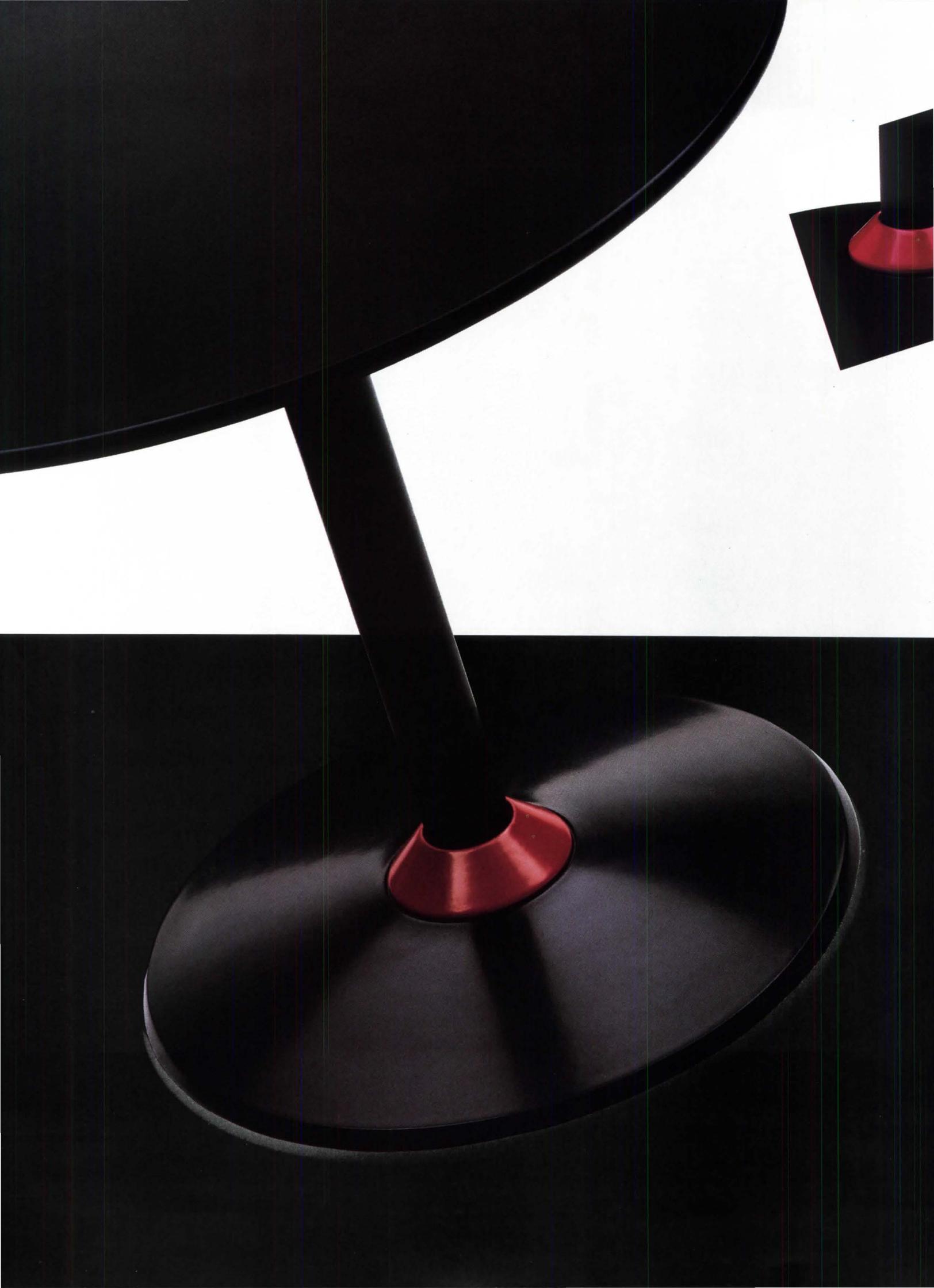
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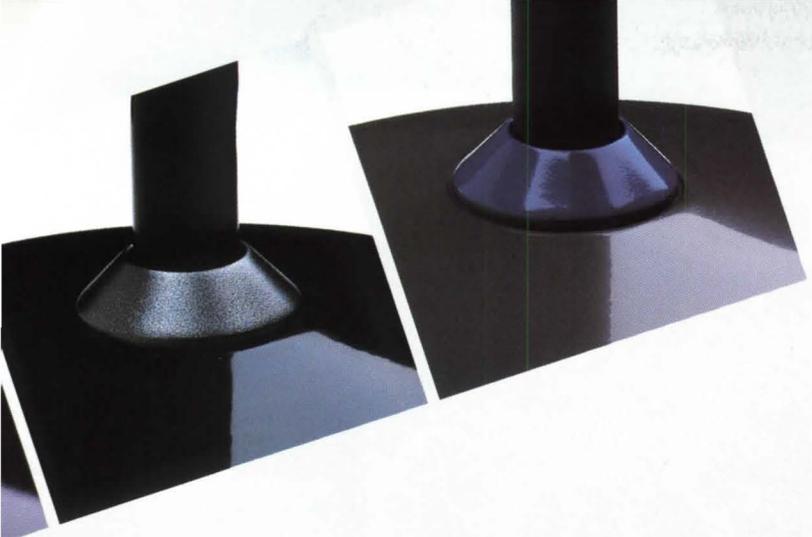
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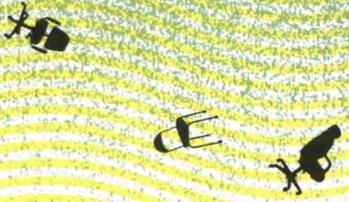




D I S C T A B L E S

Imagine a spectrum of new color possibilities and the freedom to create just the right table combination. With the Disc Table, you have over 30,000 standard ways to coordinate or contrast the column, cone and disc base elements. Top that off with a selection of 26 new laminates and a range of rich wood veneers. Colorful or monochromatic, casual or elegant, but always refined. The choice is yours. The Disc Table. Design by William Raftery.

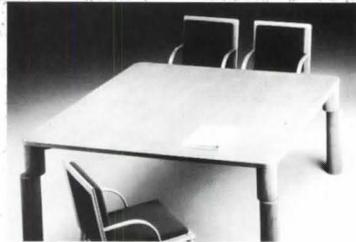
Vecta



Kittinger

The Georgian Collection mahogany desk stands on Chippendale style legs with marlboro feet supporting two drawers on each side. A three-panel leather top with gold and blind tooling is optional.

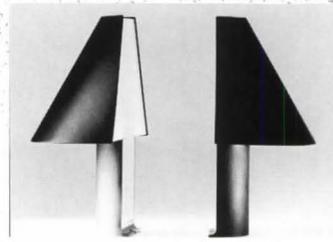
Circle 152 on reader service card



Knoll International

Introduced as part of the KnollStudio Division, the Bridge Chair is designed by Sottsass Associati in Italy. The frame and legs are solid beechwood; the curved arms are constructed of bent beechwood.

Circle 153 on reader service card



Koch + Lowy

The Edipo table lamp, designed by Marco Barbaglia and Marco Colombo, utilizes a white opal diffuser. The shade and base may be specified black or white.

Circle 154 on reader service card



Krueger

Wall-hung storage units and Trans-light® glass panels that can be transformed from clear to opaque at the touch of a button are among the additions to the Com Freestanding Office System.

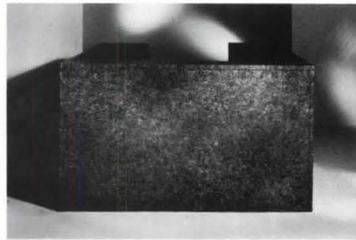
Circle 155 on reader service card



Kusch

The Desanta Seating System, designed in West Germany by Simon Desanta, has been expanded to include executive, managerial, conference, and guest chairs.

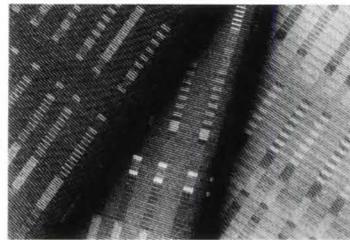
Circle 156 on reader service card



LUI Corporation

New "L" or "U" shaped reception desks feature soft radius edges and may be specified in several colors.

Circle 157 on reader service card



Jack Lenor Larsen

To complement the Tournament and Cabaret/Monograph groups from the Spring Collection, the fabrics in the new Summer Collection include silks and polished satins.

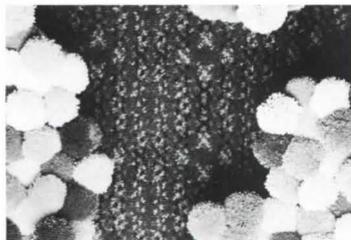
Circle 158 on reader service card



Lee Jofa

An all-over pattern of embossed beige dots on black decorates Arden Weave, a 100 percent woven cotton upholstery fabric. Peach, copper, celadon, and river blue colorways may be selected.

Circle 159 on reader service card



Lees Commercial Carpets

A color bank of 175 dyed yarns is part of a new patterned carpet program designed for heavily trafficked areas. Pile yarns are Zeftron nylon by BASF.

Circle 160 on reader service card



Loewenstein/Oggo

The Verona guest chair is proposed for institutional specifications.

Circle 161 on reader service card



J.M. Lynne

Beaumont III is a collection of 68 paperbacked natural wallcoverings blended of linen, cotton, silk, and rayon. The series includes woven items as well as warp lays.

Circle 162 on reader service card

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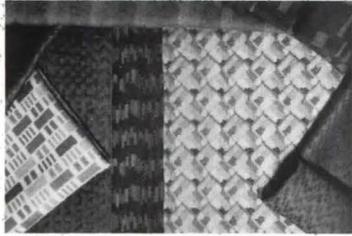
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XX

NEOCON®



Maharam

Composition, Impression, Syncopation, and Jazz are part of Wool Reflections, a collection of six new 54-inch-wide, 100 percent wool upholstery fabrics offering a total of 104 colorways.

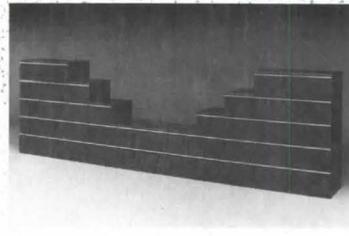
Circle 200 on reader service card



Marden

Also available as a tandem two-, three-, and four-seater, the Fiesta 1 seating series is offered in oak or walnut. The back and seat fabric are removable and can be replaced in the field.

Circle 201 on reader service card



Meridian

Additions to the Stackable Storage System™ include a range of vertical file modules. A variety of inset and outset drawer-front styles and wood or steel pulls can be selected.

Circle 202 on reader service card



Metropolitan

Brian Kane designed the Marin Chair and Loveseat for use in commercial or residential environments. Optional casters may be selected.

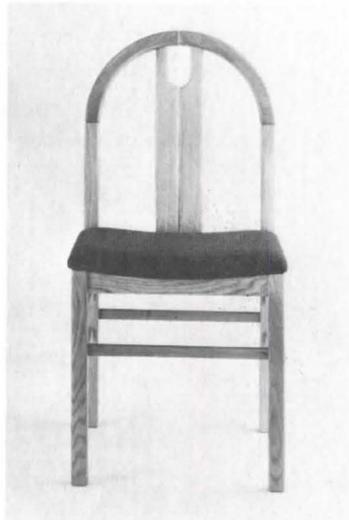
Circle 203 on reader service card



Herman Miller

New fabrics and finishes may be specified for this task chair which is part of the Ergon 2™ product line.

Circle 204 on reader service card



Monel

Offered in beech, ash, or oak; in natural, satin, or lacquer finishes; and in leather or fabric, the Catherine side chair is constructed of molded plywood and designed for all contract applications.

Circle 205 on reader service card



Mueller

A fully upholstered lounge seating group, Phil Cooper's Europe Series consists of a chair, settee, and sofa. Three choices of stitching detail are offered for each piece.

Circle 206 on reader service card



Myrtle Desk

An executive table desk in walnut solids and veneers joins the 400 Sedgfield Collection. A 48-inch diameter round table, executive service table, CRT/printer stand, and redesigned bookcases complete the introductions.

Circle 207 on reader service card



Nemschoff

A new construction method, Cor-loc™ allows for the removal of the upholstered seating core for recovering or cleaning. The feature is offered on six different designs.

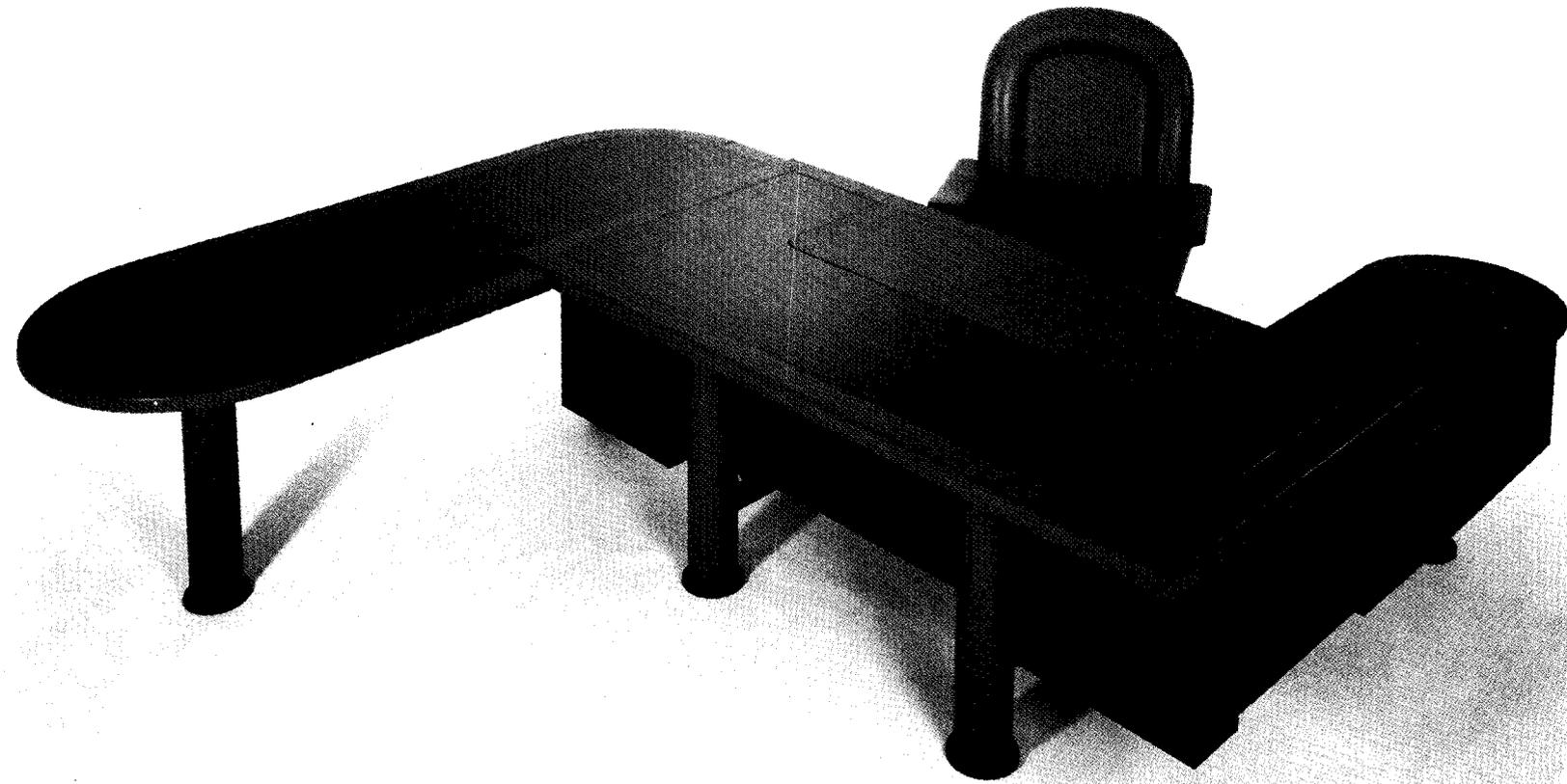
Circle 208 on reader service card



Nienkämper

Featuring a pedestal column of formed perforated steel, the Grid Column Table is offered in textured or chrome finish. The base and top are two inches thick.

Circle 209 on reader service card



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Circle No. 361 on Reader Service Card

Progressive Architecture



Office Specialty

Radius Fronts, a new sculptural front panel option for Storage Centers and Workstore Personal Pedestals, is standard in all 45 enamel colors. Plastic laminate and wood veneers may be specified.

Circle 210 on reader service card



PCI Tandem

The Series One Seating Collection may be custom specified with a fully upholstered arm or with an upholstered arm with low-profile inset wood detail in seven finishes.

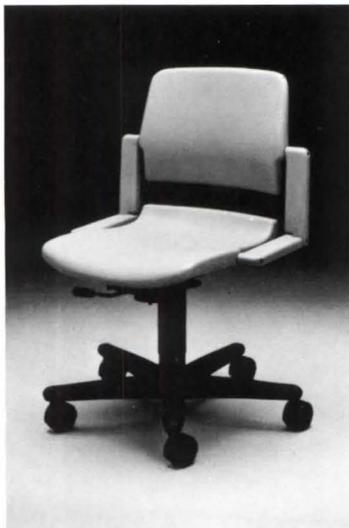
Circle 211 on reader service card



The Pace Collection

G. Faleschini designed Summit executive chairs with a base option of casters or slides. The chair has a tubular black varnished steel frame.

Circle 212 on reader service card



Panel Concepts

Created by Marta Tornero and Bruce Adams of MT Designs, Omnific operational, conference, and tech stool seating models feature articulating arms and a molded urethane construction.

Circle 213 on reader service card



Gable

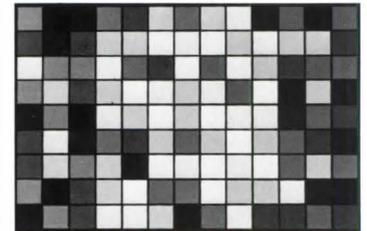


Grant

Partek Tile

Coordinated to 20 unicolored shades, Cinema Series tiles designed by Swedish architect Lena Anderson are finished with a semi-matte glaze.

Circle 214 on reader service card



Patterson, Flynn & Martin

Part of the Obsidian Collection, Bedford Squares is a contemporary design, handtufted in all wool, in black, white, and tones of gray.

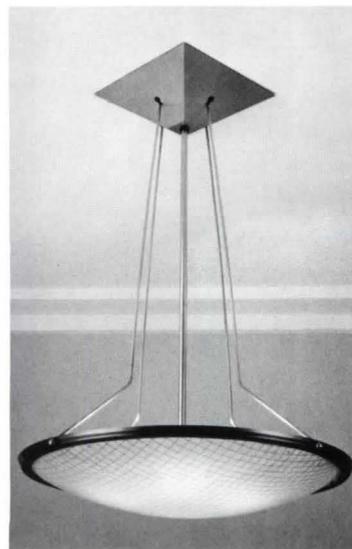
Circle 215 on reader service card



R-Way

Constructed of walnut veneer, the new freestanding computer table features a gliding keyboard drawer that includes a stop-drawer front that opens for use, then closes and conceals the keyboard.

Circle 216 on reader service card



Ron Rezek

The Celeste suspension lamp combines several finishes: molded wire glass sandblasted on the inside; a brushed stainless steel ring; anodized brushed aluminum canopy; and polished brass rods.

Circle 217 on reader service card



Ben Rose

Blue Chip, a 54-inch, wool and nylon blend, is introduced along with Resort, a 54-inch wide fabric that is basket woven of pure wool. Each pattern comes in 12 colorways.

Circle 218 on reader service card

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write American Seating Co., 901 Broadway N.W.,
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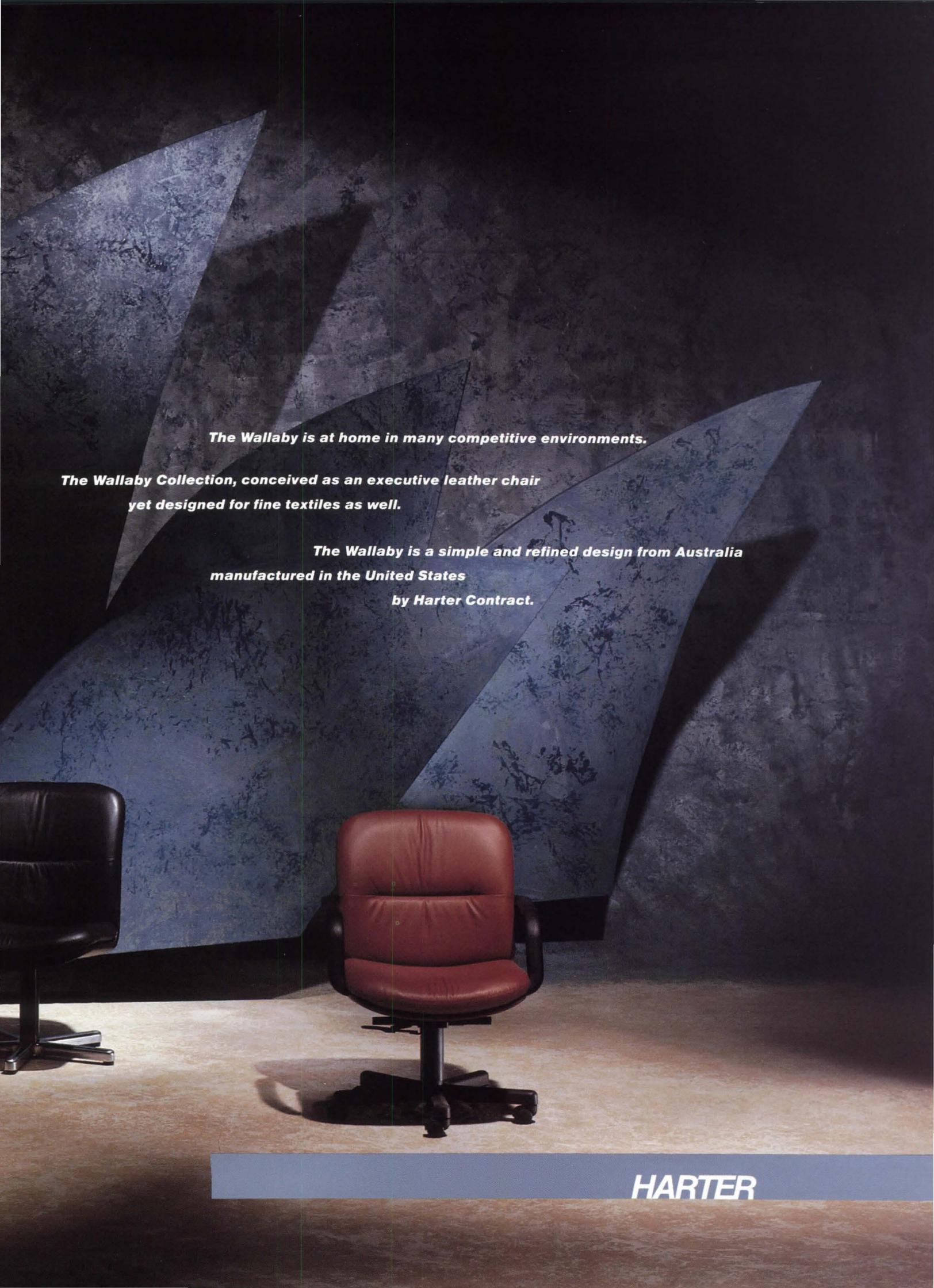
Circle No. 306 on Reader Service Card

Wallaby Seating Collection



USA 1.616.651.3201 Canada 1.519.824.2850 Telex 224453

Circle No. 337 on Reader Service Card

The image features two office chairs in a dark, atmospheric setting. The chair in the foreground is a reddish-brown leather chair with black armrests and a five-point base. To its left, a black leather chair is partially visible. The background consists of large, curved panels with a mottled, metallic blue-grey texture. The lighting is dramatic, casting long shadows and highlighting the textures of the chairs and the wall panels.

The Wallaby is at home in many competitive environments.

*The Wallaby Collection, conceived as an executive leather chair
yet designed for fine textiles as well.*

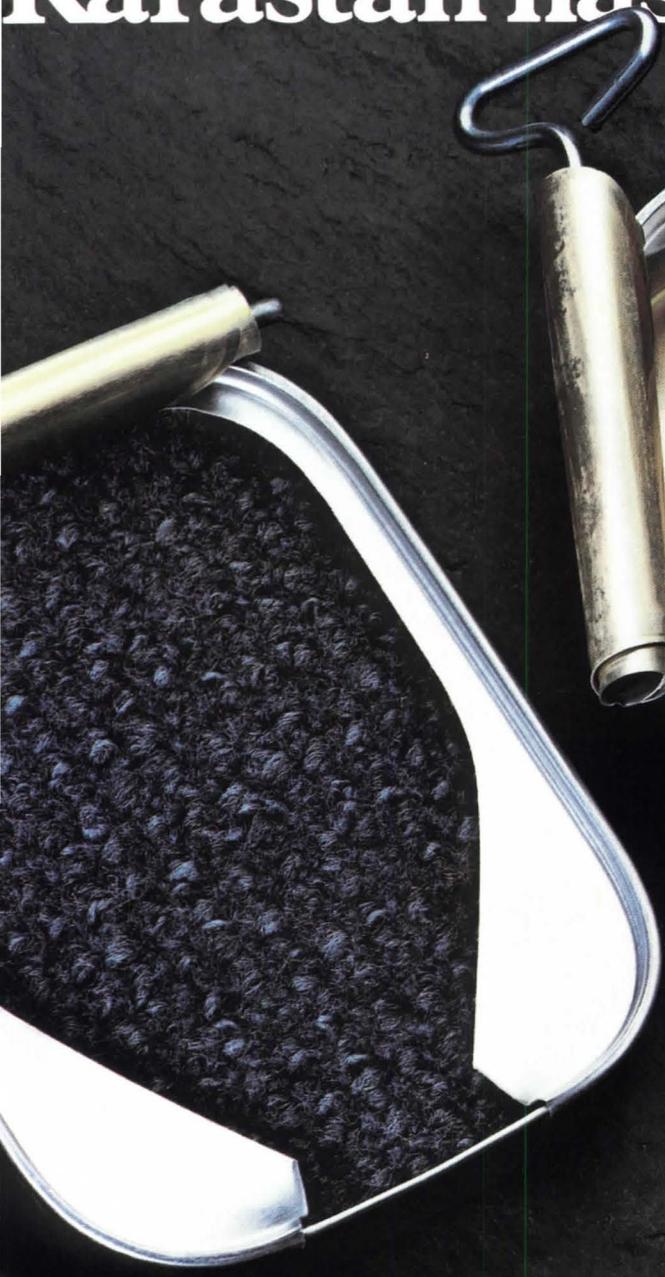
*The Wallaby is a simple and refined design from Australia
manufactured in the United States
by Harter Contract.*

HARTER

Introducing the densest carpet



Karastan has ever woven.



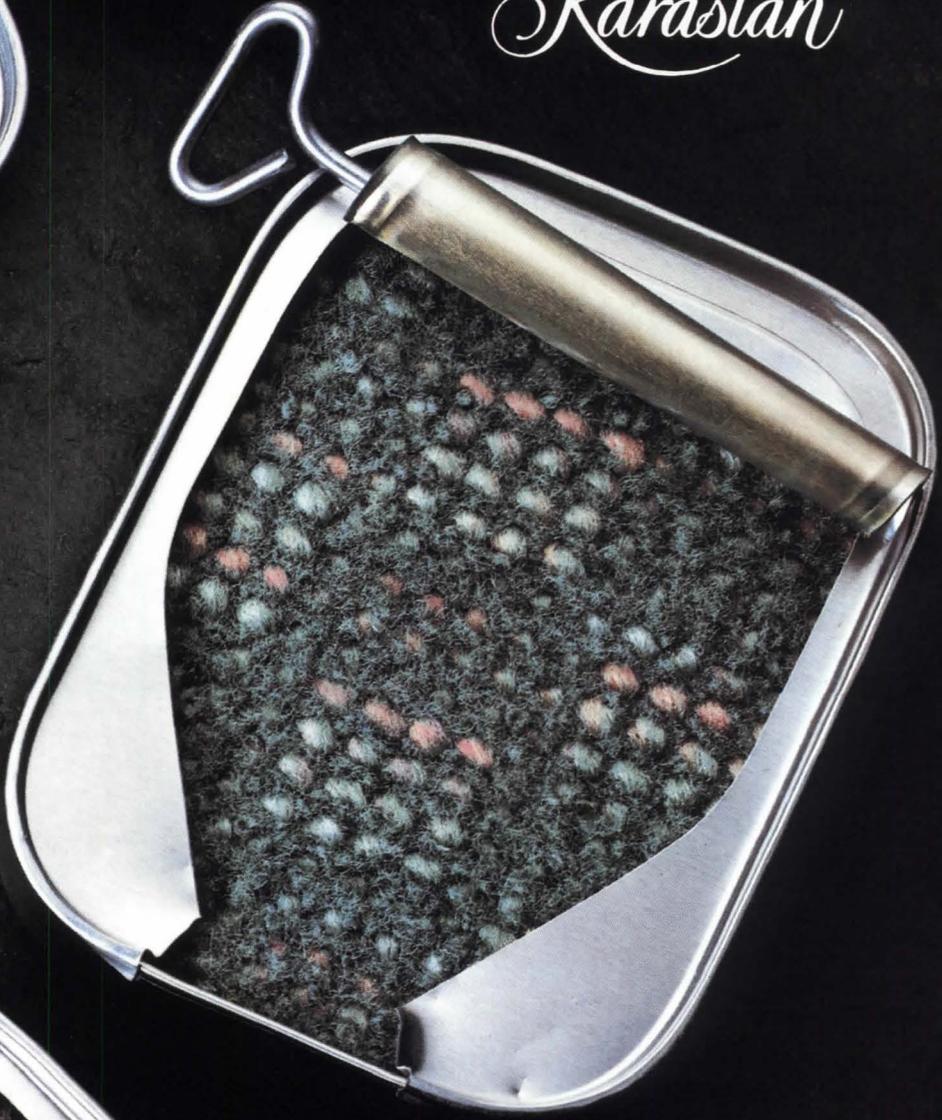
Karastan has woven over 119,000 tufts of yarn into each square yard of this extraordinarily dense new High Spec Series. The yarns used, DuPont ANTRON® and ANTRON® XL nylon, add static-control and soil-resistance to these outstandingly durable styles.

The rich, understated, coordinated colorings and tailored small scale designs work alone or with each other.

To put it more succinctly, never before has so much style been packed into so little space.

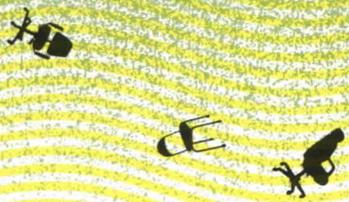
Karastan Rug Mills, a Division of Fieldcrest Cannon, Inc.

Karastan



XX

NEOCON®



RoseJohnson

Eighteen patterns representing 568 colors from the Maharam Synergism program have been added to the line of fabric options for the RJChair, introduced at Designer's Saturday.

Circle 219 on reader service card



Samsonite

A series of seven padded Varix Chairs joins the current upholstered and non-upholstered Varix styles. Stacking arm and side chairs, cantilever-base arm and side, and tablet styles are now offered.

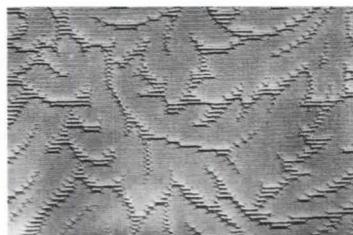
Circle 220 on reader service card



Saladino Furniture

The Marquis Chair consists of a foam core wrapped in feathers, all-foam arms and back, a semi-attached, channel-quilted, Dacron-filled back pad, and a feather-wrapped foam seat cushion.

Circle 221 on reader service card



Saxony Carpet

A 100 percent wool pile broadloom carpet, Foliage is available in bone and rose. The design is a stylized leaf, etched on a solid ground with a coordinating border.

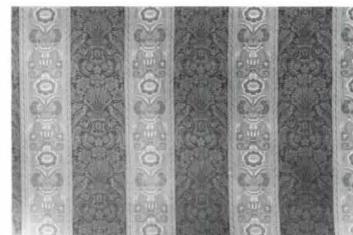
Circle 222 on reader service card



Scalamandré

Inspired by the designs of Viennese artist Koloman Moser, Golden Oriole, a cotton, wool, and nylon damask, is part of the Moser collection of fabrics for wallcovering, upholstery, and drapery.

Circle 223 on reader service card



Schumacher

A tapestry and damask woven together, Obi is 54 inches wide and 100 percent cotton. Colorations include blue, emerald, cream, coral, and garnet.

Circle 224 on reader service card



Shaw-Walker

Improvements to the Woodwind wood furniture system include metal insert options for the tables, new real wood veneers and wood finishes, and smooth transitions from surface to surface.

Circle 225 on reader service card



Shelby Williams

The Tub Style Lounge Chair features a foam-padded spring seat and padded back and sides. The seat height is 18 inches.

Circle 226 on reader service card



Spacesaver

High-density mobile filing-storage systems accommodate new or existing shelving, include mobile laterals, manuals, mechanical assist, and push-button electric powered units.

Circle 227 on reader service card



Stark Carpet

Purvic, a 100 percent nylon cut pile imported from Italy, has an overall zigzag pattern with a sharply defined relief. A choice of 12 colorways may be selected.

Circle 228 on reader service card

FIXTURES FURNITURE®



designed by Manfred Hermann
manufactured under license from Fröscher Sitzform

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delos provides enduring comfort through a unique suspension and cushioning system with the feel of substantial padding in an elegant thin profile. The office chair features a locking tilt with swivel mechanism and pneumatic height adjustment.

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Circle No. 333 on Reader Service Card

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Motion designed
by Burkhard Vogther

Does it naturally move with you?
Does it adjust to support your every move?
Does it conform to your executive style?
If not...then you're not sitting in Motion.

Motion moves you in the right direction... naturally. It supports your continuous shifts in position, so you're free to bend, stretch, think, and work. And, the Motion Series offers nine styles that are proportioned to you and your task.

When you move like this, you're moving in the right direction... you're moving in Motion.

DAVIS

DAVIS FURNITURE IND. INC., P.O. 2065, High Point, NC 27261-2065 (919) 889-2009

Circle No. 328 on Reader Service Card



“To the last person, our Senior VPs applauded the design and ambiance of our new corporate wing, especially the rich style, quality and performance of our **Anso IV**[®] and **Anso**[®] nylon carpets.”

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New York, NY 10018

Carpet—Blue Ridge
Design—Newport



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Circle No. 303 on Reader Service Card

The beauty of Corian® is not
but to your



limited to the kitchen and bath, imagination.



U.S. Post Office Station E, Chicago, Illinois
Interior design by Loebel Schlossman and Hackl



The Inn at Morro Bay, Morro Bay, California
Designed by Mabel Shults & Associates



Conference Table, Bayswater, Western Australia
Designed by Christou and Vuko



Sun Piazza Aquarium, Japan
Designed by Kodo Neriko

There's one solid surface product so extraordinary that it's even used by artists and sculptors.

It's CORIAN—made only by DuPont.

CORIAN can be carved like stone and worked like fine hardwood for total design flexibility. And your work can be ageless, because CORIAN has the elegance of marble, the permanence of stone yet is far more practical.

That's why you'll find CORIAN in hotels, offices, banks, hospitals, food service facilities and university housing.

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A 10-YEAR WARRANTY. ONLY FROM DUPONT.

CORIAN is the only solid surface product proven in commercial applications for over 15 years. It holds up so well that DuPont confidently backs CORIAN with an unprecedented 10-year limited warranty. Nothing compares with it in the solid surface category.

So to make a lasting impression—remember CORIAN. It stands up beautifully, even to the rigors of public use.

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CORIAN

The solid miracle from DuPont.

Circle No. 329 on Reader Service Card



"Forbo Linoleum Lets Me Create Beautiful Mosaics For The Floor."



Lightly marbled Forbo sheet linoleum in 11 different colors provides the perfect medium for Barbara Astman's art floor in the Olympic Speed Skating Oval. The University of Calgary also used Forbo off-white linoleum tile in the halls, where a decorative inlay of the XV Winter Olympic logo is installed.



"An historic building like the Olympic Oval demands a bold and heroic entrance—to enhance the excitement of the Winter Games, to create a legacy for the people of Calgary long after the games have ended.

"Forbo Linoleum comes in such a beautiful spectrum of colors, is wonderfully durable, and lets me create and implement designs as elegant as a Byzantine floor at a quarter of the cost."

Artist/designer Barbara Astman is a native of New York now living in Toronto. For a detailed case history and full color literature contact Forbo North America, today.

Barbara Astman

Artist/Designer
Toronto, Canada

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Mats**Design****Afra e Tobia Scarpa**

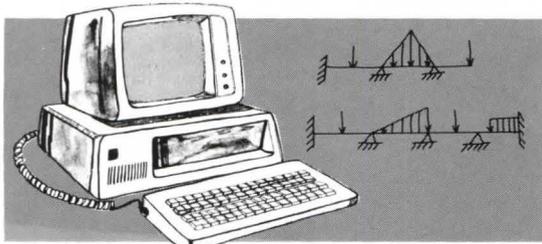
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NEOCON®

XX



Vecta

The Bira Chair offers pneumatic height adjustment, high- and mid-back models, and a new wood base option. A polished aluminum finish may also be selected.

Circle 240 on reader service card



Vitra

The Forum table range, designed by Mario Bellini, is composed of slender cylinders or columns capped by circular, square, or rectangular tops. Finish options for the table tops include wood veneer or laminates with an inlaid edge.

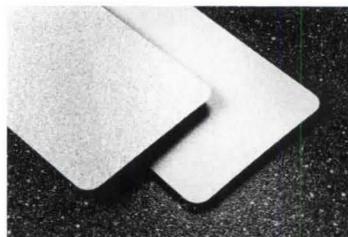
Circle 241 on reader service card



Westinghouse

The Wes-Group Ultra Panel® is constructed of a high-strength, high-density composite core. Fabric designs and textures are laminated to a foamed substrate before being applied to the panel.

Circle 242 on reader service card



Wilsonart

Introductions to the ColorVantage® line of decorative laminates include several new abstract stone designs.

Circle 243 on reader service card



Zographos

The green Tinos marble table, designed by Nicos Zographos, has bullnose edges and a recessed base. It is also available in other marbles and a granite.

Circle 244 on reader service card

BRUETON

The TNT Tables Designed by Cary Tamarkin • Timothy Techler

An innovative series of rectangular and square high and low tables in stainless steel, glass and wood—all offered in a variety of sizes and a choice of Brueton woods. Special sizes available.

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photo: Peter Pojge

Circle No. 315 on Reader Service Card

Opus 2

An Introduction

Neocon 1988

Seating By:

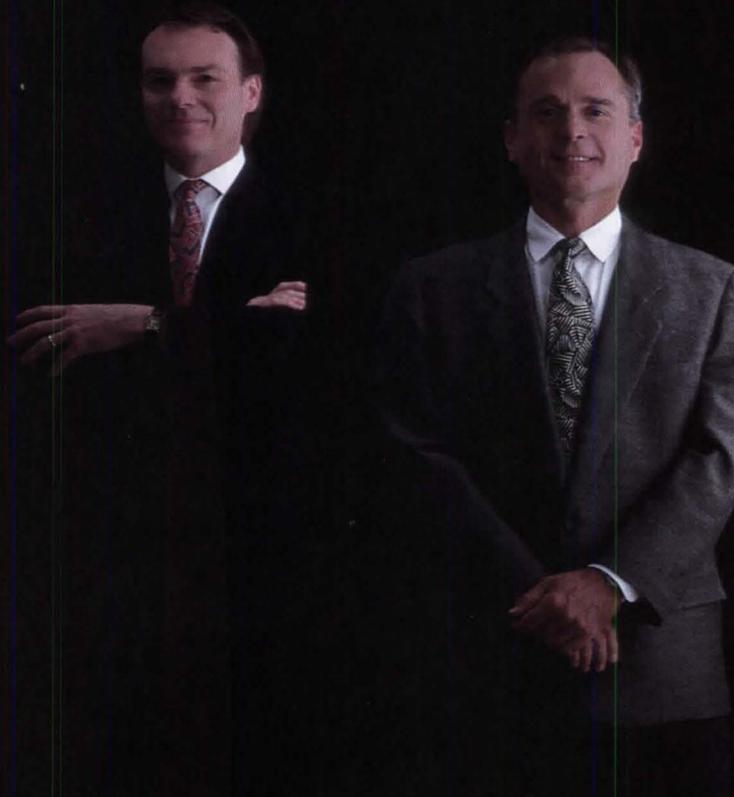
Michael Manwaring

Andrew Belschner

Charles Pfister

Paul Haigh

Michael Vanderbyl



B E R N H A R D T



Opus2



“I needed a panel system - without the panels.”

“A couple months back, I was in the market for new furniture for our Customer Service Department. Fred’s people needed something more than a desk. Something with more working and storage space, more privacy. Something more versatile and space-efficient. Something like a panel system.

“But my budget for the project wasn’t really in the systems range. And as Fred and I discussed his requirement for an open and interactive working environment, it became clear that we were really looking for something like a panel system — without the panels.

“So when our design consultant showed me the Stratum Desk System, I knew we had a winner. Stratum’s interchangeable worktops and pedestals, along with storage components and privacy screens that attach right to the

worktops, gave us the versatility and space efficiency of a panel system without making us buy panels we didn’t need.

“In fact, Stratum Desk gives you everything you expect from a panel system. Except the panels.”

For complete information, send for the “Stratum Evaluation Package”. GF Office Furniture, P.O. Box 1108, Youngstown, Ohio 44501.



Stratum Desk by GF.
When you need a panel system, but you don’t need the panels.

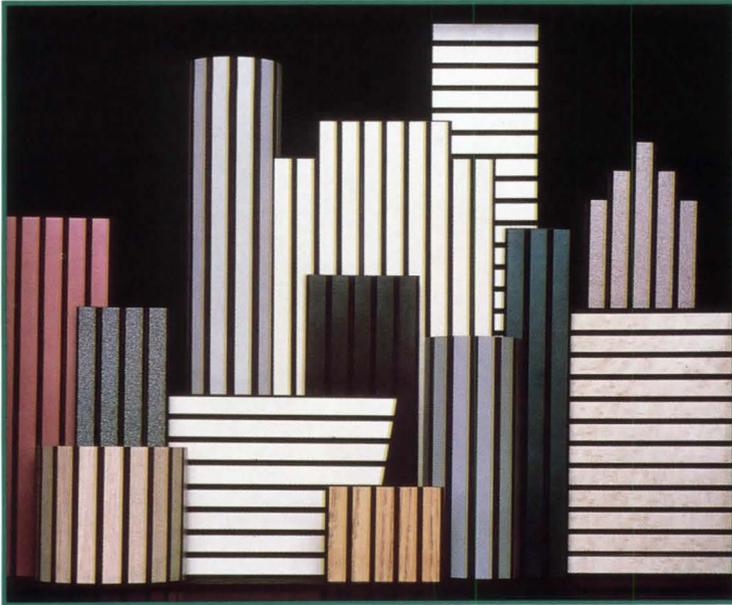


Visit us at NEOCON 20 Space 916.

Circle No. 336 on Reader Service Card

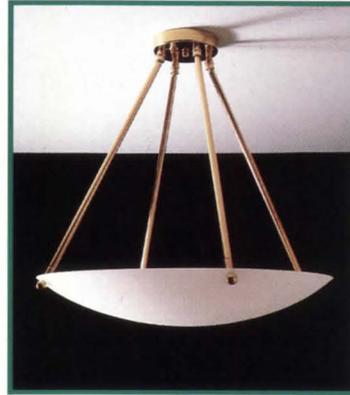
New Products and Literature

104 Technics-Related Products
169 Products and Literature
continued



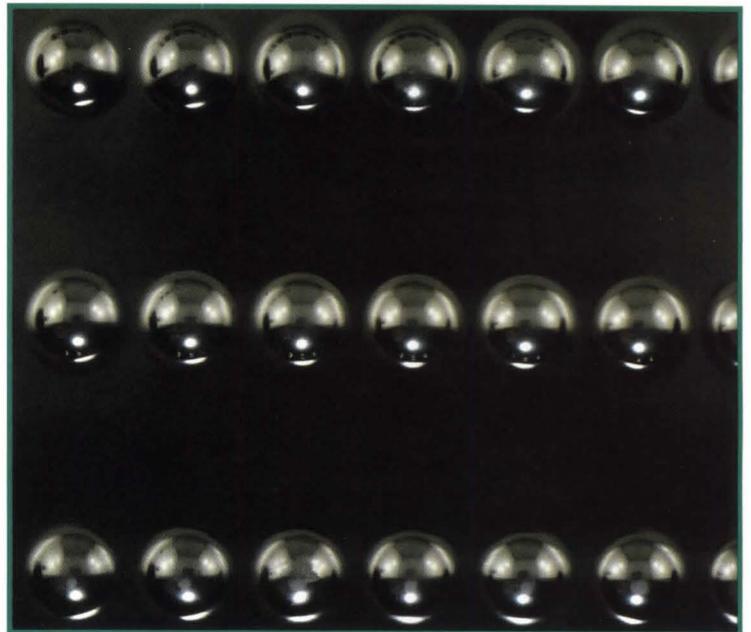
Flexible, grooved tambour in an expanded range of colors and patterns presents increased design options for flat or curved surfaces. The new line of high-pressure, decorative laminate is in addition to the traditional tambour collection, and is available in the following solid colors: bordeaux, black, almond, folkstone, Nile, white, and fog. Patterned tambours include stardust, firedust, vanilla birdseye, and antique white papercraft. Natural oak and doeskin graceful oak join the existing wood-grain tambours. Formica Corporation.

Circle 245 on reader service card



Four pendant lighting fixtures expand the Les Prismatiques line. Artemis (shown), in frosted acrylic with metal arms, casts soft light upwards and diffused light below. The Radial chandelier, a bold, double-tier silhouette of frosted acrylic with brushed pewter detailing, is punctuated by radiating lines of crystal acrylic. The Helius pendant and the Vulcan round out the expanded collection. Les Prismatiques.

Circle 246 on reader service card



Edge-Finder rubber floor tile is designed to alert sight-impaired people to potentially dangerous situations, such as the edge of subway platforms. A rounded dome projects $\frac{3}{16}$ -inch above the rubber floor surface, and is easy to detect by cane or foot. Applicable to indoor and outdoor surfaces, this flooring is available in colors to match flooring systems. Also available are the new Classics Smooth Collection of solid and marbled rubber tiles and rolls, and QL Large Rounded Squares low-profile rubber flooring in six solid colors, with custom colors available. Pirelli.

Circle 247 on reader service card

(continued on page 169)

The Conde House collection includes



chairs and tables, for contract and residential use, designed for us by architects and designers from the East and the West.



It is a diverse collection with a common focus



on fine design, craftsmanship and exceptional wood finishes.



Call your nearest Conde House representative for more information.

Circle No. 320

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(continued from page 167)

The reader service numbers for several products were not included on the reader service card last month, so those products have been repeated below.

Lippa door lever from the Forges Collection is made of nylon with a solid zinc alloy rosette, protected with a powder-coated lacquer. Valli & Colombo (U.S.A.) Inc.

Circle 248 on reader service card

The Sunline stainless steel sink, by designer Luigi Colani, has a bowl configuration that provides maximum working area in a small space. It is available with single- or double-handle faucets in a gold or chrome finish. Optional accessories include deck-controlled pop-up knob for drain release, colander tray, and teak cutting board. Franke, Inc.

Circle 249 on reader service card

Embossed doors Regal® and Regal Limited® have a textured surface with an authentic wood-grain feel. Regal's surface is factory-primed and ready to paint. Regal Limited will accept an extensive range of stains as well as paint. Both are available in a variety of styles and sizes. Weyerhaeuser Molded Doors.

Circle 250 on reader service card

Space-saving stacking chairs, constructed of solid red oak, are suitable for cafeteria, recreation, and study areas. There are more than 100 fabric selections and two wood finishes. Options include fully upholstered seats and backs, upholstered seat with oak back, or all-wood. Modu-Form, Inc.

Circle 251 on reader service card

A ceiling-mounted passive infrared detector uses a dual sensor system to screen out false alarms caused by reflected lights, drafts, and rapid temperature change. The system also avoids detection of small animals. Optex, Inc.

Circle 252 on reader service card

The DTR Series intrusion detection system uses barbed wire atop fences as both a physical barrier and an intrusion alarm sensor system. Using the taut wire principle, sensors on the wire activate the alarm when the wire is deflected. The system is adaptable to existing fences and provides virtually no false alarms. Safeguards Technology.

Circle 253 on reader service card

A central computer system monitors, records, and reports access control and alarm activity for up to 256 entrances and 1024 alarm points. The system can produce individual histories for specific cardholders, entrances, or monitor points. The hardware consists of a desktop computer with a 40 MB hard disk, a 1.2 MB floppy disk drive, and an EGA color monitor. Schlage.

Circle 254 on reader service card

Automated entrance gate systems are available with 15 standard or custom-designed gates in hardwood, hand-forged steel, cast aluminum, or cast bronze. The system's Gate-Tech gate operator integrates an adjustable steel support system with the gate opener, thus concealing the operator for safety and aesthetics. Catalpa, Inc.

Circle 255 on reader service card

The Vidiscan video monitor provides three different matrix displays, allowing the simultaneous review of either four, nine, or sixteen cameras. Identifying text can be placed in the upper or lower portion of each image. The unit offers an alternative to repeated monitors or sequential camera switching. Videoplex.

Circle 256 on reader service card

The Sentries AT Metal Detector avoids false alarms by distributing signals more evenly. The unit can detect small stainless steel guns while ignoring pocket clutter and jewelry. Eight site-specific models are available, each with up to 99 sensitivity settings. Del Norte.

Circle 257 on reader service card

The Shatterbox passive glassbreak detector responds to the sound of shattered glass while digitally filtering out other high-frequency sounds, thus preventing false alarms. The electronic microphone is capable of covering a 35-foot bank of windows, and features directional coverage for optimum signal-to-noise ratio. Sentrol, Inc.

Circle 258 on reader service card

Elevator intercoms provide communication at the touch of a button in case of mechanical failure, medical emergency, or security threat. Security personnel can also monitor the cabs on a continuous basis as a deterrent to crime in high-risk areas. The systems range from two to forty-station capacity. Talk-A-Phone.

Circle 259 on reader service card

The Cardentry Ruspass access entry card gives the user the flexibility of activating an insertion or proximity reader with a single card, eliminating the confusion that can arise from using two cards. The cards can be embossed with up to three lines of information, and can incorporate photographs, custom colors, and custom printing. Rusco Electronic Systems.

Circle 260 on reader service card

Access control card readers for use with the TechniCard line are flush mounted and suitable for tunnels, interior corridors, and other places where space is valuable. A surface-mounted model can be attached to existing walls where access control systems are being added. Both versions can be mounted in any direction so that cards are dipped, inserted upward, or inserted from the side. Frame, Inc.

Circle 261 on reader service card

The ECMG access gate controls the entry and exit of people, carts, and wheeled appliances. The gate is electrically controlled and fully motorized, is wide enough to accommodate large wheelchairs, and may be activated by a floor mat, pushbutton, or card system. Other options include variable speed control and single or dual action. Alvarado.

Circle 262 on reader service card

Touchlock keypad systems for homes or offices unlock doors using a four-digit code rather than a conventional key. The systems are operated with two-year batteries and include a sophisticated low-battery warning system. Other features include easy code change and a built-in doorbell. Paxton Automation.

Circle 263 on reader service card

Battery-powered radar intrusion detection systems offer rapid deployment and coverage of up to 328 feet per pair. The microwave sensor's tone allows personnel to determine the relative size and speed of intruding vehicles. Duration of alarm, height of detection zone, and zone sensitivity are all adjustable. Racon.

Circle 264 on reader service card

The wet-look of Glace wall tile is shown in a free color brochure featuring the ceramic shower tiles in five earthtone colors. Huntington/Pacific Ceramics.

Circle 265 on reader service card

The C30 SecuritySwitch turns lights on automatically when movement is detected inside a 75-foot radius. The coverage spans 180 degrees, making it more difficult for intruders to avoid detection. The switch can be adjusted to operate only at night or when needed, and the system itself consumes less than one watt of power. Burle Security Products.

Circle 266 on reader service card

Domed camera housings, available with brass, copper, or stainless steel finishes, can be mounted from walls, poles, or ceilings. The units hold cameras up to 12 inches long, along with a small pan/tilt or scanner. Optional heaters and blowers allow outdoor use. Videolarm.

Circle 267 on reader service card

LightAlert intelligent outdoor lighting uses infrared sensors to detect motion and turn on lights. Models are available for entryways, floodlighting, and commercial applications. The user can adjust the size of the detection area as well as the amount of time that the lights stay on after movement stops. RAB Electric.

Circle 268 on reader service card

The Home Manager home automation system alerts residents and police to any attempt to open doors or windows, and turns on designated lights when such intrusion occurs. Besides security applications, the system offers convenience features such as appliance control and room-by-room climate control. Unity Systems.

Circle 269 on reader service card

Security doors of laminated glass offer protection from forced entry and bullets without security bars or barricade screens. The door systems, commonly used in airports, banks, jewelry stores, and other secured areas, are sold complete with perimeter framing, floor closers, pivots, push-pulls, locks, and cylinders, and may be ordered with electronic access lock or strike mechanisms. Falconer Glass.

Circle 270 on reader service card

Sound-retardant doors and vision lights (non-operable windows) are described in an eight-page brochure highlighting aerospace, electrical, and critical defense-related applications. Overly Manufacturing Co.

Circle 271 on reader service card

(continued on page 171)



Don't make the same worn out choice.

ECLIPSE® reflective glass from Libbey-Owens-Ford encourages individual expression.

The colors are deep and rich. The reflectivity subtle. Blue-green. Grey. Bronze. And with the reflective coating glazed first surface, a distinctive silver.

Most vision applications don't require heat treating. Not even second surface in an insulated glass unit. So there's no tempering distortion. ECLIPSE reflective transforms solar control glass from stumbling block to focal point.

Good-bye black-and-white solutions.

Color your vision with ECLIPSE® reflective glass.

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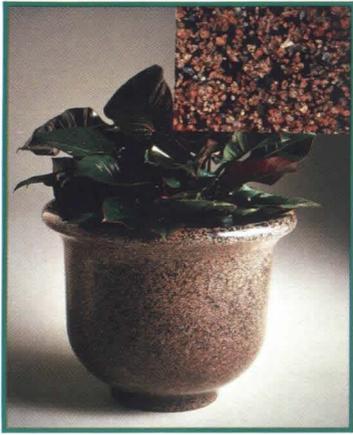
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Circle No. 350 on Reader Service Card

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(continued from page 169)

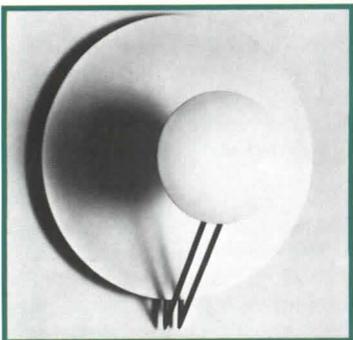


The look of red granite without the cost and weight of real granite is achieved on most seamless fiberglass products with a smooth, clear gel coat embedded with granite chips. Krueger, Inc.
Circle 272 on reader service card

ARC Clean Tread, a carpeted aluminum entrance grid, features tightly spaced carpet treads to help prevent tripping. Vinyl and serrated aluminum inserts are available. Kadee Industries, Inc.
Circle 273 on reader service card

The In-Dor Ironing Center encloses a full-sized ironing board within an all-wood cabinet that fits inside a walk-through closet door or mounts on the wall. An optional electric control panel is available. Uni-Concepts, Inc.
Circle 274 on reader service card

Designer-Shade window insulating film creates moods using silhouetted light and color. Mounted on a roller, the film is raised for natural light and solar gain or lowered to eliminate glare or reflect heat out or back into a room. Send for descriptive brochure. Designer-Shade, Ultec.
Circle 275 on reader service card



The Vega ceiling or wall fixture, created in Italy, projects the crisp white light of halogen against an anodized aluminum surface. Lightning Bug, Ltd.
Circle 276 on reader service card

The RAB100 decorative cutoff luminaire is an unusual outdoor fixture. The reflector/lens system uses fiber optic technology to create the effect of an outdoor chandelier, yet acrylic rods within the hinged lens enclosure are mitre cut, resulting in light bursts that appear suspended in space. Devine Design.
Circle 277 on reader service card

The Diaphragm Design Manual, second edition, includes major additions and expanded, updated information on diaphragm strength, stiffness, connections, and filled diaphragms. The 230-page hard-cover manual is illustrated throughout. Steel Deck Institute.
Circle 278 on reader service card

Masonry anchors and drills are covered in depth in a 16-page catalog that focuses on selection and specification, standards, safety factors, and spacing recommendations. The Rawlplug Company.
Circle 279 on reader service card

Curved curtain walls of ECLIPSE reflective glass provide aesthetically pleasing, high-tech appearance while maintaining insulating integrity. Libby-Owens-Ford Co.
Circle 280 on reader service card

An electric downdraft cooktop that requires no outside venting and eliminates costly ductwork opens downdraft cooking to people living in high-rise buildings. Modern Maid Company.
Circle 410 on reader service card.

The All Deck acrylic coating system creates a uniform, seamless walking surface for new or damaged areas. The waterproof, textured coating can be applied to concrete, wood, asphalt, diato, magnesite, birdseed, masonry, metal, hot-mop, and other deck surfaces. Environmental Coating Systems, Inc.
Circle 411 on reader service card

Spec-Alum column covers in solid aluminum plate have welded seams capable of withstanding high wind loads. Color finishes are highly resistant to ultra-violet light. Specialty Systems, Inc.
Circle 412 on reader service card

Concrete masonry and concrete pavers are described in two brochures available at no cost. National Concrete Masonry Association.
Circle 413 on reader service card
(continued on page 172)

Restoration takes a giant leap backward.



Return with us to the mid-1800's. The first thing you'll note—other than the fact your clothes seem out of fashion—is the new "Dutch Lap" siding everyone's raving about.

"I wish someone could capture that elegant look in smooth, low-gloss, maintenance-free, premium vinyl," you probably muse.

Fret not. We have.

3" Cumberland Mill and 4 1/2"

Stockbridge Dutch Lap styles are now part of the Restoration Collection® of new—yet historically-inspired—siding styles from Wolverine.

Sure, it's taken over a hundred years. But today you can get more information on the



More styles, more options, more ways to make your building your own.

entire Restoration Collection by calling, toll-free: 1-800-521-9020. Talk about progress!

Wolverine Technologies

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COMPETITION

YOU ARE INVITED TO PARTICIPATE IN AN OPEN, INTERNATIONAL 2-STAGE DESIGN COMPETITION

FOR THE WEST COAST GATEWAY



A facility that will be a western welcoming symbol and testament to the immigrants who have contributed so greatly to the city of Los Angeles and the nation.

AWARDS \$60,000 in prizes plus the opportunity for commission.

ELIGIBILITY First Stage is anonymous and open to any interested party. Up to five (5) finalists will be invited to compete in the second stage.

SUBMISSION First stage seeks conceptual ideas for the center. Two 30" x 40" boards required.

INFORMATION: Christine Morigi (213) 479-1295

REGISTRATION To register and receive a registration kit and video cassette, send name(s), address, telephone number and U.S. \$50.00 to:

WEST COAST GATEWAY 11300 West Olympic Boulevard, Suite 730 Los Angeles, California 90064

SCHEDULE

Program available
April 15, 1988.
FIRST STAGE DEADLINE
August 1, 1988.
SECOND STAGE
FINALISTS ANNOUNCED
August 15, 1988.
WINNER ANNOUNCED
November 6, 1988.

PROFESSIONAL JURY A PARTIAL LIST

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DALE ELDRON—U.S.A.
CHRISTINE FEIREISS—W. Germany
ROBERT FITZPATRICK—U.S.A.
RICHARD HAAG—U.S.A.
JON JERDE—U.S.A.
DR. WERNER OSCHELIN—Switzerland
JUHAN PALLASMAA
OCTAVIO PAZ—Mexico
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MICHAEL JOHN PITTAS, HAIA, AICP
DESIGN COMPETITION
SPONSORED BY
TUTOR-SALIBA CORPORATION
AND DMJM

REGISTER NOW!

(continued from page 171)



Minitondo, a low-voltage track system that uses miniature halogen spotlights, combines color rendition and beam control in a compact lighting system for store windows, showrooms, boutiques, and galleries. Targetti Sankey S.P.A. (Italy).

Circle 414 on reader service card

The **IRONLOCK** line of indoor/outdoor unglazed ceramic tile is now available in 31X Commercial Red, featuring a metallic additive to create a textured effect. It is available in the 6" x 6" size, with matching bullnose and corner trim pieces. The line is routinely used in high traffic situations such as chain restaurants, airports, and shopping malls. Metropolitan Ceramics.

Circle 415 on reader service card

Elliptical top windows are available to complement the firm's wood windows and patio doors. Offered in wood or clad wood, the top windows eliminate frame condensation. Wenco Windows.

Circle 416 on reader service card

Modified bitumen decking and waterproofing can help end deterioration due to water and salt corrosion. The modified bitumen membrane, with an elastic polyester core, resists puncture and expansion/contraction as buildings move. Rhoflex.

Circle 417 on reader service card

Patio doors and French doors are new additions to the Sheer-frame line of PVC window and door systems, which includes double-hung and horizontal sliding windows, casements, bays, bows, tilt & turn windows, and custom shapes and designs. L.B. Plastics, Inc.

Circle 418 on reader service card



DURAFLAKE FR grain-free particleboard is designed as a substrate for wood veneers, laminates, and vinyls in walls, furniture, and fixtures where strict adherence to fire codes is critical. A companion product, DURA-DESIGN FR, is a laminated panel available in a variety of patterns and colors. Willamette Industries, Inc.

Circle 419 on reader service card



Series SIC was designed by Eric Fulford of Browning Day Mullins Dierdorf Inc., Indianapolis, and illuminates the Lower Canal development, located between the University and the State Capitol. It includes several footbridges, lagoon, shops, residences, restaurants, offices, hotels, and landscaped esplanade.

THE NEO-ART DECO LUMINAIRE.

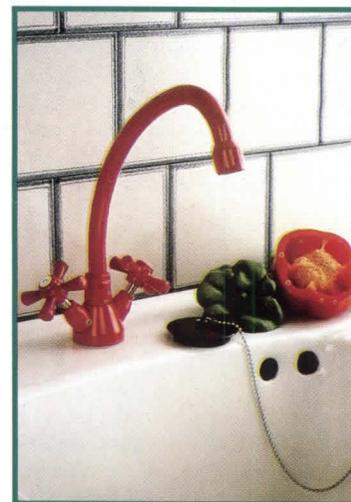
This new luminaire declares its aesthetic heritage boldly in its emphatic contours and sculptured linearity. Created originally for the new Lower Canal multi-use development in downtown Indianapolis, Series SIC is not only visually striking by day, it is also rugged, vandal-resistant, and extremely energy-efficient at night. Available with

mating posts for single or cluster mount. Write, call, or fax for details, price, and delivery. See us in Sweet's and LAFile

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The **RETRO** kitchen faucet is a new interpretation of an old favorite. It combines today's intense colors with traditional cross handles, and is suitable for lavatory or kitchen sinks. Porcher, Inc.

Circle 420 on reader service card

ResoSaver retrofit windows combine shatterproof fiberglass reinforced plastic panels and a layer of insulation for industrial buildings. A brochure describes the window system. H.H. Robertson Co.

Circle 421 on reader service card

Curtain wall testing procedures, finishing standards, and related fabrication capabilities are outlined in a 12-page, full-color brochure. A companion 24-page brochure describes the company's entrances and storefront systems. Amarlite Architectural Products.

Circle 422 on reader service card

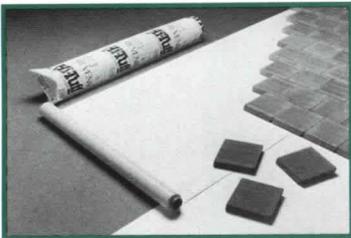


Alades is a new seating design with flared back and arms. The collection includes an armchair, a loveseat, and two sofa widths. Kron U.S.A.

Circle 423 on reader service card

A fabric-backed vinyl wallcovering called "Venice" combines the delicacy and luxury of silk with the strength of vinyl. A pearl-coat finish adds height and dimension. Columbus Coated Fabrics, Borden, Inc.

Circle 424 on reader service card



The Hi-Tuff RBS-100 ballast paver system is intended for use exclusively with the Hi-Tuff single-ply roofing system. Four standard and other custom color options are available on the units, which provide high-wind protection and carry a total system warranty from the manufacturer. Roofblok Limited.

Circle 425 on reader service card

A total skylight system, designed to follow the profile of the roofline, is the first of its kind for low-profile metal buildings. The product can also be used with standard rib panels of greater roof slopes. Custom-Curb, Inc.

Circle 426 on reader service card

Personal Choices ceramic tiles and bathroom fixtures feature eight decorator motifs and eight background colors in one size, 4" x 4" x 1/4". Summitville Tiles, Inc.

Circle 427 on reader service card

Single-ply Versigard EPDM rubber roofing systems are detailed in an 18-page booklet highlighted by color photos and installation diagrams. Goodyear Roofing Systems Division.

Circle 428 on reader service card

Movable wall systems with just five component parts are highlighted in a 12-page brochure that includes architectural drawings detailing the Forecast Series 100 and Series 200 wall systems. The Mills Company.

Circle 429 on reader service card

ENVIRO-SCAPE landscaping, using natural and man-made materials, brings nature's aesthetics into lobbies, atriums, common areas, and grounds surrounding buildings. Illustrated examples are available. Cost of Wisconsin, Inc.

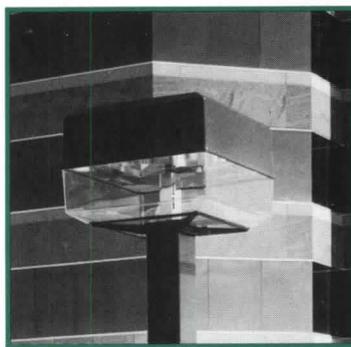
Circle 430 on reader service card

The Eagle 1760 Corporate Scanner, a high-resolution tabletop unit, is designed for automated image capture in the corporate publishing field. The intermediate-priced C-scale scanner incorporates both raster formats and raster-to-vector conversion capabilities. ANA Tech Corporation.

Circle 431 on reader service card

A 14-foot-wide Grand Revolver revolving door allows four pedestrians to walk abreast through it. The four-wing automatic door can be set to revolve continuously at four RPM or can be activated by a microwave motion detector. It also features a push-to-activate switch to slow the door to a safer two RPM. Horton Automatics.

Circle 432 on reader service card



The Supra-Lyte 250-watt luminaire, in nonmetallic housing, produces the same peak lighting intensities as a typical 400-watt high-performance post-top fixture. Wide-Lite.

Circle 433 on reader service card

Paint and other protective coatings for ferrous and nonferrous metals are described in a pocket-sized, 322-page book. Applications covered range from marine anticorrosion to products used in high-temperature environments. Sigma Coatings B.V. (Holland).

Circle 434 on reader service card

(continued on page 175)

Restoration is on a roll.



The origins of the "rolled" profile that inspired Restoration® Monterey premium vinyl siding are lost in antiquity. Or in our files.

We do know we've seen its unique shadowline on 19th-century homes from New York to California. And we know we like it.

More to the point, now you know Monterey rolled-edge, 3" siding is part of the new Restoration Collection®. Which means it's the only rolled panel with the smooth, low-gloss finish that makes Restoration such a good idea in the first place.

Or, if you prefer 3" premium vinyl panels in the traditional clapboard style (hold the roll), feel free to choose Restoration Cambridge.



More styles, more options, more ways to make your building your own.

They're both part of a Collection worth talking about. Good thing 1-800-521-9020 is toll-free.

Wolverine Technologies

Circle No. 387 on Reader Service Card

O L Y M P I C

OPEN COMPETITION

Architects, Urban Designers, City Planners, and Landscape Architects are invited to participate in a unique, open, international, two-stage competition to design the public environment of a ten block stretch of Los Angeles' famed Olympic Boulevard...and...the architecture of two major private office towers in the district.

REGISTER NOW: To register and receive the program and video cassette, send name(s), address, telephone number and US \$85 to: "Olympic West Competition," 11444 W. Olympic Bl., Suite 1100, Los Angeles, CA 90064 USA

SUBMISSION: First Stage seeks two 30"x 40" boards.

AWARDS: \$50,000 in prizes, plus opportunity for commission.

PROFESSIONAL JURY: Ricardo Bofill: *architect* Regula Campbell: *landscape architect* John Dixon: *architect* journalist/editor Richard Meier: *architect* Rai Okamoto: *urban designer/city planner* James Wines: *artist/designer*

PROFESSIONAL ADVISOR: Michael John Pittas

ELIGIBILITY: First Stage is anonymous and open to any interested party. Up to five finalists will be invited to compete in the Second Stage.

SCHEDULE: Program available May 30. First Stage deadline August 26. Second Stage finalists announced September 12.

INFORMATION: Contact Deborah Rosenthal Phone 1-800-451-7270 213/312-3600 FAX 213/479-3086

W E S T

THE GARDEN DISTRICT

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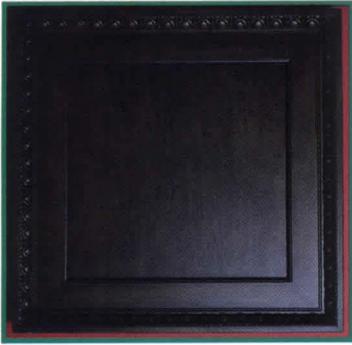
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Circle No. 332 on Reader Service Card

TCL

(continued from page 173)



Suspended plaster ceiling tiles are available in a variety of exotic faux finishes, including wood, and vivid colors. Above View, Inc.

Circle 435 on reader service card

Regal Antique faucets and fittings from England are now available in the U.S. Also offered is a floor-mounted bath and shower mixer, and a wall-mounted shower mixer. Watercolors, Inc.

Circle 436 on reader service card

Single-surface tilt tables provide ergonomic platforms for computer drafting/writing areas. The adjustable tilt-angle tables are available in 45-inch and 60-inch-wide versions, and are part of the company's Generation III line of computer support furniture. Human Factor Technologies, Inc.

Circle 437 on reader service card

Pure wool carpets for retail stores are featured in a six-page booklet that promotes wool's comfort, acoustics, texture retention, stain-resistance, ease of installation, and safety benefits. The Wool Bureau, Inc.

Circle 438 on reader service card

TrueLine oak raised-panel doors are the only such products with a certified 30-minute fire rating. TrueLine doors are offered in many species of wood and in sizes up to four feet high and eight feet wide. Jessup Door Company.

Circle 439 on reader service card

The Mega data rack, featuring hanger bars, can hold more files in less space than enclosed filing systems. The rack is engineered with an all welded tubular base and a high-pressure oak laminate top that serves as an additional work surface above the files. Mega data racks are available in three sizes. Dennison Monarch Systems.

Circle 440 on reader service card

Structural wood panels produced under APA performance standards are described in a revised 12-page product guide covering conventional plywood, composites, waferboard, oriented strand board, and structural particleboard. American Plywood Association.

Circle 441 on reader service card

SHOPLOG and PROJECT HISTORY are software packages designed to satisfy the computer needs of architects and designers. Both are written for IBM PCs or compatibles, and each is priced at \$995. Computer Design Group.

Circle 442 on reader service card



Du Pont Dymetrol spring-back seating support panels are used in four innovative chair designs—Marvins, Waveform, Lazy Spiral (adjustable), and Rocker. One piece of the elastomeric monofilament woven with textile yarns replaces conventional springs, coils, clips, webbing, padding, and decking material. Du Pont Company.

Circle 443 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.

United Gulf Bank, Manama, Bahrain (p. 65). Architects: Skidmore, Owings & Merrill, Chicago. Roofing/waterproofing: Uniroyal. Revolving doors: Tubelite. Overhead doors: J.G. Wilson. Washroom accessories: Bobrick. Fabric ceilings: Decoustics. Precast cladding: United Building Factory Industries. Marble: Marmi-Graniti; Marmi Vincentini. Carpets: Lees. Task lighting: Koch + Lowy, Lightolier. Custom fixtures: Jules Fisher/Paul Marantz. Office chairs: Herman Miller, Knoll, Zoographos, Design Selections International. Custom millwork: Schildknecht.

Restoration recalls the high-tech look of 1639.



When we sent our siding designers' imaginations roaming free, the first thing in question (other than how to get our staff back) was how to duplicate the wide, beaded panels that were once all the rage in the New World.

The answer: Restoration® Chapel Hill—a 6" beaded panel that now takes its proud place in the new Restoration Collection®.

We think it's time "ye hottest looke" in 17th-century siding had another turn—but this time in low-gloss, satin-smooth, maintenance-free, premium vinyl. And if folks want to say that's like combining the best of then with the best of now, we won't argue.

In fact, we'll send literature on Chapel Hill and the whole new Restoration Collection when



More styles, more options, more ways to make your building your own.

you call 1-800-521-9020. And it's free. (The same price as a toll-free call in 1639.)

Wolverine Technologies

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INFORMATION

○ For additional information about any product or service featured, please circle the appropriate reader service number on the postage-free card at the back of the magazine.

P/A

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 - FREE admission to architects and designers
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-

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For registration information contact:

CTDA

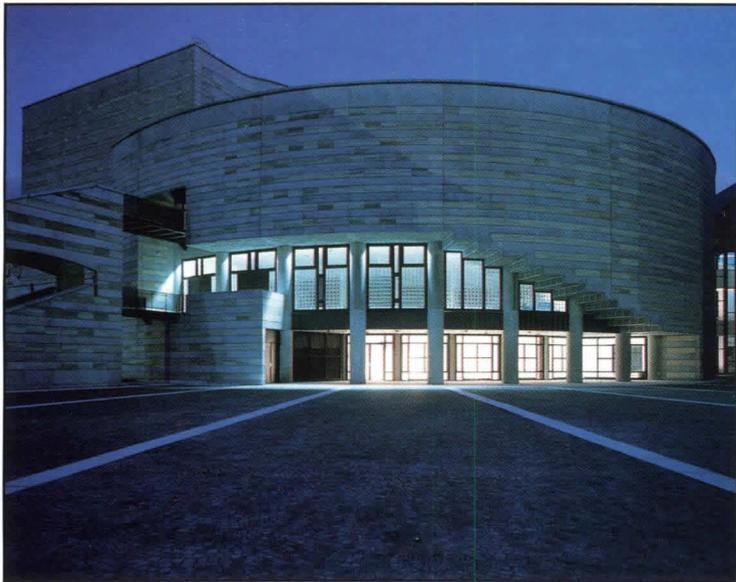
15 Salt Creek Lane—Ste. 422
Hinsdale, IL 60521
Phone (312) 655-3270
FAX 312-655-3282

ATTMCA

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Jackson, MS 39236
Phone (601) 939-2071
FAX 601-932-6117

For exhibitor information, contact:

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600 Talcott Road
Park Ridge, IL 60068
Phone (312) 823-2151
FAX 312-698-1762
TELEX 6502584508MCI



Night view of Mario Botto's theater in Chambéry-le-Bas.

Botta in Chambéry-le-Bas

Opening the June issue will be Mario Botto's new theater in Chambéry-le-Bas, France, which resolves a complicated program and difficult site conditions with considerable grace and apparent ease.

Corporate Clients

Corporations are not only major clients, but major employers of architects. A series of articles in June will look at the architects, facilities departments, and building programs of four major corporations: Disney, IBM, Prudential, and Marriott.

Also in June

A P/A Inquiry article on the design of hotel guest rooms and a P/A Technics article on curtain wall restoration will complete the feature section. The results of the Reader Poll on competitions will also be published, along with a questionnaire for a new poll on design preferences.

Call for Entries

PCI Design Awards Harry H. Edwards Award

The Prestressed Concrete Institute invites Architects, Engineers and Designers to submit outstanding precast/prestressed concrete structures for its 1988 Design Awards. Any type of structure in the United States or Canada using plant manufactured precast/prestressed concrete or architectural precast concrete is eligible. Winners will receive national publicity in major architectural publications.

Entrants may also wish to have their structures considered for the 1988 Harry H. Edwards Industry Advancement Award, which honors technological and design innovations in the field of precast/prestressed concrete.

The submission deadline is
July 31, 1988.

For more information, contact:

pci The Prestressed Concrete Institute
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(312) 786-0300



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One of the largest, most magnificent Homes in the Arthur Rutenberg collection, judged as the "Best Designed Home of the Year" by the National Association of Builders. The Biscayne, with its elegant vaulted ceilings, enormous master suite and every conceivable amenity, is the epitome of the large, luxury Florida home.

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From its angled entrance foyer to the elegant raised bath in the master suite, the Gulfstream V is one of Arthur Rutenberg's most exciting, creative designs.

* All Arthur Rutenberg designs are available at Saddlebrook.

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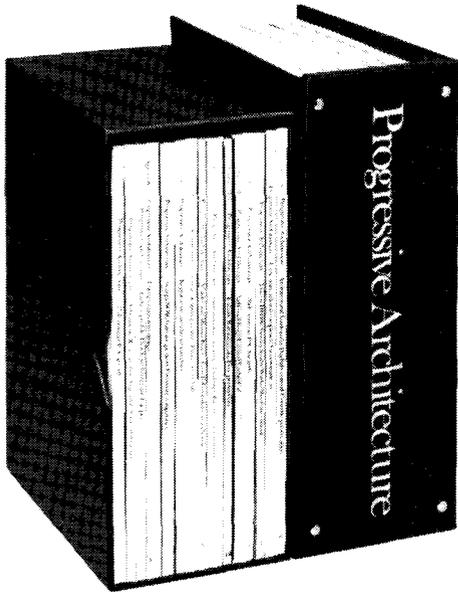


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Salary is competitive and commensurate with qualifications and experience. Applicants should send a letter of application, resume, transcripts and three letters of reference to **John F. Collins, Chairman, Dept. of Landscape Architecture and Horticulture, Temple University, Ambler, PA 19002.** Temple University is an affirmative action, equal opportunity employer.



ARCHITECT Ball State University Muncie, Indiana

This individual (1) directs the completion of assigned design projects from client contact and design development through complete construction drawings (and specifications if needed) and (2) coordinates activities of design team for in-house projects. These projects encompass all necessary architectural design, interior design and structural aspects of the development and remodeling of university facilities. Minimum Qualifications: Bachelors degree in Architecture or a related field; at least 2-3 years experience with a professional architectural/engineering or related design firm; knowledge of architectural design, structural, mechanical and electrical principles, state building codes, and OSHA regulations; ability to complete professional quality construction drawings and specifications, develop project budget, project management and contract administration. Preferred Qualifications: Architectural registration in the state of Indiana; supervisory experience with a design group. Review of applications will begin immediately and continue until position is filled. Send resume, three (3) original letters of reference and official transcripts to Dr. Norman Beck, Human Resources Department, Ball State University, Muncie, IN 47306. Ball State University Practices Equal Opportunity in Education and Employment

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Carnegie Mellon University, Department of Architecture, plans to substantially increase its faculty, especially in the areas of design, building technology, and computer-aided architectural design. It is seeking applications for full-time, tenure track positions for 1988-89 at the rank of Assistant or Associate Professor. Successful candidates will be expected to teach in the undergraduate or graduate program and to contribute to the advancement of architecture through research, scholarship, or practice.

Carnegie Mellon is an equal opportunity, affirmative action employer. Salary and rank will be commensurate with qualifications. Send resume and list of references to: Professor Ulrich Flemming, Acting Head, Department of Architecture, Carnegie Mellon University, Pittsburgh, PA 15213, USA.

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CARNEGIE MELLON UNIVERSITY

Head Department of Architecture

Carnegie Mellon University invites applications for the position of Head of the Department of Architecture. The faculty and the university administration have developed a strategic plan that calls for an expansion of the faculty size and increased enrollment in the PhD program. All full-time faculty will be engaged in research and scholarship or in a practice that contributes to the discipline. Computer-aided design and building performance are the subjects of two established research programs.

The University and the faculty of its Department of Architecture are seeking a person who will provide persuasive leadership for the discipline within the College of Fine Arts, the university, and beyond. Willingness to raise funds, accept established programs, work cooperatively with faculty, recruit faculty and students and foster excellence will be considered essential. The search committee seeks persons committed to the belief that architecture is a university discipline.

Nominations and applications should be submitted by 31 July 1988. Documents in support of persons identified as acceptable candidates for the position will be requested thereafter. The search committee will make its recommendations to the dean and provost following interviews of a select number of candidates who will be invited to the university during the Fall Semester 1988. Dr. Paul Christiano, Professor and Head of the Department of Civil Engineering, is chairman of the search committee. Address correspondence to him at the Department of Architecture, Carnegie Mellon University, 500 Forbes Avenue, Pittsburgh, Pa., 15213, USA. Telephone calls should be placed to (412)268-2356. Carnegie Mellon is an equal opportunity, affirmative action employer.

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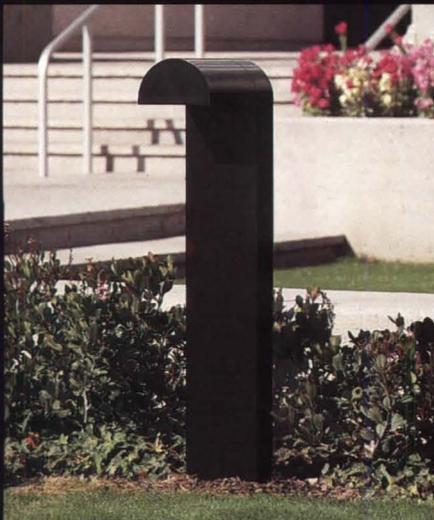
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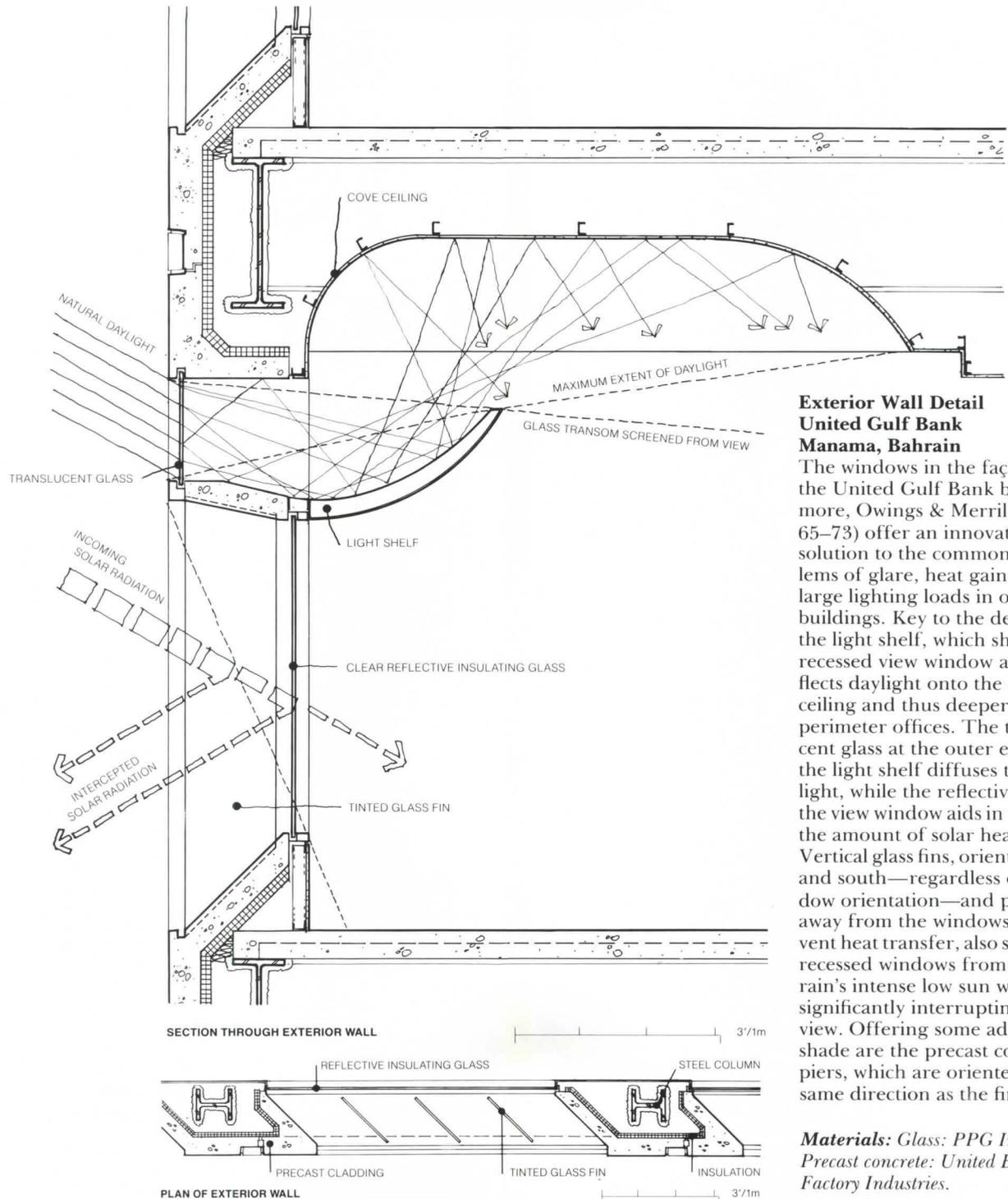


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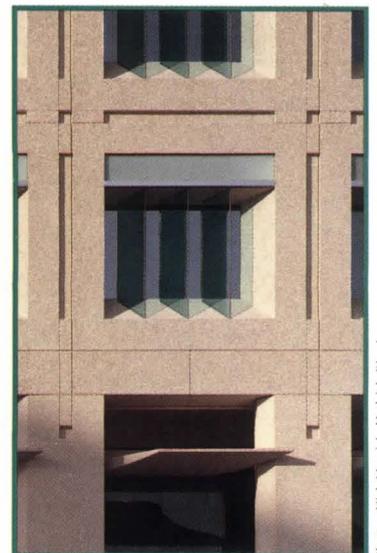
Exterior Wall Detail United Gulf Bank Manama, Bahrain

The windows in the façade of the United Gulf Bank by Skidmore, Owings & Merrill (pages 65–73) offer an innovative solution to the common problems of glare, heat gain, and large lighting loads in office buildings. Key to the design is the light shelf, which shades the recessed view window and reflects daylight onto the coved ceiling and thus deeper into the perimeter offices. The translucent glass at the outer edge of the light shelf diffuses the daylight, while the reflective glass in the view window aids in reducing the amount of solar heat gain. Vertical glass fins, oriented north and south—regardless of window orientation—and pulled away from the windows to prevent heat transfer, also shade the recessed windows from Bahrain's intense low sun without significantly interrupting the view. Offering some additional shade are the precast concrete piers, which are oriented in the same direction as the fins.

Materials: Glass: PPG Industries; Precast concrete: United Building Factory Industries.



OFFICE INTERIOR SHOWING LIGHT SHELF AND GLASS FINs



DETAIL OF EXTERIOR WALL

Photos: Nick Merrick, Hedrich-Blessing

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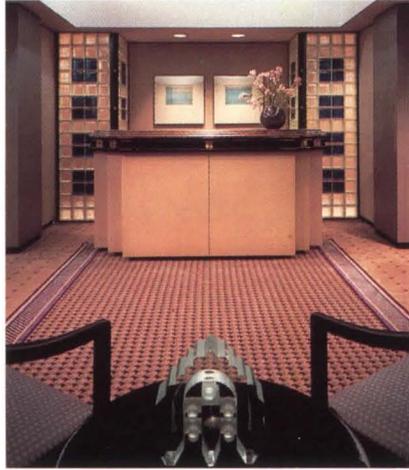
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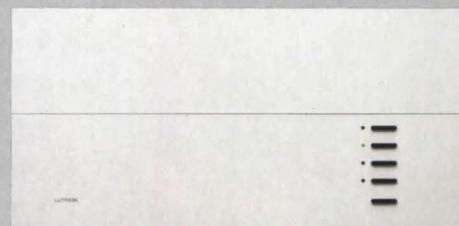
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