Progressive Architecture

September 1981

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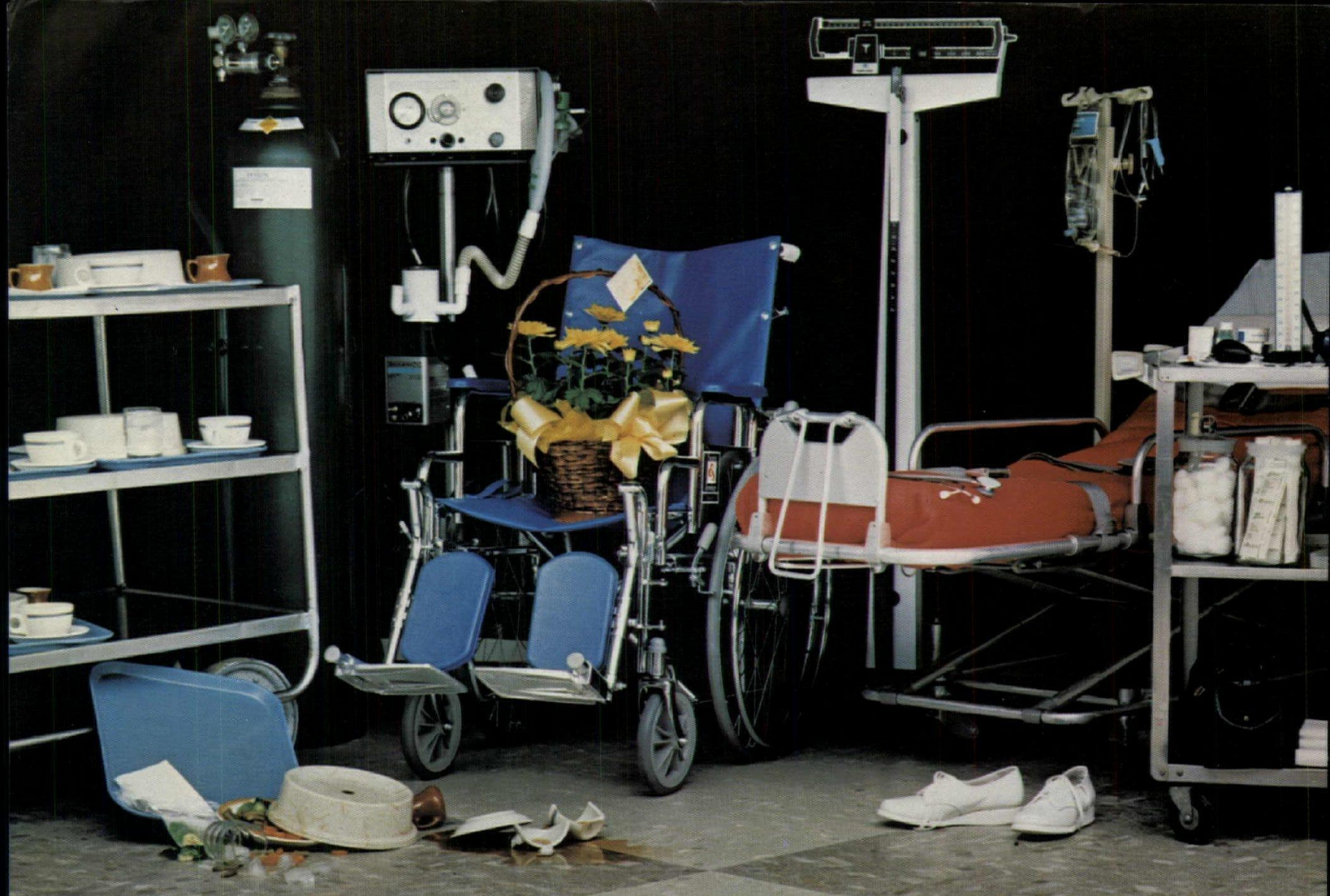

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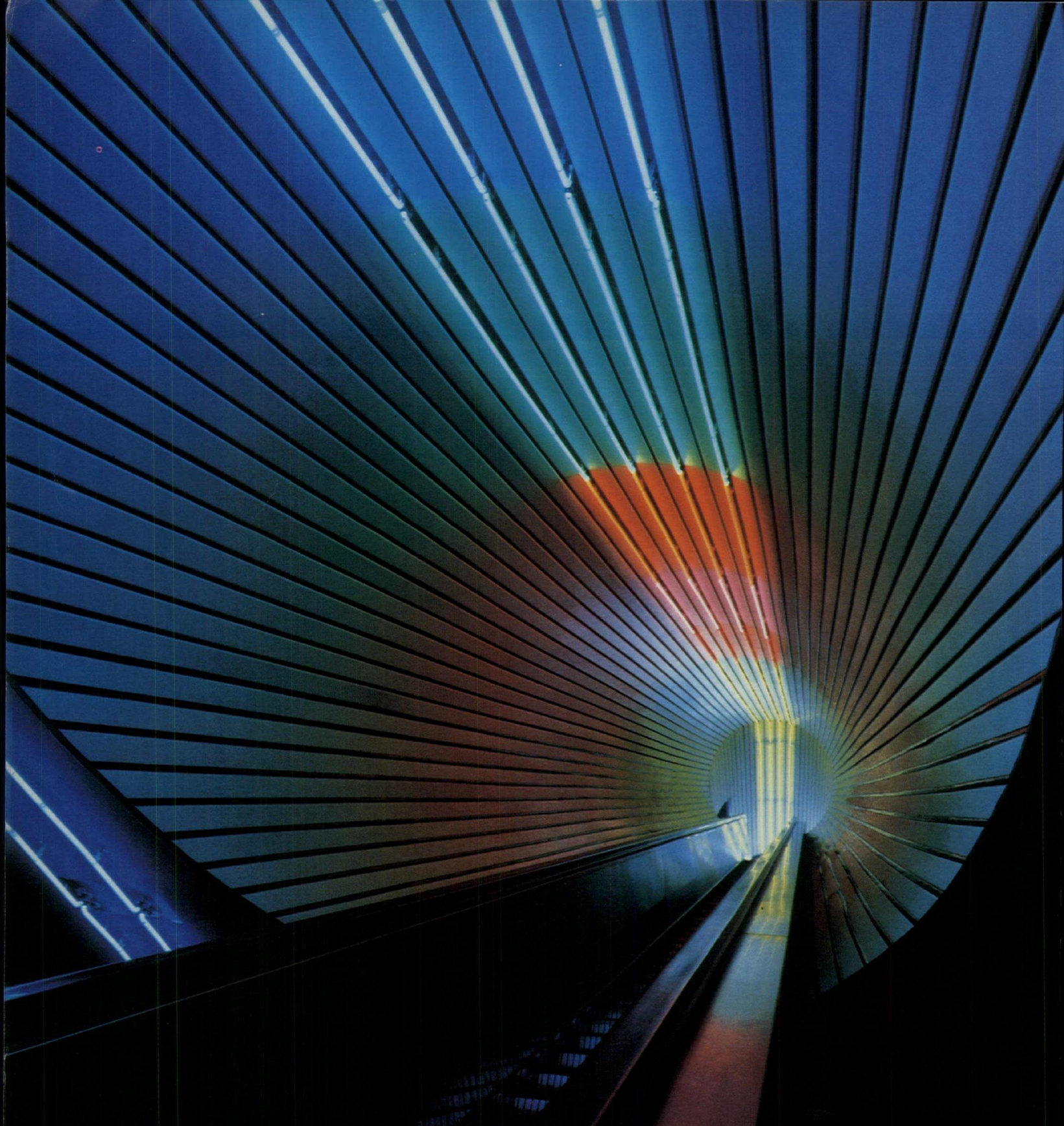

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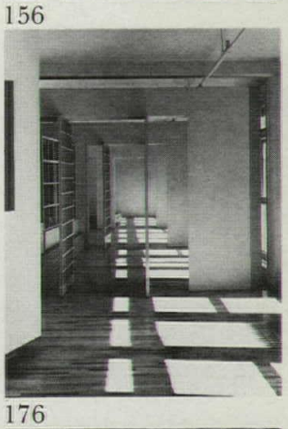
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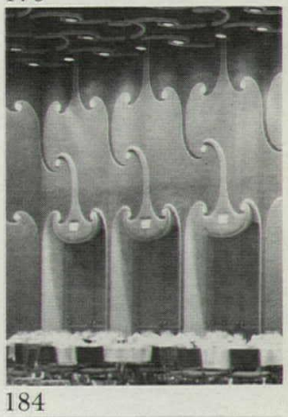
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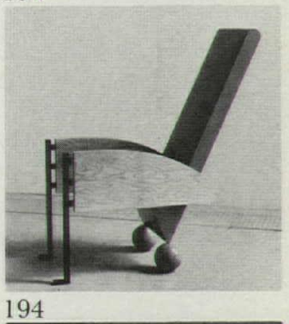
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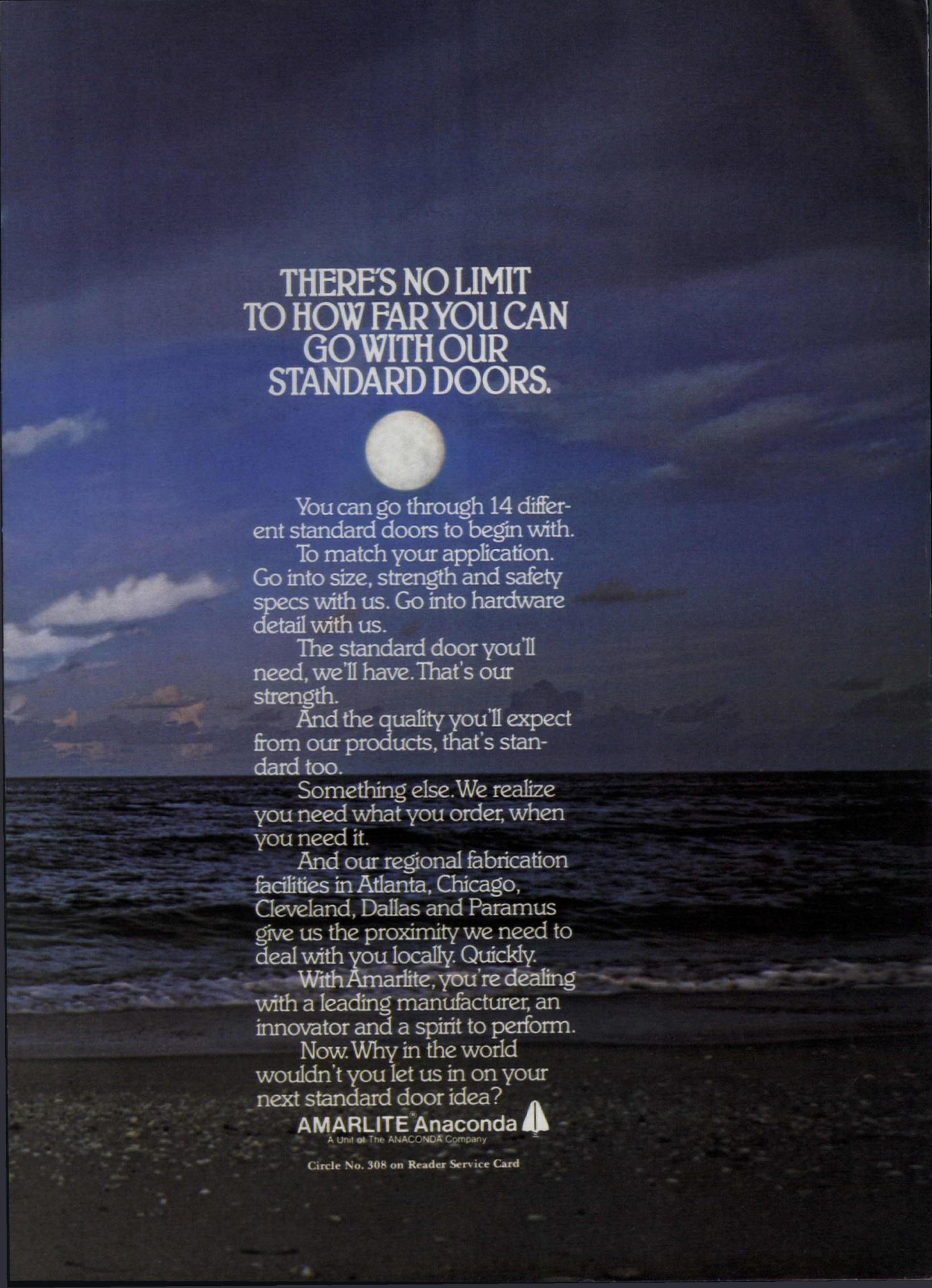
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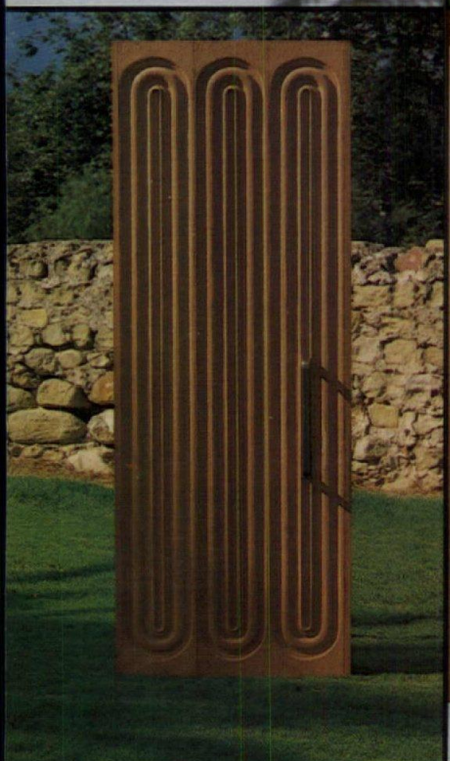
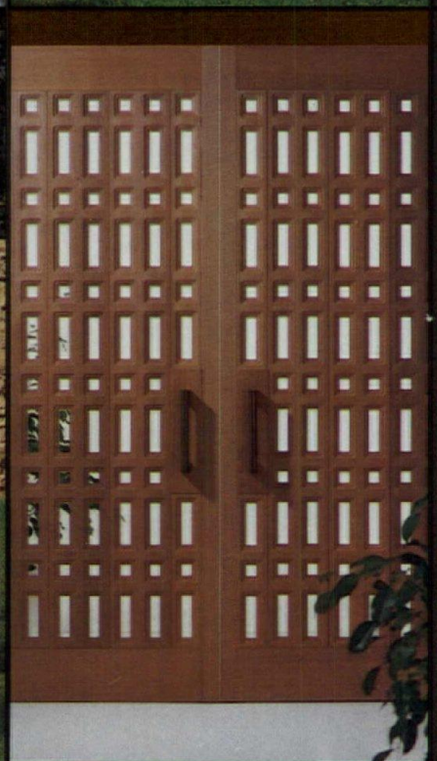


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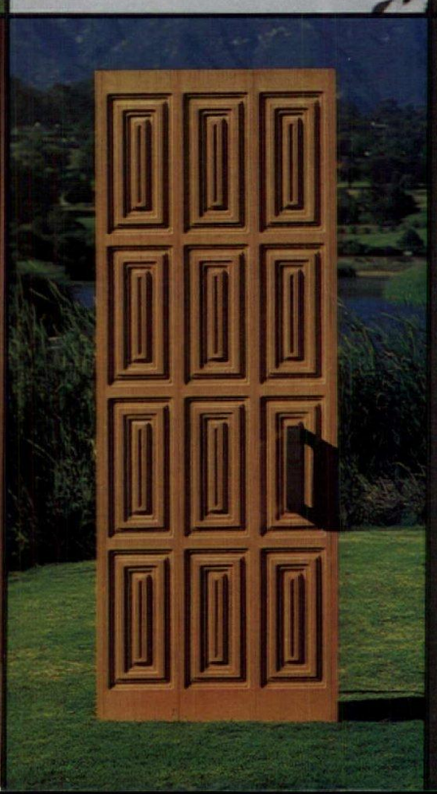
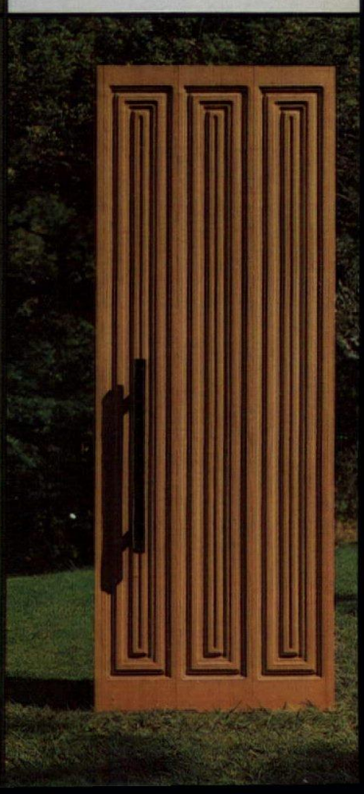

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Competition contention 5

The informal 'competition' for commissions, public and private, seems to be with us. This last editorial in a series takes up ways in which such procedures can be improved to the advantage of the architect, the client, and the design.

No architects are really enthusiastic about quasi competitions such as requests for proposals from architect-developer teams or interviews with design concept presentation. Yet they face such selection procedures ever more frequently. A July 8 column in *The Wall Street Journal* reports that these methods are finding increased favor with corporate clients. It cites reservations about them, but is bound to give the trend another nudge.

What can be done with these competitive selection methods to give the client a more authoritative choice and encourage the best firms to exert their best efforts? The AIA Design Committee's draft position paper, cited in last month's editorial, sets forth some sound recommendations: an impartial (outside) professional adviser, a clear statement of design parameters and evaluation criteria (particularly where economic factors are to be weighed along with design), strict submission requirements (neither demanding nor permitting excessive presentations), and an "independent design evaluation panel." This last crucial element is not called a "jury," since it may be only advisory, but it should be identified to participants in advance.

Many "competitions" are being conducted today with few, if any, of these reassuring features (see last month's Editorial), but two examples are worth examining for serious efforts to address these matters.

GSA's new selection competition

The design commission for the new Social Security Administration building in the Jamaica district of New York City (P/A, Aug. 1981, p. 36) was the first to be awarded under a new competitive system developed by the General Services Administration, as a model for future procedures under the pending Senate Bill 533 on Federal buildings. Congress mandated a competition for the Jamaica building in its authorization.

Compared with the GSA's previous "Level 3" competitions—which few architects will lament—this one involved more contestants (six vs. three), a smaller fee for each ($10,000 for Jamaica vs. $50,000 for a comparable commission under Level 3), a short schedule (5 weeks to submission, one more week to selection), a briefing for all competitors, and a strict limit on material submitted (no models; limited detail), a concise program. Instead of the in-person presentations of Level 3, this program involved strictly anonymous submissions. Architect David Dibner, GSA Assistant Commissioner for Design and Construction, feels that this change "separates salesmanship from substance" and saves the firms involved significant effort and money. It also keeps the architects from becoming "wedded to" a design that may have to be altered during design development. The one dubious practice carried over from previous GSA competitions is the anonymous jury—composed entirely of Federal employees— in this case administrators and design professionals from both the building and the using agencies (GSA and SSA). Outside professionals cannot now serve on GSA juries without elaborate public disclosures of finances and interests—an obstacle that may be removed for jurors under the pending bill. As with Level 3, no report supporting the decision is made. Also, as with Level 3, the commission is still contingent upon subsequent fee negotiations.

Selection for private commissions

Some elementary but crucial improvements in the "interview with concept presentation" competition prevalent among private clients have been tried under the guidance of Dean Keith McPheeters of the Auburn University School of Architecture. McPheeters has served over the past four years as professional adviser for a series of private Architect-Selection competitions. What elevates these competitions above most in-house corporate contests is the participation of the professional adviser and the involvement of respected outside professionals to assess the designs.

In the most recent competition he administered—not discussed in detail here because the client has not yet made it public—two well-known architects served as advisers to an in-house jury that included the company's president and its staff architect. Six competing design teams made presentations to the jury and its outside consultants; then the outsiders reviewed all six with the jury, made a unanimous recommendation, and left; jury deliberation then confirmed that choice. McPheeters was present at all stages.

McPheeters, like Dibner, emphasizes that the process must be focused on selecting architects—for their response to a manageable competition program—leaving ample latitude for changes in the designs during the give-and-take of design development.

These two constructive approaches to competitive architect selection give the competing architect realistic requirements to meet and the assurance of professional assessment for their efforts. Examples such as these may direct the current zeal for casually organized, wow-the-executives "competitions" into procedures that will truly advance everyone's interest in responsible selection of architects.

John Morris Dixon

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Views

Scarpa's example

Thank you for the May issue's provocative glimpses of the work of Carlo Scarpa, surely a master designer. Your handsome coverage of his work set me to comparing Scarpa to Kahn and Aalto, whose work I know better. Scarpa's love of finely crafted, joint-celebrating detail parallels, I feel, the work of Aalto in light fixtures, hand rails, and other building hardware, seen as early as 1928 in the Southwestern Finland Farmers Co-op Building, and in the Turun Sanomat plant and offices, both in Turku. Working in Aalto's office, I was aware of his desire to detail all significant aspects of a work, but the impact of those details came only when I traveled over Finland visiting his works. Even the early transitional work is powerful in this aspect. Important as it is, detail is always subservient to the whole in Aalto's work.

The power of detail to say loudly "I care" got my attention in the few works of Scarpa that I could see in the early '60s in Italy. And I heard his name always, either as teacher or master of display, when I talked with Italian architects. Now comes your coverage to show "God is in the details" . . . and elsewhere. Even as the classicizing influence of Italy is always felt in Aalto's work, surely Scarpa must have come to us with similar pressures from his age and his education. How stimulating is the produce of a façade like the Banco Popolare di Verona! And in the large and small geometry I see the kind of fascination with it that also characterized Lou Kahn's work. From the same generation as Scarpa, Kahn evidenced an immense power that geometry exercised over him. Studying and later working under him, I witnessed even a kind of respectful awe from him that some could ignore betimes the siren call of the bi-axial solution, so deep was it in his own education and being. Yet he was not hobbled to it. The tension created by Scarpa's almost round window with a tail in the almost classical façade reminds me of Kahn's tense group of rigidly classical forms at the Day Camp, Trenton Jewish Community Center, set in motion on their circular dais by the power of human intellect. In the details the pavement of Scarpa's Museo di Castelvecchio, Verona, calls to my mind Kahn's paving channels in granite at the entrance to the now-deceased AFL/CIO Insurance building in Phila., or in travertine at the Kimbell Museum.

The drive to *get it right,* including the details, marks the work of all three of these men. Of them, only Aalto got a chance to produce a fairly large amount of work, and the war years saw even him doing only potato bins and wine cellars for friends. Perhaps hard times allow sharpening of refinements, but surely some scope in practice keeps us from choking on the detail, keeping it subservient to the larger matter at hand. But significant detail does energize the whole of Architecture.

Thank you for showing us a master's work.

William T. Odum, Architect
Dallas, Tx

Minneapolis street life

As a former patron of the twin cities' transit system, I read with great interest Ms. Baymiller's probing jabs at Venturi, Rauch & Scott Brown's proposed metallic forest for Hennepin Avenue (P/A, July 1981, pp. 31 & 34).

I would love to be on the corner in mid-winter when the first errant snowplow attempts to transplant one of Ms. Scott Brown's tinsel trees, or in the first thaw of spring when city crews start hunting for the remains of "appropriate trash receptacles." Just maybe they could add a chapter to their "book" by spending a few days walking along Hennepin Avenue in the dead of winter, when it approaches 30° below, before subjecting the Minneapolis community to their sense of humor.

Richard P. Bryant, AIA
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[*Views continued on page 14*]

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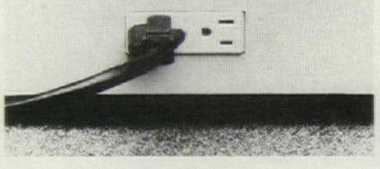



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Views continued from page 10

Downtown devitalized
Roberta Brandes Gratz' article (P/A, July 1981, p. 82) is refreshing in its clarity and a positive restatement of urban design positions that I thought had gotten lost in the last few years. Her focus on the importance of streets dominated by pedestrian movement and on the desirability of small-scale incremental change that cannot occur in the necessarily-sterile master planning of large blocks of a city is excellent. Also, how good to hear once again someone pointing out the basic harm that automobiles do to an intense urban area.

Having worked for several years in the mid-70's on a plan to remove automobiles from the very pedestrian-scaled downtown of Providence, Rhode Island, I was surprised to see this year's P/A award to an old-style master plan for Providence that injects more traffic into downtown while opening up an historic open space to suburban mall development that will almost certainly harm the historic commercial center. I hope this award was an aberration and that you actually agree with Ms. Gratz.
Paul F. Pietz
Equinox, Inc.
Peterborough, NH

Plants and perlite
In the May issue of *Progressive Architecture* (pp. 166–171), a staff-written article entitled "Green Stuff" referred to the danger in using perlite in combination with highly fluoridated water. Unfortunately, the author was merely repeating an old misconception that has been repudiated by more recent and well-known research by Dr. Sheldrake at Cornell University and O.A. Matkin at Soil and Plant Labs.

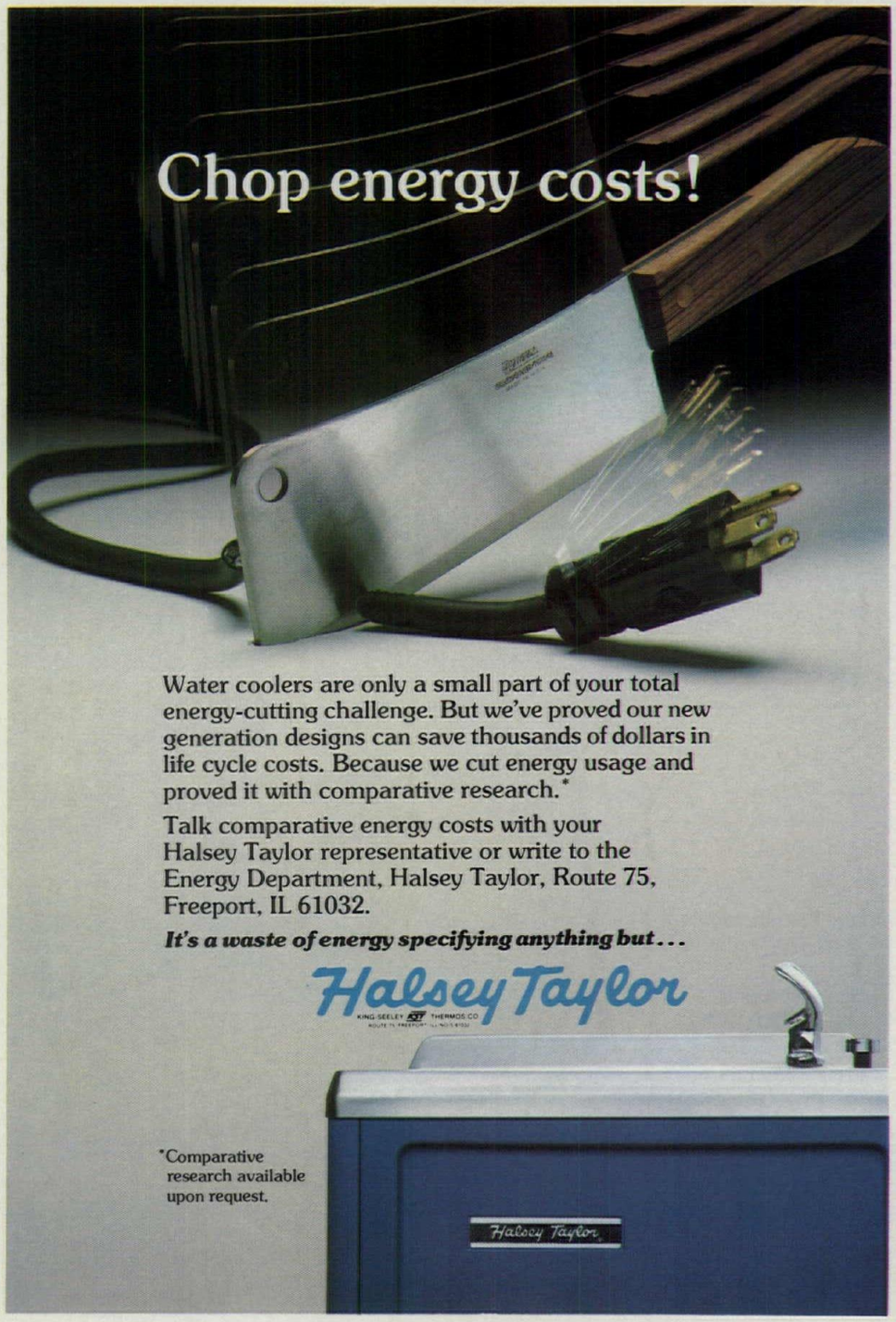
All plants require some fluoride for growth, and all soil mix constituents contain fluoride. In a typical mix, however, perlite contains less than 1 percent of the fluoride in superphosphate fertilizer and only 10 percent of the fluoride in trace elements. Clearly, perlite is not an important contributor of fluoride!

Research has gone on to show that when growing certain fluoride-sensitive tropical plants, a simple solution is to increase the pH of the soil by using lime. This "locks up" the fluoride in the soil thus making it unavailable to the plants.

Perlite has been used successfully for many years and is being used to advantage by an increasing number of plant propagators, commercial growers, nurseryman, and landscapers around the world to grow all types of plants including so-called "fluoride-sensitive" ones such as Dracaena.
Robert S. Milanese, Managing Director
Perlite Institute, Inc.
New York, NY
[The advice in this article was offered by various professionals in the landscape field. We appreciate the opportunity to bring this further expertise to the attention of our readers.—Editor]

Correction
The entry in the competition for design of the Wick Alumni Center, University of Nebraska, identified as being by William Turnbull (P/A, June 1981 News report, p. 46) was done in collaboration with Donlyn Lyndon.

Credit extended
The prairie photograph used in the mural for the Crown Center Hyatt Hotel (P/A, July 1981, p. 116) was the concept and work of Patricia Duncan, using equipment provided by Jack Rankin.



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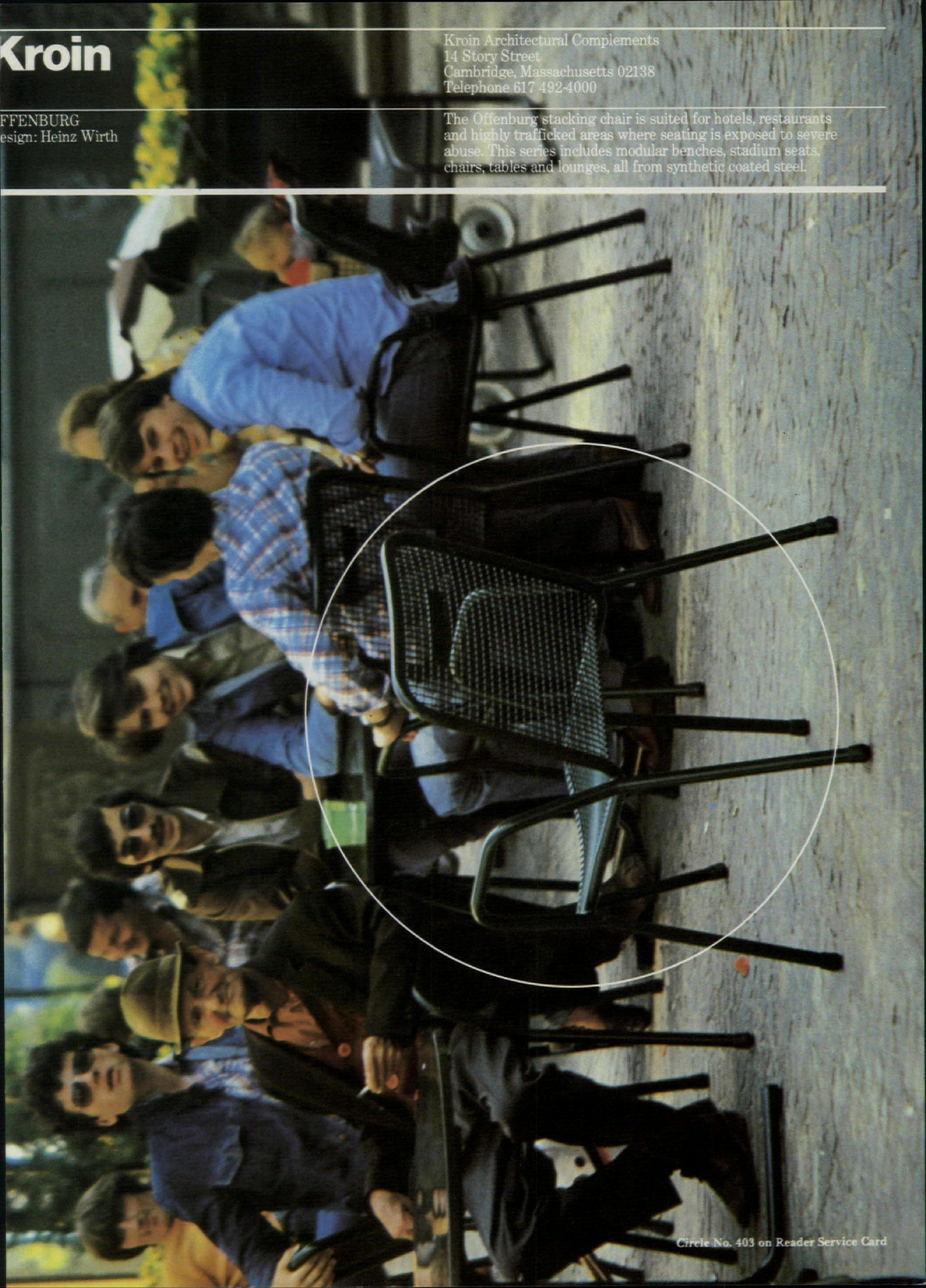

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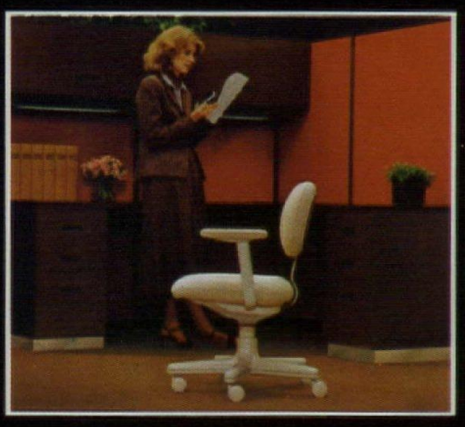

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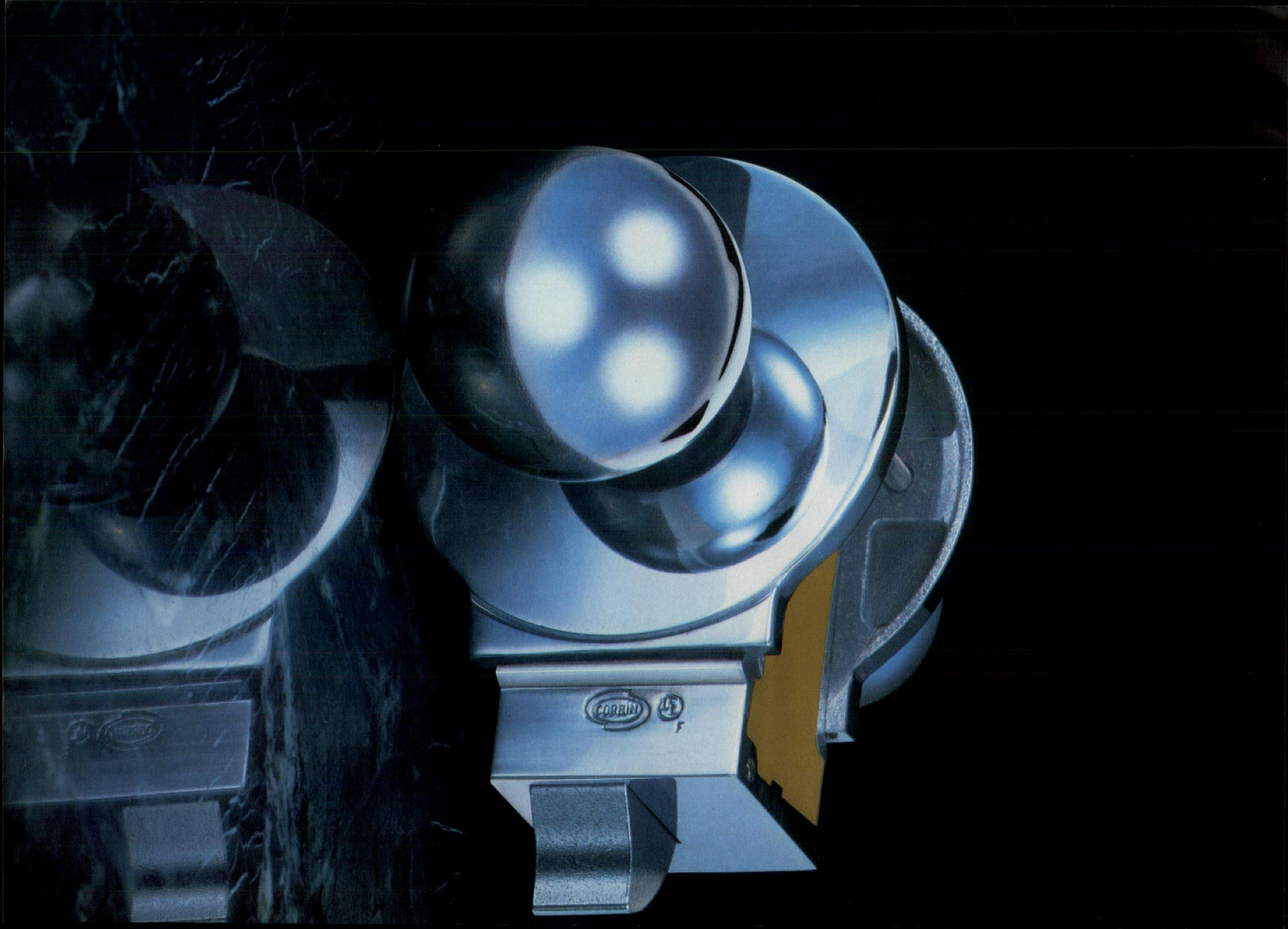
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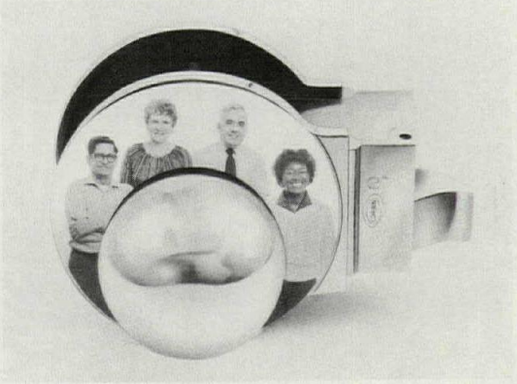

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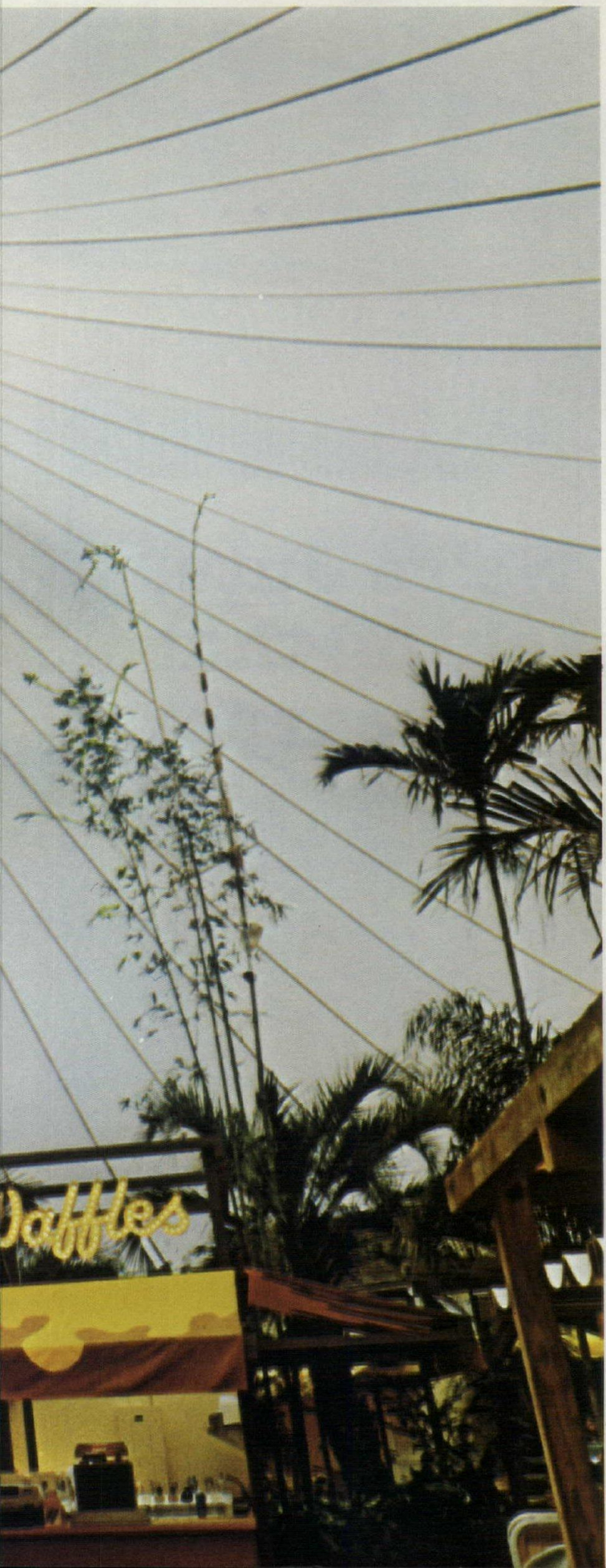

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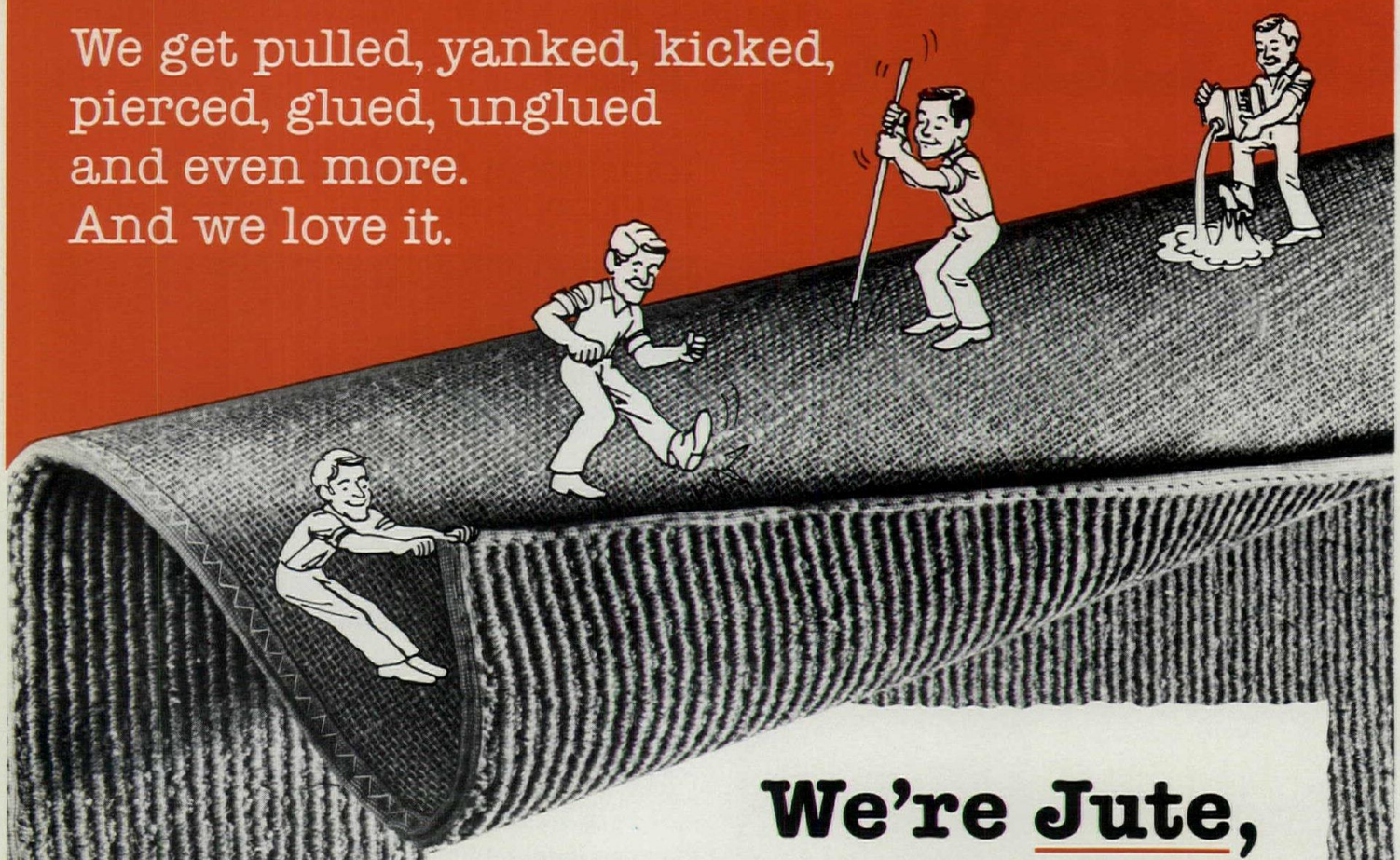

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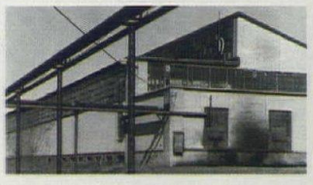

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Niagara Mohawk Power Corporation
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Facility, Buffalo, New York
Architect: Owner-designed
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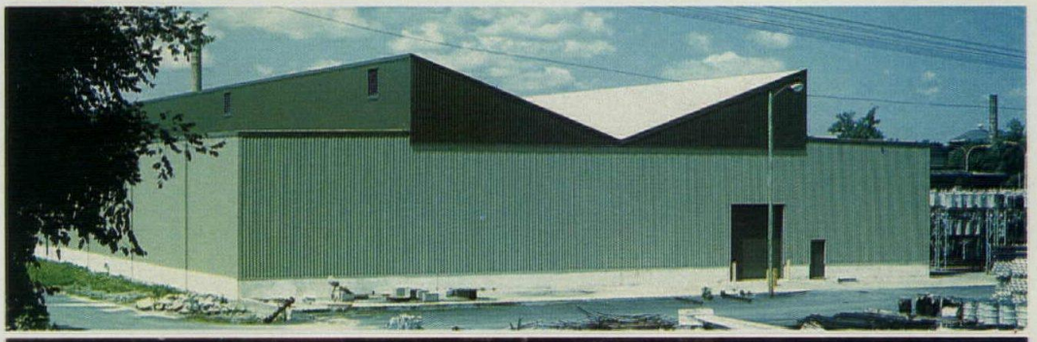



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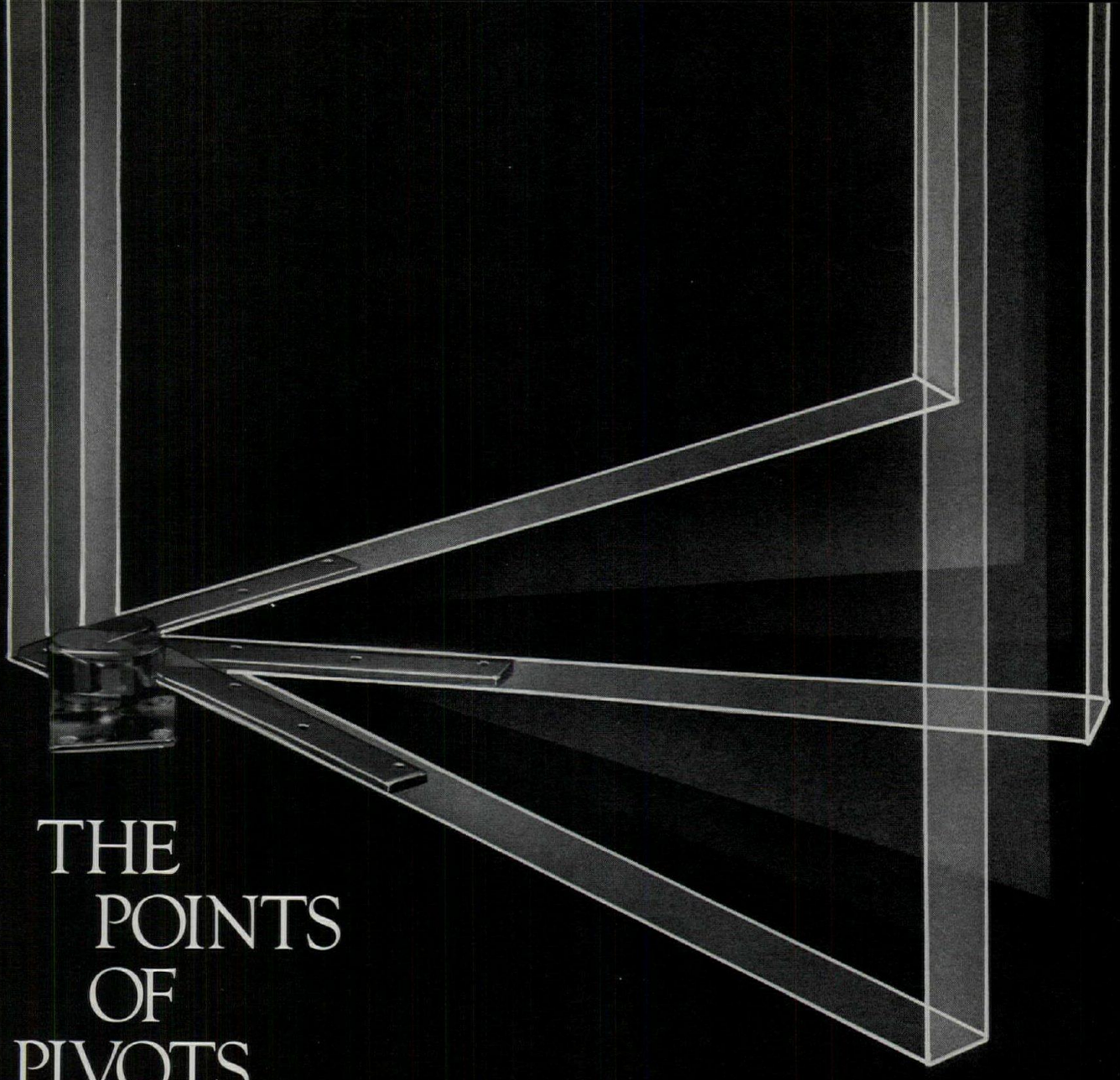

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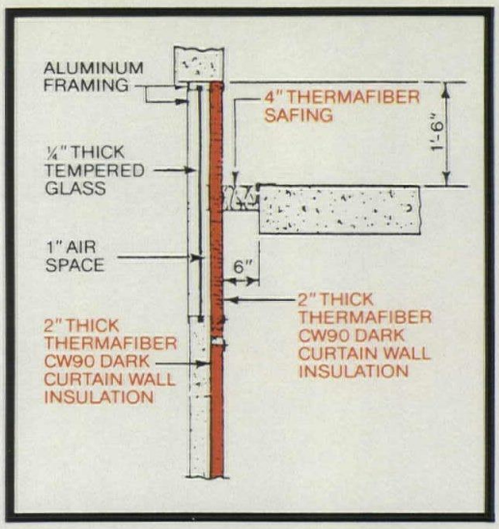

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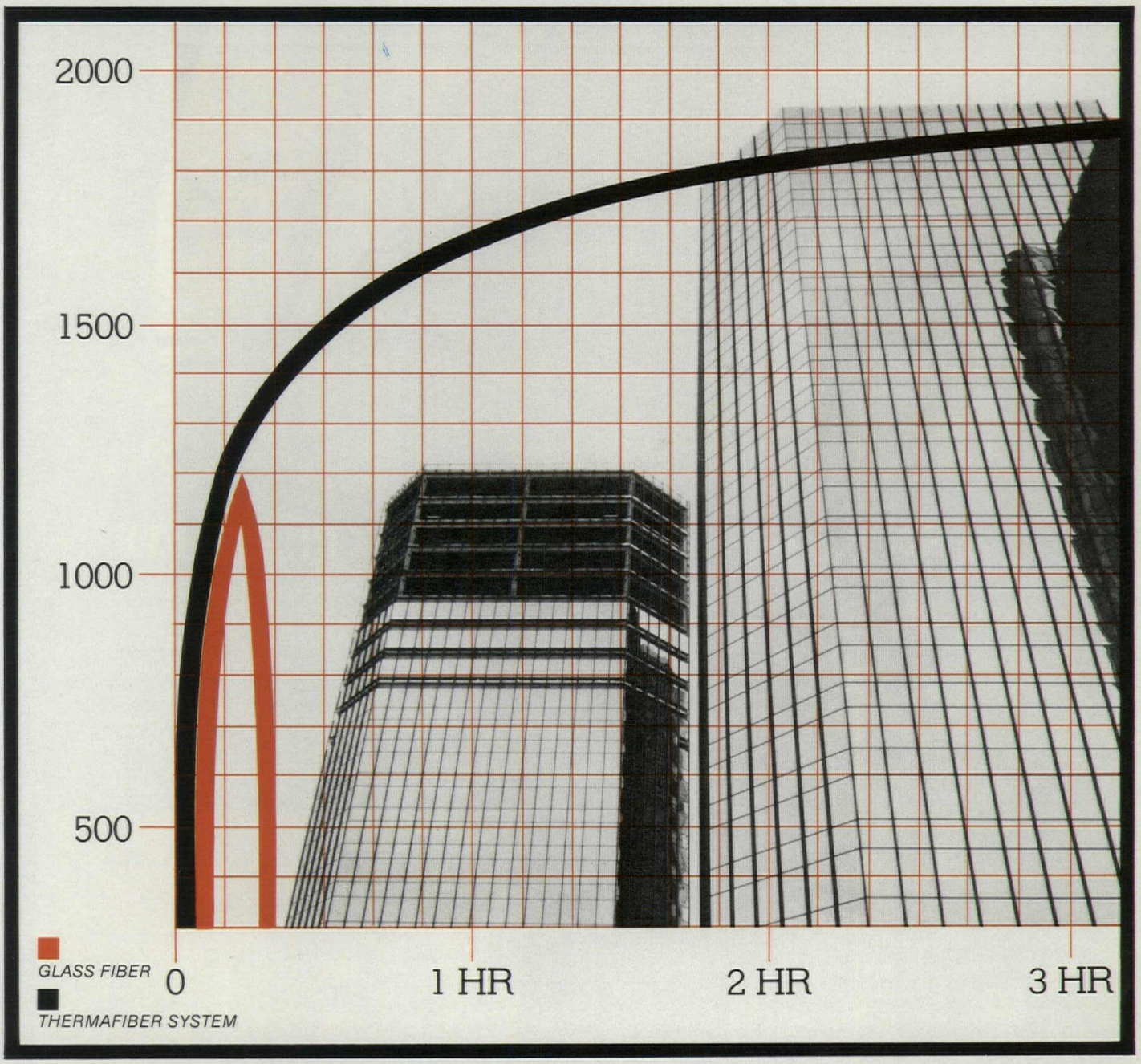

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P/A News report

Boston museum wing opens

With I.M. Pei & Partners' East Building of the National Gallery of Art in Washington so recent in the public memory, an encore follows. In this case, it is the new addition to the Museum of Fine Arts in Boston, the West Wing. If it pales by comparison, it has that right, since it is a true addition and did not have the elastic budget that produced the Washington showcase.

The 80,000-sq-ft West Wing is appended to the monumental 1909 structure designed by Guy Lowell and is sheathed in granite from the same quarry in Deer Isle, Me. The total project also includes renovation of an additional 80,000 sq ft of the existing facility—including swallowing up an earlier addition—and new HVAC provisions for the entire museum. The West Wing is designed to allow it to function separately from the main building as well as with it.

And function it does, either way. In fact, the older building will now have a workable circulation pattern where previously there were dead ends. The new entrance, now considered the main entrance, is on axis with the main corridor of the existing museum, and the circuit is to be completed by connecting galleries along the other end of the building as well. For both practical and orientation reasons, this is a big improvement.

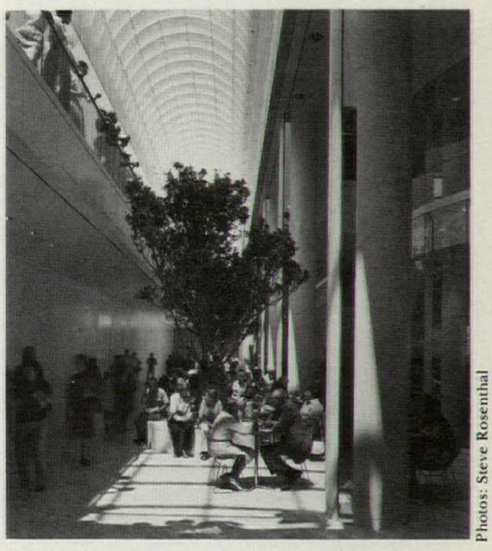
Located near the current parking areas, this new entry matches the new wing in understatement. Like the addition as a whole, it is impeccably executed and detailed. The entry sequence is fine, too, with views through to the old building, and the arrival in the 225-ft-long galleria topped, 52 ft above, by a superb continuous vaulted skylight. For all of that, the entry itself doesn't feel like the main entrance, as the existing one on Huntington Avenue does. And if future parking is included in a project not yet underway across Huntington, it would seem natural to prefer the older entrance. It should be noted, however, that the new entry and wing are carefully designed with barrier-free access as one key consideration.



Opening off of the skylit galleria on the first level is a museum shop, which in turn overlooks an existing sculpture court, still to be redone. Above and below the shop are a restaurant and a cafeteria, respectively. Occupying the west half of the wing are the Remis Auditorium on the first floor and the Graham Gund Special Exhibition Gallery on the second. Screened skylights throughout the gallery admit light of a special quality to this large space.

But the vault itself is the key architectural feature. It is a further refinement of Pei's skylight technology for Washington's East Building, using polished tubes to control and diffuse natural light. The resulting light quality is delightful, even on overcast days. The space itself is lined on the gallery and auditorium side with lacquered panels and on the other by glass and exceptional board-formed concrete. The space, the detailing, and the light are truly wonderful. In fact, in keeping with the Pei reputation, the interiors and appointments throughout are nearly flawless and elegant.

It is on the exterior that questions arise. The building is so understated it is almost mute. Approaching it from Huntington Avenue on public opening day, one would have found it difficult to spot the entrance, were it not for the festive banners and the crowd. The proximity of the museum's main loading docks, immediately to the right of the entry, almost demands some drastic and sensitive coverup. Even though it is depressed below grade, it is a jarring juxtaposition.



Photos: Steve Rosenthal

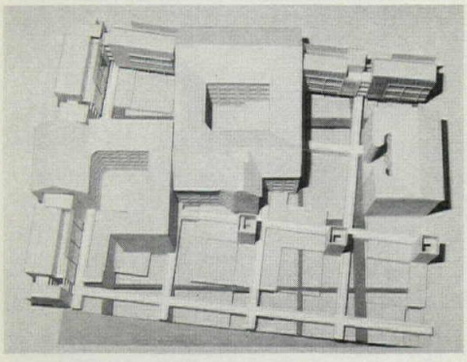
Top: Museum entrance. Above: atrium.

On the north side facing the Fens greenery, the façade is pierced by flush-glazed openings, which are delightful from inside. As one passes by on that side, however, the reason for two openings—and not one elongated one—on the second level is not clear. From the outside, it would have been nicer to see the vaulted skylight uninterrupted. Also on the Fens side, the sober cornice of the new wing collides with the more ornate Classical detail on the existing in a seemingly arbitrary manner, without regard to elevation alignment.

News report continued from page 37

Approaching the museum from the west on Huntington, a viewer is aware of another set of dissonant images as the otherwise elegant vault form visually collides with mechanical and other building elements.

While the West Wing will draw some of the same comments about commercialization or consumerization of art as did the East Building in Washington, such criticisms are ill informed. Art is reaching more and more people, whether through the increasing occurence of spectacular major shows or through heightened interest and awareness. All in all, the West Wing is a cool, pristine solution to the program as perceived by most museums today. It is skillful and delightful inside, where it most counts, and the way it closes the circulation loop is excellent. [JM]



Model of Eisenman design.

Self-reflection: Eisenman in Berlin

Berlin's Checkpoint Charlie is America's passageway in the barrier that divides a city from itself and a part of a nation from its former capital. To highlight and display the Berlin Wall, the International Building Exhibition (IBA) organization has commissioned a group of exemplary buildings on a site in the South Friedrichstadt area adjacent to the wall. It is part of the 1984 IBA exhibition that will feature new and restored buildings and urban spaces, under the theme "Living in the city" (P/A, March 1981, p. 33).

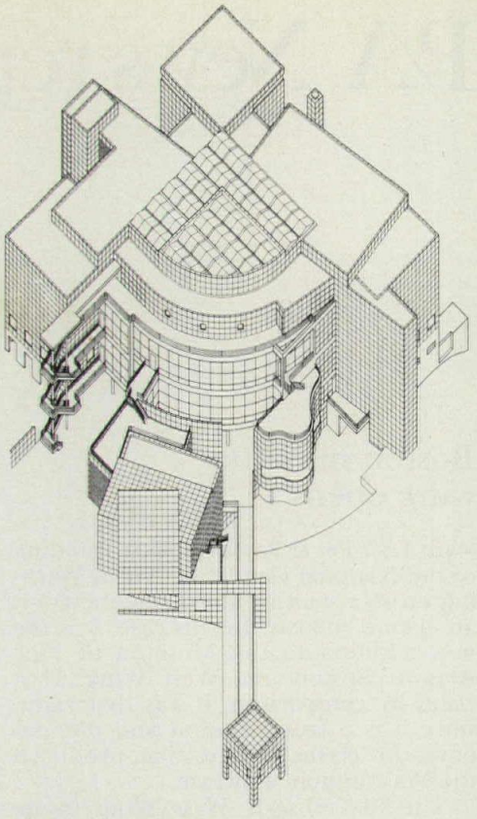
The competition held for the South Friedrichstadt site required that submissions incorporate a flexible program for housing, three war-scarred turn-of-the-century courtyard buildings, and on its northern perimeter, a 3.3-meter-high fixed parti—the Berlin Wall itself.

Eisenman Robertson, with Peter Eisenman as partner in charge, won its special first prize for a complex design, which includes two mixed-use buildings, an office building, and a public park, as well as a Museum of the Artificially Excavated City, which is the site itself. Here he will construct a willfully symbolic and monumental excursus on the history of Berlin, which, in the usual Eisenman manner, is also a polemic, this time on Post-Modernist historical reference. Those who have followed him from house to house will, however, recognize differences as well as similarities.

On three of the corners left by the existing structures and facing away from the wall, he has inserted a commercial building for the nonprofit G.S.W. Construction Company, and two separate mixed-use buildings, each with three levels of offices and two levels of housing arranged in duplexes with roof gardens. In the park, the existing buildings provide the rhythm for a typical 19th-Century bay system and lot division, represented below ground level by a grid of brick foundation walls. Over this is superimposed a second grid of limestone walls, 3.3 meters high. An artificial ground plane, visible in the spaces formed by the intersection and collision of the two grids, dips from city level to the water level on which 18th-Century Berlin was built. Four massive concrete L-shapes settle in the larger squares, the interstices covered by a lattice of sand-filled boxes at ground level, their grid occasionally climbing the elevations. The brick walls represent the imaginary foundations of Old Berlin, in strict accordance with the ancient bay and lot system. The higher limestone walls transcribe the conceptual grid of the Mercator Projection, which unites the severed city to the universality of the world's spaces. It rotates upward in the form of three roofless tower cores. These are not only garage entrances, but also passages into the past, for through them one descends into the four massive L-shapes which house the museum of imaginary artifacts from the Artificially Excavated City, themselves inaccessible and viewed through peepholes. The Mercator walls are promenades over the inaccessible excavations. The ground cants 3.3 degrees, the towers are 3.3 meters square, and the Mercator grid 3.3 meters high: the Berlin Wall is repeated, denied, and transformed to become, for a symbolic moment, merely a wall among walls.

Rejecting the usual Post-Modernist ploys, the stuffed expedition trophy, or the disemboweled and reapplied façade, Eisenman has created by erasures and additions a plentitude of voids where the only activity possible is that of self-reflection. The cuts are deep and clear, the symbolism simple, and the absence of sentiment patent. Eisenman and Berliners can reflect on separation and passage, on the nature of walls, and on their recurrence in the last 50 years of Germany's history. [Helene Lipstadt]

Helene Lipstadt is a social and architectural historian, who is currently producing a Study of Architectural Journals in the 19th Century.



Atlanta's High Museum.

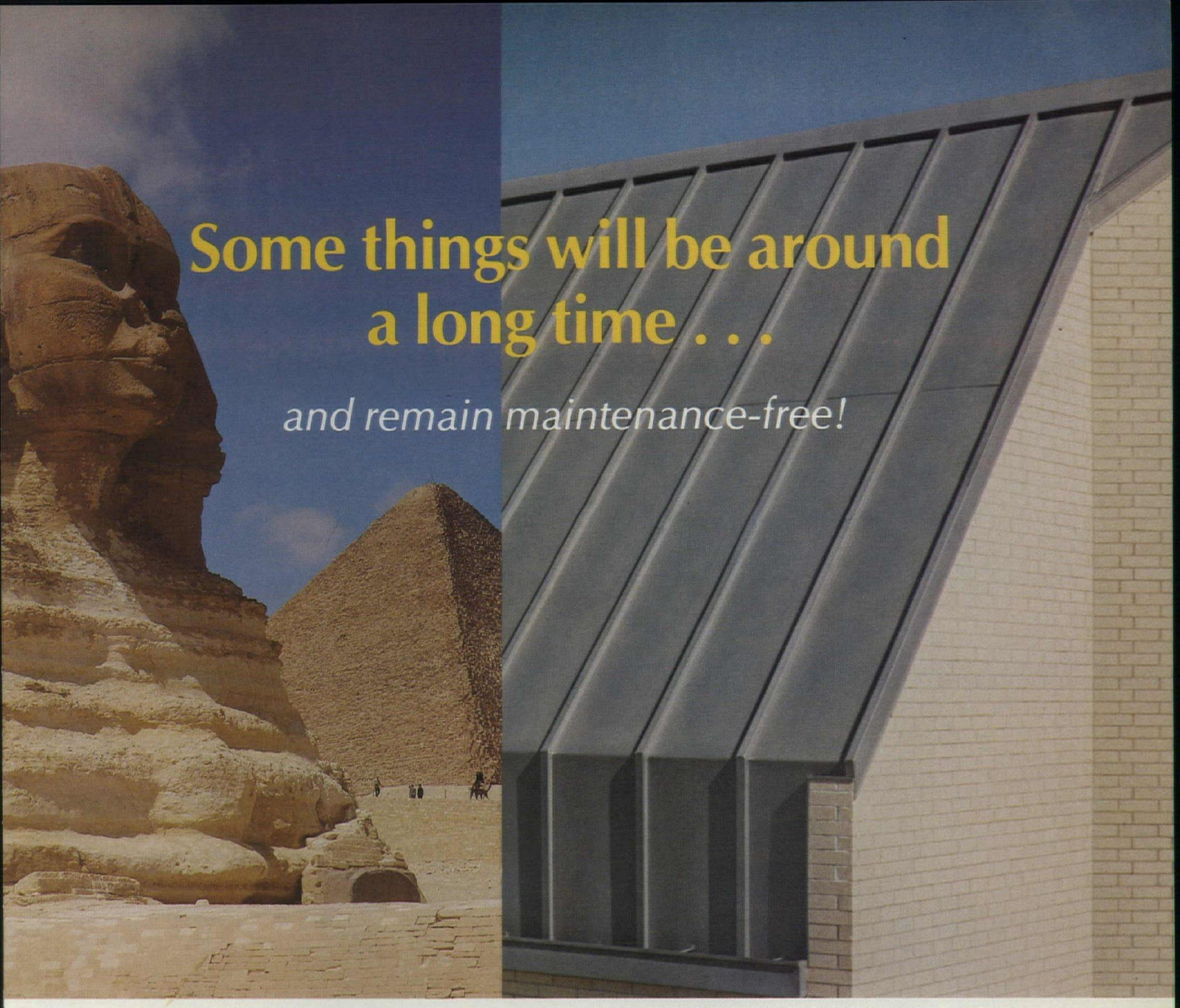
Meier in Atlanta: Something for everyone

There is something for everyone in Richard Meier's High Museum of Art for Atlanta: a cubic pavilion skewed to a long connecting bridge, multicurved walls, segmental walls, screen walls, skinny wings and stacks, a skylit atrium, a greenhouse-roofed section, and almost every possible angle in the extremely jagged outline of this 140,000-sq-ft facility scheduled to be completed by fall 1983.

The six-level concrete structure will be clad in enameled steel panels and glass, closely matched in color and texture. Daylight will be introduced through the skylit atrium and through windows in certain other areas, with artificial or filtered light generally used. The building revolves around the atrium, with exhibition spaces (including a flexibly arranged sixth floor that can accommodate large traveling exhibitions), a 316-seat auditorium, an Education Department, a café, gift shop, board room, and storage facilities. Operational equipment is energy efficient.

The new Museum will house the permanent collection of early Italian and Renaissance, Baroque and Rococo, 19th-Century French, American, non-Western, and 20th-Century art, prints, photographs, and decorative arts.

[*News report continued on page 42*]



National Federation of High School Associations Headquarters, Kansas City, MO., *Architect:* Kiene & Bradley Partnership, Topeka, KS., *Installation:* Kaw Roofing & Sheet Metal, Inc., Kansas City, KS.

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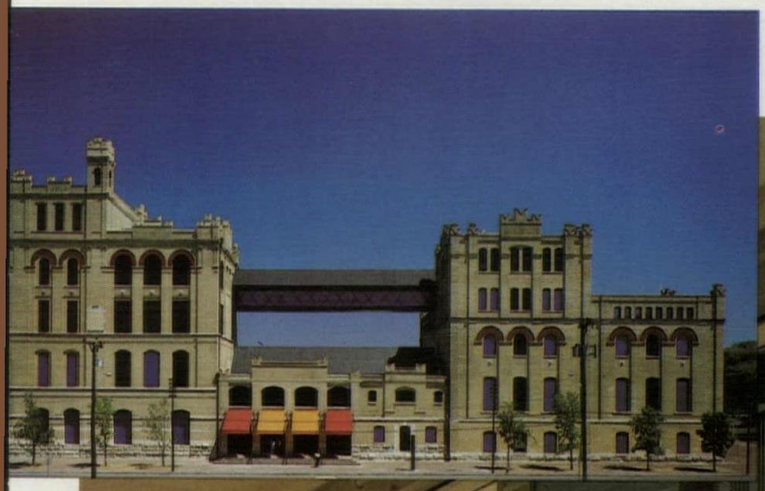
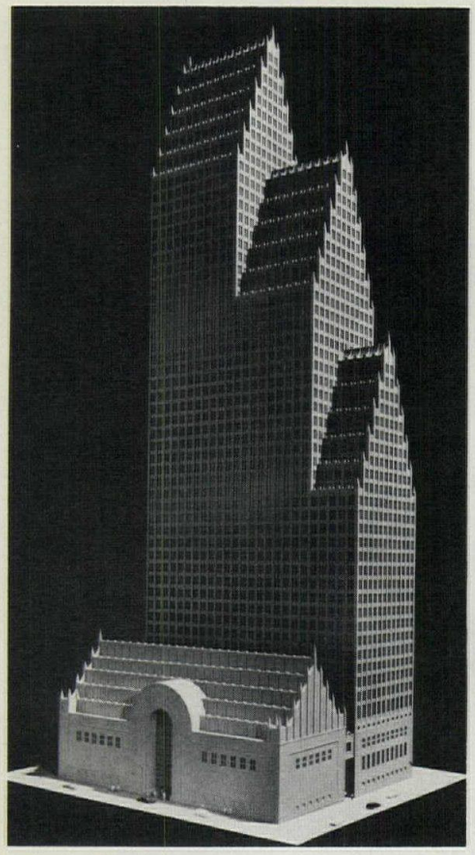


San Antonio Museum of Art
Architects:
Cambridge Seven Associates, Inc.
Associate Architects:
Chumney, Jones & Kell, Inc.
Contractor:
Guido Brothers Construction Company

Photos © Nick Wheeler 1981

ELEVATORS BY DOVER

News report continued from page 38



RepublicBank Center.

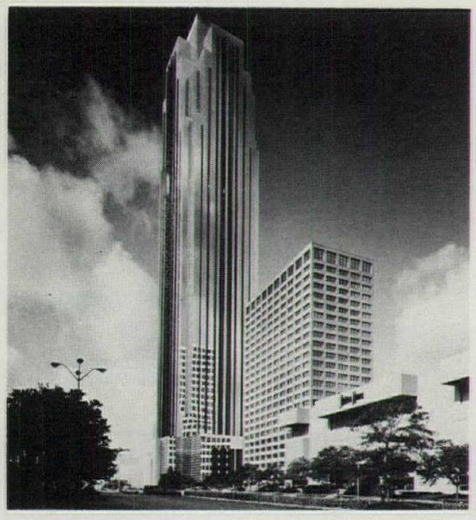
Johnson in Houston: This time, neo-renaissance

Developer Gerald D. Hines Interests has chosen to make a "dramatic architectural statement" with its new 56-story RepublicBank Center by Johnson/Burgee, on the northwest side of Downtown Houston, near Pennzoil Place. The tower, of glass and Napoleon Red flame-finished Swedish granite, will contain 1.2 million net rentable sq ft of office space, 12,000 sq ft of retail space, and underground parking that will connect to the extensive downtown underground tunnel system.

The tower is divided into three pitched-roof segments by two major setbacks, allowing floors to vary from over 30,000 sq ft to under 5000 sq ft. Adjacent to the tower is a pitched roof skylit banking hall.

The building's historical precedents have been described by the architects as both renaissance and Dutch. The renaissance flavor is established by spires that rise from every roof level, "obelisks giving a sparkling effect against the sky," according to Johnson, who compares the effect to that of New York's Woolworth Building. The gabled roof ("the only way to end a stone building," according to Burgee) is derived from gabled houses found in the Netherlands. Entry through the building will be through a 75-ft-high arch, which will continue through the banking hall and office lobby. Granite will be used extensively in the interior lower levels; on the exterior, the play of planes will give the building depth.

Energy-saving features (double-pane insulating window, energy-efficient lighting, and HVAC) and life-safety systems (sprinklering, emergency pressurization, and ventilation) are incorporated into the design. Construction is scheduled to begin this summer.



Transco Tower.

And again: Art Deco, Oz, and Urbanity

By autumn 1982, Houston will have its first honest-to-goodness Art Deco skyscraper, thanks to developer Gerald D. Hines and architects Johnson/Burgee in association with Morris Aubry. The 1.6 million-sq-ft Transco Tower, to be constructed adjacent to The Galleria in the City Post Oak area, will rise 69 stories to a height of over 900 ft, becoming probably the tallest building in the United States located outside a central business district. John Burgee has labeled the Tower "the flagpole of the Galleria area," as its sheer height will contrast sharply with its surroundings, which include a three-acre landscaped park.

The tower will be sheathed in reflective gray glass framed in anodized aluminum, with columns of dark-glazed triangular bays accentuating its verticality. There will be five significant setbacks. The street approach is dramatic: a flag-lined ceremonial drive sweeps up to the "Presidential Entrance," a 90-ft-high archway of ornamental pink Texas granite. Inside, the upper floor of a two-level lobby connects to the *actual* entrances—all-weather skywalks leading from The Galleria and from a 3200-car parking structure with two helistops.

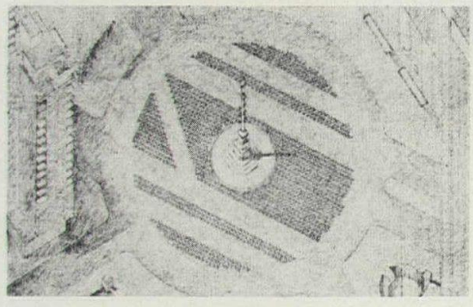
To complete the Oz-like image of the setting, site development will include the Mountain Fountain, a ten-story structure built of stacked and terraced circles, planted with cypress trees, with a mini-Niagara Falls fountain carved out of its side. Also in the project, a 1600-sq-ft nonprofit art gallery will feature corporate-sponsored public exhibitions.

More important than its fantasy image, Transco will introduce an intensity of activity that will transform the tantalizing image of urbanity of the Post Oak area—with its linkages between open spaces and alternative pedestrian experiences—into the Real Thing. [Peter C. Papademetriou]

ReVisions: the young uns speak out

It was bound to happen eventually—a protest by the new generation against the well-promoted not-so-young-uns of a period just passed. That it happened in a mannerly way, under the auspices and in the premises of the very Institute of Architecture and Urban Studies set up by the all-powerful fathers, is interesting if not inspirational.

ReVisions: 12 conversations among architects 35 and under was a series held weekly during spring 1981, to make a new voice heard above—or at least among—the insistently pervasive calls of Eisenman et al. No one direction was indicated, but many ideas were expressed in talks with such titles as "Post-Modernism and Other Arts," "Contextualism and Regionalism: Rome/America," "Politics, Taste, and the Avant-Garde," and "Sources: Shaking the Tree." Speakers included Mark Mack and Andrew Batey, Andres Duany and Elizabeth Plater-Zyberk.



Diller's Columbus Circle.

As finale of the series, a competition to redesign Manhattan's Columbus Circle was held and judged by the peer group that had attended a majority of the talks. Few guidelines for the competition were given, in order to "encourage the widest possible diversity of responses," according to series organizer Christian Hubert. The result was a wide range of beautifully presented proposals, from practical to whimsical. Winner Elizabeth Diller (who received a mention in P/A's 1st Conceptual Furniture Competition, P/A, May 1981) placed 2500 orange traffic cones at four-foot intervals in a pattern organizing the disparate islands of the rotary. The common cones, "like a snowfall veiling and connecting unlike things," provided but a temporary sketch replacing a hodgepodge pattern with a better one.

In order that the snowfall of young ideas does not melt, similar events are planned for future years. (SD)

[*News report continued on page 47*]

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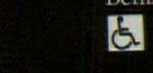

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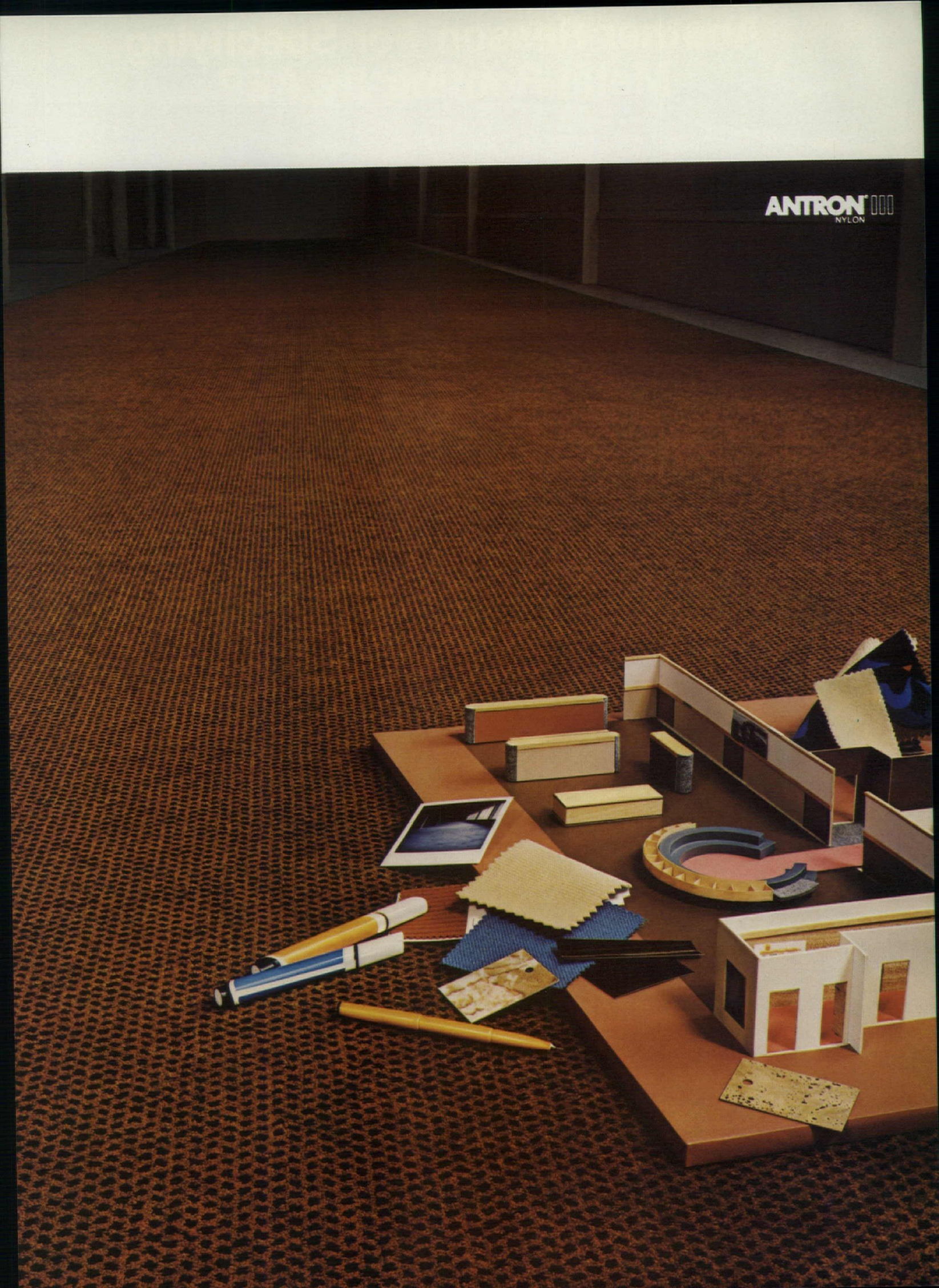
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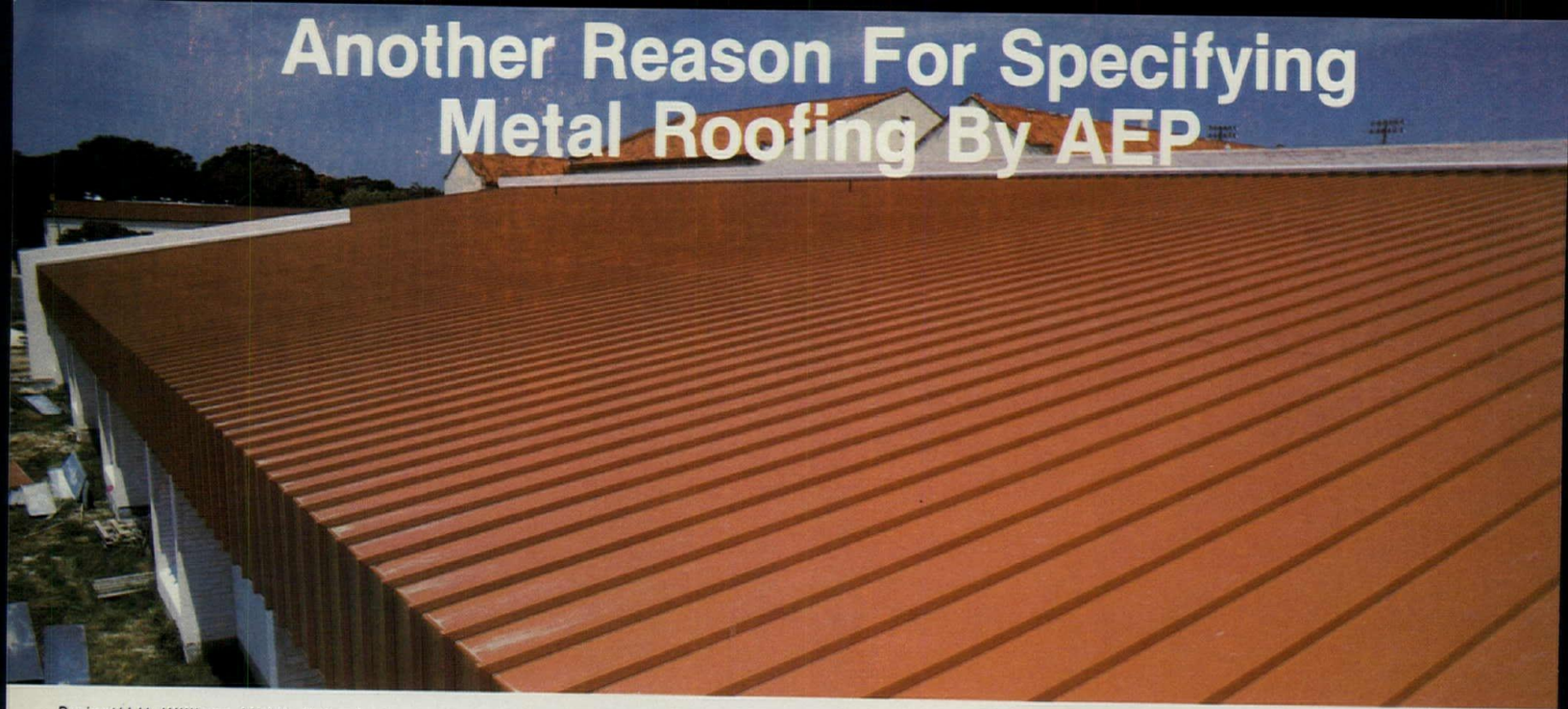

Project/J.H. Williams Middle School
Location/Abbeville, Louisiana
Architect/J. Elliott Lormand Inc.
Baton Rouge, Louisiana
General Contractor/Ernest Simon & Son
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Area/120,000 sq. ft. metal roofing

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Project/Dublin Library
Location/Dublin, CA
Architect/Collin & Byrens
Berkeley, CA

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Artists on architecture

Architects are rather titillated, these days, by their "invasion" of artists' territory: by inference in architecture (Gehry's sculptural work, for example, and Graves's painterly approach) and by the actual snaring of a corner of the gallery market. Gallery entrepreneurs eagerly exploit the movement, devising inventive ways to package it (Castelli's Houses for Sale, P/A, Dec. 1980, p. 32) and inviting artists to respond to it (the New York Rosa Esman Gallery's recent "Architecture by Artists" show, a mate to its earlier "Art by Architects"). And architects solicit artists to collaborate with them in put-up projects, in the New York Architectural League's 1981 centenary exhibition. (P/A, May 1981, p. 44).

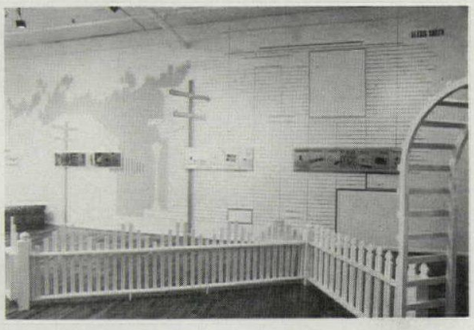
But artists do not wait for invitations from architects and architectural hostesses to comment upon "architectural" spaces and forms. They design usable spaces, of course (see the Maberry loft, p. 165), and they explore architectural dimensions in their work: a few examples are shown on this page.

Brad Davis and Ned Smyth's 1977 collaboration "The Garden" uses concrete columns, arcades, naturally scenic walls, and fonts to define space, to comment with religious overtones on the relationship between art and nature, and to trace the symbolic origin of the column in the plant forms of Egyptian and Islamic architecture. And to spice up the "Post-Modern" discussion, it may be noted that art historian/critic Joseph Mashek calls the revisionary strain "Neo-Neo," a Post-Neo-Classical re-view of the classics. The distanced, refining look backwards, says critic Carrie Rickey, is a cross between historical drama and the dictates of revivalist fashion and adds that "Idealizing a golden age is as much a withdrawal from the problems of the present as is the repudiation of history in the hopes of starting at square one."

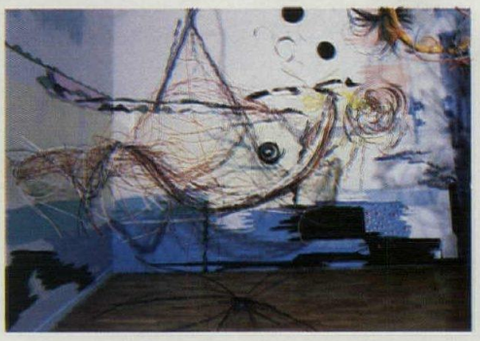
Judy Pfaff's work is less architecturally referential, but she rends, wraps, and weaves linearly through architectural spaces with post-industrial products—plastic, contact paper, Mylar—as well as with wood, wire, and reeds. In her 1980 installation "Deepwater," water loosens the pull of gravity. Her work borrows from Constructivism and has often been called a three-dimensional realization of Abstract Expressionism—rapid, gestured, personal. Its pastel-to-acid colors invite the label "New Wave," while Grace Glueck in the *New York Times* wraps it up: "It would make a lovely party room."

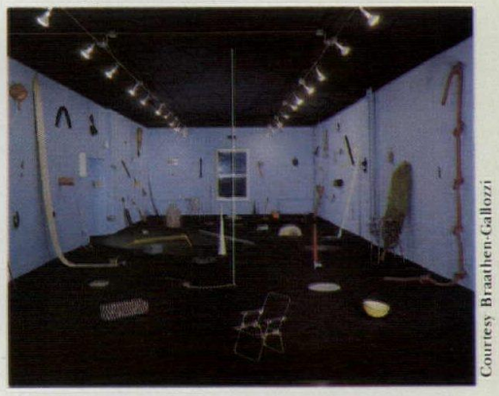


Photos courtesy Holly Solomon Gallery









Courtesy Braathen-Gallozzi

1 Brad Davis and Ned Smyth's "The Garden" 1977. 2 Alexis Smith's "USA" 1981. 3 Kim MacConnel's "Furnishings" 1977. 4 Judy Pfaff's "Deepwater" 1980. 5 Donald Lipski's "Passing Time" 1980.

Alexis Smith's ingenuous work "USA" bears a close relationship to the most guileless "Post-Modern" architecture, with its literal inclusion of homey (corny) Americana objects: a white picket fence, telephone poles, an arched trellis, a bale of hay, a wooden ladder, old postcards. The California artist's work has long been literary, with quotations from well-known texts blown up like billboards and juxtaposed in collages with visual elements ("USA" incorporates passages from "Main Street," "USA," "Our Town," as well as advertisements). Smith has been hobnobbing with architects (especially Coy Howard), and her work now lithely steps into the architecturally scaled third dimension and the simplistically applied architectural reference.

In the Rosa Esman show, the artists' work (not all prepared especially for this event) relays social messages at least as potent as the formal and spatial explorations: the military implications of Charles Simonds' "Gate of Souls" and Ed Kerns' "A Secret Base Somewhere in the West"; and observations on material consumption and the individual in society in Claes Oldenburg's Graham Greene-like duplex-receptacle-as-suburban-tract-home, and Saul Steinberg's kitchen-as-city-street.

Who invites whom? The visual patterning, associative reflections, and social commentary of art filter into architecture—seen soon on the walls, eventually in the world. (SD)

[*News report continued on page 51*]

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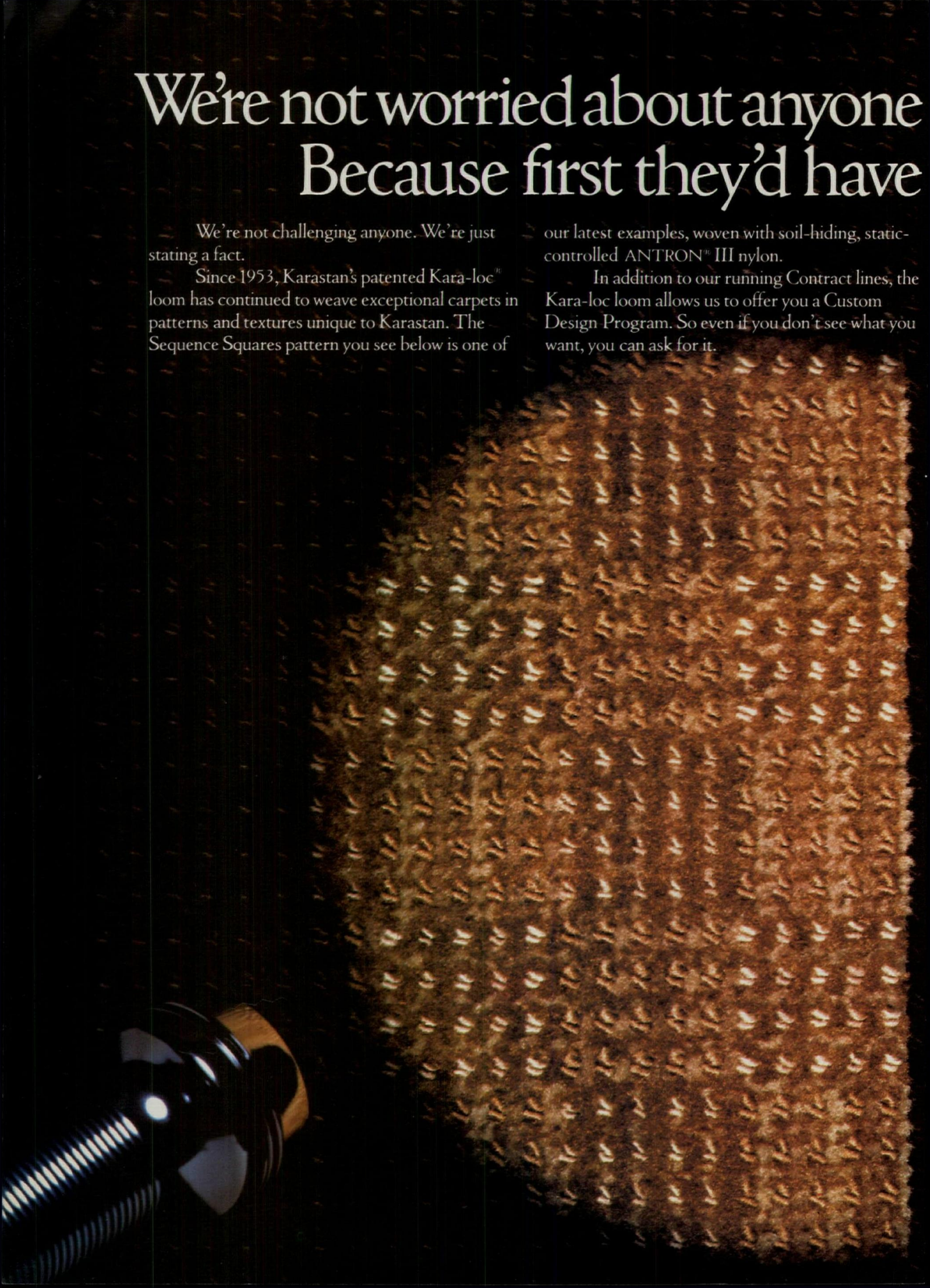

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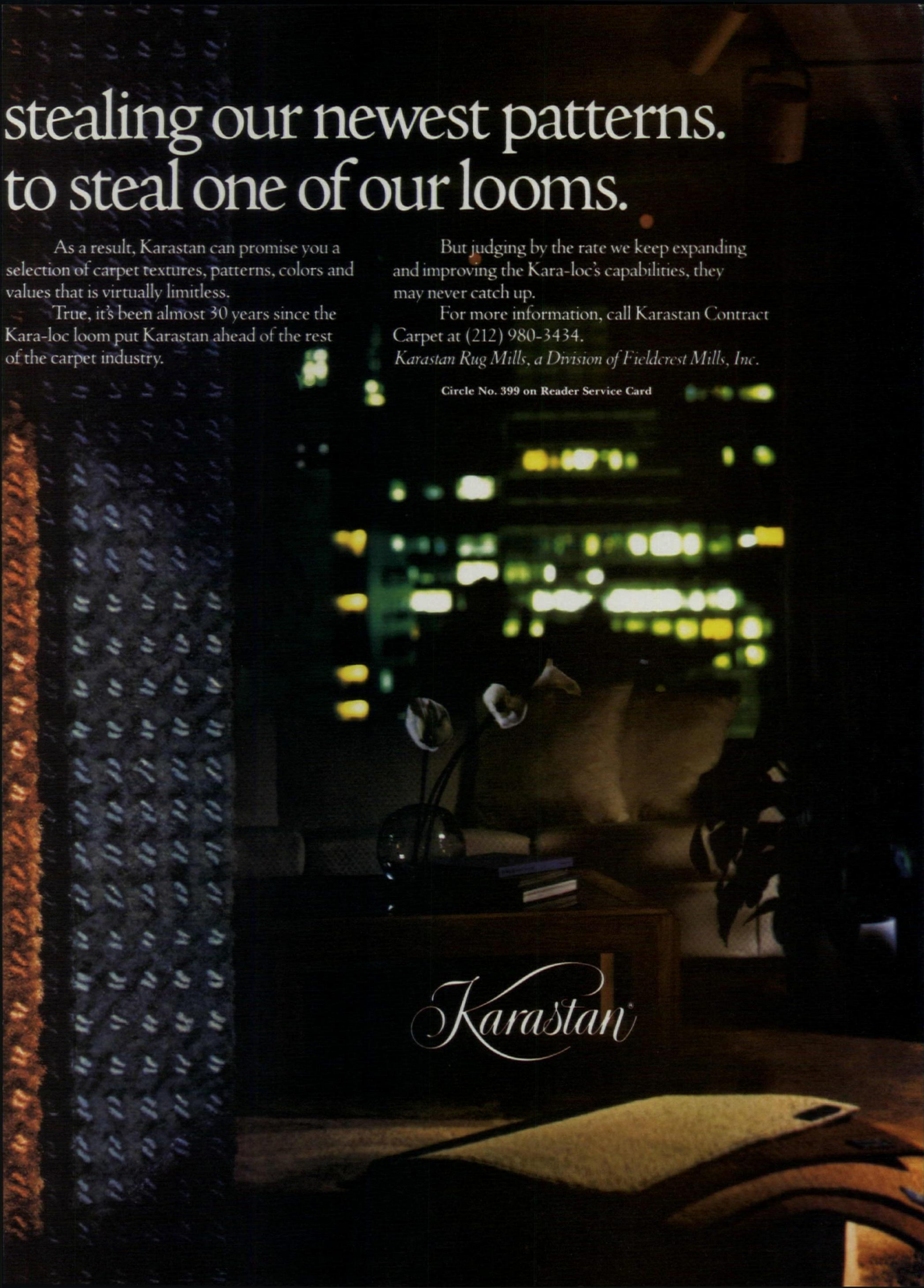

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News report continued from page 47



Lent by the Brooklyn Museum

Breuer's B19 coffee table.

Marcel Breuer: Furniture & Interiors

Since the last decades of the 19th Century when architects began to take a serious interest in the furniture that would fill the spaces they created, the impulse to design a unified interior has led to a frequent problem: furniture designed by architects is often dependent upon the architectural space for which it was designed to be totally successful. (Witness, for example, Frank Lloyd Wright's furniture for the Imperial Hotel, Tokyo.) The exhibition of furniture and interiors by Marcel Breuer now at The Museum of Modern Art, however, reveals that this is not a universal problem, for the best of these pieces stand alone as independently successful works of art. Certainly the B19 table (1928) produced by Thonet, the wall cabinet (1926) for the Wilensky apartment in Berlin, and the wood and aluminum lounge chair of 1932–3 can be appreciated with or without an understanding of the interiors in which they were originally used.

Breuer's tubular steel furniture designs of the late 1920s are justly famous. Indeed they have been more a part of the fabric of modern design during the last two decades than they were when first produced over 50 years ago. Less well known, however, are both Breuer's early designs and the work he produced after he left Germany. The exhibition presents the broad range of Breuer's design interests, and in it we see his development. Breuer's shift in the mid-1920s from the de Stijl, constructivist-influenced productions of his early youth at the Bauhaus in Weimar to designs in tubular steel is a dramatic reflection of his artistic maturity at an early age. His later interest in the possibilities of aluminum and plywood reflects both a continuing interest in exploiting the potential of new materials for a mass market and, in the case of the plywood furniture, a new desire to use a material which was warmer, more inviting, and thus more acceptable to his public.

Yet it is to the early tubular steel furniture that we are drawn to return in admiration time and again at the exhibition, for it is beautiful and timeless in a way that the plywood furniture is not. Whether the fact that these pieces have been reproduced since the early 1960s is a result of their timelessness or part of the reason they still look fresh and modern, it is perhaps too soon to say. The former seems more likely.

The installation at MoMA is intelligent and cogent, arranged chronologically and supported by photographs of furnished interiors, floor plans, period advertising, posters, and working and patent drawings, all of which are an aid in understanding Breuer's work. Thus, for instance, the complex relationship between the cantilevered chairs of Mart Stam, Ludwig Mies van der Rohe, and Marcel Breuer is made clear with the aid of a photo-text panel. The installation itself is clean and attractive. With its arrangement of photo panels in strips on the walls and material in projecting cases supported by tubular metal legs, which keep the floor space open, it contains affectionate references to Breuer's own design.

The show was organized by J. Stewart Johnson, curator of design at MoMA, and Christopher Wilk, guest curator for the exhibition. Mr. Wilk has also written a thoughtful catalog, which will remain a contribution to the scholarship of the field. After closing in New York Sept. 15, the show travels to Baltimore (Oct. 13–Nov. 22, 1981), Winnipeg (April 1–May 15, 1982), Cleveland (June 16–July 25, 1982), and Montreal (Sept. 13–Oct. 31, 1982).

Before his death in July, Marcel Breuer was the last of the great teachers of the Bauhaus, the German school which had an overwhelming impact on our century; he was a leader of the Modern movement, a movement whose [*News report continued on page 54*]

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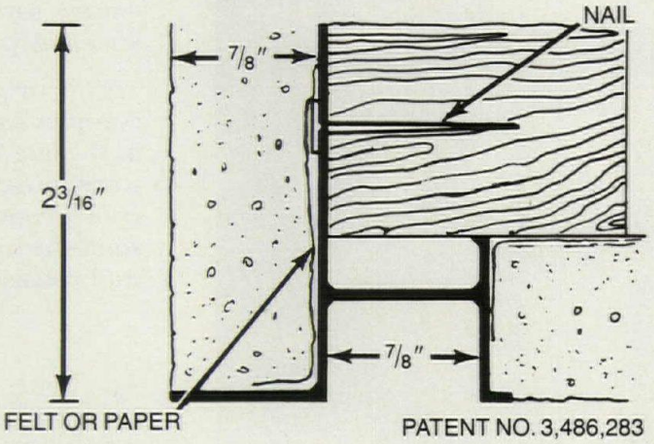

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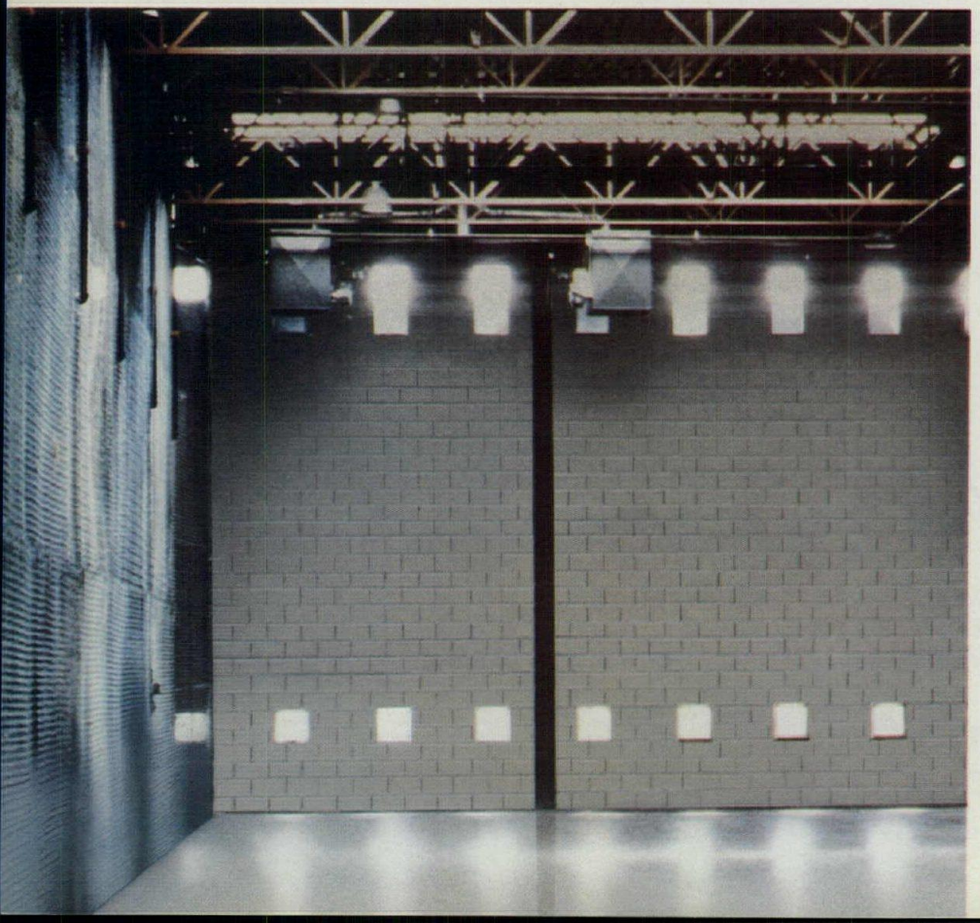
The office building with the handsome split ribbed concrete masonry surfaces and limited north window areas. 50% of the south wall is glazed and fitted with solar shutters for night insulating and sun control. Concrete masonry "Mass" is at work here.

An overall view of the warehouse interior with the concrete masonry Trombe wall in the background. The window-like squares are openings for heat transfer.



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Innovative concrete masonry passive solar energy system provides 38% of winter heating, maintaining a 55° interior temperature.

Payback in 7½ years.

The rigorous Vermont winter is a tough test for a concrete masonry passive solar energy saving system. Time and experience has proved that the system works.

The original office and warehouse complex was built with concrete masonry in the late 70s. When an expansion of the warehouse was needed, the architects chose concrete masonry again, using a south-facing Trombe wall. The Trombe wall consists of a concrete masonry wall,

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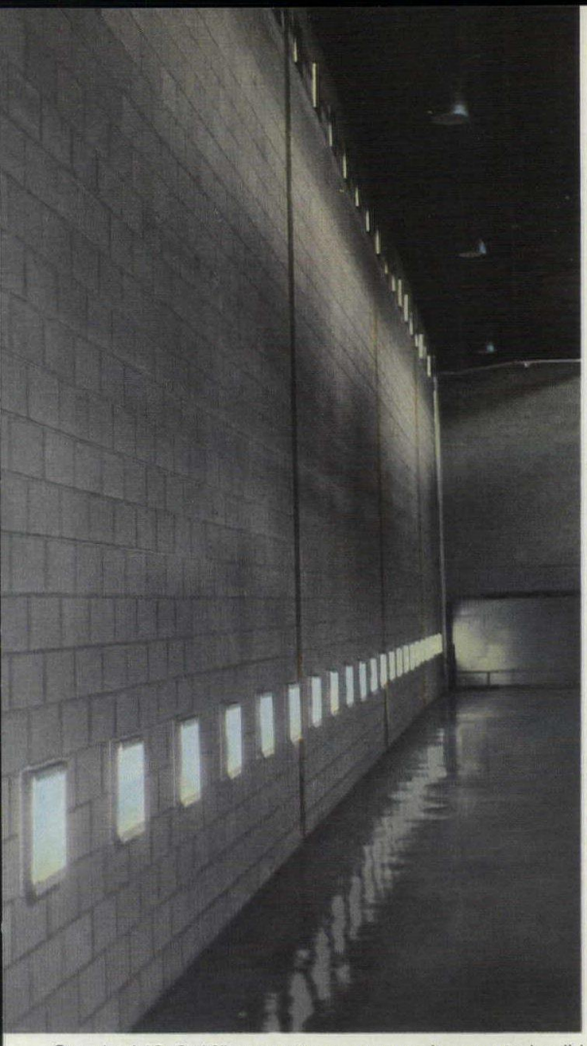
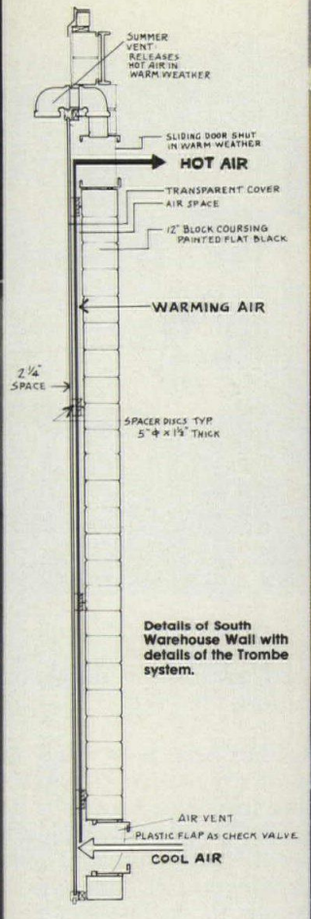


Standard 12x8x16" concrete masonry units, grouted solid and painted black on the exterior, are employed in the Trombe wall.



Details of South Warehouse Wall with details of the Trombe system.



A construction photo showing the venting ports which exhaust trapped solar heating to the outside in Summer. The grilles shown, transfer heat to the inside during Winter. Diagram at left shows how the system operates.

grouted solid, painted black and a double-skinned series of plastic panels to channel the stored heat back into the building.

Proper orientation of the building, and the Trombe wall, provide 38% of Winter heating required to maintain the building at 55° F. The architects estimate the system will save over 2,800 gallons of oil per year, or a payback in 7.4 years. The solar scoops provide 90% of the lighting required.

C. Treat Arnold, AIA, partner in the architectural firm stated in regard to the selection of concrete masonry, "... the material filled our design needs, in addition to satisfying the necessary thermal and fireproofing qualifications."

Split ribbed concrete masonry units frame the acrylic panel covered Trombe wall which is built of 12" concrete block, grouted solid and painted black.



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News report continued from page 51

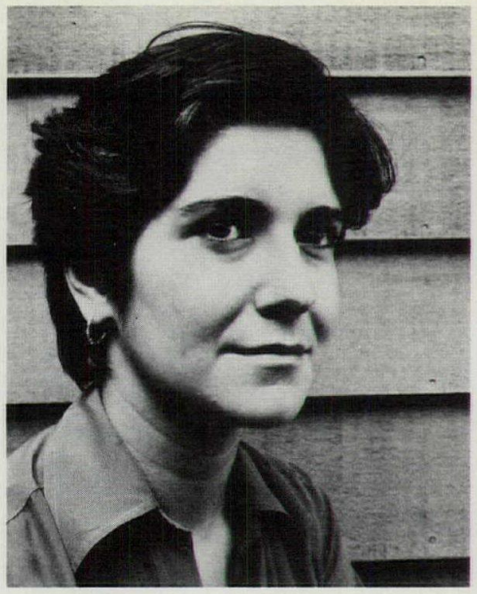
production sometimes now seems to us coldly functional. But Breuer once said, "While a utilitarian object must be useful, functionalism is not the highest value"; and elsewhere, "I think that it should be emphasized . . . that functional needs are not only physical, but also human and spiritual. The house is not a 'machine for living.' " The show at MoMA reveals that, at his best, Marcel Breuer transcended the purely functional and produced designs both humane and aesthetically powerful. [Kevin Stayton]

Kevin Stayton is an assistant curator, Decorative Arts Department, Brooklyn Museum.

P/A promotes Miller, appoints Viladas

Nory Miller has been promoted to Senior Editor of *Progressive Architecture,* with broad responsibility for coverage of design. Since joining the P/A staff in September 1979, Ms. Miller has been responsible for the magazine's features on interior design. She developed P/A's International Conceptual Furniture Competition, held for the first time this year, and will take major responsibility for that program again in 1982.

Before joining the P/A staff as an associate editor, Nory Miller had spent two years as assistant editor of the *AIA Journal* and before that had been managing editor of the *Inland Architect.* She has contributed articles to numerous other publications in the U.S. and abroad.



Pilar Viladas.

Pilar Viladas has been appointed Associate Editor of *Progressive Architecture* in charge of the magazine's interior design features. An alumna of Radcliffe College, Harvard University, Pilar Viladas received a Bachelor of Arts degree, magna cum laude, in art history. After serving as managing editor of *Skyline* magazine, published by the Institute for Architecture and Urban Studies in New York, she joined the staff of *Interiors* magazine in 1979, where she held the position of Special Features Editor.

CSI: the subject was "Failure"

While "Construction project failure" was billed as the subject of the 25th annual Construction Specifications Institute convention held June 22–24 in St. Louis, neither incisive analysis nor solutions materialized. Instead, the program drifted into platitudes about the need for harmony in the industry, and promotion numbers for the Institute's standard documents.

Success, however, characterized the main event—the largest nonresidential construction product exhibit in the U.S. Over 300 well-designed and even ingenious booths covered the ample floor of the Cervantes Convention Center in St. Louis's redevelopment area, with treatment ranging from the total experience of Mobay Chemical's mirror-enhanced film on color additives for concrete, to the effective simplicity of Zero Weatherstripping's product display. Furthermore, exhibit viewers showed such seriousness of purpose that their knowledgeable technical questions often forced booth salesmen to promise later, further researched, responses.

At the member's forum, outgoing president George S. George and the executive committee affirmed the Institute's resolve not to involve itself with its professional members' employment opportunities, client contacts, and liability insurance; but they entertained discussion about posthumous conferment of Fellowship status, and about distribu-

[*News report continued on page 58*]

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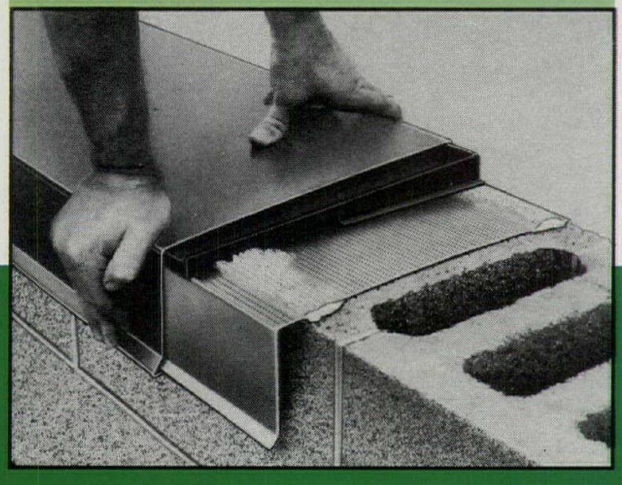
Hickman PERMASNAP Coping ...it's a "snap" to install.



After the galvanized cleat and special chair are mounted on the masonry, the Hickman Coping Cover simply "snaps" in place. There are no nails, no wood nailer, no screws, no imbedded anchor bolts. The PERMASNAP System is guaranteed waterproof . . . and withstands 60 pounds per foot uplift. For fast, effective protection plus good looks, specify PERMASNAP Coping by Hickman. See us in Sweet's (7.3 Hi).

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A translation of the ancient saddler's art into modern chairmaking.

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photo: PETER PAIGE

THERE ARE THOUSANDS OF STORIES THESE ARE JUST



(1) Transamerica, San Francisco, built all of its 48 stories around Celotex Celotone natural fissured ceilings. It was one of those rare times when the company chose not to diversify.

(2) The 7 stories in Water Tower Place, a Chicago shopping center, are built around Celotone natural fissured ceilings. After all, top shops deserve the tops in tops.

(3) The Kennedy Library, Boston, tells some fantastic stories about the life of JFK. Topping them all are 9 stories by Celotex. Celotone natural fissured tiles were the architect's choice.

(4) Arco, Los Angeles, built two beautiful towers of 50 stories each around Celotone Texturetone tiles. Rumor has it one of the OPEC sheiks wants to rent one of them as his West Coast palace.

BUILT AROUND CELOTEX CEILINGS. A FEW OF THEM.

(5) All 160 stories in the Embarcadero Center I, II, III and IV high rises in San Francisco are built with Celotone natural fissured tiles. We'd say that's one of the highest compliments paid to any ceiling company.

(6) The Super Dome, New Orleans, built its 27 stories around Celotone Texturetone 2' by 2' lay-in panels. We guess they wanted a super dome on every Super Dome floor.

(7) The 4 stories in Xerox World Headquarters, Stamford, Conn., are built around Celotone Texturetone 12" by 12" acoustical tiles. Incredible as it may seem, they refused to settle for any copies.

Celotex has 18 different ceilings you can build your own stories around. Contact Al Thornton, The Celotex Corporation, 1500 North Dale Mabry Highway, Tampa, Florida 33607, 813/871-4133 Ask for our 1981 Celotex Acoustical Ceiling Systems brochure. It tells the whole story.

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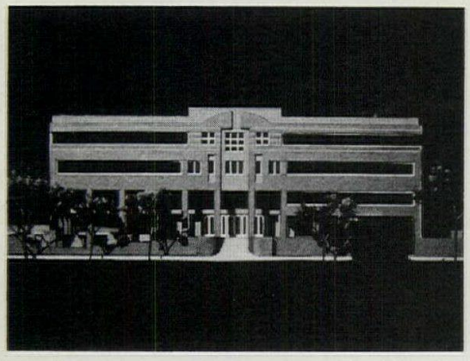
News report continued from page 54



CSI headquarters proposal.

tion of spec-data sheets to interested industry members.

A small scale model displayed CSI's proposed new headquarters building in Arlington, Va, eliciting critical comments about its design, as well as expressions of surprise at the paucity of information provided to explain such a symbolic undertaking: no program, plans, nor details were exhibited.

CSI Executive Director Jospeh Gascoigne's announcement about the 1982 Atlanta convention met with general approval: it will be held largely on a weekend, to minimize loss of office time, and to take advantage of lower air and hotel rates. [Walter Rosenfeld]

Walter Rosenfeld, AIA, CSI, is Managing Director for Professional and Technical Services at The Architects Collaborative, Cambridge, Ma.

Solar Rising: Balloon grounded, not deflated

Severe administrative budget cuts have curtailed solar programs, but have strengthened attitudes towards energy, as evidenced at the AS/ISES Solar Rising conference held in Philadelphia May 26–30. The American Section of the International Solar Energy Society saw fewer registrants—1600—than expected, but found conferees seeking ways to capitalize on the new market potentials released by expected deregulation of energy prices.

While last year's Phoenix conference showed the general optimism during Carter's administration, this year's conference displayed a refinement in marketplace products, both in the strong exhibit area and in the presentations by the Passive Division and the Architecture and Construction Division. The latter presentations indicated a trend towards smaller, strongly conservative energy systems, simpler passive and hybrid systems, and improved use of computer modeling techniques for design decision-making.

The "Solar in the Cities" presentations message was clear: local communities must become self-reliant through energy conservation and the wise use of solar power. Chuck Burnette described his Philadelphia Solar Planning Project's process of categorizing residential and commercial buildings and assessing their potential energy savings, while selling the energy-wise program to the community. Burnette illustrated the importance of conservation of renewable resources to increase community energy self-sufficiency while reducing the drain of dollars from the local economy.



Sunstat.

Another significant development surfaced at the "Big Building" program preceding the main conference: major architectural firms such as TAC and

[*News report continued on page 62*]

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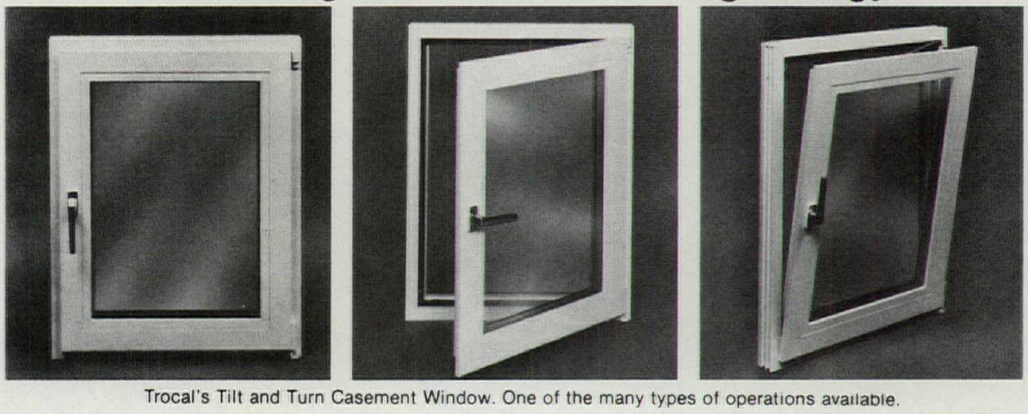

Trocal's Tilt and Turn Casement Window. One of the many types of operations available.

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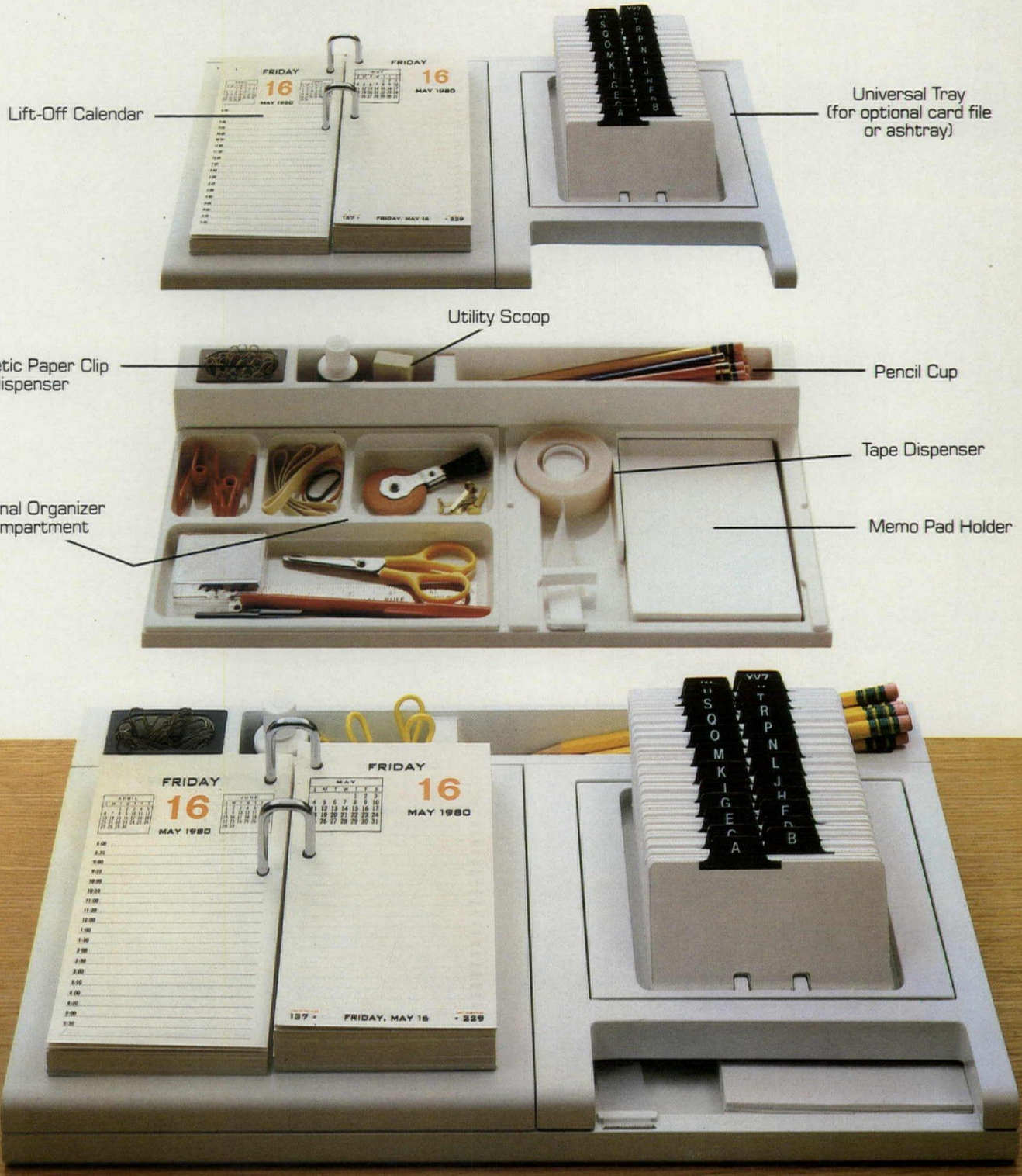

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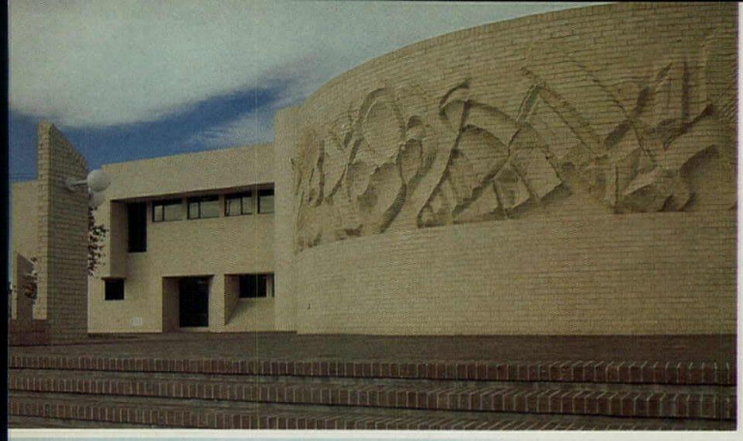
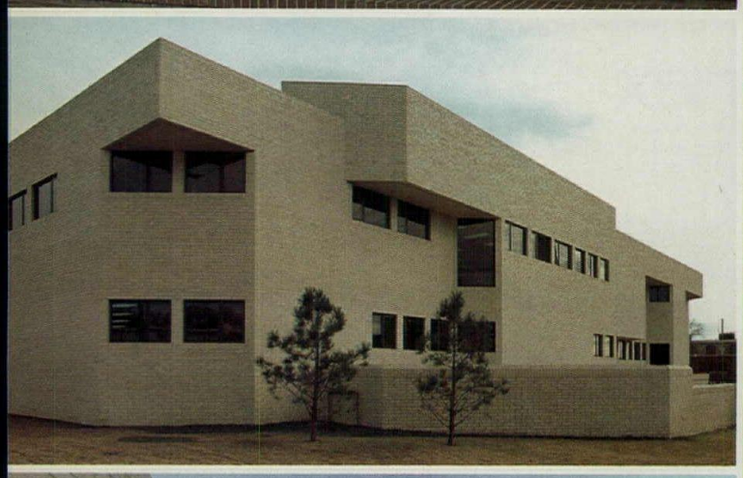
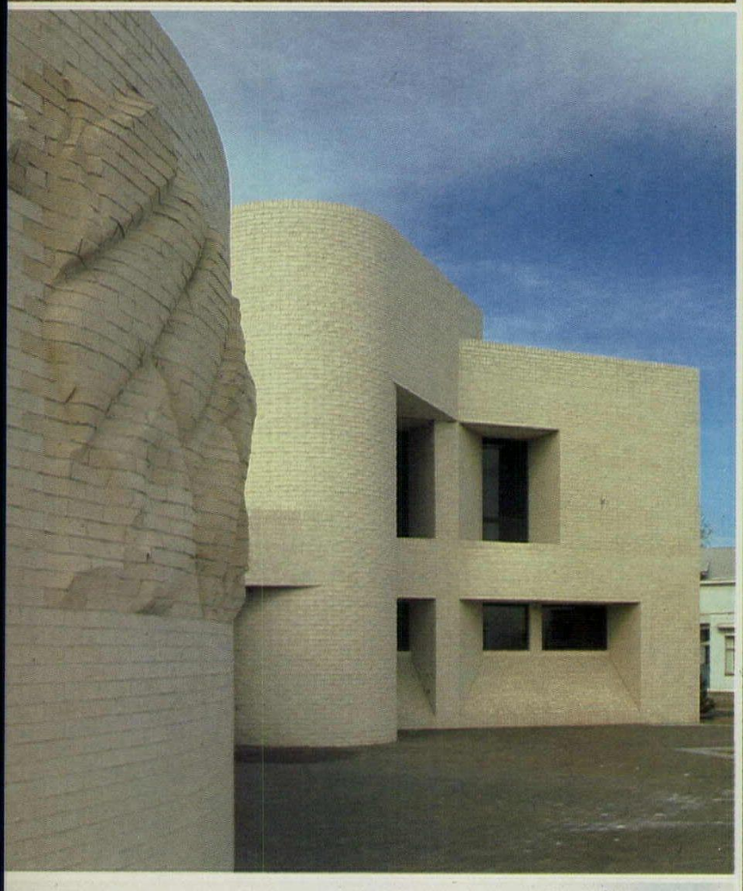
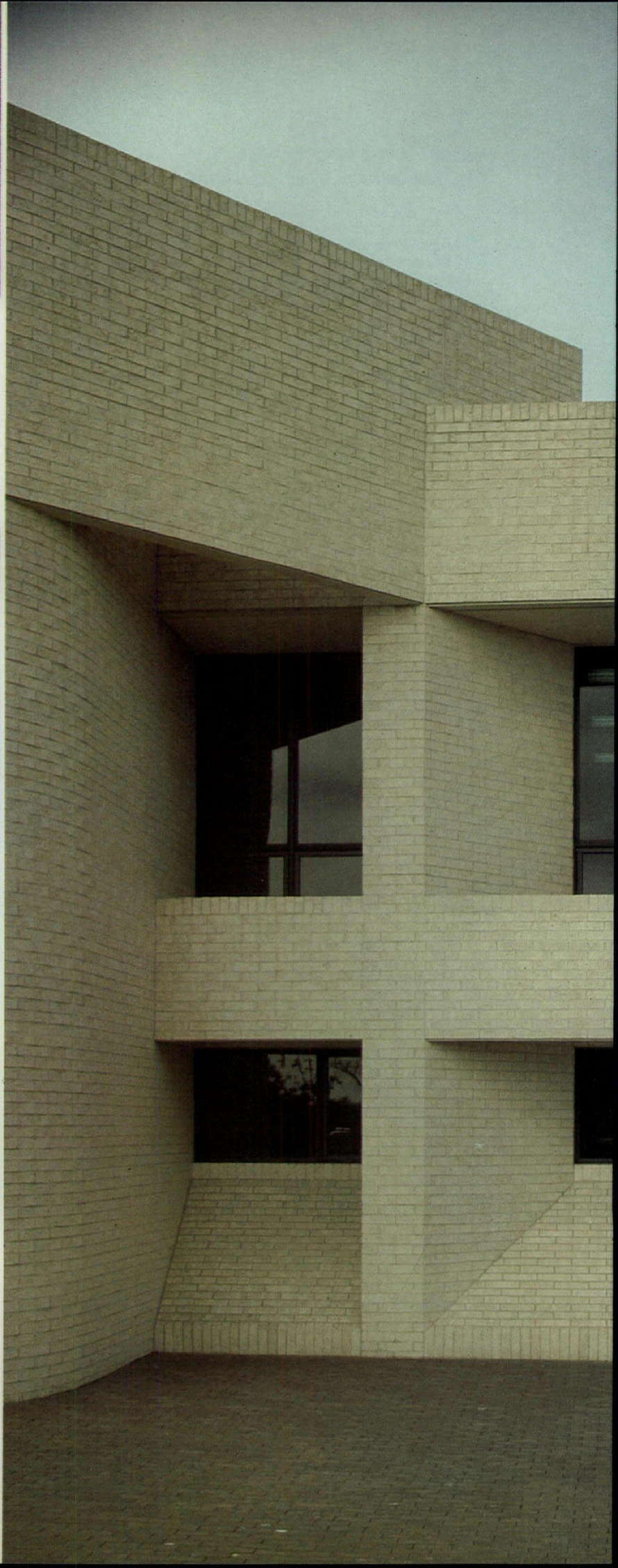
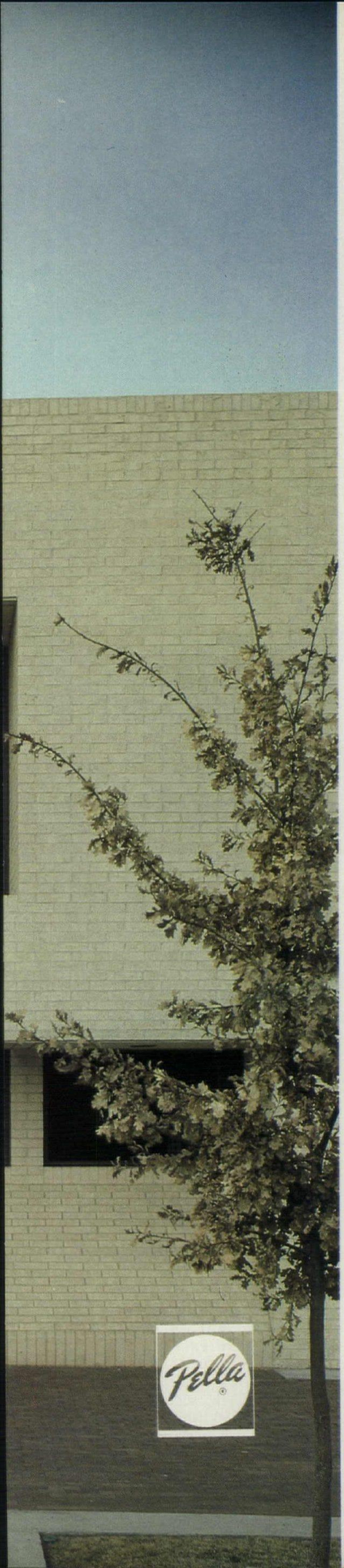












Deep-set Pella Clad Windows and thick masonry walls reflect more than the regional architecture of the Southwest.

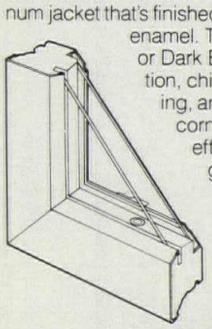
They also reflect a lot of heat.

And here in Pueblo, Colorado, keeping cool is much more of a problem than keeping warm. That's why the architects chose the ages-old adobe form of construction for the School District 60 Administration Building.

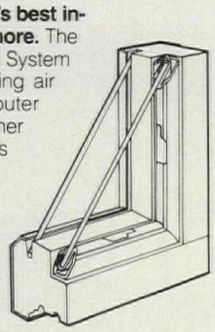
The 42,000 square foot, three-level building has load bearing walls of vertically reinforced oversize brick with insulated interior surfaces. The deep-set Pella Clad Windows with Solarcool® Bronze glazing admit an abundance of daylight, while shielding the interior from direct sunlight and glare.

Operable Pella Clad Windows relieve the occupants of the "sealed box" feeling and are integral to the efficient operation of the building's absorption air conditioning system as well. And the Pella Clad System keeps the exterior as maintenance free as possible while still providing the warmth and beauty of real wood in the inside.

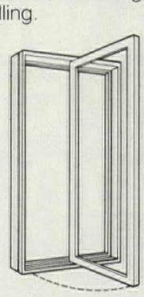
The Pella Clad System. Completely covering the exterior surface of doors and windows is a sturdy aluminum jacket that's finished with high-temperature baked enamel. This tough coat, in either White or Dark Brown, resists color degeneration, chipping, flaking, peeling, cracking, and a host of other plagues. The corners are carefully lap-jointed for effective weather protection and give a neat, mitered appearance. Underneath, the solid wood construction has been vacuum treated with a water and insect repellent preservative — after forming and *before* the units are assembled. Perhaps the best part of the Pella Clad System is that custom sized and shaped fixed windows are available with the same low-maintenance Cladding to match doors and operable windows.

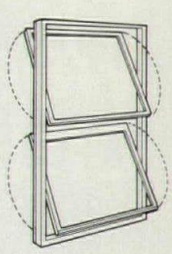


Air space. It's one of nature's best insulators. And Pella offers more. The Pella Double Glass Insulation System features a full $^{13}/_{16}$" of insulating air space between the fixed outer pane and the removable inner glass panel. Or specify Pella's Triple Glass Insulation System with a total of ¾" of air space between the fixed outer pane and the removable inner double insulating glass panel. For Sliding Glass Doors and large Fixed Windows consider optional Pella Triple Insulating Glass with two $^{5}/_{16}$" air spaces between three panes of glass. Standard glazing is double glass with ½" of air space. Where protection from heat gain and glare is the issue, specify reflective environmental glass.

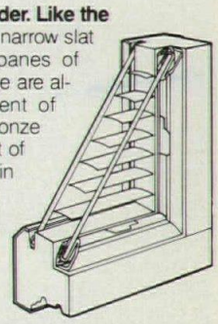


Easy washing. A distinct advantage. Pella Casement and Awning windows feature a unique patented hinging system that allows the sash to open towards the center of the frame. There's more than ample room to reach both sides of the window without leaving the building or using ladders. Pella Double Hung windows have a special spring-loaded vinyl jamb that allows each sash to rotate 360°. Every corner can be easily reached for cleaning. And because the sash pivots at the center, the weight is counterbalanced for safe handling.





More Pella options to consider. Like the Pella Slimshade®. Attractive narrow slat metal blinds set between panes of glass mean dust and damage are almost unheard of. Adjustment of these Oyster White or Dark Bronze blinds is easy with just a twist of the dial set inconspicuously in the lower corner of the sash. And they offer considerable heat retaining benefits as well as shading. Available on Pella Casement and Double Hung windows, the Pella Contemporary French Sliding Glass Door, and the new Pella Sunroom.



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General Contractor: Houston Construction Co., Pueblo, Colorado
Owner: School District 60, Pueblo, Colorado

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News Report continued from page 58

CRS are showing increased involvement in energy-conservative design.

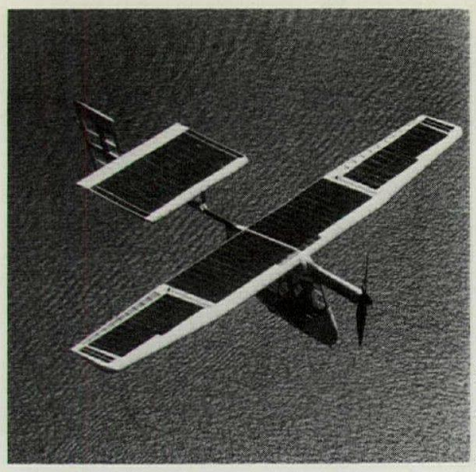
As at all conferences, attendees had to sort through myriad solutions to find and integrate the appropriate tools for their needs. This conference dramatized the integration process for the first time: it featured an Urban Design Charrette sponsored by the Association of Collegiate Schools of Architecture. Five teams of architects and students worked for three days in the exhibit area to produce designs for Philadelphia's South Broad Street Corridor. The solutions, from high-rise to mid-rise, proved the tremendous design opportunities for large solar developments in dense urban areas.

While the conference's mascot, the solar balloon "Sunstat," did not fly because of strong winds, it symbolized today's energy situation. Not deflated, it has yet to take off. [Peter J. Pfister]

Peter J. Pfister is Associate Principal and Director of Energy Group, Architectural Alliance.

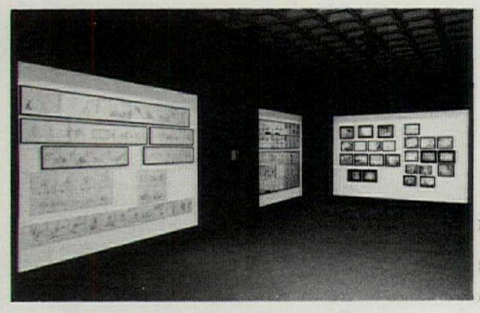
While a solar plane takes flight

A 217-lb plastic plane called the "Challenger" crossed the English Channel in July, powered only by the rays of the sun. While other planes have flown on sun-generated electricity, their energy has been stored in batteries. The "Challenger," however, drew its energy (a maximum of 2700 watts) directly from 16,128 solar cells on its 47-ft-long wings and 13-ft horizontal stabilizer to drive its two small electric motors. The plane's lightweight plastics—Kevlar fiber struts, Mylar sheathing, and Lucite windscreen—were provided by the project's sponsor Du Pont, and the cells, originally designed for Air Force satellites, were loaned by NASA. Paul MacCready, the plane's designer, admits that airplane flight is "a ridiculous use for solar energy," but maintains that the experiment was an excellent method to advertise the potential of solar power as an energy source.



Tony Frank/Sygma

The Solar Challenger.



Geoffrey Clements

Disney at the Whitney.

Disney, in SITE

"Innovation" is not in evidence in the exhibition design prepared by the "innovative" architectural firm SITE, for the display "Disney Animation and Animators" shown over the summer at the Whitney Museum of American Art in New York. SITE, in fact, reverts to the modern cliché of black matte rectangular modules in various configurations to frame sketches, test reels, scale models, and films of the Disney Studio, with emphasis on its golden age between 1932 and 1942.

Obviously, the "frame" is a metaphor for the screen itself; the framed display material is highlighted within a darkened atmosphere representing a movie theater. And certainly, the framework is politely low-key, allowing the Disney material to speak for itself.

This simple and polite approach, however, does not excuse the blinding effect of poorly focused lights, nor the illegibility due to insufficient lighting of the white-on-black section titles: the elements of good exhibition design must be followed, however clever the concept. Furthermore, basic artistic judgment has faltered here, as heavy black frames

[*News report continued on page 66*]



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Capture the Sun with New SolaireFilm Wood Windows and Doors by WEATHER SHIELD



Now available from Weather Shield Mfg., Inc., an innovative glazing system that puts more of the sun's energy to work for you. Weather Shield SolaireFilm Energy-Efficient wood windows, patio and entrance doors give you a powerful new building component which can significantly reduce heating costs.

These windows and doors are built like conventional triple pane units except that the center lite is a transparent solar sheet developed especially for insulated glass glazings. The film is suspended on spring mounted spacers that are visible on the narrow ends of each unit. Both the suspension system and film have undergone rigorous testing to insure years of trouble-free operation.

SolaireFilm units from Weather Shield have the same "U" factor and insulate as effectively as triple pane glass, yet are more transparent to solar energy. The combination of "more heat in and less heat out" means you save on heating costs. Few other solar components work as simply, cost as little, or are as maintenance-free as Weather Shield windows and doors with this new transparent solar film.

Take advantage of this unique glazing system on your next building project. Weather Shield is offering passive solar film in selected sizes of its fine quality wood windows, sliding patio doors, direct set units and steel insulated entrance systems. All are available in a choice of primed wood exteriors or any one of Weather Shield's low maintenance exterior finishes.



Super energy-efficient quad glazing is offered in direct set units only. Quad pane units are 1¾" thick, consisting of two lites of film suspended between the outer layers of glass. The units rate high on solar transmission while insulating better than triple pane units.

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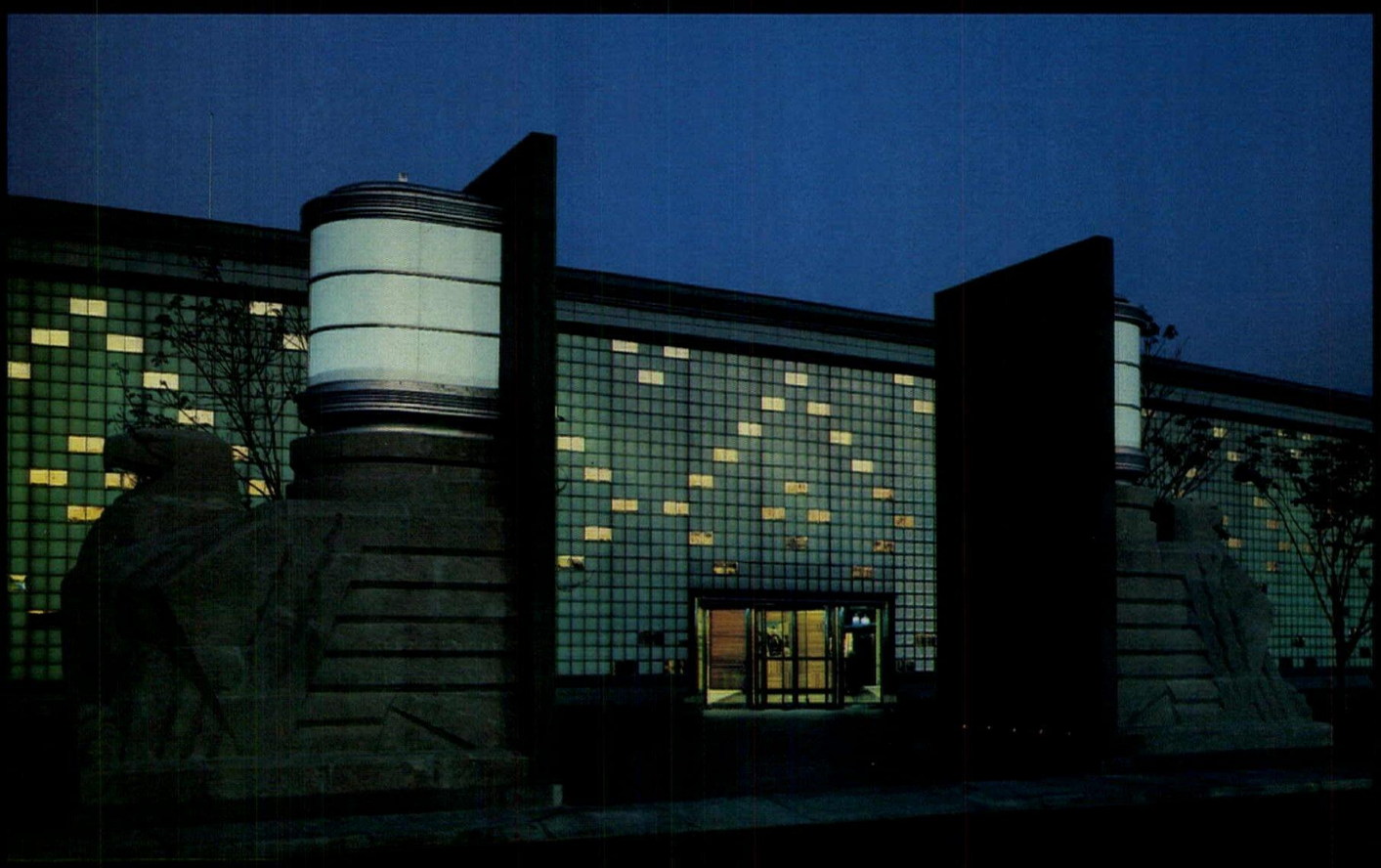
Glass Block for the 80's ...design with confidence



Best Products Company, Richmond, Virginia
Architect: Hardy Holzman Pfeiffer Associates
ESSEX™ and SOLAR REFLECTIVE Glass Block

Glass Block help you control light transmission from outside or from room-to-room...beautifully: they help to conserve energy, too.

Conceptual variations are encouraged by the form and function of Glass Block. Graceful or striking windows, walls and partitions may be designed. The clean contours of curved panels and serpentine shapes or the simplicity of straight panels may be put to use with exciting results. With Glass Block, the architect's or designer's perception and skill are employed to the fullest.

Natural and artificial light may be effectively utilized to create interesting environments. Light may be directed, diffused, reduced or reflected . . . translucence or transparency varied. A sense of space or a point of interest may be effectively enhanced . . . design with confidence.

Conserve Energy

Because of the insulating value of Glass Block, heating and air conditioning equipment with reduced capacities may be specified and future energy requirements lowered. Artificial lighting requirements may be reduced with a corresponding reduction in energy needs.

Glass Block are made by fusing two halves of pressed glass together creating a partial vacuum. This gives Glass Block the insulating value of a 12-inch thick concrete wall (U-value 0.56, R-value 1.79) . . . design with confidence.

Design Flexibility

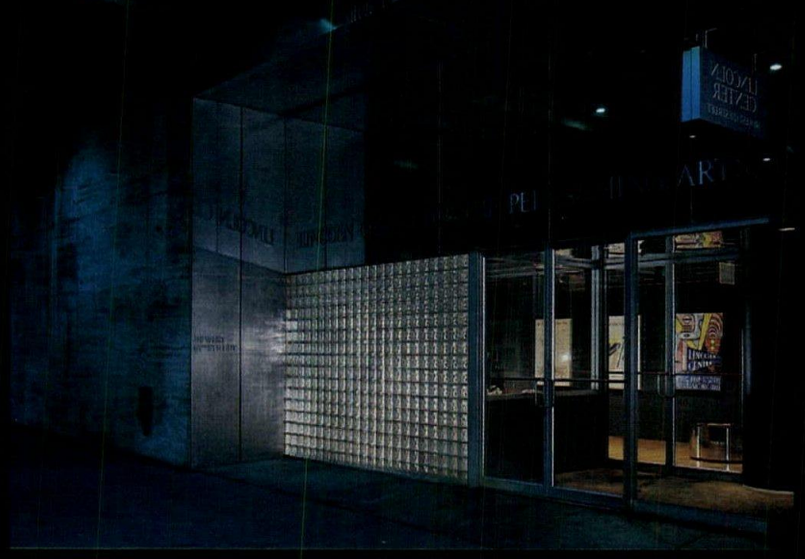
Glass Block are available in patterns which disperse or diffuse light, which offer maximum light transmission and others which produce light patterns at right angles or with a prismatic effect. An optional fibrous glass insert



Unigraphics, San Francisco, California
Designer: Environmental Planning and Research, Inc.
VUE™ Glass Block



Seymour Martinique Shoes, New York City
Designer: Stanley Felderman, Ltd.
ARGUS™ Glass Block



Lincoln Center for the Performing Arts, New York City
Architect: Gwathmey Siegel
DECORA™ Glass Block



Private Residence, Pittsburgh, Pennsylvania
Architect: Tasso G. Katselas
DECORA™ Glass Block

controls solar heat gain, brightness and glare.

VISTABRIK® solid glass units offer excellent light transmission and maximum protection from forcible entry.

Solar Reflective Glass Block, the maximum energy saving Glass Block, will be available in the fall of 1981.



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AGB-181

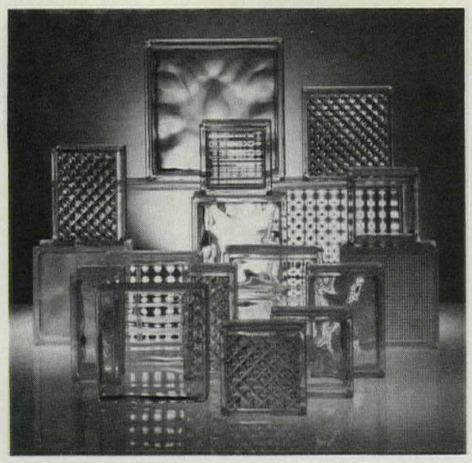
News report continued from page 62

are overpowering around sketchy pencil drawings on flimsy yellow tracing paper. The frames succeed, in fact, only where electricity and electronics are involved —in a back-lit ensemble of old film strips (an art montage in its own right) in the "Five Feature Films" section, and in video playbacks shown on small television-size screens that contrast well with the scale of the larger frames.

The Disney work itself continues to delight its perennial fans, with a freedom and energy far exceeding the exhibit's moribund module. (SD)

Glass block plant resumes production

Once on the verge of extinction, glass block is again in a healthy state of production. This country's only producer of the again popular block, Pittsburgh Corning, reversed a short-lived decision to stop production. Although the company makes other materials, notably insulation and acoustical panels, glass block is no junior member of the family. Having been a popular material in years past, glass block dipped somewhat in designers' interest in the 1960s and 1970s. Pittsburgh Corning's manufacturing facilities in Port Allegany, Pa, opened February 10, 1938. By the late 1970s, they had become dingy and inefficient, in energy and production.



Glass blocks still produced in USA.

After considering the notion of closing the plant down, the company received pleas from many design professionals to reconsider. The material was making what most regarded as a strong, and probably long-lived, comeback. Company officials, armed with the evidence, decided to update and resume production. President John L. Baldwin cut the ribbon at the plant July 14, as it resumed full production on the line, about 4800 units per work shift. [JM]

Calendar

Exhibits

Through Sept. 22. Mystery of Form: Architecture of Alvar Aalto. The Museum of Finnish Architecture, University of Maryland, College Park.

Through Sept. 23. Fisher/Florian: an exhibition comparing the work of two urbanists. Frumkin & Struve, Chicago.

Through Sept. 24. Along a Grand Boulevard: Architecture and the Landscape of the Mississippi River. Gallery at the Old Post Office, Dayton, Oh.

Through Sept. 30. House Proud: Canadian Houses as Seen by Nineteenth Century Artists. Royal Ontario Museum, Toronto.

Through Oct. 3. Ten Architects: A New Generation. Max Protetch Gallery, NY.

Through Oct. 4. The Art Fabric: Mainstream. Minnesota Museum of Art at Landmark Center, St. Paul.

Through Nov. 1. The Golden Age of Naples: Art and Civilization Under the Bourbons, 1734–1805. Detroit Institute of Arts.

Through Nov. 1. The Drawings of Andrea Palladio. Ackland Memorial Art Center, University of North Carolina at Chapel Hill. Subsequent dates: **Nov. 15–Dec. 31,** San Antonio Museum of Art.

Through Dec. 12. "New Chicago Architecture." Gran Guardia Vecchia, Verona, Italy.

Sept. 15–Oct. 25. Alfred Bendiner, FAIA: A Retrospective. The Octagon, Washington, DC.

Sept. 17–Nov. 1. Art of the Olmsted Landscape. Metropolitan Museum of Art, New York.

Sept. 19–Oct. 18. Buildings Reborn: New Uses, Old Places. IBM Corp., Endicott, NY.

Sept. 24–Dec. 28. Retrospective exhibition of the work of Jack Lenor Larsen. Musée des Arts Décoratifs, Pavillon de Marsan, Palais du Louvre, Paris.

Sept. 29–Oct. 22. The Artist Views the City. Gallery at the Old Post Office, Dayton, Oh.

Sept. 26–Oct. 25. Transformed Houses.

[*News report continued on page 70*]

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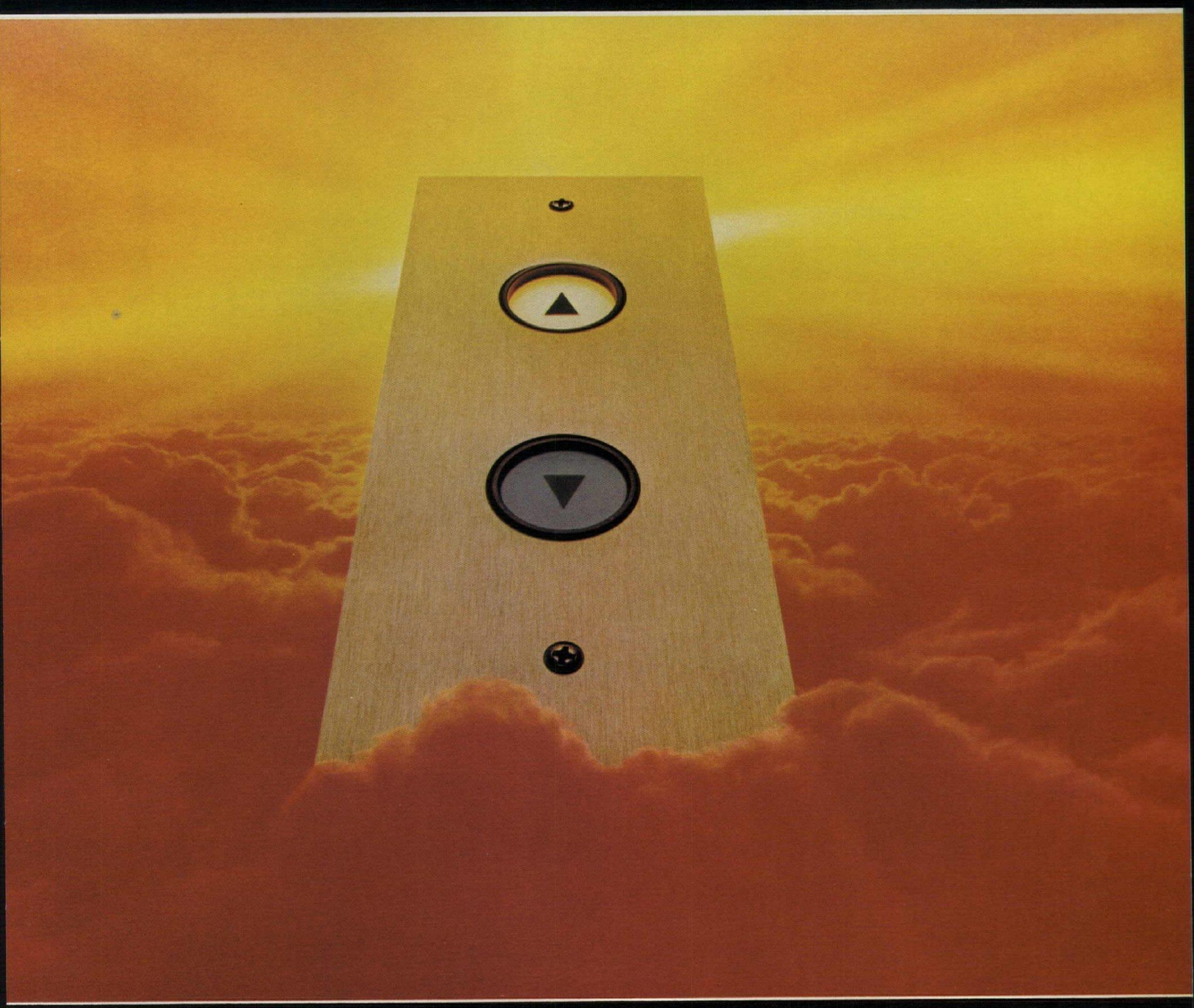

Schindler Haughton



The thirteen-story Marina Del Sol condominiums in Corpus Christi used Vulcraft joists and steel deck throughout.

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Developers: Marina Del Sol, Inc. Architect and Engineer: Edgar L. Muller & Associates General Contractor: Braselton Construction Company Steel Fabricator: Palmer Steel Supplies, Inc. Steel Erector: W. P. Atkison Company, Inc.

Vulcraft's redesign of the balconies resulted in a significant cost saving.



Even though they were building high-ticket luxury condominiums, the owners didn't want to waste money on construction costs.

So when the Marina Del Sol was being planned in Corpus Christi, Texas, the plan was to save money by building with Vulcraft steel joists rather than poured-in-place concrete. This cut one-third off the construction time, proving once again that Vulcraft joists are a more cost-effective structural system.

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Besides steel joists, Vulcraft also supplied steel deck for this thirteen-story showplace by the Gulf. And Vulcraft is the only company in the country that manufactures both steel joists and steel deck. This means you can rely on one source for both. Another plus for working with Vulcraft.

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Parson's School of Design, 2 W. 13th St., New York.
Oct. 1–23. Watercolor drawings for the rebuilding and redecorating of the Teatro Valle in Rome, 1791, by Francesco and Giandomenico Navone. Lucien Goldschmidt, New York.
Oct. 2. "The Classical Tradition—the Wave of the Future," sponsored by Classical America, at the School of Architecture, University of Texas at Austin. For information contact the School of Architecture or Henry Hope Reed, Classical America, 227 E. 50 St., New York 10022.
Oct. 3–Nov. 1. America's Architectural Heritage. AIA, Washington, DC, and South Western College, Chula Vista, Ca.
Oct. 10–12. Energy Expo 81. Stewart Airport, Newburgh, NY.
Oct. 13–Nov. 22. Marcel Breuer: Furniture and Interiors. Baltimore Museum of Art.
Oct. 14–Nov. 29. Innovative Furniture in America. The Lowe Art Museum, Coral Gables, Fl.
Oct. 25–29. SaudiBuild '81—international construction exhibition which reflects the priorities of the Kingdom of Saudi Arabia's third Five Year Plan. Further information from: Gerry Dobson, Overseas Exhibition Services, Ltd., 11 Manchester Square, London W1M 5AB.
Oct. 27–Nov. 19. Architecture, Design and Engineering at the University of Cincinnati. Drawings, sketches, and scale models by faculty and students from the College of Design, Architecture and Art and the College of Engineering at the University of Cincinnati. Gallery at the Old Post Office, Dayton, Oh.
Nov. 20–Jan. 17, 1982. The Domestic Scene (1897–1927): George M. Niedeken, Interior Architect. Milwaukee Art Museum.
Nov. 24–Dec. 17. The Work of Mario Botta. Gallery at the Old Post Office, Dayton, Oh.

Competitions
Sept. 21. Submission deadline for Reliance Development Company's Award for Distinguished Architecture. Contact Reliance Development Co., 919 Third Ave., New York, NY 10022 (212) 750-7500.
Sept. 30. Registration deadline for Walker/Group Student Competition. Contact Competition Director, Walker/Group, Inc., 304 E. 45 St., New York 10017. Submission deadline: **Nov. 30.**
Oct. 15. Submission deadline First Annual Allmilmö Kitchen Design Competition. Contact Tomorrow's Kitchen Today, P.O. Box 629, Fairfield, NJ 07006.
Oct. 31. Mailing date for entries, Laminator's Safety Glass Association "Design of the Year" Award. Contact LSGA Design Scholarship Award, 700 Van Ness Ave., Fresno, Ca 93721.
Nov. 1. Deadline for entries, Concrete Reinforcing Steel Institute Design Awards VI Program. Contact Vice President/Marketing & Promotion, Concrete Reinforcing Steel Institute, 180 N. LaSalle St., Chicago Il 60601 (312) 372-5059.
Dec. 1. Entry deadline, Plywood Design Awards. Contact American Plywood Assn., P.O. Box 11700, Tacoma, Wa 98411.
Jan. 26, 1982. Deadline for mailing entries, The Second Annual International Conceptual Furniture Competition. Contact International Conceptual Furniture Competition, Progressive Architecture, 600 Summer Street, P.O. Box 1361, Stamford, Ct 06904.
Feb. 1, 1982. Submission deadline Fourth Arango International Design Competition. Theme: Multi-Purpose Furniture. Contact Intercon Arts, Inc., The Metropolitan Museum and Art Center, 1212 Anastasia Avenue, Coral Gables, Fl 33134.

Conferences, seminars, workshops
Sept. 17–18. Passive Solar Workshop. Santa Fe, NM. AIA approved. Contact Passive Solar Associates, P.O. Box 6023, Santa Fe, NM 87501. (505) 983-1506. Future workshops: Chicago **Nov. 9–10;** Atlanta **Nov. 13–14;** San Francisco **Nov. 30–Dec. 1.**
Sept. 19–21. Teilhard and Metamorphosis, An International Centennial Conference/Celebration, Arcosanti, Az. Contact Jeff Stein, 6433 Doubletree Rd., Scottsdale, Az 85253.
Sept. 20–25. American Concrete Institute Convention, Quebec Hilton, Quebec, Canada. Contact Cynthia A. Clapp, Convention Coordinator, ACI, Box 19150 Redford Station, 22400 West Seven Mile Rd., Detroit, Mi 48219.
Sept. 26–30. International Federation for Housing and Planning Congress. Liège, Belgium. Contact IFHP Congress Dept., 43 Wassenaarseweg, 2596 CG The Hague, The Netherlands.
[*News report continued on page 74*]



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Photo: David Dubick

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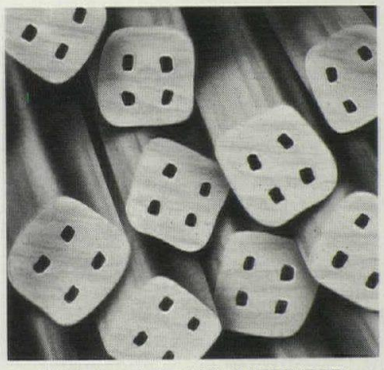
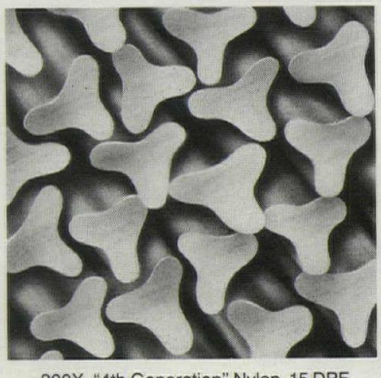


300X. New Antron® XL, 34 DPF (BCF). Total Surface Area: 19,500 cm²/oz. of face fiber.



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News report continued from page 70

Oct. 4–6. First North American Conference on Industrial Architecture, sponsored by The American Institute of Architects, Detroit. Contact Maurice Payne (202) 626-7364.

Oct. 5–6. Passive solar and earth sheltered housing conference, Jackson, Ms. Subsequent date: **Oct. 8–9.** Atlanta. Contact Gayle Wells, P.O. Box 6282, University of Alabama, University, Al 35486.

Oct. 5–7. Fifth Biennial Wind Energy Conference & Workshop, Sheraton Washington Hotel, Washington, DC. Contact Conferences Group, Solar Energy Research Institute, 1617 Cole Blvd., Golden, Co 80401.

Oct. 6. Full-semester course, Solar Energy Applications to Buildings. Boston Architectural Center. Contact Jeremiah Eck, The Program in Continuing Education, Boston Architectural Center, 320 Newbury St., Boston, Ma 02115 (617) 536-3170.

Oct. 7–10. Annual meeting of the Association for Preservation Technology, Washington, DC. Contact REHAB/TECH, % Mary Oehrlein, Suite 301, 1555 Connecticut Ave., NW, Washington, DC 20036.

Oct. 11–13. "Forces that Influence the Future of Education" symposium, sponsored by the AIA, Columbus, In. Contact Pete McCall (202) 626-7465.

Oct. 12–16. Second EEC Symposium on Construction in Areas Subject to Natural Disasters, Lisbon, Portugal. Contact United Nations CHBP, Palais des Nations, CJ 1211-Geneva 10, Switzerland.

Oct. 16–17. Second National Technical Conference on Earth Shelter Buildings, Williams Plaza Hotel, Tulsa, Ok. Contact Jody Proppe, Architectural Extension, 120 Architecture Bldg., Oklahoma State University, Stillwater, Ok 74078.

Oct. 24–25. Design conference/workshop, Hyatt Regency, Columbus, Oh. Contact Institute of Business Designers, Ohio Regional Chapter, P.O. Box 15747, Columbus, Oh 43215.

Oct. 26–30. 1981 ASCE Convention, St. Louis. Contact Mary Jo Rieth (314) 421-1476.

Oct. 26–30. International Conference on Energy Use Management. Berlin, West Germany. Contact Marcia Untracht, Publicity Coordinator, ICEUM-III, P.O. Box 64369, Los Angeles, Ca 90064.

Oct. 28–30. Third Annual Meeting, Interior Plantscape Association, Radisson St. Paul Hotel, St. Paul, Mn. Contact IPA, 11800 Sunrise Valley Drive, Reston, Va 22091.

Oct. 28–31. Third International Conference on Urban Design. Galveston, Tx. Contact the Institute for Urban Design, Main P.O. Box 105, Purchase, NY 10577 (800) 323-6556, ask for Locator A-129.

Oct. 28–31. Seventh International Congress on "Sports, Swimming Pools and Leisure Facilities for the Disabled." Cologne, Germany. Contact Cologne Trade Fair Co., P.O.B. 21 07 60, 5000 Cologne 21, Germany for exhibit information. Congress information: IAKS-office, Neusser Strasse 26, 5000 Cologne 1, Germany.

Oct. 31–Nov. 2. "Designing for Energy" Conference, Denver, Co. Contact Joy Brandon, AIA, 1735 New York Ave., NW, Washington, DC.

Oct. 31–Nov. 3. 1981 Annual Conference and Exhibit of the Industrial Designers Society of America. The Century Plaza Hotel, Los Angeles. Contact the Society at 6802 Poplar Place, McLean, Va 22101.

Nov. 4–8. SARA National Convention. La Mansion del Rio Hotel, San Antonio, Tx. Contact William E. Baldwin, ARA Convention Chairman, 1100 Jorie Blvd., Oak Brook, Il 60521.

Nov. 12–13. Planning and Design of Ambulatory Care Facilities, Chicago. Contact Elliot Joseph, Division of Ambulatory Care, American Hospital Assn., 840 North Lake Shore Dr., Chicago, Il 60611.

Nov. 15–20. International Symposium on Design for the Disabled, Tel Aviv, Israel. Contact Secretariat, P.O. Box 3, Belconnen, A.C.T. 2616, Australia.

Nov. 21–24. American Society of Landscape Architects 81st Annual Meeting and Exhibit. Washington Hilton, Washington, DC. Contact William W. Oyler (202) 466-7730.

Dec. 7–9. Lighting World International, The First Advanced Illumination Exposition and Conference. Sheraton Centre Hotel, New York. Contact Robert Weissman, National Expositions Co., 14 W. 40 St., New York, NY 10018 (212) 391-9111.

Jan. 11–15, 1982. 37th Annual Conference SPI Reinforced Plastics/Composites Institute. Sheraton Washington, Washington, DC. Contact SPI RP/C Conference Information, 355 Lexington Ave., New York, NY 10017.



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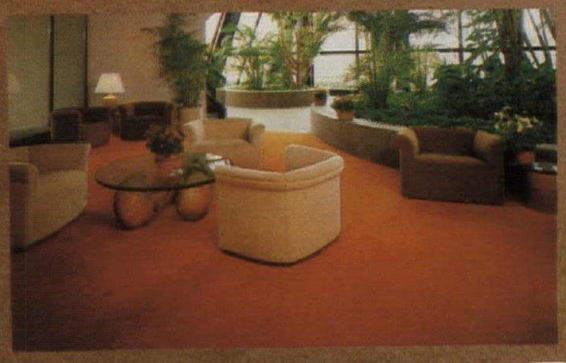

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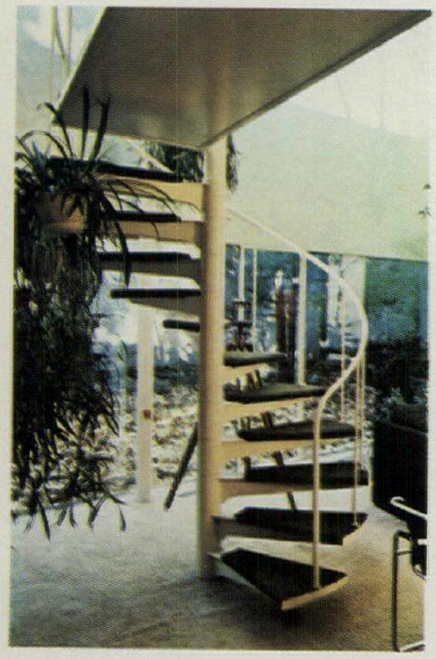

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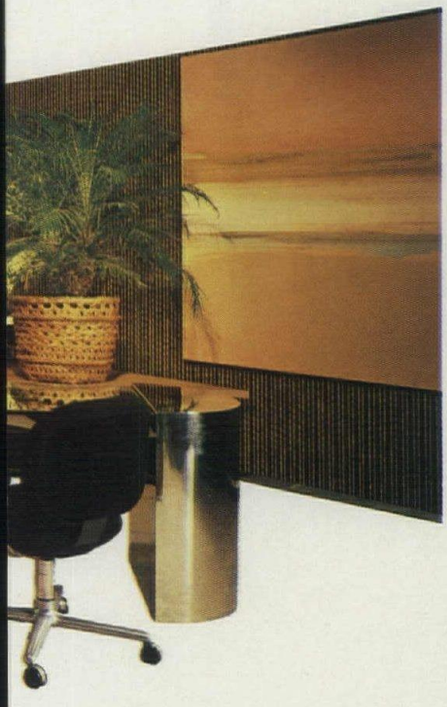

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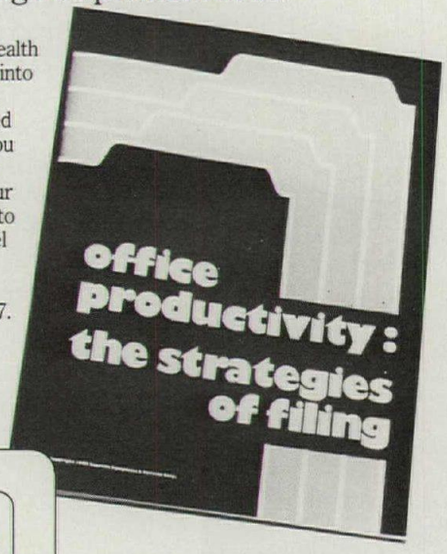

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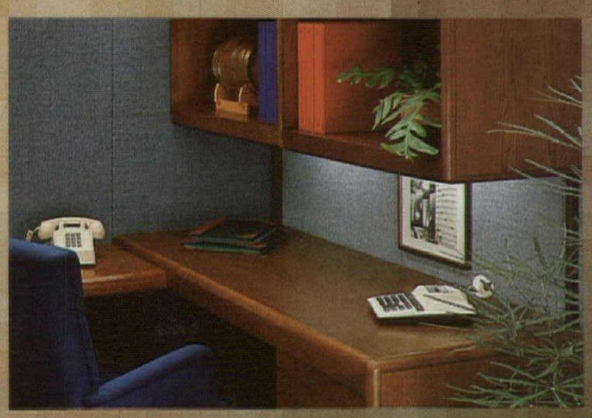

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And even in the forward-looking architectural environment of Columbus, Indiana, the high drama created by PPG's reflective Solarcool® Bronze glass helps set Bell of Indiana's switching station apart.

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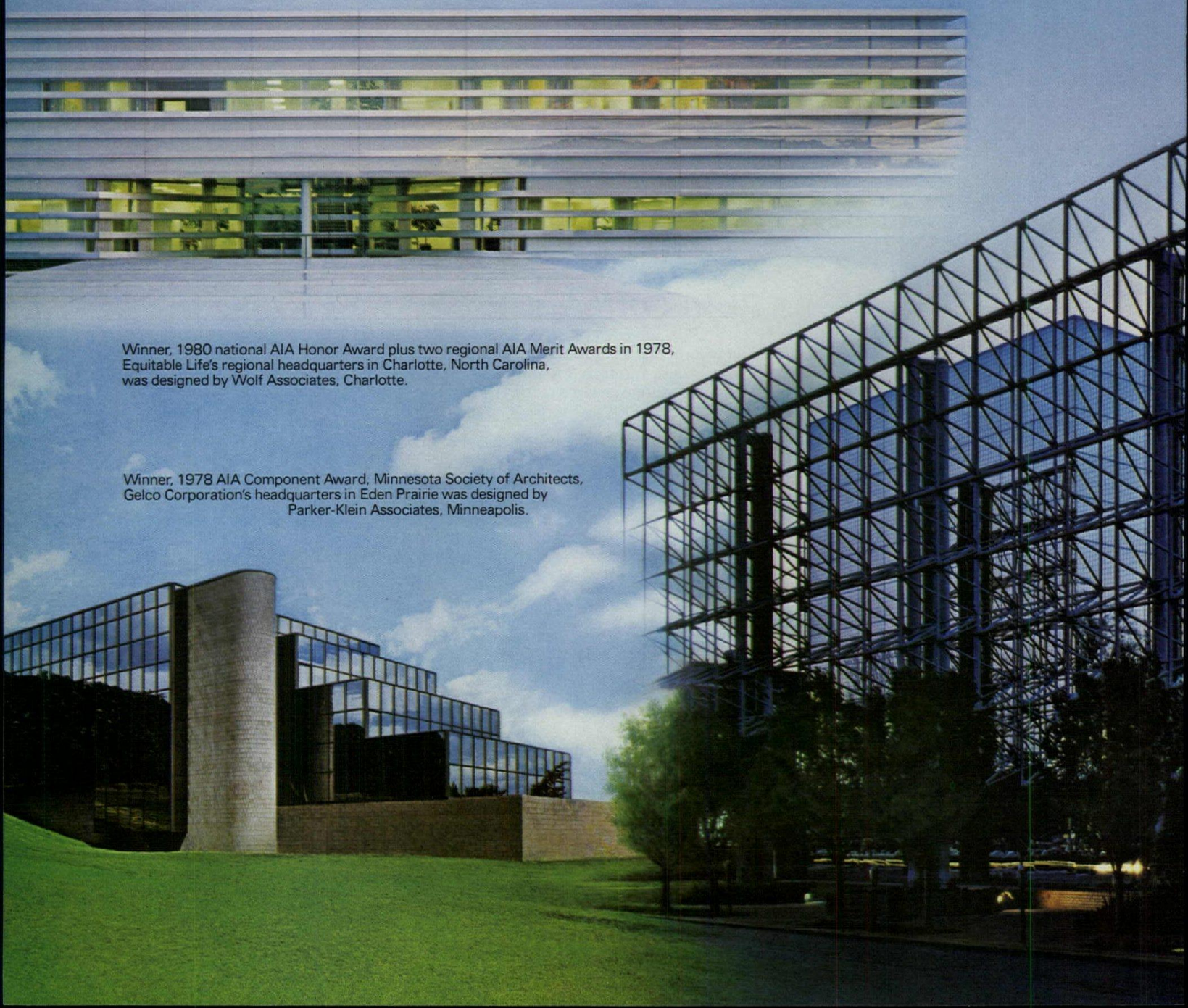

Winner, 1980 national AIA Honor Award plus two regional AIA Merit Awards in 1978, Equitable Life's regional headquarters in Charlotte, North Carolina, was designed by Wolf Associates, Charlotte.

Winner, 1978 AIA Component Award, Minnesota Society of Architects, Gelco Corporation's headquarters in Eden Prairie was designed by Parker-Klein Associates, Minneapolis.

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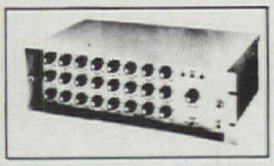

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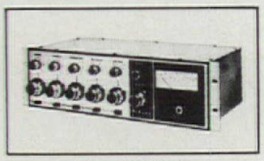

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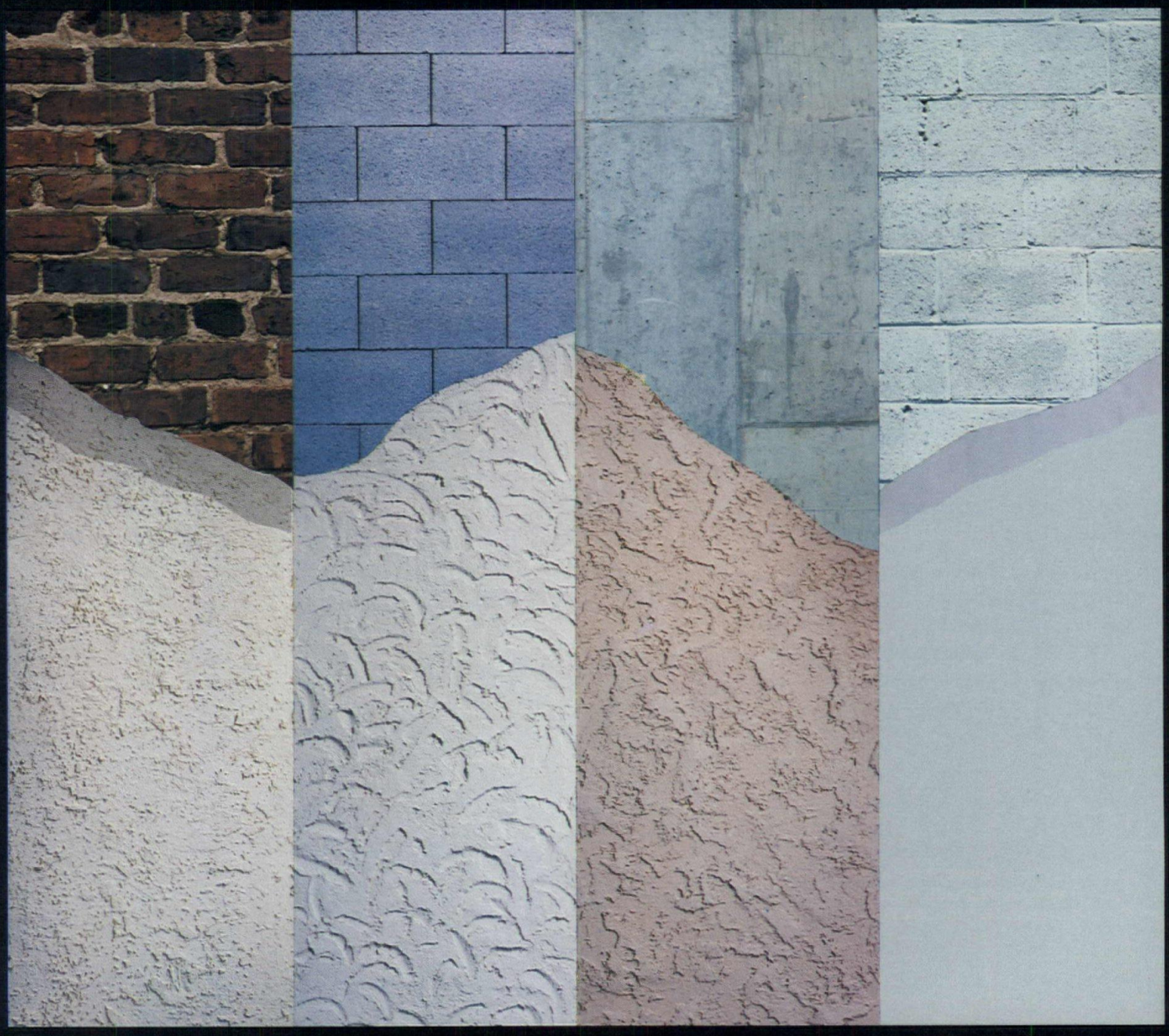

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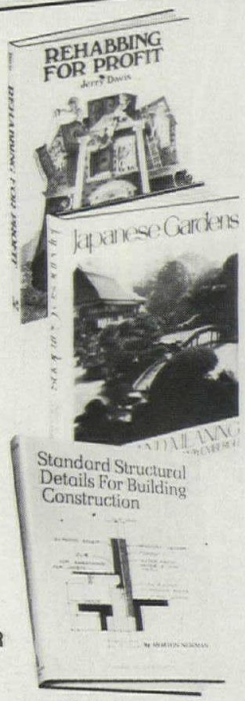

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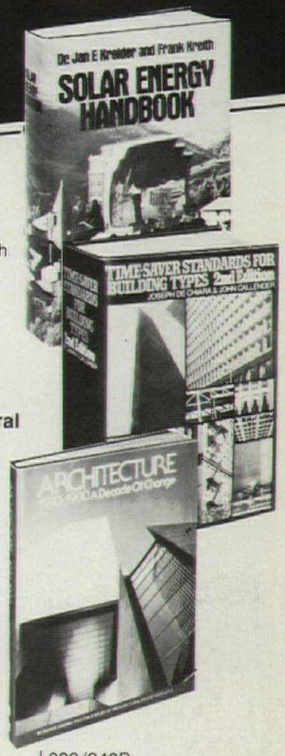

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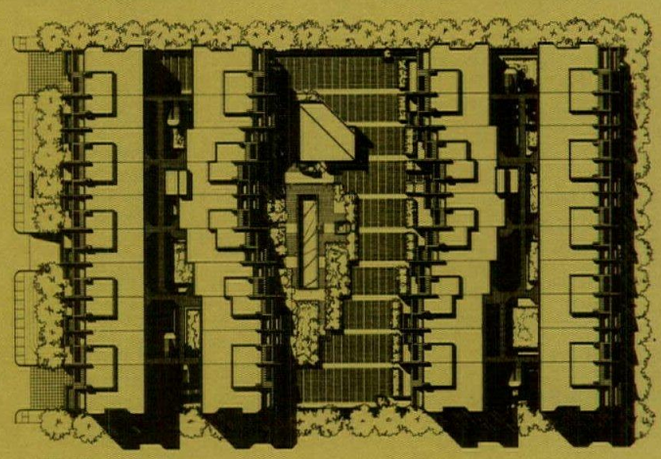

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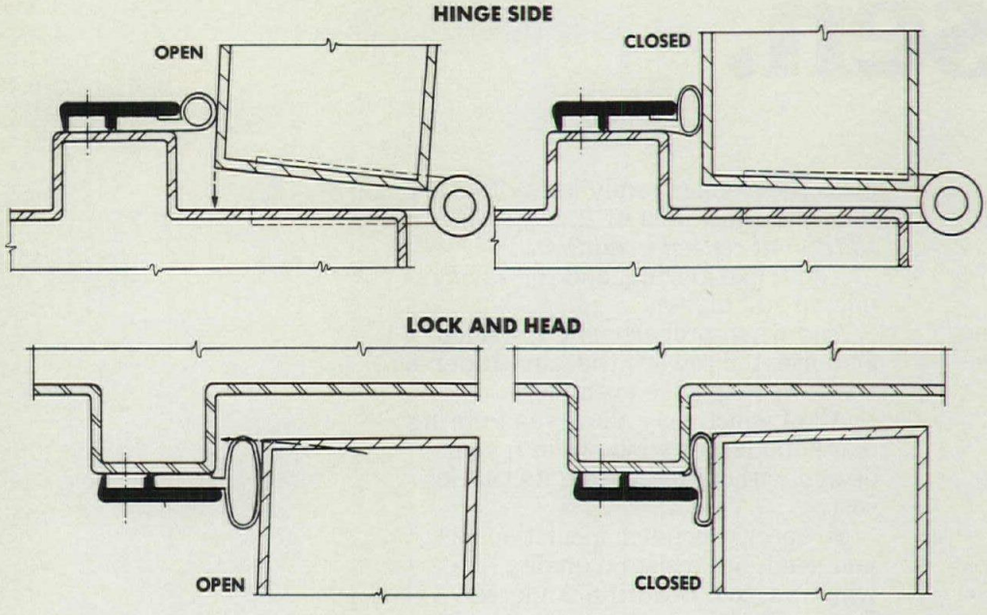

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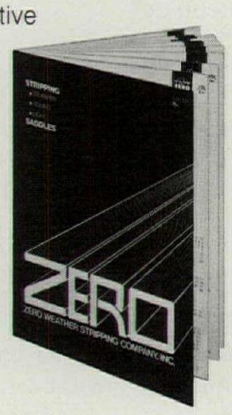

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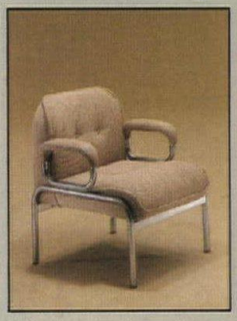
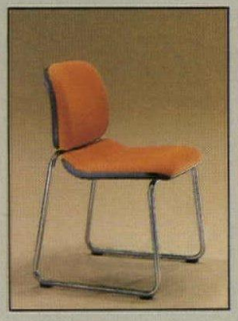
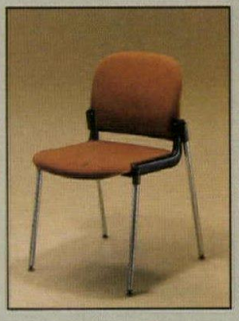
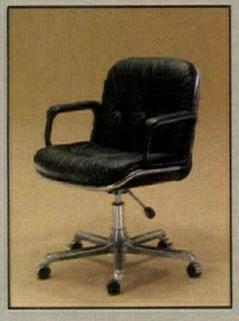


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ASD+ gives you more components to choose from than any other system. Yet you need fewer actual parts to create a work station. You won't find this kind of engineering simplicity with competitive systems.



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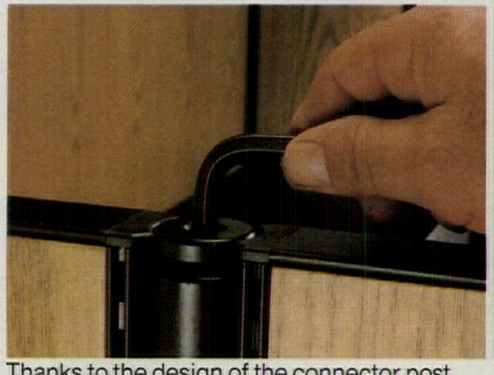
For more information:

Write Westinghouse Architectural Systems Division, 4300 36th Street, S.E., Box 8829, Grand Rapids, Michigan 49508. In Canada, call collect (416) 362-7796.





Thanks to the design of the connector post, a hex wrench is all that's necessary to loosen the top of the post and remove or rearrange panels. It's the ultimate in rearrangement flexibility.



Wood panels and work surfaces combine to give the executive secretarial station a warm, rich look. And matching lateral files hang at the proper height for instant access to materials.

Westinghouse Open Office System

Making more people more productive in less space at lower cost.

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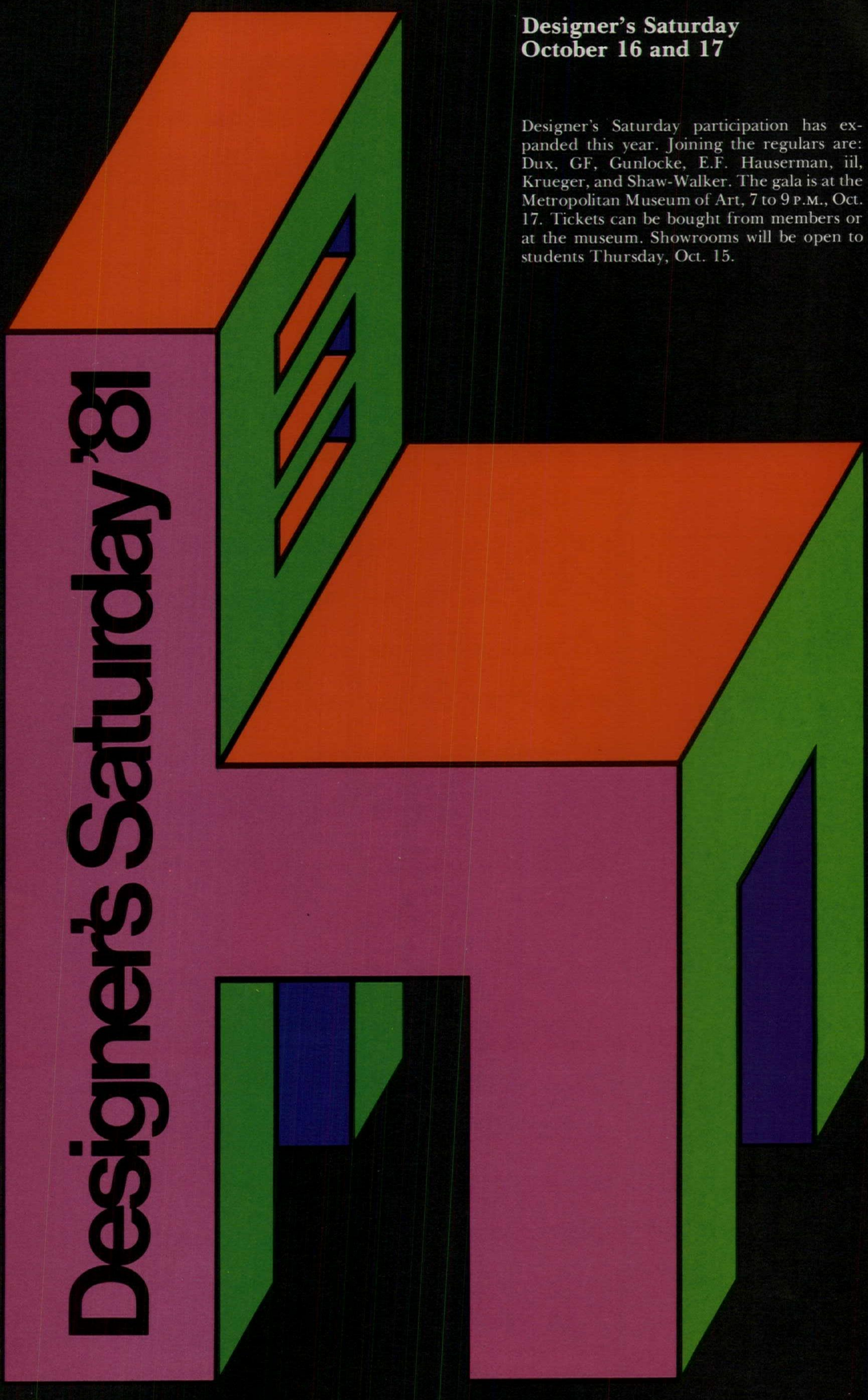
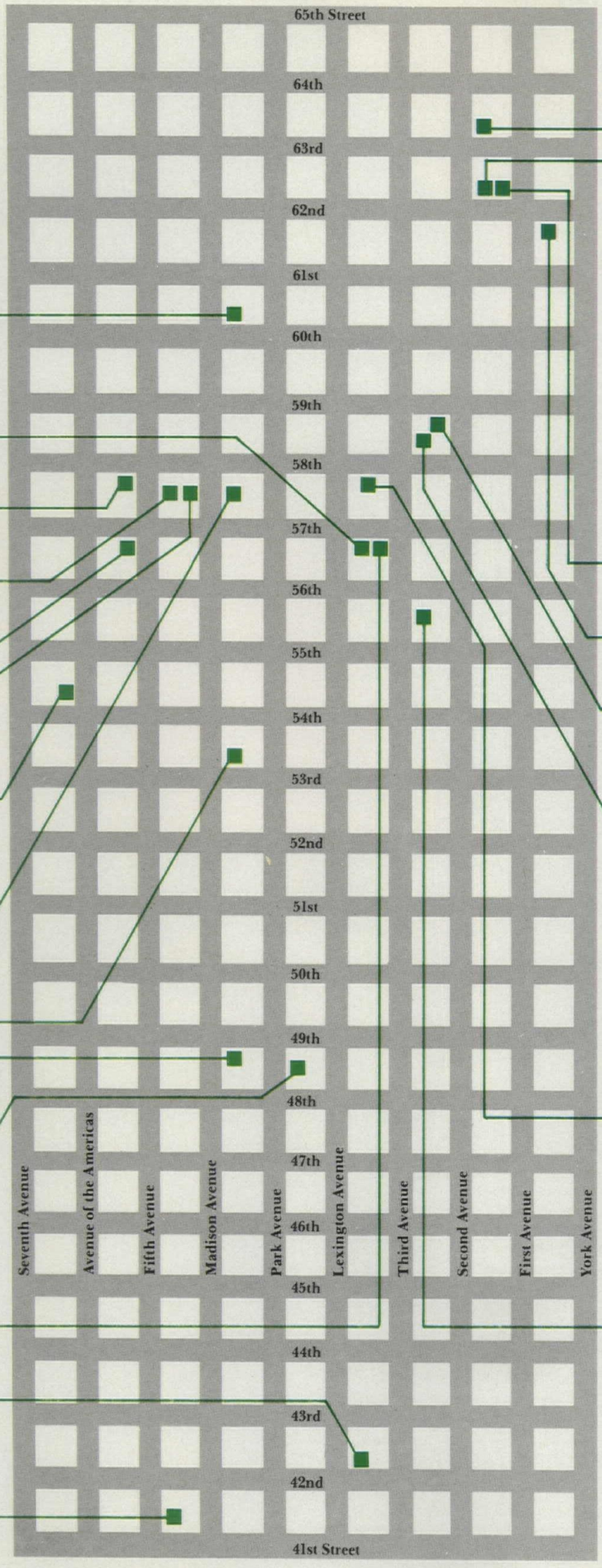


Designer's Saturday
October 16 and 17

Designer's Saturday participation has expanded this year. Joining the regulars are: Dux, GF, Gunlocke, E.F. Hauserman, iil, Krueger, and Shaw-Walker. The gala is at the Metropolitan Museum of Art, 7 to 9 P.M., Oct. 17. Tickets can be bought from members or at the museum. Showrooms will be open to students Thursday, Oct. 15.

Design: Gilbert Lesser ©1981 Designer's Saturday, Inc.

Designer's Saturday 1981 Showroom Map



GF Business Equipment, Inc.
655 Madison Avenue
980-0111

Haworth, Inc.
New York Division
655 Madison Avenue
826-6796

Knoll International
655 Madison Avenue
826-2400

C.I. Designs
136 East 57th Street
750-9602

Harter Corp.
4 West 58th Street
355-4933

B & B America
745 Fifth Avenue
752-5234

Sunar
730 Fifth Avenue
246-5200

Herman Miller, Inc.
600 Madison Avenue
838-8280

JG Furniture Systems
1345 Avenue of the Americas
621-4213

Atelier International, Ltd.
595 Madison Avenue
644-0400

iil international, inc.
595 Madison Avenue
759-3243

Brickel Associates, Inc.
515 Madison Avenue
688-2233

Cumberland Furniture Corp.
40 East 49th Street
759-8444

Steelcase Inc.
299 Park Avenue
421-5060

Castelli Furniture, Inc.
950 Third Avenue
751-2050

Stow/Davis
Furniture Company
950 Third Avenue
688-9410

Shaw-Walker
Chrysler Building
42nd Street and Lexington Avenue
697-8700

E.F. Hauserman
489 Fifth Avenue
687-7930

Beylerian Limited
305 East 63rd Street
755-6303

Dunbar Furniture Corp.
305 East 63rd Street
838-8718

Dux
305 East 63rd Street
752-3897

ICF Inc.
International Contract Furnishings
305 East 63rd Street
750-0900

Thonet
305 East 63rd Street
421-3520

Turner Ltd.
305 East 63rd Street
758-4744

Helikon Furniture Co., Inc.
315 East 62nd Street
688-3210

Pace Collection, Inc.
321 East 62nd Street
838-0331

Stendig, Inc.
410 East 62nd Street
838-6050

Jack Lenor Larsen
232 East 59th Street
674-3993

Metropolitan Furniture Corp.
979 Third Avenue
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Harvey Probber, Inc.
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John Stuart International
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Arconas/Airborne Corp.
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Intrex, Inc.
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Lehigh-Leopold
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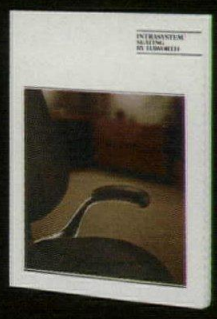
IntraSystem™ Seating by Haworth is designed and scaled for the open office.

IntraSystem Seating by Haworth. Four different chair groups designed and scaled specifically for use with the Haworth open office interiors system. Ergonomically responsive to users, functionally responsive to tasks and aesthetically responsive to surroundings. Coordinating and enhancing the open plan environment. Aesthetic options are bolstered by an all-new, comprehensive fabric and color system, affording virtually unlimited design alternatives. IntraSystem Seating by Haworth. Finally—seating designed expressly for the open office environment.



Send for the "IntraSystem Seating Package". Write One Haworth Center, Holland, MI 49423.

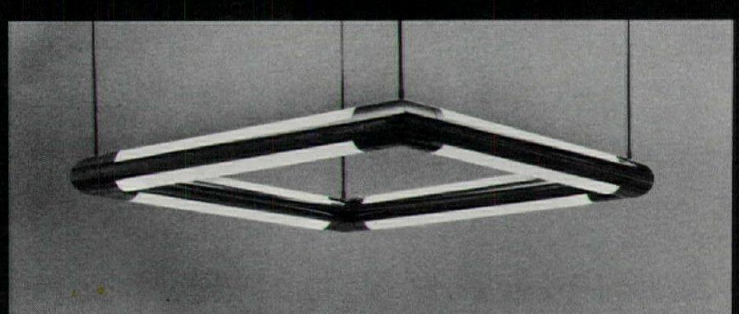
HAWORTH®

Circle No. 379



Habitat Incorporated

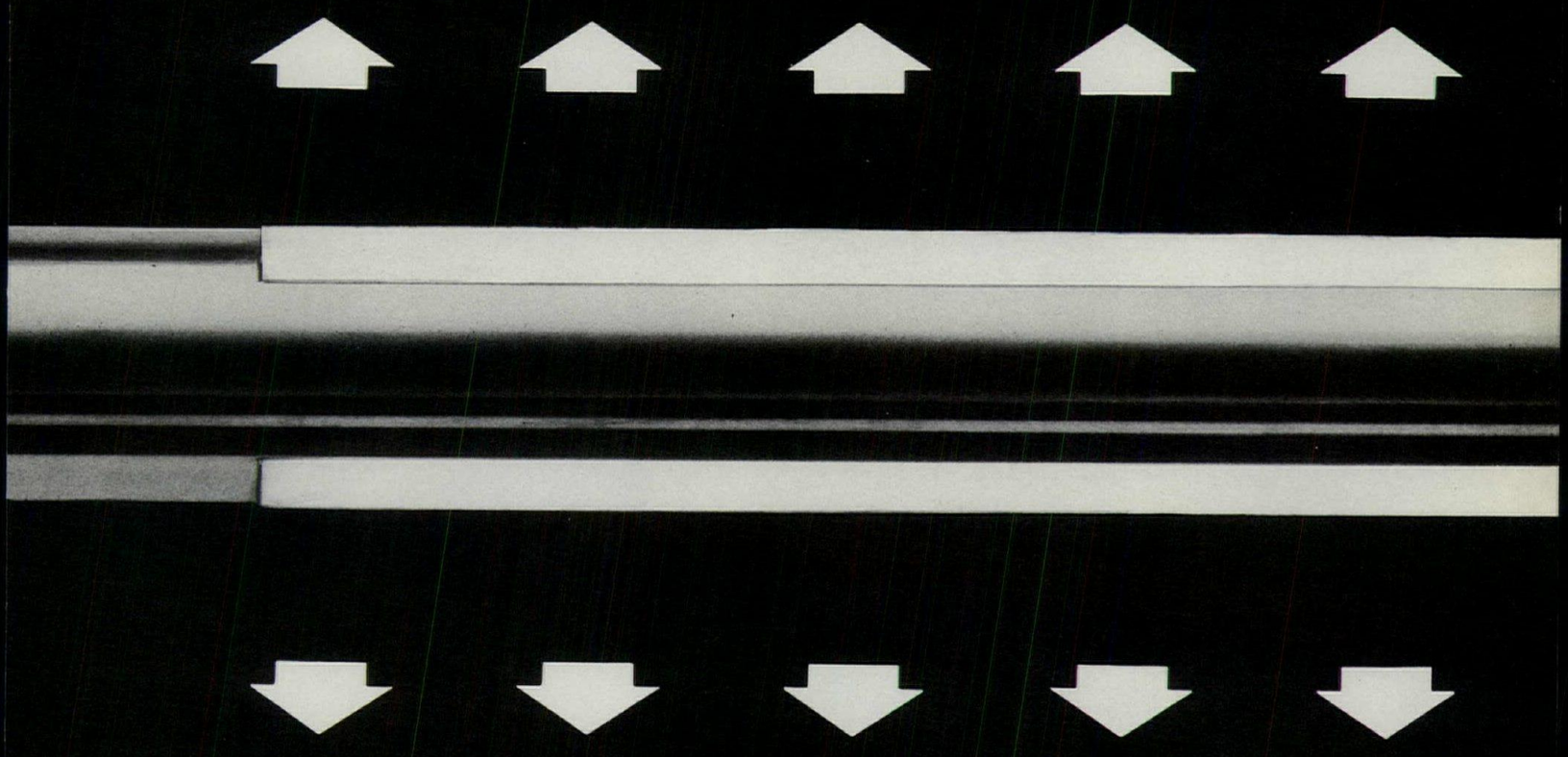
Showroom: 150 E. 58th St., NY, NY 10155



Double Aperture / fluorescent 6

Designer: Paul Mayen

A companion to the Designers Fluorescent series, this modular fixture provides both indirect and direct lighting. It accommodates the energy efficient fluorescent lamp of various wattages. Available in single, tandem, and custom configurations.



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For: Custom Applications, contact our sales department.

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Telephone: (203) 792-7400

Telex: HABASICT - 643-713

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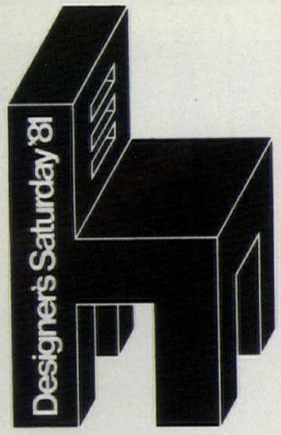
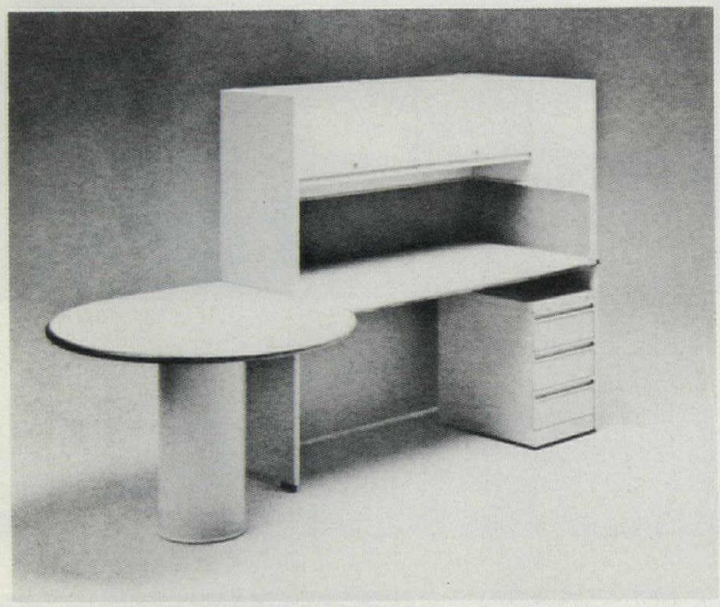




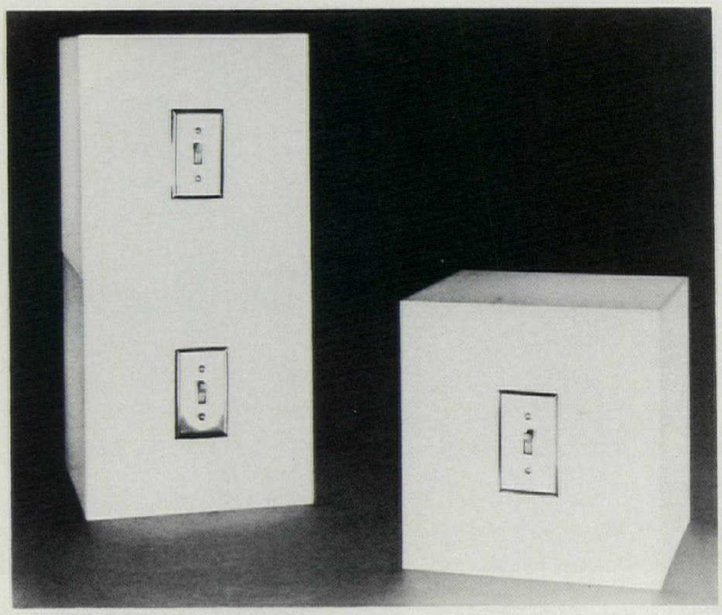
Arconas Corporation: *Primavera seating designed by Andre Vandenbeuck, manufactured under license from Strassle International of Switzerland, is molded of urethane on steel frames.*
Circle 100 on reader service card



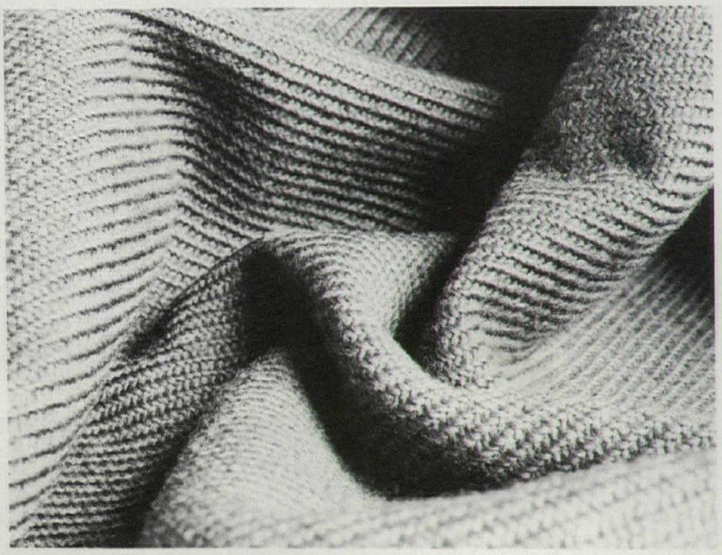
Atelier International: *Marcatré system of modular work stations, table/desks, storage, and accessories, designed by Mario Bellini, is being reintroduced.*
Circle 101 on reader service card



B&B America: *Two-seat sofa in Alanda lounge series, by Paolo Piva, has back that converts to headrest, arm cushions that are individually adjustable for comfort.*
Circle 102 on reader service card



Beylerian: *The Light Cube, by SoHo artist Lewis Stein, is a 12-in. Lucite cube with chrome switchplate that can be used alone or in multiples for floor or table.*
Circle 103 on reader service card



Brickel Associates: *Pentimento wool/nylon twill, designed by Ward Bennett, uses different colors in warp and weft for three-dimensional effect; latex backed and mothproofed.*
Circle 104 on reader service card

JG/62-63 Auditorium Seating/National Gallery of Art



The JG/62-63 with its minimum side profile facilitated this continental layout. Concealed double articulating tablet arms blend with standard arms. Removable front rows add versatility

Complimentary layout service available on request.

Installation: National Gallery of Art, Washington, DC
Architect: I.M. Pei & Partners
Product Design: Peter Dickinson

JG Furniture
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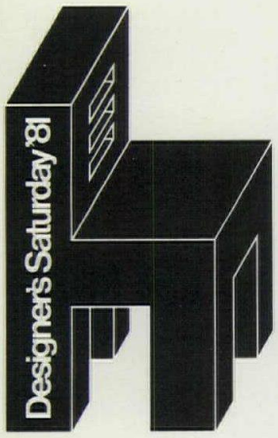
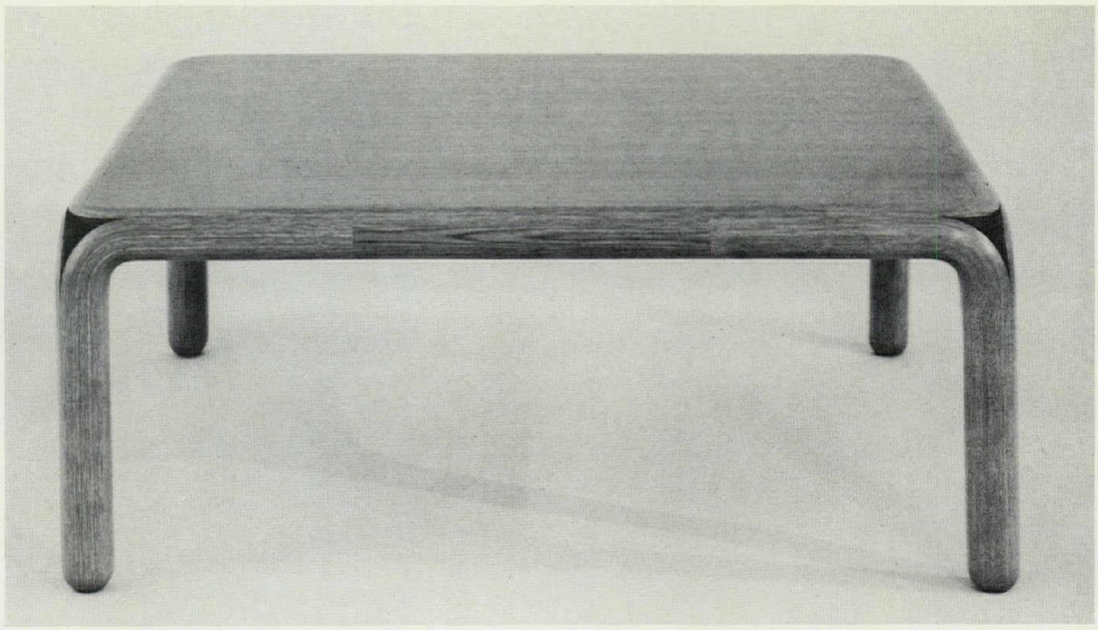
JG

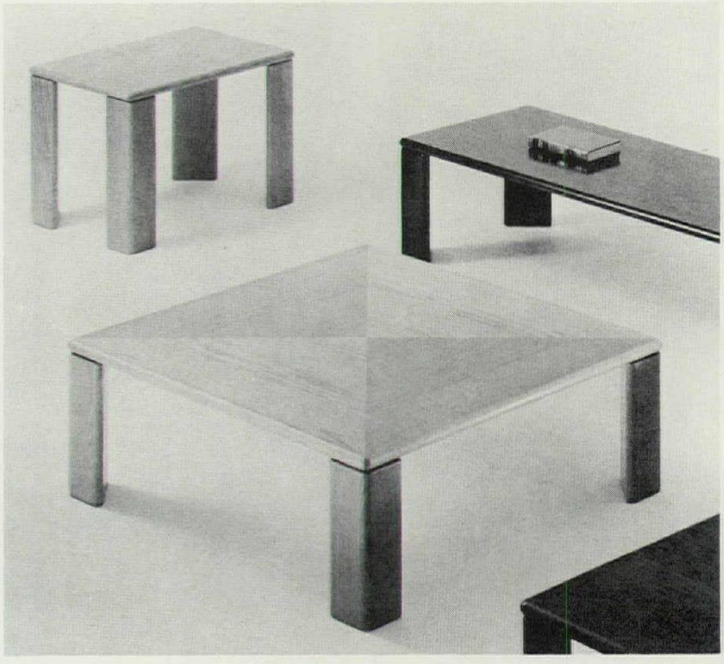




C I Designs: *Series 355 coffee, conference, or dining table can also be a desk.*
Circle 105 on reader service card



Castelli Furniture: *Summit table series and base system, shown with DF seating, is available in executive and conference versions.*
Circle 106 on reader service card



Cumberland Furniture: *5240 Table Group, walnut or oak veneer tops, solid walnut or oak legs; tops have solid wood bullnose edge.*
Circle 107 on reader service card



Dunbar: *Column section table with solid ash legs, 19½ in. high, with 24-in.-square glass top, designed by John F. Saladino.*
Circle 108 on reader service card

Advent III
Open Office System

probber



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

Designers opt for Advent III for many reasons.

They know, for example, that wire management alone justifies their decision. The entire Probber system is an *unrestricted* electrical raceway accommodating all current and future needs. Wires and cables are fully concealed, entirely accessible and infinitely expandable.

Designers also know that if task lights are what their clients need now, Probber can still install state-of-the-art ambients at any future time *without* disrupting the office, or defacing the furniture, or cluttering the landscape.

And both designers and their clients have learned that relocating Probber's furniture stations — contents and cables intact — is easier, faster and far less disruptive than wrestling with 'bits and pieces' erector-set panel systems. Probber's hydraulic-lift dolly assures that one person can do the job.

Whether in fine cabinet woods or serviceable laminates, Advent III is as innovative today as it was five years ago. And will be tomorrow. And ten years hence.

Harvey Probber, Inc.

Factory and Offices
Fall River, MA 02722
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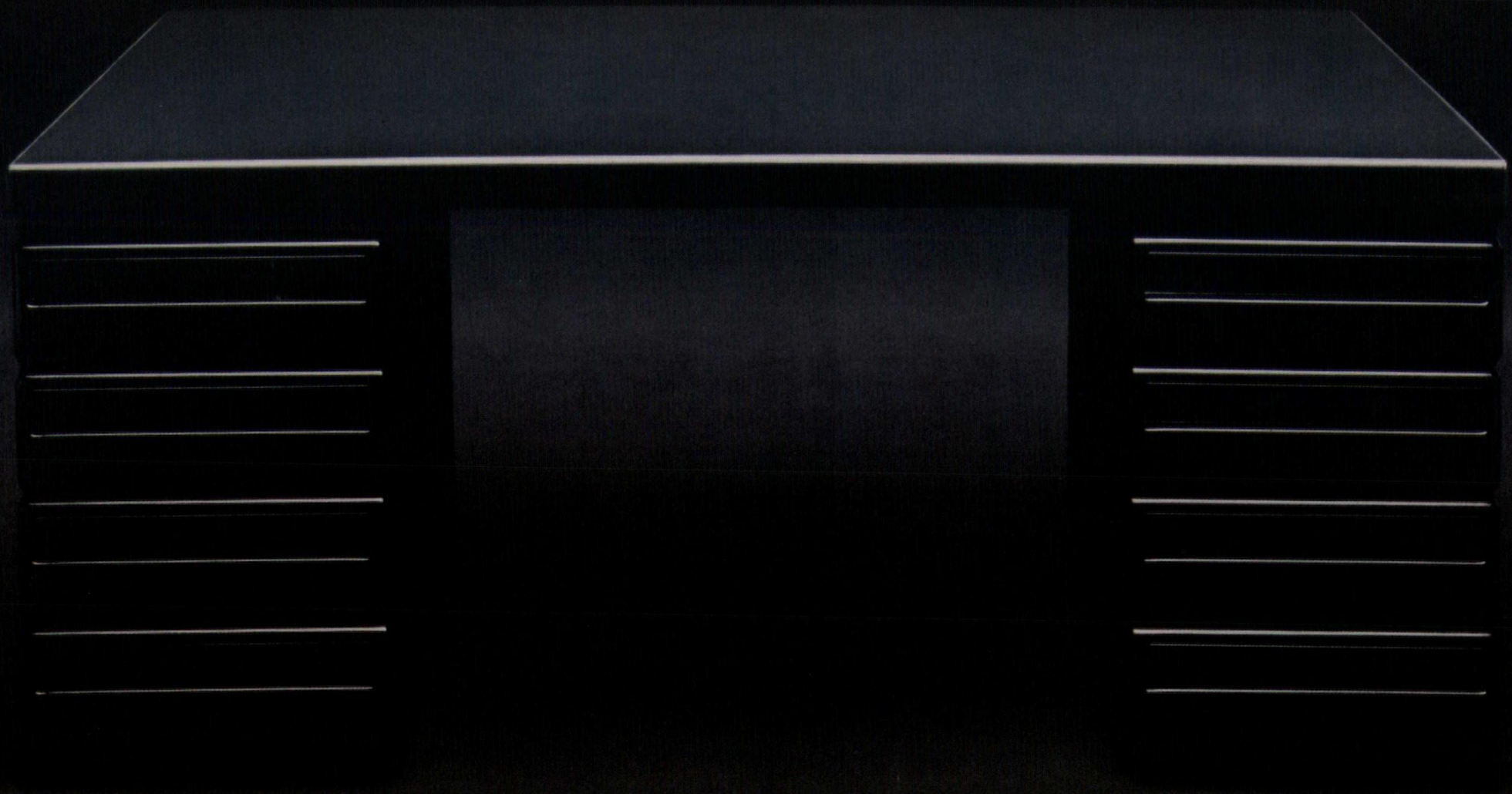
Circle No. 436


Knoll The Hannah Desk
Circle 301 on inquiry card



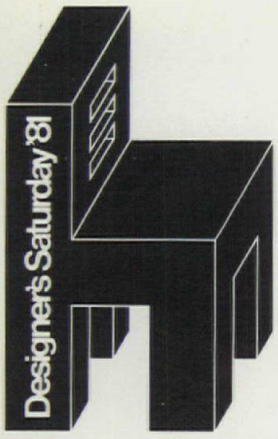
From the first architectural principle comes the first truly modular desk. The Hannah Desk.

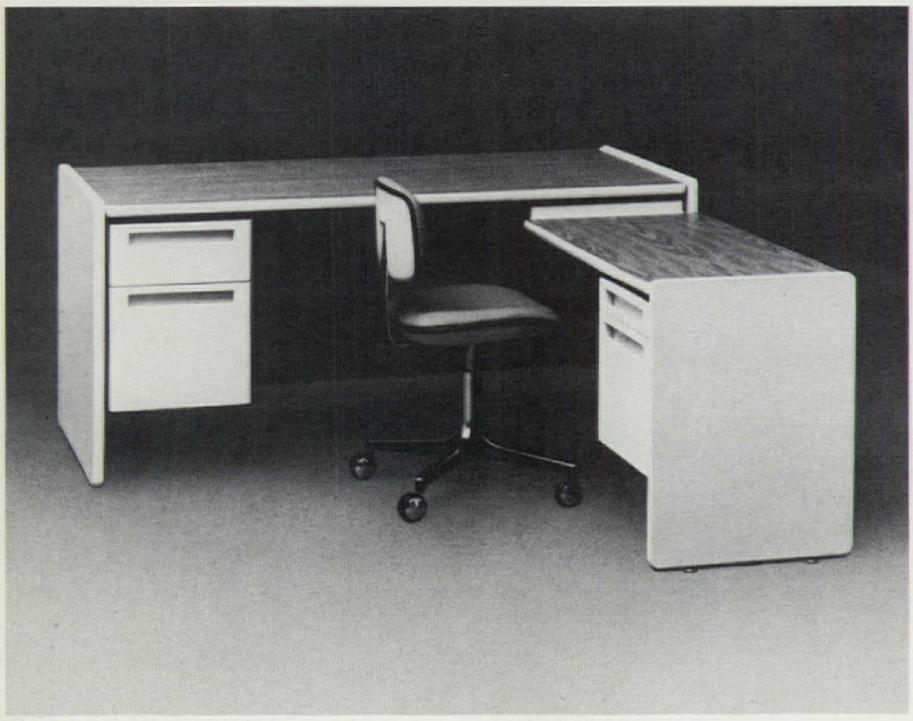
Gravity, and Bruce Hannah, have combined to produce a significant breakthrough in office planning: the creation of a totally flexible desk and cabinet system.

Until now, the desk has always been a fixed structure, the storage space inflexibly attached to and hanging from the top. Bruce Hannah's desk is just the opposite. The storage space, or pedestals, support the top – the posts supporting the lintel, architecturally speaking. Consequently, the pedestals are not permanently attached.

The result? For the first time, the furniture within an open plan office is as flexible as the walls of the office system. And equally important, for the first time, you can have total flexibility within conventionally planned offices.

The benefits? For the end user, a desk that changes as his or her needs change. For you, on-site flexibility. And an installation that will look as good years later as it does on the day of completion. And for both, the quality and aesthetic excellence you expect from Knoll. At a price you may not expect. We invite you to write for the fully detailed Hannah Desk brochure. Knoll International. The Knoll Building, 655 Madison Avenue, New York, NY 10021.





GF Business Equipment: *Open Plan System desk collection has radiused end panels and work surfaces, molded drawer fronts, and comes in six widths.*
Circle 110 on reader service card



Harter: *HarterWall optional components for flexibility include work surfaces, drawer units, CRT surfaces, shelves, files, counter tops.*
Circle 112 on reader service card



Dux: *Sessan chair has chrome frame, upholstered seat, back, and armrests of fabric or leather; for desk, conference room, or office side chair.*
Circle 109 on reader service card



Gunlocke: *Tempus seating has oak frames and anthropometric design, adjustment and back height options, with or without arms.*
Circle 111 on reader service card

Visit our New York showroom



Graphic design: Bill Bonnell
Photography: Bill Kontzias

Showroom design:
Michael Graves, architect

Designer's Saturday, October 15, 16, and 17.

See all of Sunar's remarkable office systems, chair and table collections, objects, and fabrics.

Highlights are the Race and PAS systems. The Helena Chair, Niels Diffrient for Sunar.

The Drabert Chair Collection, "Engineered like no other chair in the world."

The Michael Graves Table

and new upholstery weaves and leathers in a host of elegant colors.

sunar

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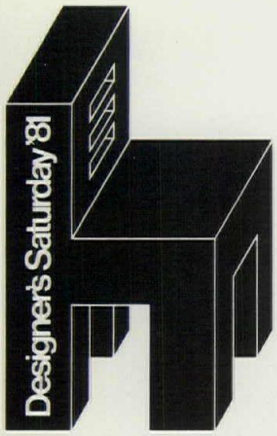
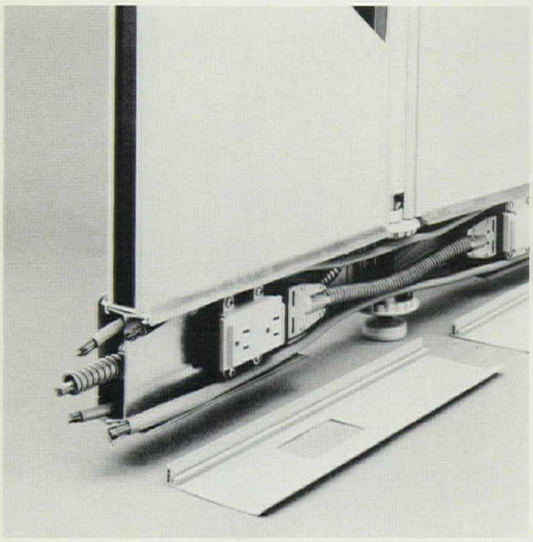




Haworth: *Paper management components integrate into UniGroup open office system, can be hung on panels or shelves or freestanding on surfaces.*
Circle 114 on reader service card



E.F. Hauserman: *Privacy Panel System single raceway is prewired for power and communications. Panel covers match furnishing components.*
Circle 113 on reader service card



Helikon Furniture: *Peabody Lounge Series, designed by Lawrence Peabody, includes lounge chairs and sofas available with or without caning.*
Circle 115 on reader service card



ICF: *Additions to the Spaghetti line designed by Giandomenico Belotti include armchair, dining table, occasional table, and stool.*
Circle 116 on reader service card



Intrex: *Utility/File Cabinet complements the Katonah series of desks, credenzas and file cabinets designed by Paul Mayen.*
Circle 117 on reader service card



7066 MARIPOSA UNPOLISHED TRAVERTINE COFFEE TABLE / DESIGN PULELLA

THE PACE COLLECTION INC. / 321 EAST 62 ST., NEW YORK, N.Y. 10021 / 838-0331

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brings you
the first full height Privacy Panel™ System.



Privacy Panel™ System *provides differentiated privacy with four panel heights, including the first full-height panel, as part of a complete space and technology management system. One integrated system provides a multitude of configurations, even fully enclosed offices.*

New heather-tone colors and basket-weave textures are color matched to ***Privacy Panel System's*** *extensive line of furnishing components.*

Several new product offerings extend functional flexibility. They include nine free standing filing and storage units, a variety of electronic systems support surfaces and a pre-wired power base for distributing power and communications, as well as Hauserman's CAS seating product line, which is color matched and accent coordinated to complement the ***Privacy Panel System.***

To receive a copy of the new ***Privacy Panel System*** *brochure call, toll free, 800-321-8698. Or write to The E.F. Hauserman Company, Marketing Communications, 5711 Grant Avenue, Cleveland, Ohio 44105.*

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Uniting people and electronic equipment to enhance the potentials of both.



Sophisticated electronic equipment can be only as effective as the people who use it. And that's where Steelcase Ultronic 9000 helps you help others.

It adapts to the dimensions of people and machines. Creates comfortable eye-to-screen and hand-to-keyboard relationships. Supports an almost



infinite variety of tasks. And provides needed work surface and storage for computer-related projects. No other systems furniture gives you so much to work with in designing for the new dimensions and demands of the electronic office.

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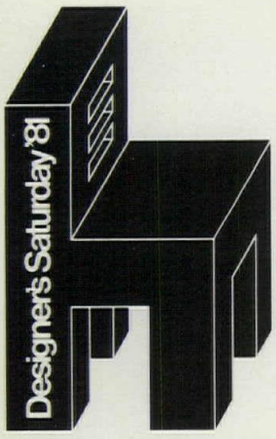
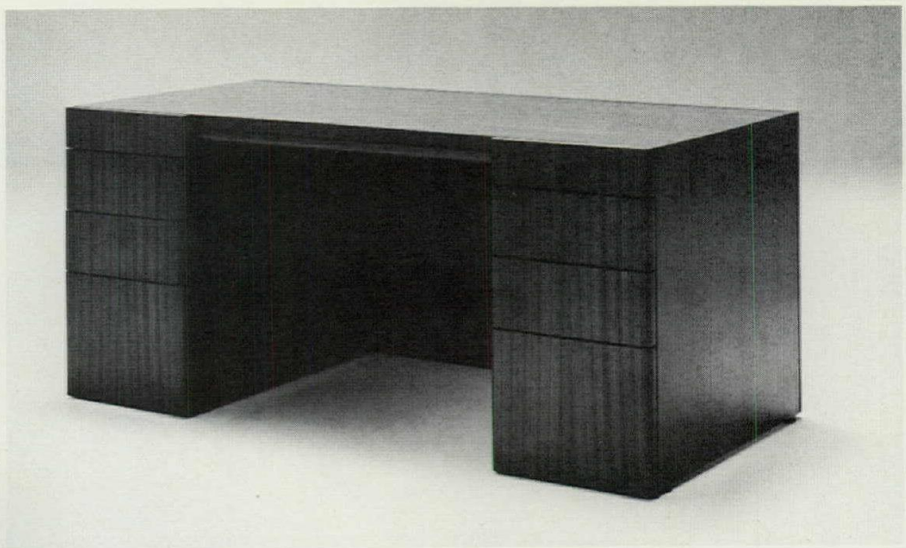
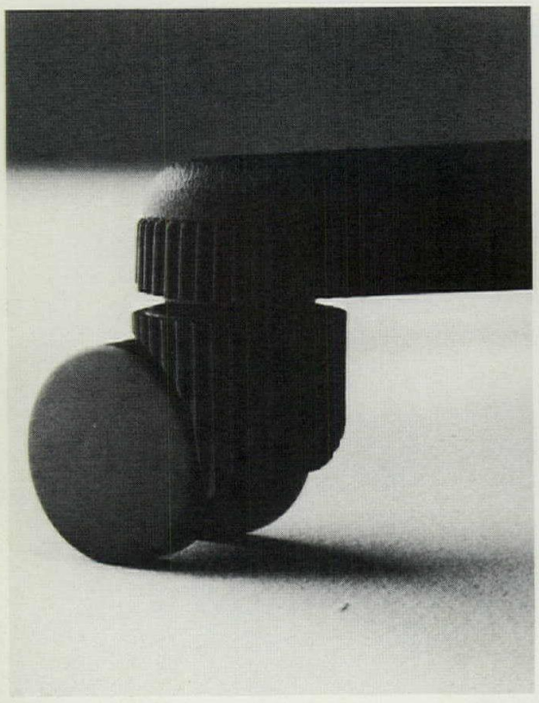
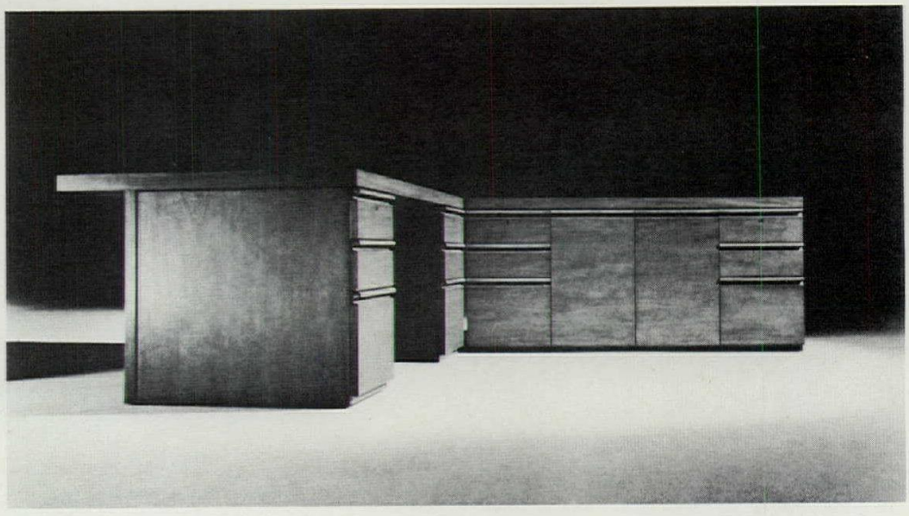




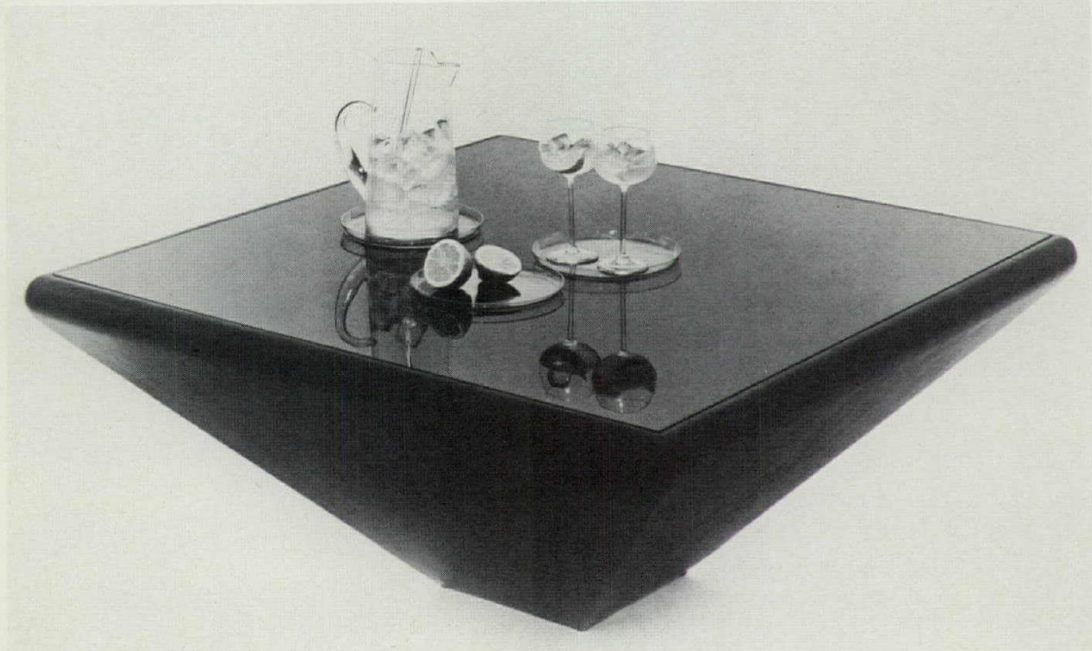
JG Furniture Systems: *Deco contemporary executive desk, designed by Tom Janicz, has radiused front panel and drawer fronts, mahogany top.*
Circle 118 on reader service card



Krueger: *Vertebra chair improvements include self-skinning urethane five-blade base with redesigned caster details.*
Circle 120 on reader service card



Knoll International: *Modular wood desk and credenza, designed by Gwathmey Siegel, has pedestals to the floor for increased storage; available in mahogany, Knoll Techgrain™, or plastic laminate.*
Circle 119 on reader service card



Jack Lenor Larsen: *The Quadro #6750 inverted pyramid coffee table, designed by Tom Boccia, is fully upholstered in leather and has a black glass top.*
Circle 121 on reader service card



See us during
Designers' Saturday
4th Floor/655 Madison Ave/N.Y.

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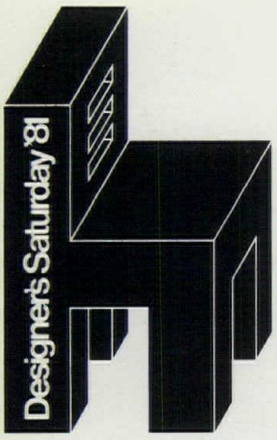
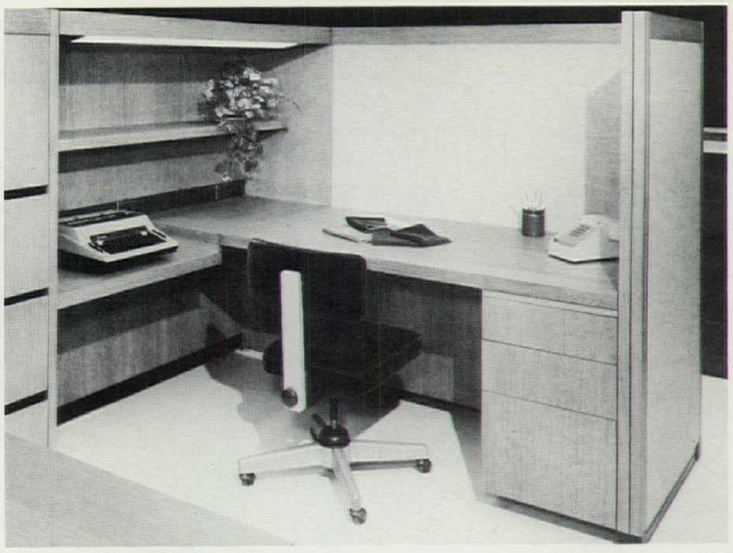
There's more to GF than meets the eye.

GF Business Equipment





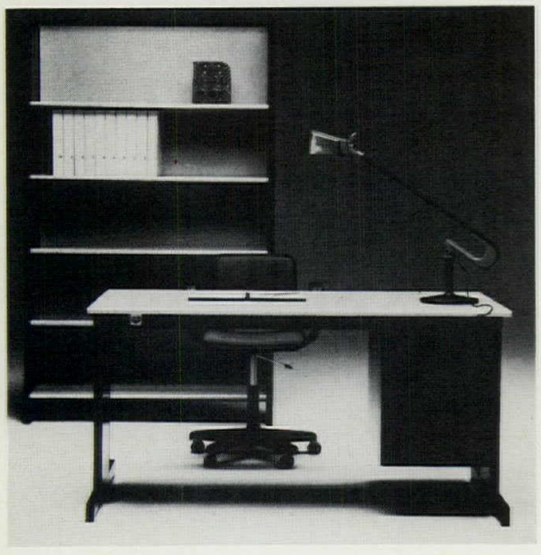
Lehigh-Leopold: *Group 55 Open Landscape desks, shelves, and freestanding lateral files with optional drafting table.*
Circle 122 on reader service card



Metropolitan Furniture: *Stanyan arm chair, designed by Bryan Kane, has tubular steel frame, upholstered seat and back.*
Circle 123 on reader service card



Herman Miller: *Vitra ergonomic office chairs with low or high backs, arms or armless, have synchro-tilt mechanism to provide proper support.*
Circle 124 on reader service card



The Pace Collection: *Olivetti-Synthesis office system includes desk with wiring ducts for electricity and telephone. Pace is the distributor.*
Circle 125 on reader service card

The Bentwood Collection



Stendig

Stendig selects the best of bentwood for the perception of our time. These models are made at the original factory located at the edge of a vast Beechwood forest in Koritschan, Moravia (now Czechoslovakia). This factory was built in 1856 by Michael Thonet, on a site that was chosen for its proximity to the finest material available for the bentwood process. These Beechwood trees are still cultivated to produce a tougher, more durable wood with longer, straight grained fibers that withstand the stresses of bending. Original water and steam method of manufacture is still employed. Stendig Bentwood chairs are *hand-made* and *hand-caned* by craftsmen who continue in a heritage of pride in workmanship.

Stendig showrooms in Chicago, Los Angeles, Miami, New York. Other showrooms in Atlanta, Denver, San Francisco, Seattle. Representatives in major cities. Write or call Stendig® Inc., 410 East 62 Street, New York 10021 (212) 838-6050. Stendig Inc., a subsidiary of **Stendig International, Inc.**

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Vertebra®

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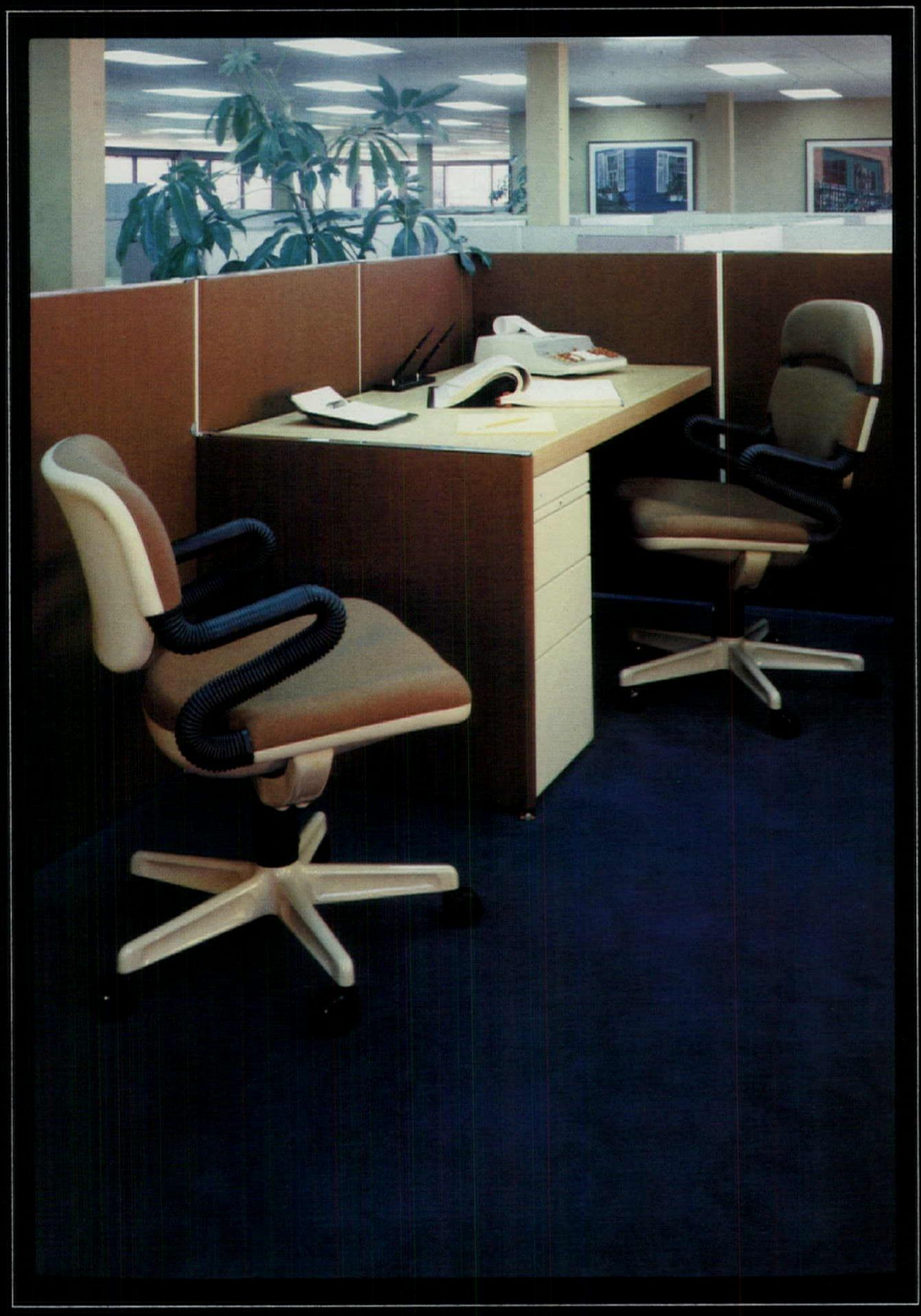

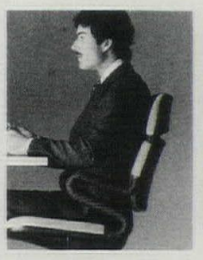

Sit up



Tilt forward



Relax



Tilt backward

Designed by
Emilio Ambasz
Giancarlo Piretti
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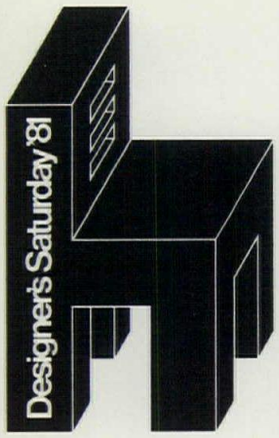
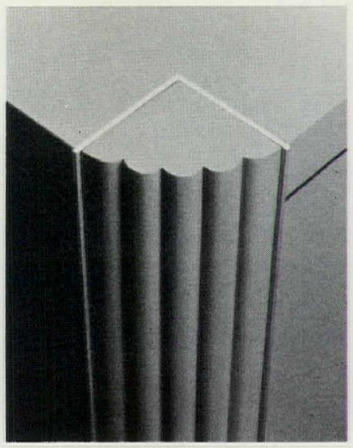
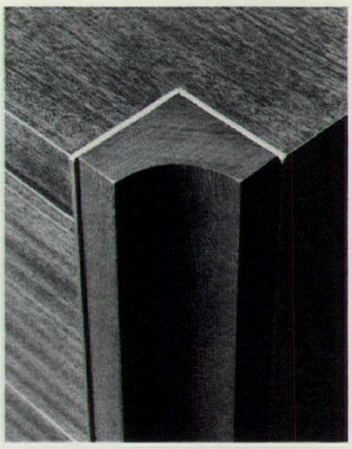
Designer: In-house







Harvey Probber: *Advent III customizing allows designers to select materials, details and colors; post details shown.*
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Steelcase: *424 series chair is available in 32 versions of swivel-tilt, swivel-base, and fixed base side chairs; sled-base side chairs, and secretarial chairs.*
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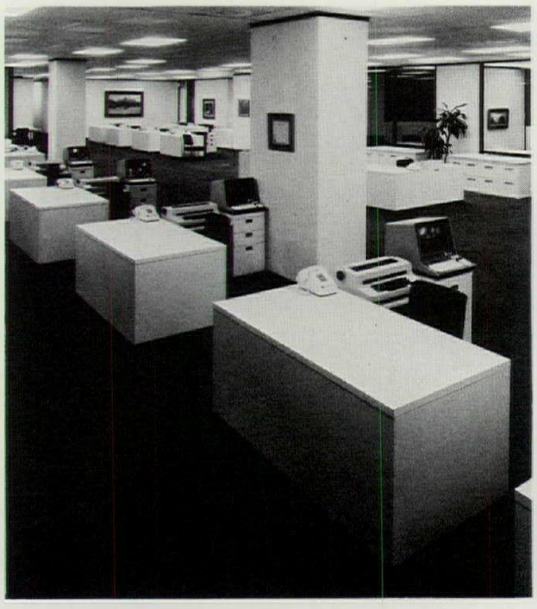

Shaw-Walker: *Series 75 cube desk has recessed hardware, internal wiring, and right or left returns for equipment.*
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Stendig: *Barrett modular lounge seating series consists of left-facing, right-facing, intermediate, and corner units.*
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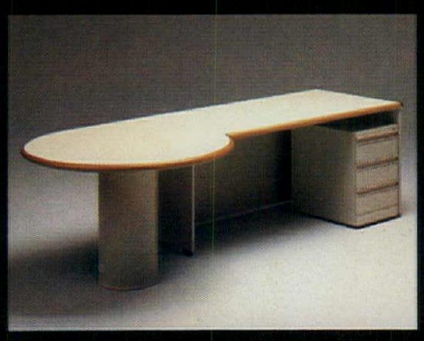



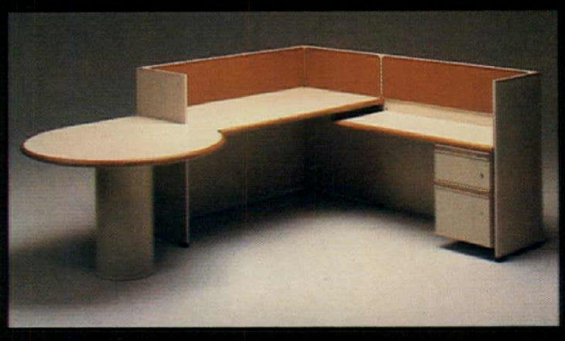



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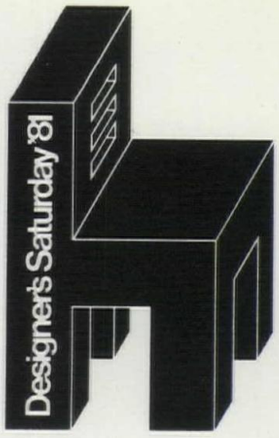

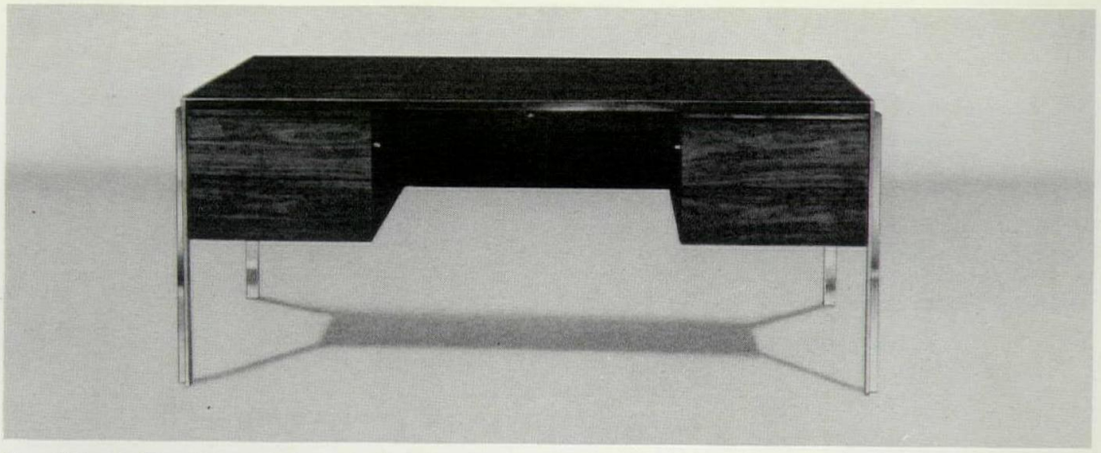

Stow/Davis Furniture: *Electa desk, part of a group of desks and credenzas, available in teak, walnut, cherry, and oak finishes, bronze or chrome trim, choice of tops.*
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Sunar: *The Helena chair, designed by Neils Diffrient, comes in executive, guest, and work station versions on 5-prong base, sled base chair.*
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Turner: *Floor lamps of mahogany, designed by Alan Friedman, from a line of tables, chairs, and lamps, in limited editions of 100. Tables have Honduras lacewood veneer tops with mahogany finish, solid mahogany hand-carved legs.*
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Thonet: *Conference/club chair added to the Petitt Ply collection, designed by Don Petitt; side and arm chairs complete group.*
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Vecta Contract: *FS Series seating, designed by Klaus Franck and Werner Sauer, includes high-back, manager, and operator chairs.*
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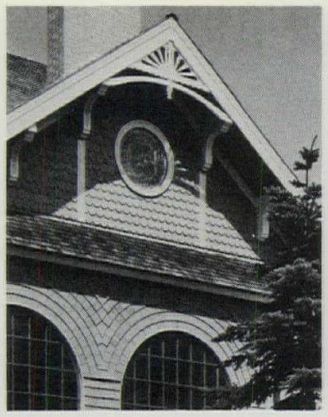



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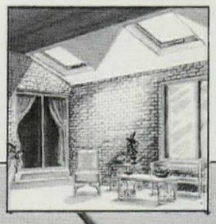

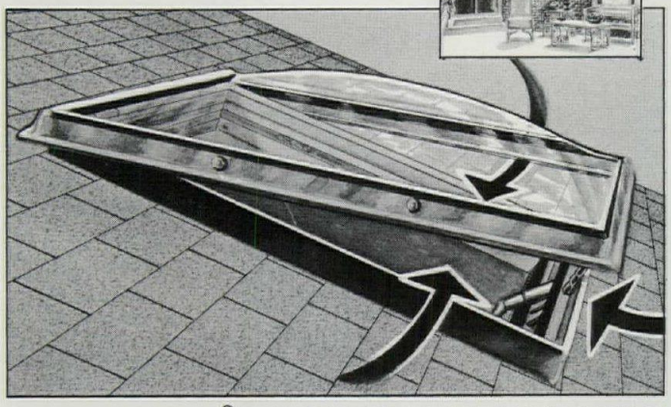

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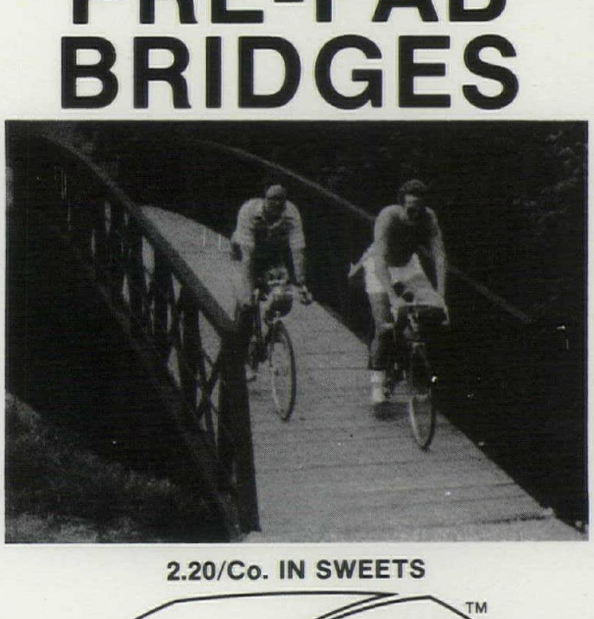

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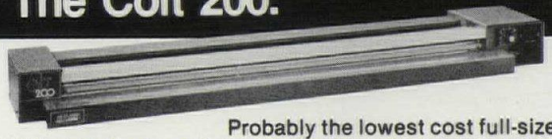

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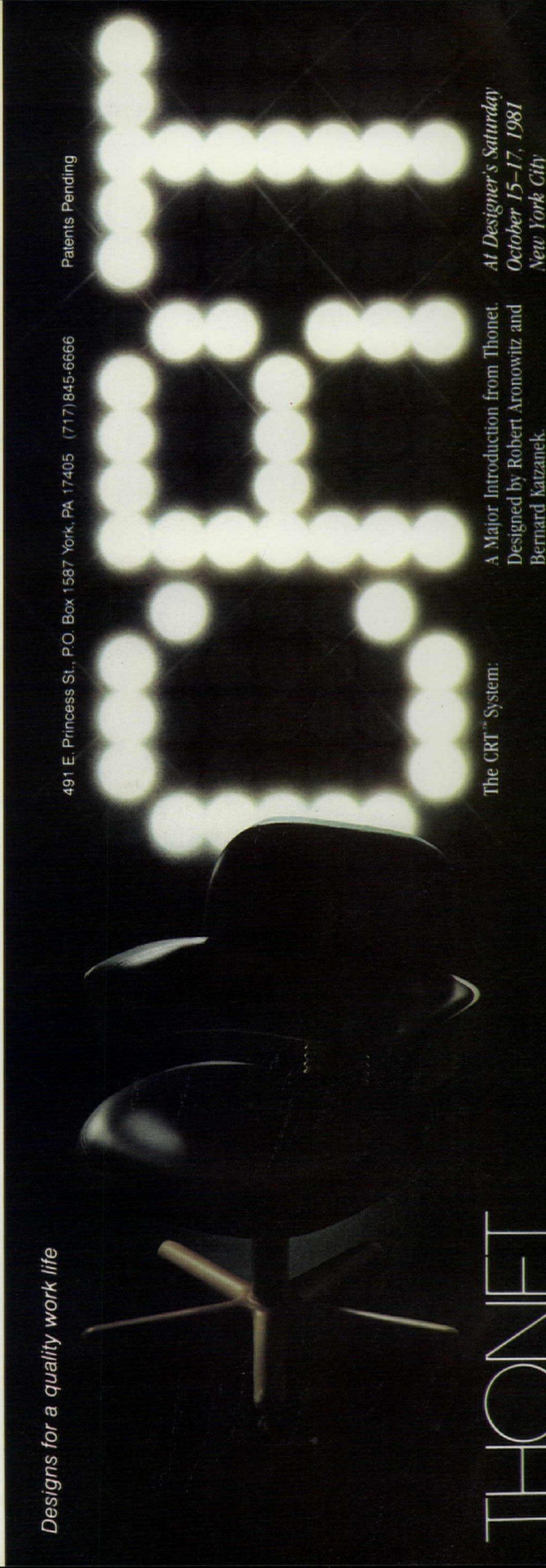


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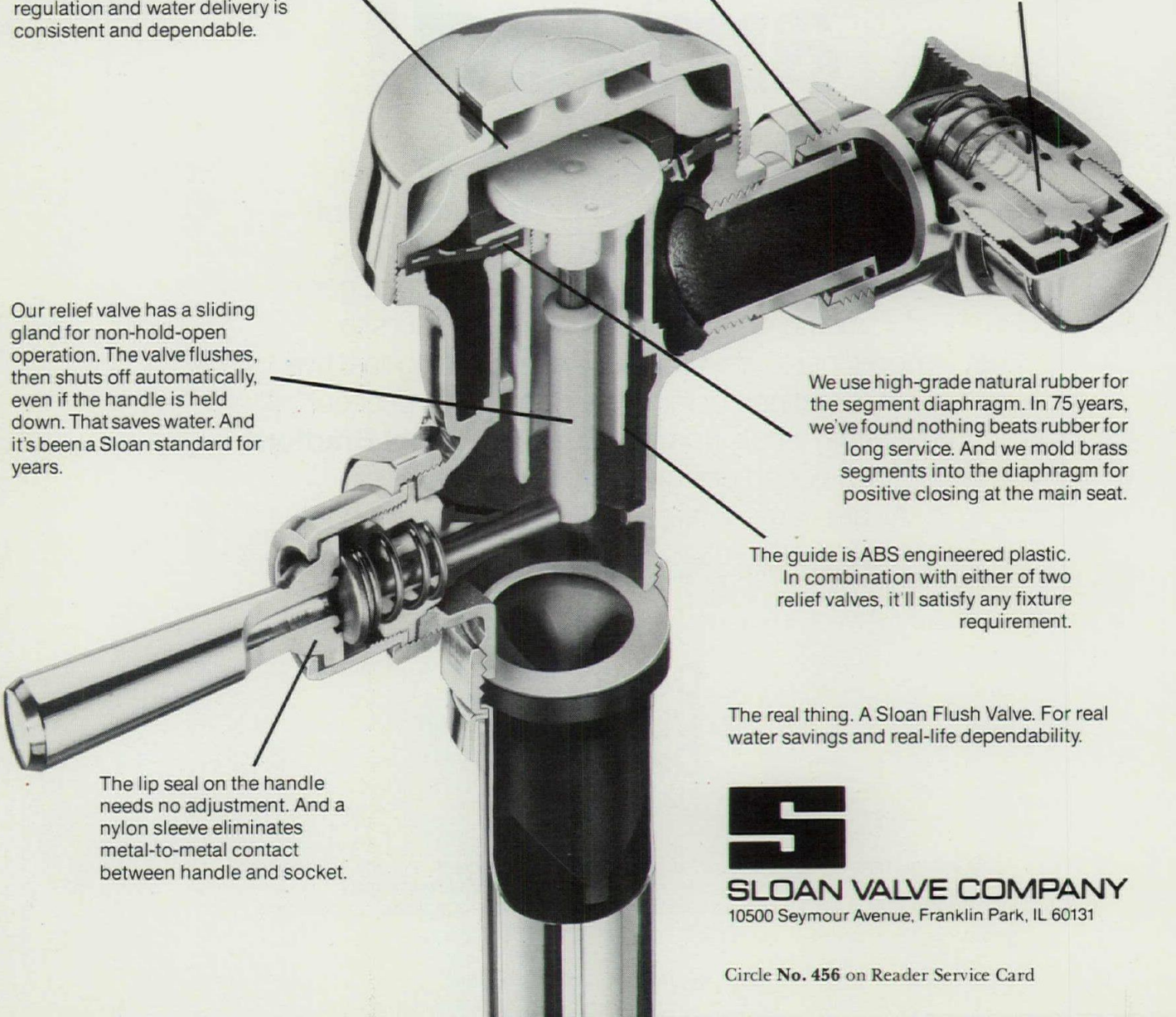

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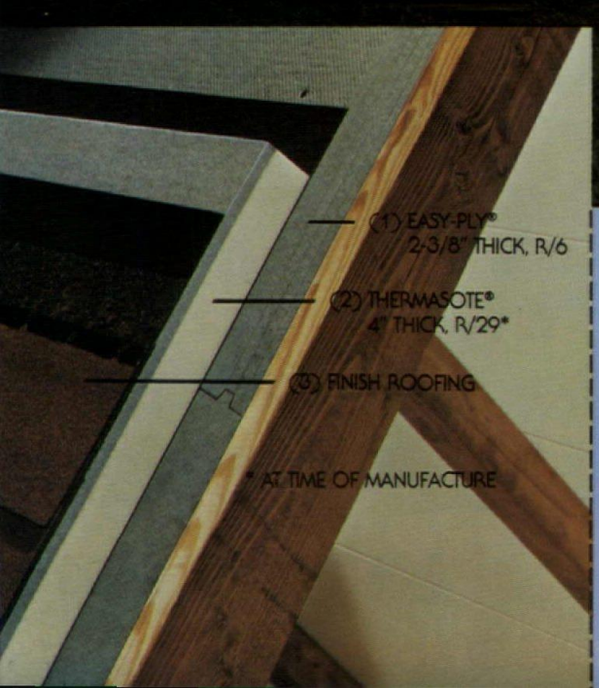

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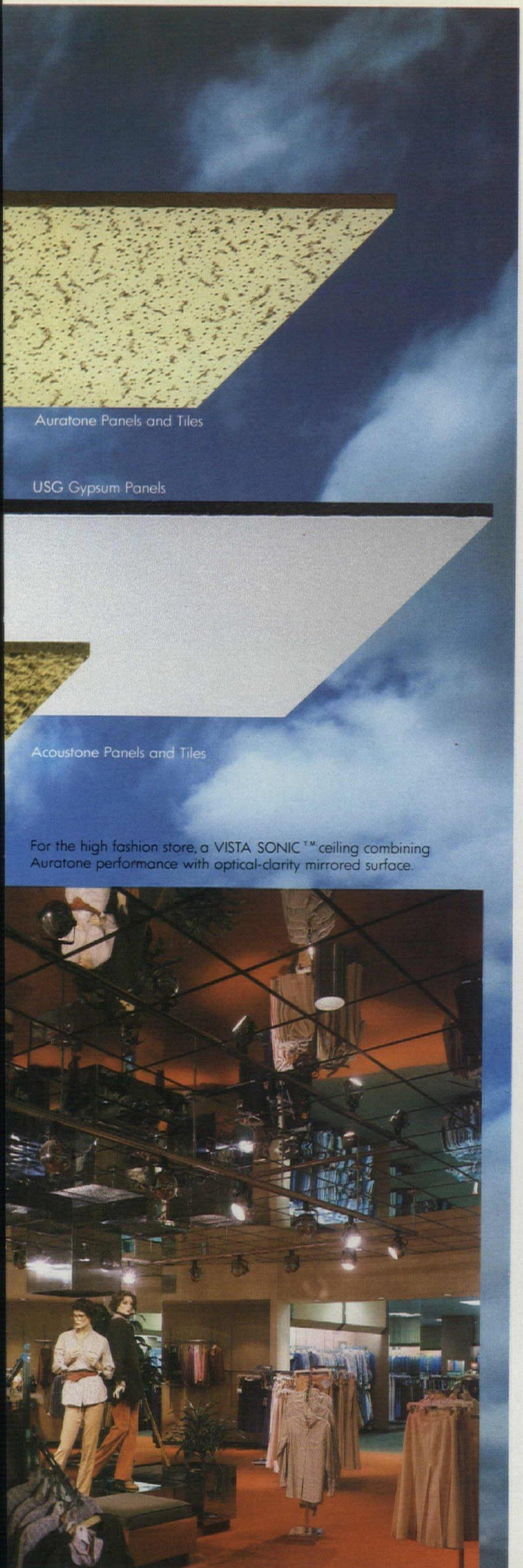

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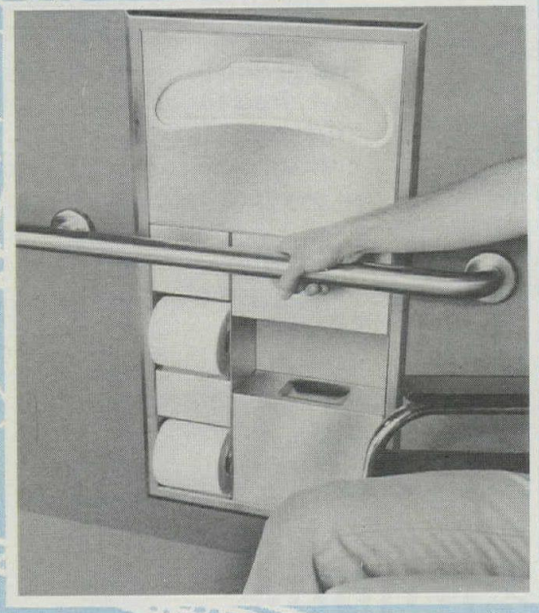

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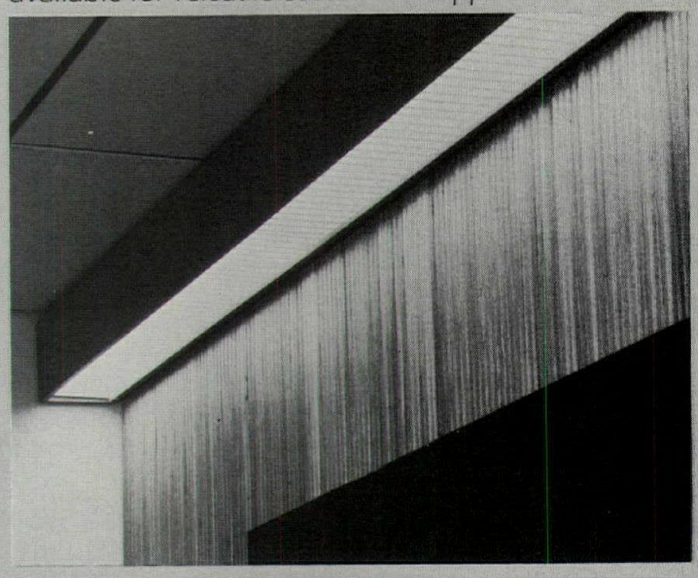

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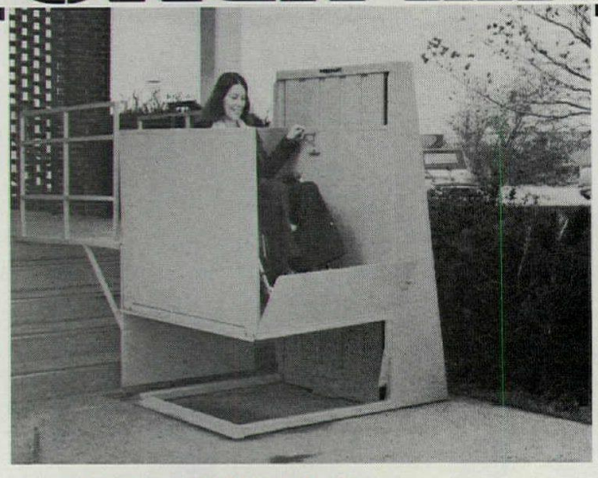

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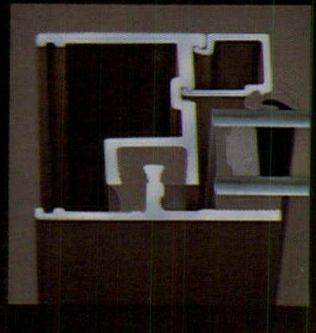

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Don Simpson, Gulf Waterproofing

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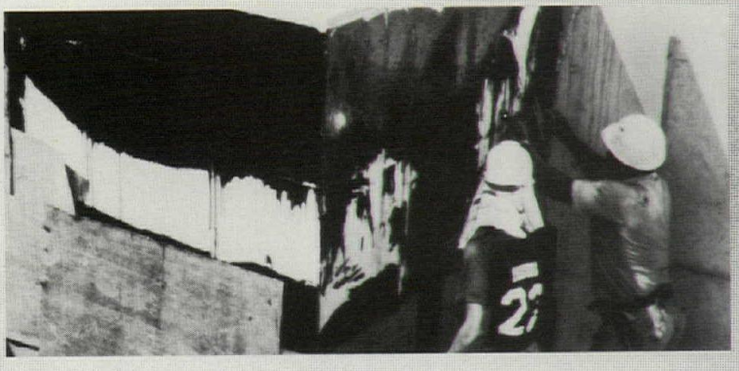

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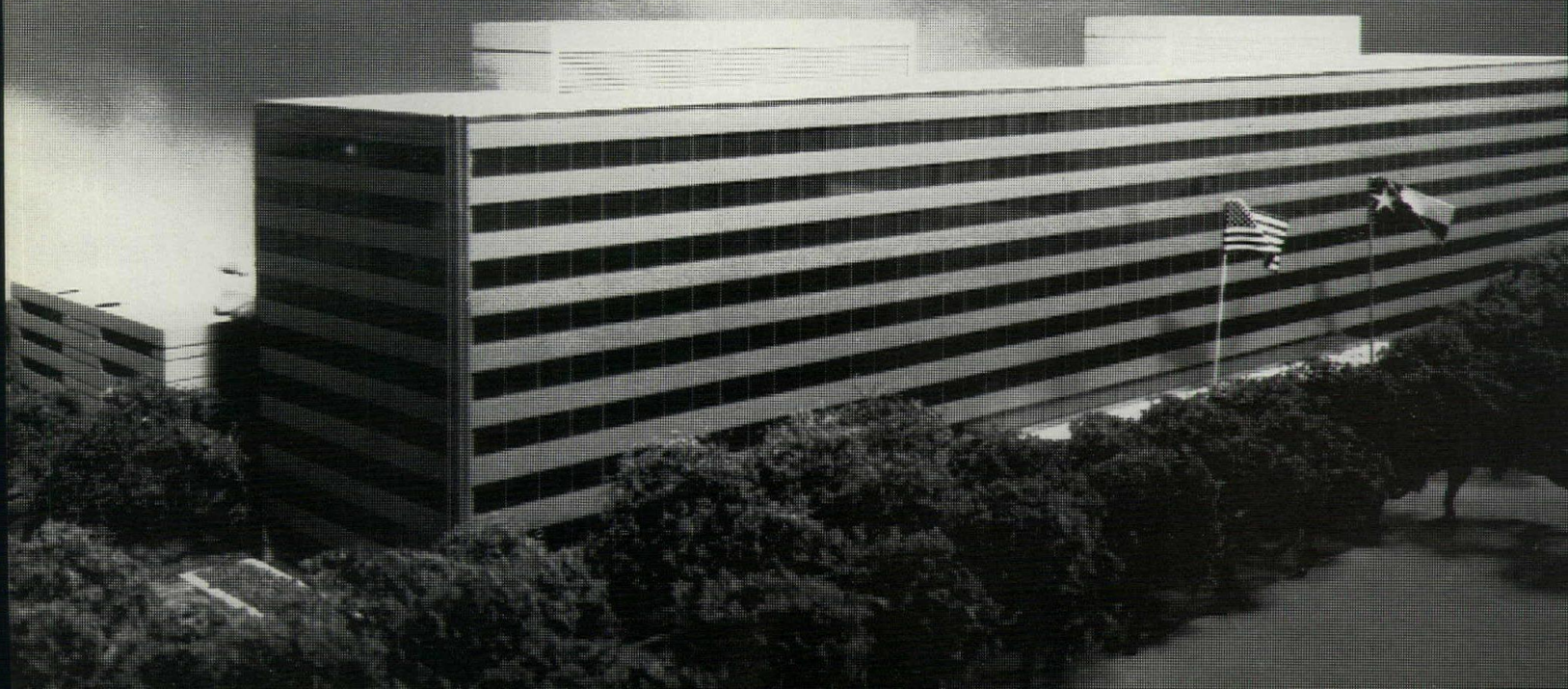

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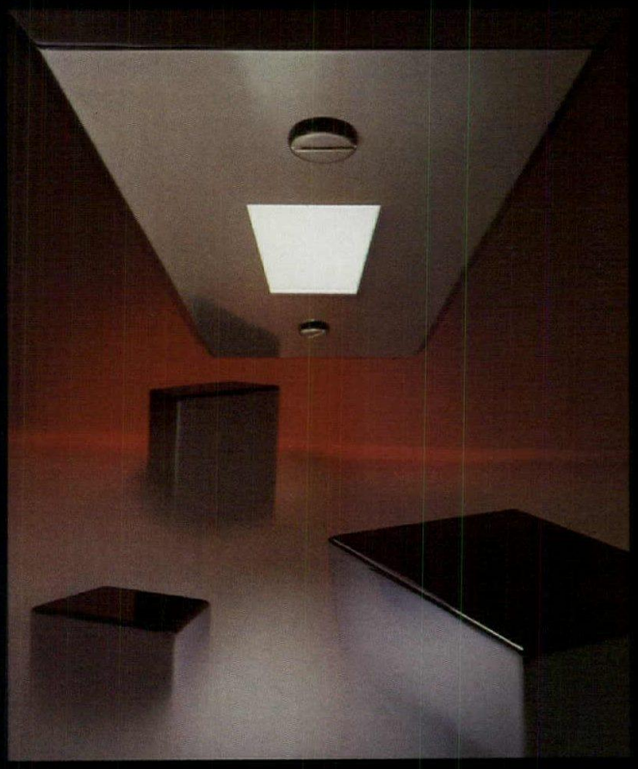

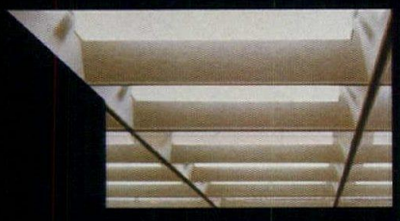

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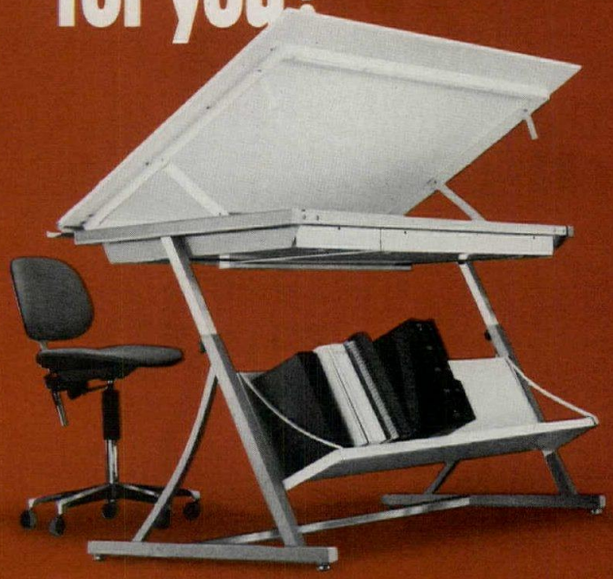

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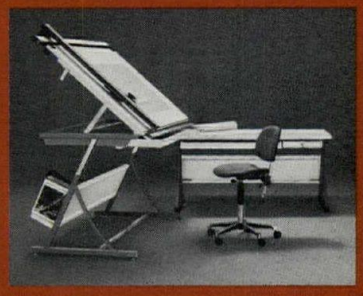

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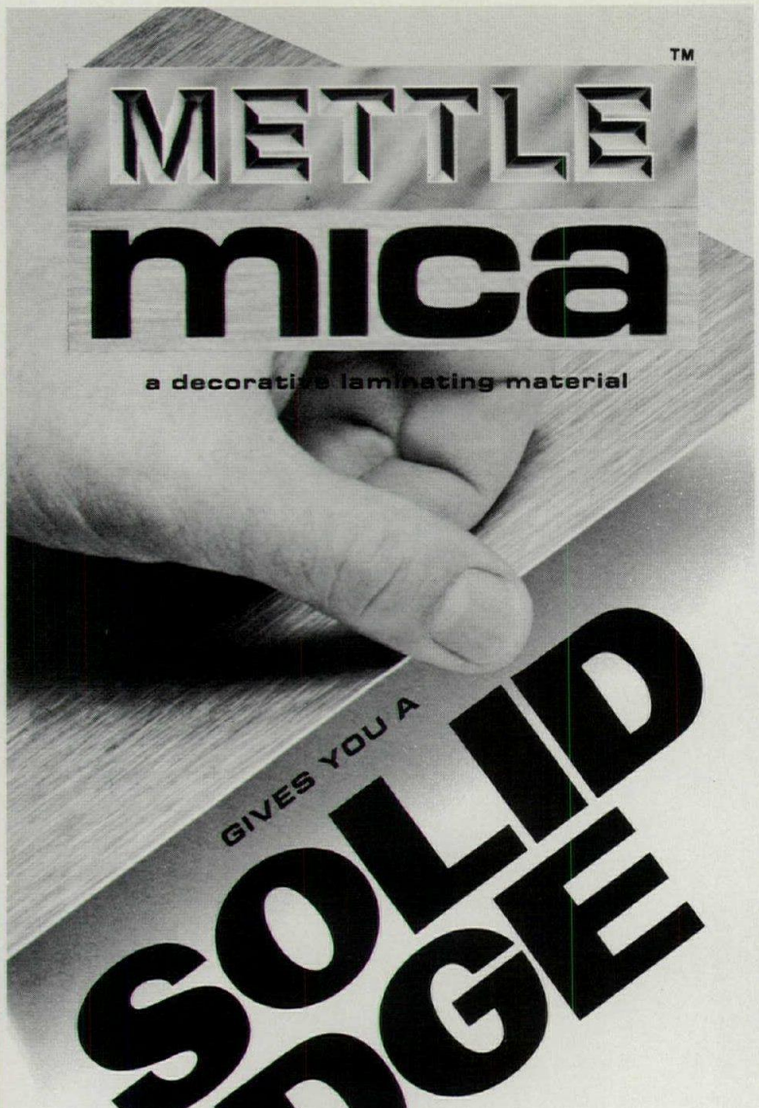

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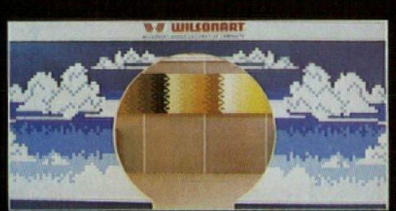

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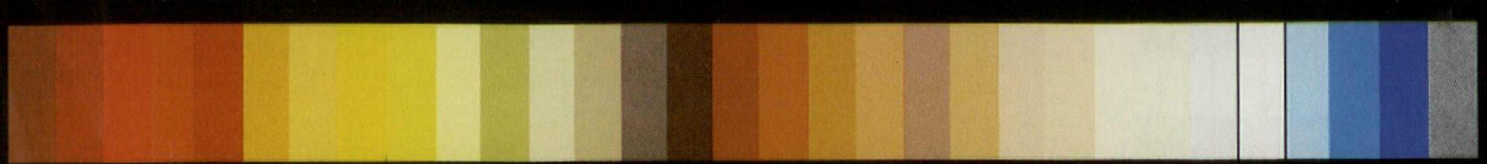

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'Put it in backward when forward fails'

Certain thoughts inform this issue, lie behind the way it is organized into projects, surveys, and independent essays. It is the idea that a commonplace of historical research—the extrapolation of linkages between artifacts, social order, and events—should be adapted as an important tool of contemporary criticism as well. P/A intends this issue as a preliminary step.



Mark Schlesinger

"Proto-Symbolist Room" by Anthony Machado, on exhibit at Janus Gallery in Los Angeles (July/August, 1981). Elegant materials are juxtaposed to the tackiest kitsch (bowling ball, stick-on plastic squares, Astroturf). Imagery is repossessed and transformed (Rolls-Royce door and hood). Distinctions are blurred (is the plexiglass case of granite balls a column, a sculpture, or a displayed collection?).

Title is from the song "Everything old is new again," words and music by Peter Allen and Carole Bayer Sager: A & M Records.

The room above was concocted by an interior designer *qua* artist for a Los Angeles gallery. In the center sits designer Anthony Machado's own Modernesque bed in black lacquer and leather with the retro Futurist name of "Hovercraft." Granite balls are displayed as is a bowling ball. A Rolls-Royce hood and door have been mounted on the walls, the hood covered in 1930s/New Wave graphics. Astroturf checkers the floor; plasticized stick-ups climb the wall, and blue lamé lies cheek to cheek with satin on the bed.

Archaeologists coming across this hundreds of years from now might rightly conclude that they had stumbled across something very indicative. An image of a society undaunted by distinctions in taste cultures, embracing equally the paraphernalia of the rich and of the working class, high art and kitsch; freely appropriating imagery disconnected in time and space; with a taste for experimental sensuality and a curiosity about decoration. They might also conclude that as a society it was rather assertive about its presence, nervous about its control over the situation. Machado, they might notice, doesn't cover the floor with Astroturf or the wall with pattern; he marks paths through them. He doesn't just hang a photograph; he cuts pieces out of it.

In this issue

The point of view of this year's interiors issue is why wait those hundreds of years. The projects on the following pages have been chosen for their particularity to our time. Loosely they fall into three categories: those bearing some relationship to the theatricality, lurid unease, and revivalism of New Wave; those evincing an inventive, iconoclastic, or even nostalgic fascination with materials and process; and those adapting exterior, often historical, vocabulary to interior spaces. There are a survey of industrial design and three independent essays.

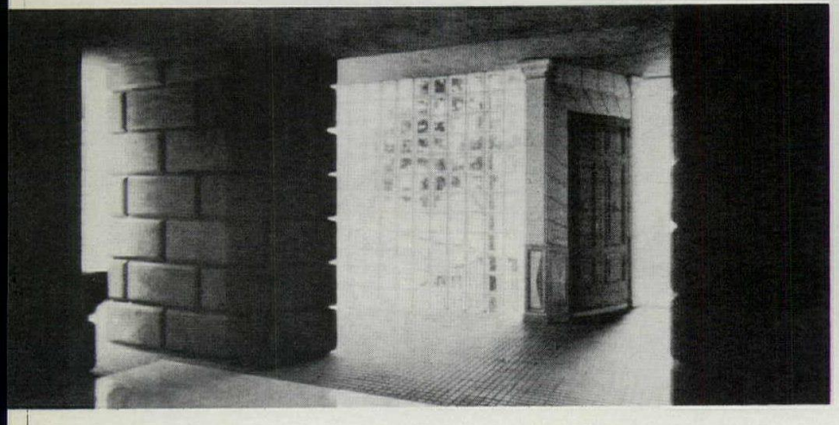
It is intended that this issue be regarded as a kind of time capsule, a series of clues to our own time and factors underlying seemingly unconnected phenomena. It is a thought process far easier when done in hindsight. One would face little argument today suggest-

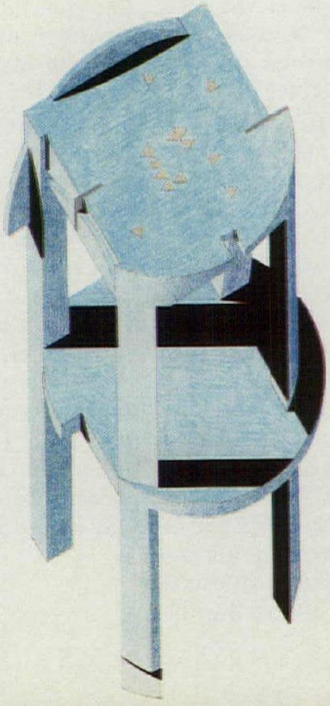


Sadin/Karant



Frank Israel





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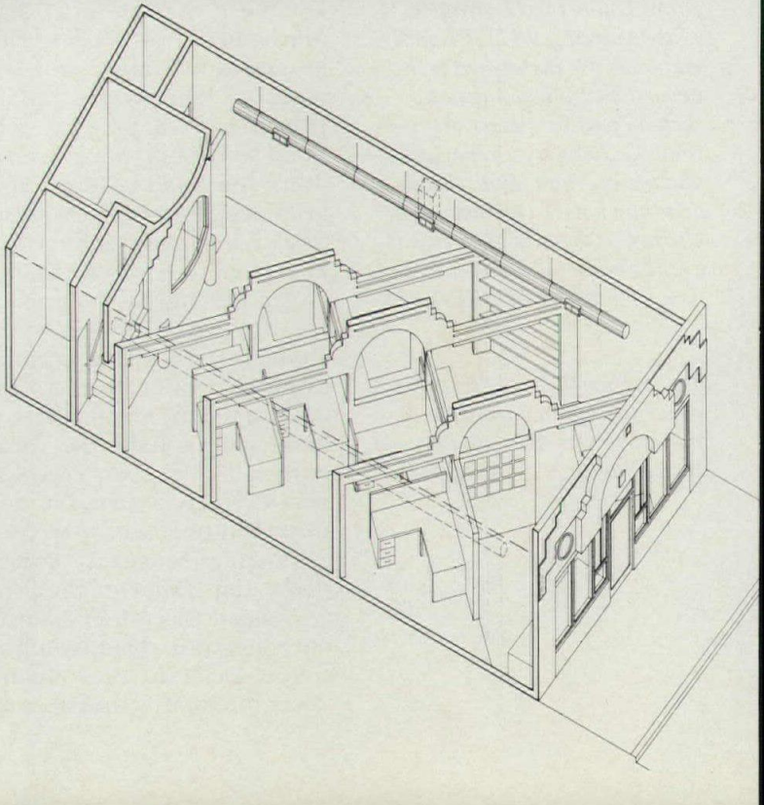


A bathroom from Newman/Lustig's Boris residence in a Chicago suburb uses silkscreen gridded tiles for intense geometric patterning (top left). The entrance area and part of the main space of Piero Sartogo's apartment in Rome is treated as outdoors (with "surreal" reversals): rusticated partitions, glass-block outer enclosure, and entrance door set in a casing with blocks incised in false perspective (middle left). "Table of Occasional Shifting Centers," by David Woolf (bottom left) made of white maple, mother-of-pearl, inlaid stainless steel and stained in colored goat's milk. The table, juxtaposing colonial with contemporary technologies and regular with eccentric form, is intended to symbolize tension between conscious intent and primitive urges, expressed in simultaneous representations of time—what was but isn't any longer, things coming and going. Candy-color plexiglass display fixtures in Melrose Avenue's "Shop" (top right, also p. 172). Cactus fixture is by Paul Fortune, who also designed the murals at China Club (p. 156). Michael Franklin Ross's offices under construction in a Los Angeles storefront (bottom right). Interior "façades" mimic the exterior one, implying a continuing shift of inside and outside. Not shown is the "kinetic cornice" of deep blue metal, rippling, sequin-like disks, a device borrowed from billboards.

ing that the significant events informing the European vanguards of the 1920s were World War I and the Industrial Revolution. The characteristics most visible about our own era are likely to be those in greatest contrast to the immediate past.

Beyond history

From Wendy's old-fashioned hamburgers to the swashbuckling new romantics, images from the "good old days" have become the sets, props, and costumes for life as pageant. Stencils, tile work, and wood carving have reappeared as have molding, quoining, and trapezoids. The phenomenon is often discussed as evidence of the end of innocence about progress, a failure of belief in the future, a retreat into the past. Yet, if there is not a belief in the future, neither is there the idealization of a specific past as in, say, the Renaissance. Too many periods are reproduced simultaneously. Weimar pallor is interchangeable with Robin Hood. And Ziggy Stardust is anything but banished in disgrace.

What is often missing from discussions of the current frenetic revivalism is that, historically, cultures have always borrowed forms and images, out of context, from other cultures and their own past *when they knew about them.* Rome borrowed from Greece, China borrowed from India. The extreme eclecticism of the 19th Century coincided with major archaeological discoveries and the replacement of missionaries with anthropologists as the source of information about faraway peoples. As the transportation revolution of the early half of the century gave rise aesthetically to both the eclectic exotica discovered and the streamlined form from the machines that made it possible, the current communication revolution seems to have brought not only the information but the disconnected interchangeability of image characteristic of its electronic purveyors.

Images are uprooted by pushbutton, not only from time, but from space and appropriateness. Rustication is found on interior partitions. Windows look from inside to inside. Calligraphy, once for hand-held scrolls to express thoughts, blows up as a billboard mural with no expectation of being deciphered.

Beyond class

The deliberate affronts and plain indifference to the trappings of class distinction or aspiration—expensive materials, order, permanence—suggest another development. America has long been dedicated in earnest to the erasure of systemic class barriers. Americans imagine that "their whole destiny is in their own hands," said de Tocqueville. But the land of opportunity still expected people to better themselves. If Mildred Pierce in 1945 censures the old aristocrats, she is still working hard to "improve" her own family.

Today the deliberate option of junk materials, bad taste, disequilibrium, eroded form, accidental splatters, and unapologetic juxtapositions suggests something else entirely. Though the rhetoric sometimes sounds rebellious, the sound is hollow. For all the current economic unrest, one has only to look at an early episode of "I Love Lucy" to appreciate America's hypermobility these last 30 years. With prosperity so widespread, the proof of wealth diminishes in importance. By the mid-1970s, the Gallup Poll showed Americans more interested in travel and entertainment than in their house or car. Similarly, the experimentation with texture, color, form can spread beyond the safety of established taste cultures, not to mention into the age-old pastime of the totally secure—slumming.

Beyond control

There is an underside to free-ranging choice, and that is unpredictability. While it would be easy to show from historical example our relative comfort and freedom from fear, few would deny widespread anxieties of insurmountable problems daily gathering force. The economy is inexplicable, the bureaucracy untouchable, modern medicine can be as dangerous as beneficial, and the streets aren't safe. Actually, they never were (the phrase highway robber didn't refer to your reupholsterer), but affluence and democracy have brought expectations of perfectability and an uneasy feeling that we should have things better under control.

The recent concentration on self-discovery has transmogrified into assertiveness training, lifestyle, vitamins, and EST. The freedoms seized in the 1960s remain, but the plane of perfectability has moved from social to personal. There seem to be parallels in architecture. The sublimation cities suggest a fundamental withdrawal with the added reassurance of rendering truly large things at adult toy scale. Agitprop involves a similar focusing in on individual sensory, emotional, and intellectual experience. And, in general, from craft revival to chicken wire fixtures, there is much asserting of presence.

Architects have a particular anxiety here. The evolution of the service professional has their perceived necessity hanging by a legal thread. On top of which, Modernist theory undermined the traditional roles of architects, leaving only programming and engineering.

The contrast with current work is dramatic. In a Mies lobby, for instance, materials have a totemic quality—large sheets of glass, exposed steel beams, freestanding marble partitions. The thingness is so strong that added color or "unnatural" shape is abhorrent. Compare the visibility of the creator in the tilework of Zambonini or Sawyer, the juxtapositions of Moore, or Ferri's handcrafted ballroom. Corporate Modernism erased gestures, "Roman holiday" puts them back. In current work, materials are bent, cut, applied, and decorated. Typically, some respond to anxiety by exerting visible control; some with a frenzied, even destructive, aggression; and others with a front-stage display of indifference (randomness and accident).

It is, however, a decade in which designers are not inclined to abdicate as their grandfathers did. [Nory Miller]

China Club restaurant, Los Angeles, Ca

Orient Express

Frank Israel

The new talked-about spot in Los Angeles, China Club is steeped in atmosphere. Among the cast of characters: the mysterious Orient, sultry 1930s, cynical New Wave, exotic romance, Weimar café society.

Designed by Pator Sato and executed by Paul Fortune, the mural in the main dining area (opposite page, top and lower left) sweeps the length of the room. The bar (lower right) is raised above the dining area and is separated from it by a chrome railing.

West Third Street in Los Angeles was, until recently, an amalgamation of commercial, industrial, and residential buildings. When Cedar Sinai Hospital moved to its present location just west of San Vicente Boulevard, the real estate values soared, and much of the light industry that filled the one-story concrete structures along the street moved over the hills into the San Fernando Valley. In the fall, Welton Becket's design for the Beverly Center, a colossal eight-story complex housing over 150 shops and restaurants, will open at the corner of Third Street and La Cienega Boulevard. It is already having a profound effect on West Hollywood and will perpetuate the transformation of this street into Los Angeles' most fashionable way.

The China Club is a case in point. The 1940 Art Deco building originally was a small manufacturing plant. Most recently it housed the Beverly Venetian Store, a wholesale outlet for the interior design trade, which in the 1950s occupied many of the buildings along Third Street. When Tong Fu, Inc., purchased the building in the summer of 1980, the trend of new boutiques and gourmet eateries had already begun. What was missing was a focus along the street—a place that could operate both as a clubhouse for local residents and an urban showcase to the visitor from back East or abroad. The China Club was conceived this way, and now, only eight months after its December 1980 opening, it is established among the artistic and fashion community of Los Angeles.

The remodification of the original 4400-sq-ft store developed along the concept of clubhouse, café, and art gallery: a gathering place where so many things can take place and do! In May, William Burroughs came to read excerpts from his most recent novel and autograph copies for the public. In April, a West Hollywood group celebrated the opening of a new designer showroom at the Pacific Design Center. And most recently, the club was closed for a private party in honor of a very important young film actress.

The design of the China Club was largely the effort of Sampei Abe of Tokyo, Japan. He worked with two Los Angeles designers: Norm Lazerine & Associates, building architects for the superstructure, and Sy Chen, interior architect. There were many other persons involved in the project. Pator Sato designed the gigantic dining room mural, which was executed by Paul Fortune who painted his own designs on the walls of the tea house in the rear of the restaurant. The sign on the front façade, the etched motifs on the barroom mirror, and the overall graphics were conceived and executed by April Greiman and Jayme Odgers.

Sampei Abe's design fulfills the multifunctional vision of the client. The China Club is more than a bar and restaurant, and the spatial organization emphasizes this fact. The plan is separated into a series of distinct areas, each with a sense of its own. One part encourages a particular type of dress, conversation, or attitude that another may turn its back on. For example, the bar is long and horizontal, raised several steps above the formal restaurant, completely visible to it. For that reason, taking a drink is a public event, and those who stand or sit must pose themselves in front of stage lights to public scrutiny. On the same level, to the side facing the street, is a sitting bar. A much more private space, the deep upholstered banquettes invite intimate conversation. The low lighting veils the visitor: you are never quite certain who is there. The gray-carpeted floor and softly textured walls contrast the shiny black wood floor of the public bar and the reflective glossy white walls and long mirror.

The bar is separated from the restaurant below by a chrome railing, which specifically recalls a detail in a particular restaurant in Paris, La Cupole. Before its most recent renovation, this Parisian institution housed a café, bar, restaurant, and dance hall. The dance hall has been eliminated. It was originally located above the restaurant and given access from it by a grand staircase and balcony, with the same strip railing that is used by Sampei in the China Club. La Cupole must have inspired various aspects in the overall design. It is, of course, a gigantic space in which a thousand persons can dine at one time. The China Club is much smaller and, for that matter, more complex. The incredible sense of space that La Cupole conveys is combined with a sense of intimacy on the floor. The groupings of tables, booths, and

Frank Israel practices architecture in Los Angeles, teaches at UCLA, designs for the movies, and writes on many subjects.







China Club restaurant, Los Angeles, Ca

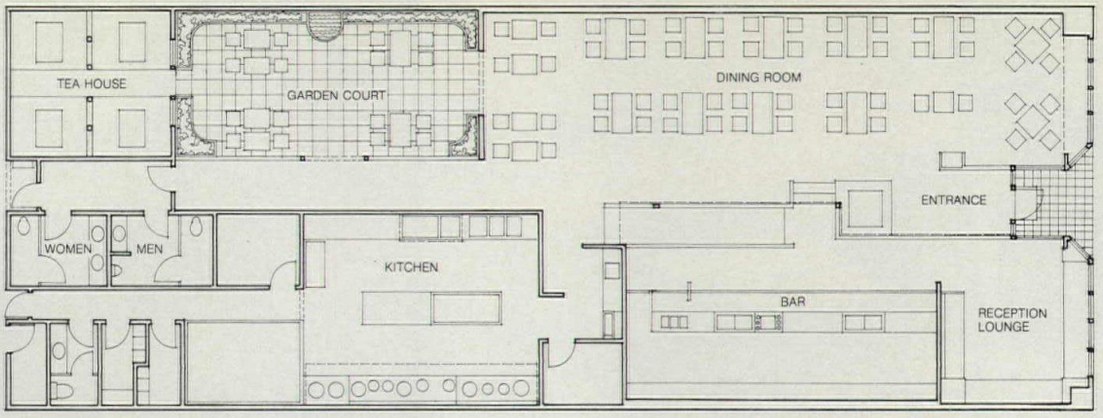












FLOOR PLAN

counters fashion private places; the soffit, however, is never touched—it hangs free to create continuous spatial elegance and grandeur.

Pator Sato's gigantic dining room mural is immediately overwhelming. It unifies the room and imbues it with some of the celestial majesty of La Cupole. The mural symbolizes heaven on earth. A group of women spirited in a Botticellian pose hover in the air. The 60-ft-long painting extends the entire length of the restaurant. There is no escape from its aura. The black tile floor reflects the deep purples and reds of the picture, which are repeated in the place settings and tableware. The combination of industrial track lighting, mesh wall sconces, and down lights composes a variety of light patterns, which highlight the mural and at the same time accent the food as well as the clientele. Sampei Abe designed the painted black rattan chairs and tables, which he had fabricated in Hong Kong.

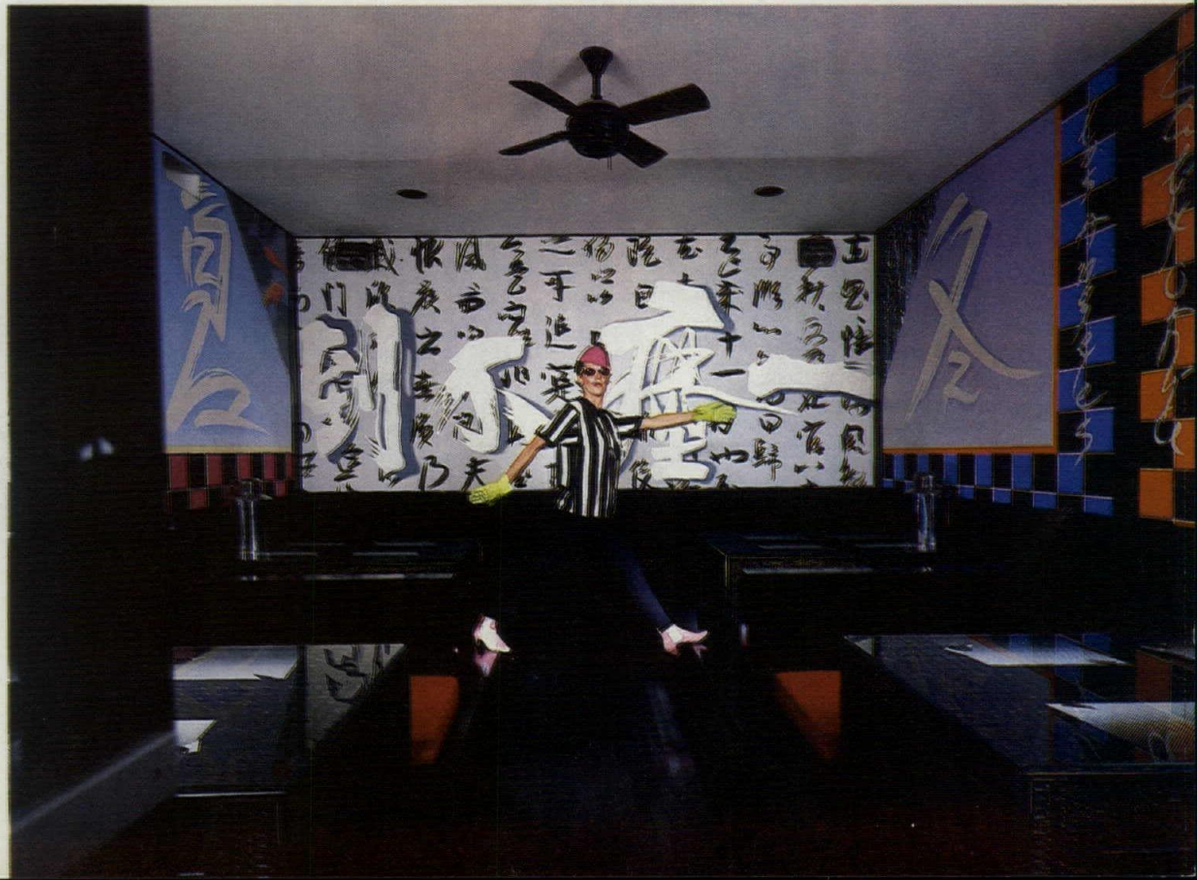
Beyond the main dining room is the garden room, which is used at lunch and at other times for private parties. An indoor-outdoor room, it is covered by a skylight, which permits light to fill the space during the day. The floor is tiled in a black-and-white checkerboard design. Tile planters have been built out from the walls, which are protected by bamboo wainscoting. The garden room is more like a courtyard in which tables seem alien, awkward elements. It does become a gracious gathering spot for the crowds which fill the China Club each month for a gallery opening or poetry reading. The gallery, which is adjacent to it, is a long, white, open hall. It leads to the tea room in the rear.

The tea room is the China Club's fortune cookie. A special place for special occasions, the tea room is removed from the public exposure and festivities of the bar and restaurant. It is a small, 250-sq-ft room with a series of raised booths where the visitor removes his shoes and sits on cushions. Paul Fortune's mural, "The Four Seasons," covers the walls. These paintings inspire a mood of reverie. They are a rich display of Japanese calligraphy combined with images from nature, such as a gold carp, or a snow-covered cherry tree in bloom. The largest painting is a graphic composition of a 14th-Century Japanese proverb stating: "No dust of the earth shall settle in this place." Artist Fortune meant to say that the China Club will be so busy it will never have the chance to get dusty. The ceiling fan and painted wood floor recall Somerset Maugham, as well as the film "Casablanca." The tea room is romance. When it is empty, one stops to look and make believe.

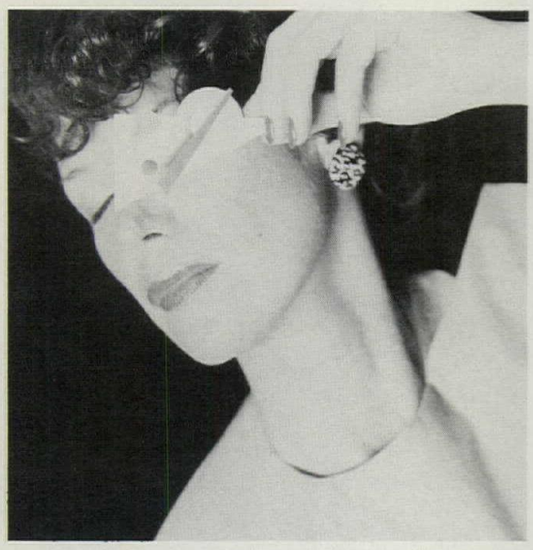
The China Club combines the efforts of a group of artists and designers from different locales. The result is an eclectic design which recalls the Orient, Constructivist design, and Streamline Moderne. The hard-edge graphics by April Greiman and Jayme Odgers combine Eastern and Western motifs. The neon sign on the exterior, the bar mirror etchings, menu format, and table tops are designed to unify these stylistic influences. The waiters' clothes were even designed to suggest a Russian Cossack uniform with a Chinese collar. Perhaps if the graphics had been given the stage that the Pator Sato mural occupies, the China Club would have a more coherent identity. As a series of carefully composed vignettes, the China Club successfully invites a varied cast of characters to participate in a richly textured series of experiences. When the evening is over, however, it may be difficult to piece together the events that have occurred. The overall spatial organization could be tighter. Though one appreciates the variety of experiences, what is missing is a sense of counterpoint, which a carefully organized architectural plan achieves. Counterpoint enriches the experience by structuring an armature in which the relationships that exist between things is revealed. There is no overall spatial axis in this design, even though there is certainly a front door and a back room. The China Club ignores a strong or even subtle architectural plan to concentrate on appearances, giving impressions, setting up an innuendo that the story here is still forming itself and anything can happen. □

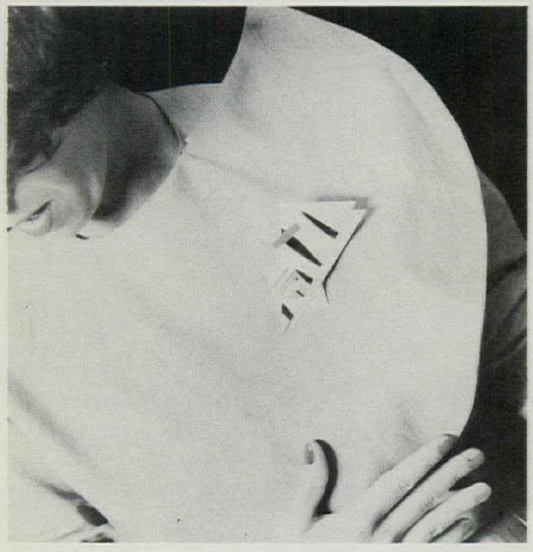


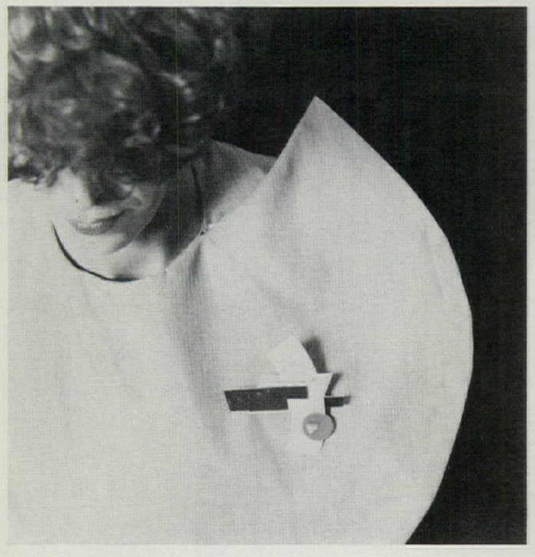
Beyond the main dining room is the garden room (above), which leads into the tea room (right).

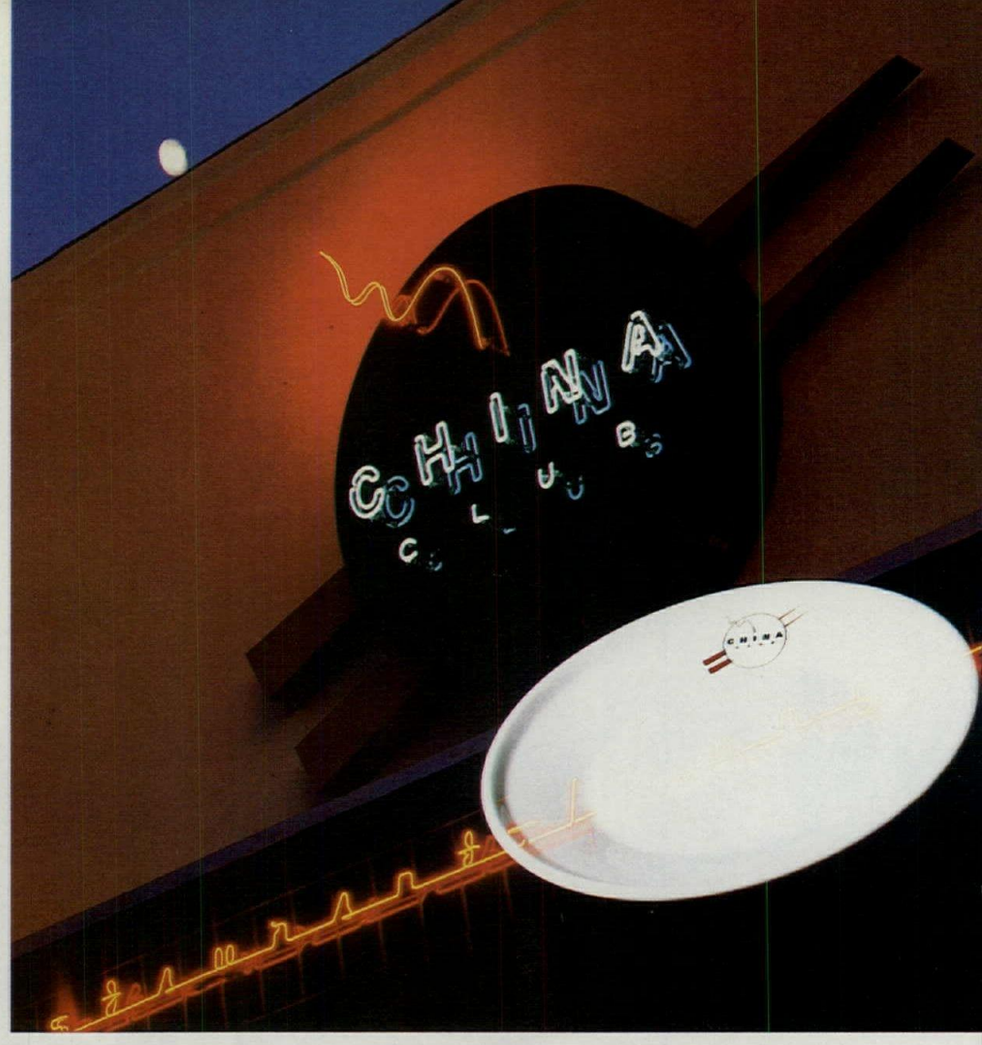


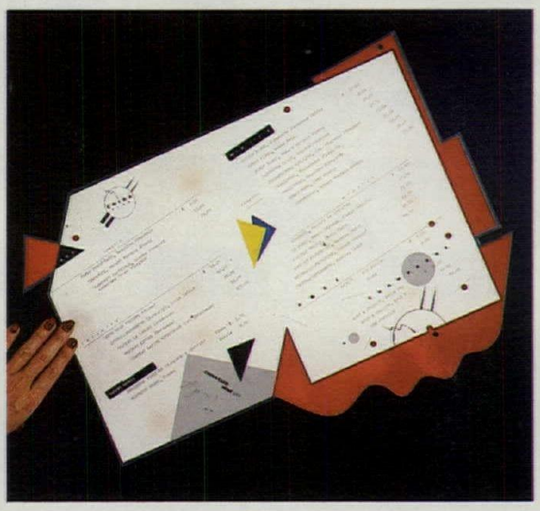
China Club restaurant, Los Angeles, Ca

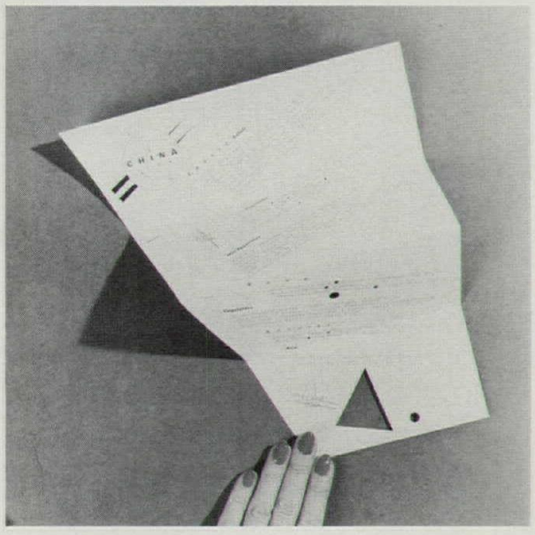












Graphics: April Greiman; sign and pins: Jayme Odgers.

Data

Project: *China Club, Los Angeles, Ca.*
Architects: *Sampei Abe, Tokyo (U.S. representative office, Sy Chen, Los Angeles; building architects: Norm Lazerine & Associates, Los Angeles).*
Client: *Tong Fu, Inc.*
Program: *remodification of 1950s venetian blind store, 4400 sq ft—tea house, 250 sq ft; garden, 460 sq ft; gallery, 240 sq ft; dining room, 1500 sq ft; bar and lounge, 750 sq ft; kitchen, 1200 sq ft.*
Structural system: *steel structural beams added.*
Major materials: *gypsum board partitions and ceiling; tile floors (see Building materials, p. 307).*
Mechanical systems: *electricity, plumbing, air conditioning added.*
Consultants: *murals, Pator Sato, Paul Fortune; graphics, April Greiman, Jayme Odgers.*
Contractor: *Owener Contractor.*
Costs: *$46 per sq ft.*
Photography: *Jayme Odgers. John Colao, assistant; April Greiman, stylist.*

Washed up on the New Wave

Barbara Goldstein

New Wave—the aesthetic of a subculture—is becoming fashionable. But what does it offer?

Last June, on a muggy Pasadena evening, several hundred young people lined up outside Perkins Palace waiting to get in to a concert. Most were dressed conservatively and, despite a delayed performance, were quiet and well behaved. Except for a small knot of flamboyant claques sheltered under the marquee, this could have been kids waiting to go into the movies. But they were waiting to hear the Plasmatics, one of the most controversial contemporary rock bands.

The Plasmatics, like most successful bands of the last few years, are performance artists more than anything else. They play speeded-up 1950s style music competently and loud, but the main thrill for the audience is the stylish and violent performance. Like the ritualized recreation in Orwell's *1984*, the show functions as a symbolic catharsis for the spectators.

During the course of the evening's entertainment, the Plasmatics destroyed every symbol of middle-class America: the front lawn (in the form of flower pots smashed on stage), a television set (which fell to the rage of a sledge hammer), and the-Chevy-in-the-driveway (which was blown up as the finale of the show). The band played well. They looked good in Mohawk hairdos and sexy clothing, and the show went off like a Las Vegas magic act. This is New Wave.

New Wave is a form of Post-Modernism which, rather than using the safe, remote images of the distant past, relies on more recent nostalgia. It reuses images we can find at the back of our closets rather than on the dusty library shelf. Like the waves in the ocean, it is a movement of short duration in a constantly shifting sea of style. And like much of what washes up on the beach, its components are flotsam and ephemera, recycled elements arranged on a neutral plane.

The term New Wave is itself recycled, resurrected from the *nouvelle vague*, the movement of French film-makers like Truffaut and Godard, who romanticized the ordinary side of life. What New Wave shares with that movement is a love of the commonplace.

Contemporary use of the term seems to have originated in England as a label for bands and styles that evolved from early punk. The punks were concerned with social rebellion: their songs and activities decried the monotony of public housing, the grayness of their lives, and the boredom of unemployment. They were violent songs which have proven to be prophetic. Punk was a grass-roots subculture of the young, and its proponents made their own clothes, newspapers, and music.

Punk became New Wave with the creation of the Sex Pistols. Here was a band that was punk in its class origins and musical style, but it was a complete media event. Virtually invented by fashion designers Vivian Westwood and Malcolm McLaren, they had a stylized appearance, and everything they produced was carefully stage managed for maximum impact. (The release of their big hit single, "God Save the Queen," with its refrain of "There is no future in England's dream," coincided with the celebration of the Royal Jubilee.) What followed was the self-conscious product of design, like the white boys' cover version of down-home black music.

New Wave graphic and interior design is the same thing. It has pretenses of being rough-edged or shocking in content, but underneath it is calculated, deodorized, chic. Its elements are familiar, derived mainly from the 1950s, and it achieves its effect through clever manipulation of kitsch images within a loose framework. In fact, even the "picture plane" achieved in most New Wave graphics depicts the same kind of space as the television screen—floating and disembodied.

Like Post-Modernism, New Wave is a style of pastiche and collage. It is witty, has few discernible rules, and can only be enjoyed by those who understand its vocabulary. It is a comment on the existing state of society, a subculture flying the banner of Art.

It is fashionable for New Wave designers to describe themselves as artists or members of the avant-garde, and to promote their ideas as Dada. But it is cynicism, not art, which allows them to embrace things normally considered bad taste. Like Pop Art, New Wave is a polished and satirical form of social commentary. Beginning with *Wet* magazine, with its sophisticated graphics promoting hedonism and thinly veiled violence, New Wave juxtaposes the ordinary with the profound in an attempt to create 20th-Century surrealism. The worship of kitsch reflects the credo of the ultra-hip, "too cool to care." While survivors of the 1950s remember cheap housewares as just that, the upwardly mobile of the 1980s enshrine it as art. New Wave exploits the ugly by labeling it beautiful, and all with a sense of irony.

It is tempting to assume a critical stance and label the entire movement as callous, exploitative, and shallow. The flip side of the story, however, is New Wave's sincere, sentimental love of the imagery which composes the style. The worship of the stylistic extremes of the 1950s is a poignant nostalgia for the last real period of American optimism, hope, and prosperity. The juxtaposition of a gold lamé pump against a black asphalt parking lot is sad, somehow. In a post-prosperous economy, we can only long for the innocent excess of an earlier age.

It is doubtful that New Wave graphic or interior design will have a profound effect on architecture. Its lifespan is too short and its content too specific for it to be absorbed into the architectural mainstream. And although many architects are enamored of ordinary everyday materials such as asphalt shingles and plywood *au naturel*, we have yet to see these juxtaposed against those architectural chestnuts of the 1950s: fin, parabolic curve, or latticed façade. It is unlikely we will ever see the marriage of Frank Gehry and Edward Durell Stone.

As a graphic design discipline, New Wave is already on the way out. Any style that has appeared in the pages of *Mademoiselle* magazine will soon hit the popular press and trickle away. Just as High-Tech began fading with the publication of the book, New Wave will soon be on the wane.

The only question that remains is what is the next wave in architecture? After High-Tech and Post-Modernism where will architects turn? It seems that many contemporary architects, from Europe to California, share a fascination with the commonplace, a preoccupation that began with Robert Venturi. But in most contemporary examples, this love of the ordinary is a form of regionalism rather than irony—a response to the easily available, cheap materials of the area. It is a particularized rather than a generalized style and does not really translate from one place to another. This new regionalism reflects a response to poorer and more pessimistic times. Maybe these explorations will yield enduring architecture; or maybe, like the Plasmatics performance, they will act as a symbolic metaphor for the frustrations of the 1980s. □

Barbara Goldstein is one of P/A's Los Angeles correspondents and editor of *Arts + Architecture* magazine, which resumes publication this month.

The Odeon restaurant, New York

The past unmasked

A New York restaurant, remodeled by its new owners, looks to its own past.

"We didn't try to create any particular kind of Art Deco or Streamline Moderne atmosphere in here," Lynn Wagenknecht said; "we just picked up things that we liked that we thought worked together." That statement by one of the owners of Odeon restaurant clearly expresses the partners' attitude about the place and also gives direct clues to what is so appealing about it. One does not sense that the interior has been "done," and as a result it has a very relaxing and un-self-conscious quality about it that is quite refreshing to find in New York.

In certain respects it is a little strange that the restaurant would have this quality, because it is made up of elements that normally would not necessarily lend themselves to such an ambiance. Chrome tube furniture on terrazzo floors under an exposed acoustical-tile ceiling are not the obvious ingredients for creating such a setting, and especially not when the space gives the impression of having been done essentially in black and white. But the main reason the place works so well and has its easy, uncontrived air is that the owner/designers were truly appreciative of and sensitive to what was already there. They saw that behind a somewhat tacky 1950s cafeteria interior there was a hidden layer of 20 years earlier. To a large degree, their job was one of repainting, removing layers of garish plastic wall paneling, getting rid of the cafeteria food counter, and throwing out the rest of the furniture. But their input is really seen in what they did after this, which is what makes The Odeon so special.

It is probably because Lynn Wagenknecht and her partners Brian and Keith McNally were not trained as architects or interior designers that they could exercise restraint and not feel compelled to impose their own wills on the place too much. They could accept it and like it for what it was, which, after the stripping and cleaning, turned out to be a rather spacious room with some interesting details. It was also, however, a rather ordinary space of the type that might have been found in a bus terminal restaurant of the 1930s. With their improvements, though, there is no mistaking that the restaurant is now one of the most sophisticated and glamorous spots in town.

Into this space the partners have put an appealing collection of chrome tube furniture of the 1930s and 1940s, which was collected from a wide variety of sources. They were also able to find a rather preposterous but quite marvelous Moderne Brunswick bar of dark wood, curving ribbed glass, and mirror that now commands one end of the room. They located clear ribbed glass to use in the divider between the bar and the dining room, and they found a Bakelite mosaic mural of the New York skyline from the Fifth Avenue Woolworth's, which was being demolished. New streamlined wall sconces were also added, along with new pink mirrors that pay homage to those that had once graced the walls. Other than these new additions and the things that were thrown out, everything else pretty much remained.

The original dark wood paneling of the 1930s renovation turned out to be in need of only cleaning and polishing, so it was retained. So, surprisingly, were some 1950s angled aluminum door and window cornices at the front of the room. Most trained eyes would surely have banished these to the dump, but now they add a rather appealing reminder of the early days of industrial high-tech, before it was known as that. They do something else, too. They tell you that this room has had a history of use over the decades and that it was not created as a set piece

The restaurant was remodeled from a 1950s cafeteria that had previously been a 1930s café in a cast-iron building of 1869; with this fascinating mixture, it is one of New York's most glamorous in spots today. Most of the 1930s interior shell was retained, and furniture from that period was collected to complete the scene.

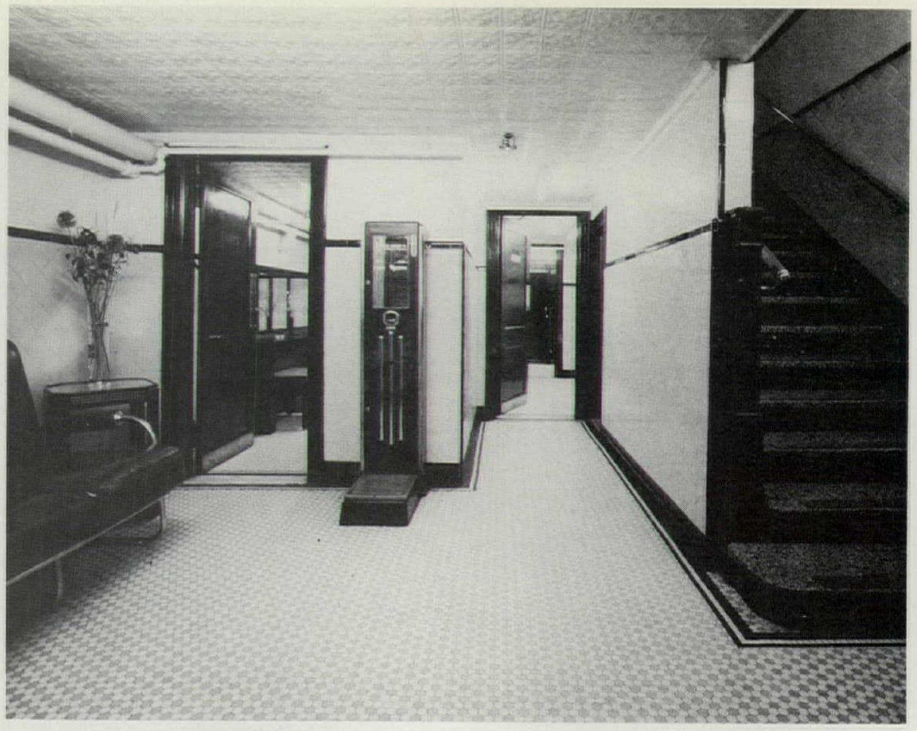






The Odeon restaurant, New York





all at once. This expression of transformation and use through time, here and elsewhere in the restaurant, gives it something of a sense of tradition that has a lot to do with its comfortable and reassuring ambiance.

The partners also retained the handsome ceiling light fixtures, which add another welcoming touch—that of international Modernism—to the space. These metal and glass globe pieces seem to be a close approximation of one of Marianne Brandt's stunning Bauhaus designs. In the downstairs bathrooms, nothing was removed. The fixtures, the pale yellow and black wall tiles and gray and white octagonal floor tiles remain from the 1930s, under the pressed-tin ceiling original to the cast-iron building of the 1860s.

The partners met each other while working at various New York restaurants. They are all in their 20s. Wagenknecht is from Chicago and the McNally brothers, who named the restaurant after the British cinema chain, are from England. When they decided to open a restaurant, they wanted only a nice, comfortable lunch place downtown. They reasoned that it would succeed, in view of the noisiness and crowding of most of the others. After four-and-and-half months of doing their own construction, however, they found the lunch people never came. But unexpectedly, the night crowd did, and in less than a year The Odeon has become one of *the* places in town.

The food is very good, but that alone does not guarantee success in New York. Nor hardly would the neighborhood in TriBeCa, between SoHo and Wall St., which is fairly deserted at night. One suspects that the mixed clientele of gray-flannel brokers, actors, artists, models, rock and punk types come primarily for the atmosphere, which is simple but also gracious, and ultimately rather elegant. The lesson of The Odeon is that places do not always have to be heavily designed to be successful. An inviting setting of simplicity and restraint, with a character of its own that is allowed to flourish, can also sometimes be the best. [David Morton]



Data

Project: *The Odeon restaurant, New York.*
Design team: *Lynn Wagenknecht, Brian and Keith McNally.*
Building architect: *John O'Neil designed original cast-iron building of 1869.*
Clients: *Lynn Wagenknecht, Brian and Keith McNally.*
Program: *renovation of an older cafeteria into a restaurant.*
Structural system: *cast iron.*
Major materials: *furniture and bar from 1930s and 1940s, wall paneling of 1930s, new ribbed glass dividers, wall sconces, and mirrors.*
Contractors: *the owners, using licensed workmen.*
Photography: *Norman McGrath.*



The 1950s Tower Cafeteria (top left) before renovation shows paneling and furniture that was removed. The bathrooms downstairs (top right) of the 1930s were only cleaned and repainted, and the 1950s renovation (left) of the ground floor of the 112-year-old building remained relatively unchanged.

Philip Maberry Loft, New York

Pattern on pattern

Some lofts are artistic interiors; but others, like this one by artist Philip Maberry, are live-in works of art.

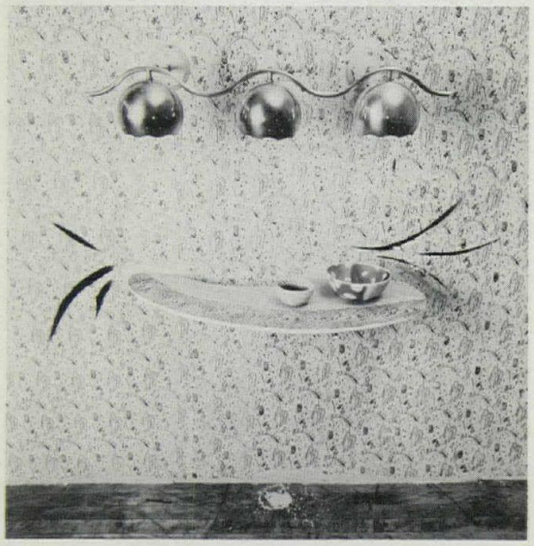
Artist Philip Maberry (seated) and associate Scott Walker.

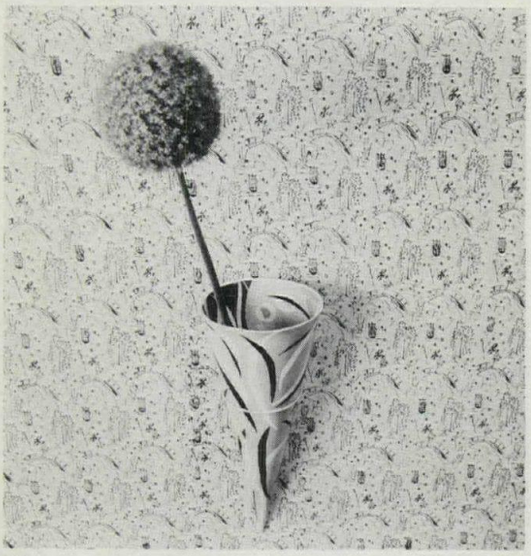
The gradual blurring of art, design, and architecture has always occurred in interiors executed by talented artists or architects. Yet the overlap occurring in the last decade or so has something unusual about it. It comments on and borrows from principles of Modern art, while freely using as basic materials the commercial products of modern design. Design, art, and architecture, however, are brought together to force the perception of both the differences and the continuities between the three disciplines—in conception as well as production.

From the conceptual viewpoint, it has be-









Maberry and Walker coated walls of dining room in a stenciled pattern of roll-on paint (see previous page and left middle and bottom); then Maberry added a frieze-like band of a larger pattern and overlaid the two patterns with vertical strips of wallpaper trimmed to the sinuous contour. The repainted thrift-shop dining table, originally blond oak with a blond plastic laminate central panel, folds down to three sizes.

The 1950s lamp from Canal Street has been mounted above the artist-designed wall shelf (left middle); a porcelain slip-cast cone vase by Mayberry holds an ailium flower (left bottom). Walker in kitchen wears a Maberry-decorated shirt (left top). A Maberry silkscreened fabric is backlit in alcove (opposite, left). Maberry studies his pottery (opposite, right top) near the specially made bent-legged metal pipe table and a painting by Rusty Wallis. The living room seating is organized around a gray linoleum "rug" Maberry painted in delicate free-form drip style, a counterpoint to the blob motif of his mural in the rear. Walker covered the side chair in foreground in vinyl and wired it internally to create an "electric chair."

come more and more usual to see paintings by artists attracted to ornamental forms and decorative patterns leap out of the picture frames and spread over on floors, ceilings, walls, and furniture. But Philip Maberry, a young artist known for the ceramics, fabrics, and furniture he has shown in the Hadler-Rodriquez Gallery in New York, has created, with associate Scott Walter, a live-in art work using paint and found objects, and even found fabrics and found wallpaper.

No chintz

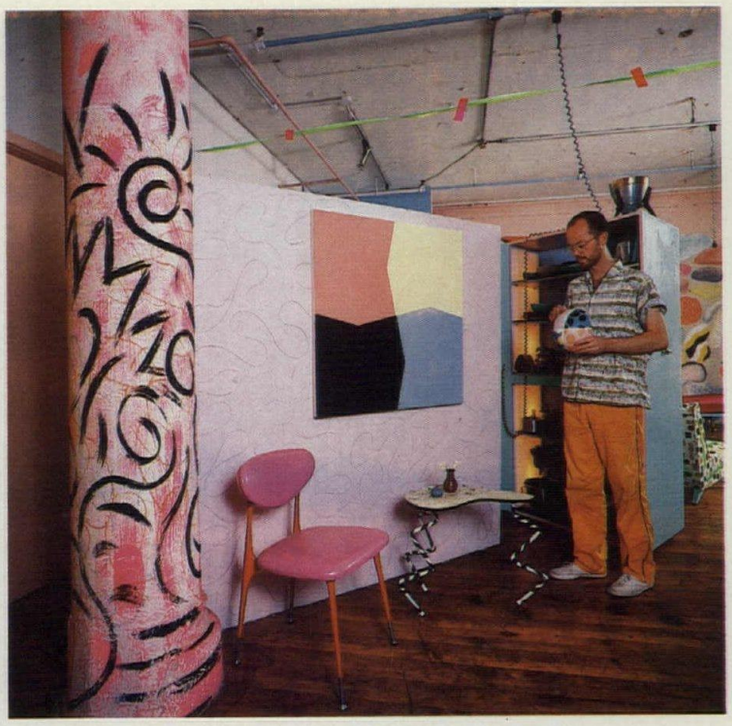
What separates Maberry and other artists like him from the chintz-on-chintz school of decorators is the conscious deployment of two-dimensional elements and forms through three-dimensional space. Linear elements, such as the brightly colored electric cords, are suspended from the ceiling, and abstract brush strokes, usually seen on canvas, now adorn walls, columns, floors, and table tops. While the architectural shell is acknowledged, it is incorporated into the overall pattern through the painted stroke. Thus the interior constitutes a series of artistic scenes, as if one were seeing them outside of a frame, but with multiple vantage points.

In this space of pattern on pattern, the forms consciously link to earlier periods of Modern art, from Surrealism to Abstract Expressionism. But the interiors go even further to comment on the borrowing of those forms for commercial design production. By using old thrift-shop items—often 1940s or 1950s kitsch—Maberry and Walker transform the object and make it "art." But they do so by adhering to the original aesthetic system from which the artifact sprang. Taking the castoff object out of the domain of its own design history, yet keeping its associations, they give one pause. There is inventiveness here about a way of seeing—and subversiveness about a way of designing. [Suzanne Stephens]

Data

Project: *Maberry loft, New York.*
Designers: *Philip Maberry, Scott Walker.*
Program: *1600-sq-ft loft for living, working.*
Major materials: *vinyl, paint, thrift-shop furniture.*
Photography: *Norman McGrath.*







On the (Melrose) road

Frank Israel

The new shops on Melrose Avenue in Los Angeles look to New Wave music, 1950s Rock and Roll, and 1980s High Tech and Futurism; the style is cut-rate, cheap, and off the wall.

Metropolis (right) is the ultimate New Wave boutique; it combines High Tech elements with surgical tables and chicken wire for an unformed and open-ended ambiance.

Frank Israel practices architecture in Los Angeles, teaches at UCLA, designs for the movies, and writes on many subjects.

This jet age is getting worse
I feel I'm half a universe away . . .
I left my home some time ago
To fight the creatures of the U.S.A.
You tell me that this neon world is free . . .
You say this is the place I ought to be . . .
The time has come for me to go . . .
You say it's fast but it's feeling slow today.
"Lost in the Neon World" by Be-Bop Deluxe*

The new music, which rocked the American recording industry last year, is having its effect on the design world. Los Angeles' Melrose Avenue is witnessing an urban renaissance precipitated more by a change of spirit as evoked by New Wave than by the will to remodify and upgrade the environment. The road that links Beverly Hills to East Hollywood has always housed small antique shops and clothing boutiques. The comparatively low rents have invited the more avant-garde designers and shops to establish themselves along this axis. The most remarkable aspect of the phenomenon is the call to arms of a particular attitude and style, like its musical counterpart, which each new shop and store front is sporting.

"The guys and girls who work the shops in day are in the Veil at night. They dance there and hear the new sounds—making up buzz words and dress to exchange on Melrose the next day. Sometimes we even switch jobs." (Roxy from Vertigo). This easy style and almost ad hoc attitude comes from the Kings Road in London, which in the mid-1970s saw the arrival of new shops like Seditianaries to go with the new Punk music of the Sex Pistols. The Kings Road had always been an important thoroughfare of fashion and style through the 1960s. The music of the Beatles had, of course, promoted a complete renaissance in the fashion industry in Great Britian in the name Carnaby Street. The Kings Road adopted the Mod Style in its restaurants, record shops, and boutiques, and in the 1970s made the transition from "Blow Up" to "Bloody Kids" at the World's End.

Vinyl Fetish, Vertigo, Industrial Revolution, and Just William suggest a dynamic tactile reality more than the world of retailing. The names splatter themselves over the stucco façades of the one-story, mainly Spanish-style structures along Melrose. Some are stenciled imprints and others neon lines. The method of spelling it out is pulled inside each shop through graphics, and a general style has evolved. This style is cut rate, cheap, off the wall. The palette is broad, but the materials limited. Historical references are mostly to Rock and Roll and the 1950s with an undercurrent of 1980s Futurism.

Last July the Melrose Avenue Business Association ran a midnight sale. Each shop identified itself musically and graphically. Songs especially composed by Los Angeles' New Wave groups celebrated the openings of stores such as "Like It Rock" and "Flip." There were vinyl banners, Day-Glow billboards, and laser leisure (laser beams crisscrossing palm trees). The shops were all open. Driving from one to another, one identified a general attitude.

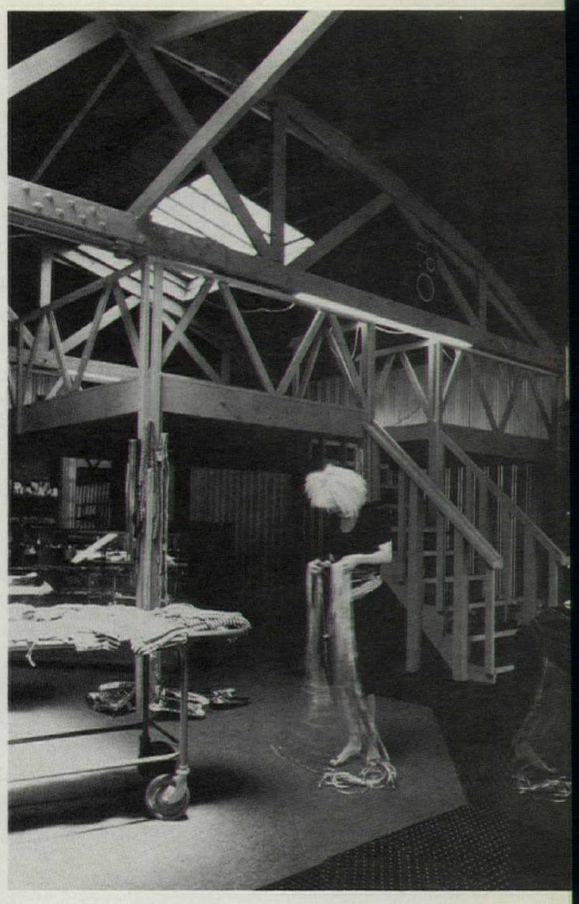
"Shop" was designed by Maria Fernandez and Charmian Espinoza, who are the proprietors and managers of this woman's boutique. The walls are pink; the carpet, upholstered banquettes, and changing room curtains are deep forest green. Lucite display cabinets and tables were fabricated by Pat Alt of Art Services Incorporated. The merchandise in this boutique plays a supporting role to its very stylish interior, which suggests a woman's apartment, let's say in Earl's Court, London, or the East Village, New York.

East of Shop, Cowboys and Poodles offers a collection of never-worn garments from the 1950s and 1960s. The ever-changing interior display mixes wallpaper, coat racks, downlights from a recently demolished franchise restaurant chain, painted plywood chairs, and a live terrier next to a stuffed poodle. Perhaps the most beguiling spaces in this store are the dressing rooms. Unlike Shop's, which were simple and primary, these vignettes of Americana, which celebrate their namesakes, Cowboys and Poodles, resemble a children's bedroom from the 1950s with its curios, storybook wallpaper, lassos, and cowboy blankets.

L.A. Eyeworks, which is the effort of its owners Barbara McReynolds, Gai Gherardi, and the designer David Richards, represents a slicker design vocabulary than Shop and Cowboys and Poodles. Here, the aesthetic references are High Tech and the materials and finishes metallic and glossy. Terra-cotta-colored Pirelli mat covers the floor. The soffit above is held by prefabricated industrial metal stripping. The display cabinets, doors, and examination desks have been cus-

*Capitol Records.





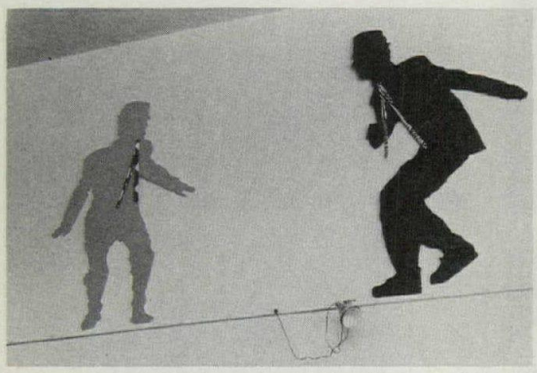




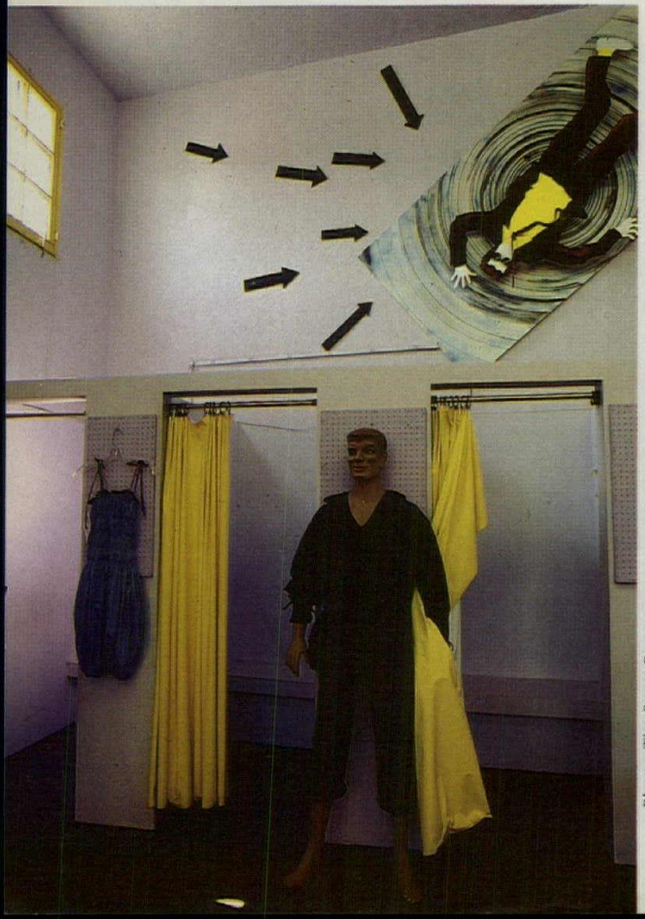
Photos: Tim Street-Porter

tomized. The merchandise, which is very high quality eyeglass frames, occupies center stage. The decor is subdued to allow the glasses to shine in all their splendor. Each month, L.A. Eyeworks hosts an exhibition of photographs and optically related objects. McReynolds and Gherardi designed the space with this in mind. Recently, these two women opened the City Café next door, an informal restaurant serving the Melrose community. Melrose needed a place to stop and take a coffee while shopping, working, or after a blitz at one of the New Wave clubs down the street. The City Café was opened with that in mind.

When Billy Shire first walked into the vacant space on Melrose, which he eventually rented for The Soap Plant, he was impressed by the generous amount of light and the general outdoor garden quality of the large room. He designed his shop to preserve this mood, painting the walls and ceiling green and mauve. The concrete floor was splattered in colors that echo those of the walls and ceiling, and even the merchandise, which is generally wrapped in soft tones and textures. Ev-







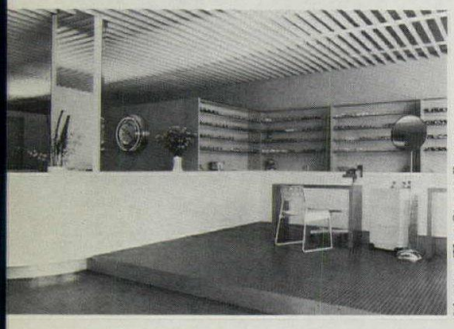


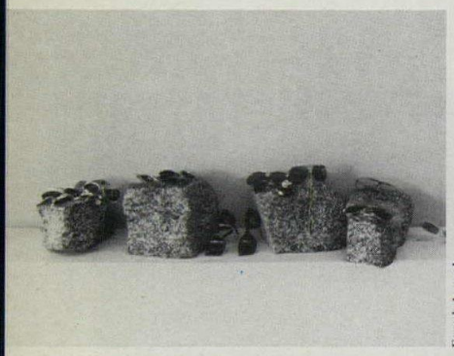
Photos: Tim Street-Porter

Cowboys and Poodles (above and facing page, top) mixes reused things from a demolished franchise restaurant chain with stuffed poodles and other elements to end up something like a child's bedroom of the 1950s. Vertigo (left and above left) and Soap Plant (right) rely on two-dimensional surfaces to create a sense of style. At Vertigo, there is a constant ambiguity between objects for sale and those on display, while at Soap Plant, merchandise is often wrapped in soft tones and textures to complement the carefully controlled palette of the decor.

Photos: Tim Street-Porter







Photos: Tim Street-Porter

Frank Israel



Industrial Revolution (top) is a High Tech paradise that parodies Frank Gehry with its tapered rear-view window. In Eyeworks (above), materials and finishes are metallic and glossy, but the decor is subdued so the glasses will stand out. In contrast, Shop's interior (above right) is designed very stylishly, with a woman's apartment in mind. Here the merchandise plays a subordinate role to the decor.

erything here is interchangeable because the aura is so firmly established. Shire restricted himself to a very low budget and has achieved a rich sense of decor and style through a carefully controlled palette.

Vertigo was inspired by the Alfred Hitchcock film of the same name starring Kim Novak and James Stewart. Linda Weinman, who originally opened her clothing and curio shop on the Sunset Strip, moved to Melrose because "that is where the action is now. The Strip was a center for the rock and disco culture of the 1960s and 1970s. With the advent of New Wave, Melrose has replaced Sunset." Vertigo combines two-dimensional graphic images, such as silhouetted figures, with three-dimensional objects, such as an airbrushed television set and a bald female mannequin. It is difficult to determine what is for sale and what is display. The TV is carefully composed to crown a semicircular shirt-and-sweater rack. The male mannequin dressed in a jumpsuit, pulling a dressing room curtain aside, suggests an almost Dadaist sense of reality, especially after one glances up at the rotating cut-out figure above. The young ladies who work at Vertigo dress to enhance and enrich the world of which they are so much a part.

Industrial Revolution is worlds apart from Vertigo. Nancy and Claude Kent make fun of Frank Gehry with their tapered rear-view window. They have fashioned a High-Tech paradise where it is ambiguous what is a store fixture and what is not. And the New Wave music never stops!

Metropolis, which is part of this Melrose melody, is actually off the street, further west on Santa Monica Boulevard. It combines elements from each of the above to be the ultimate New Wave boutique. The corrugated aluminum walls suggest High-Tech ambiance, but the splattered dress racks and painted wood trusses that hold up the roof suggest another world, less slick and less controlled. The Pirelli mat floor is splattered in areas and reflective in others. Wired glass skylights, exposed fluorescent tubes, and industrial downlights illuminate the space. Surgical tables have been painted and glossed up to display merchandise. Chicken wire has been contorted into a ball, which is a rack for a display of sunglasses. Maggie Laine, who designed and owns the boutique with her husband, wants it to form itself and never be completed. "There is a lot of space here, anything can happen. I imagine Metropolis will open itself to live music, of course. This is much more than a clothing store. I'm still not clear exactly what it is. When I put it together I wanted it to reflect that spirit: to be open-ended, easy, unformed; the merchandise, customers, and decor to be interchangeable."

The evolution of a design spirit inspired by New Wave and ushered in by the design and fabrication of a street of shops by the proprietors themselves could only take place in Los Angeles. This city encourages a do-it-yourself strategy in which the aesthetics are open-ended. The emphasis here is much less on finished details and more on work in progress. Like the music which foreshadowed its beginning, this New Wave style intends to be revolutionary. It is neither optimistic nor negative. It accepts the force of change and helps bring it about. Its components are not slick and expensive, but banal and cheap. Neon, paint splatter, found objects and borrowed things, juxtaposed elements, some for sale, others only on display, compose the vocabulary here. There is no apparent logic to bring these components together. Instead, the process is intuitive, almost ad lib, like the music. Critics of New Wave claim this new mood is fading and the more refined manner of the mid-1970s will regain, with disco, its one-time dominant position. Melrose Avenue begs to differ and rockets up like the gospel so many years before:

"What does this mean to me?
What will it be?
Except the nuez of things before
And things to be.
It will come by itself,
Hard and easy, all at once."

"Future Shock" by The Daddies

Leo de Wys, Inc., New York

Moon over magenta

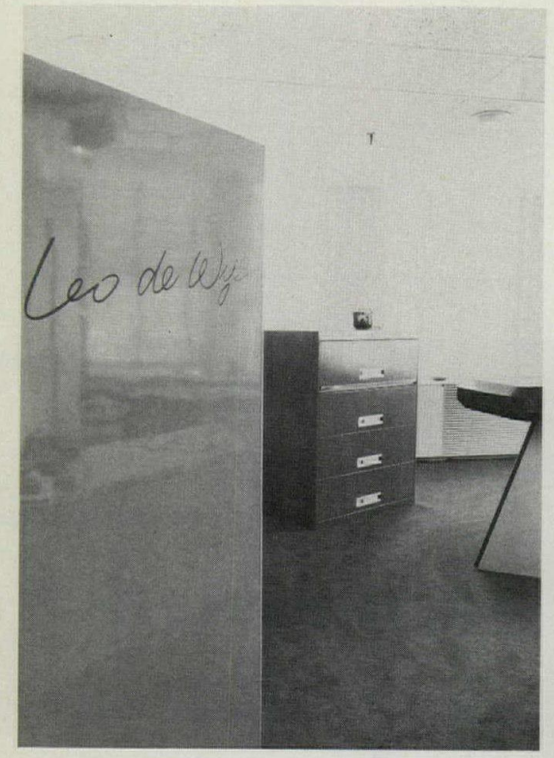


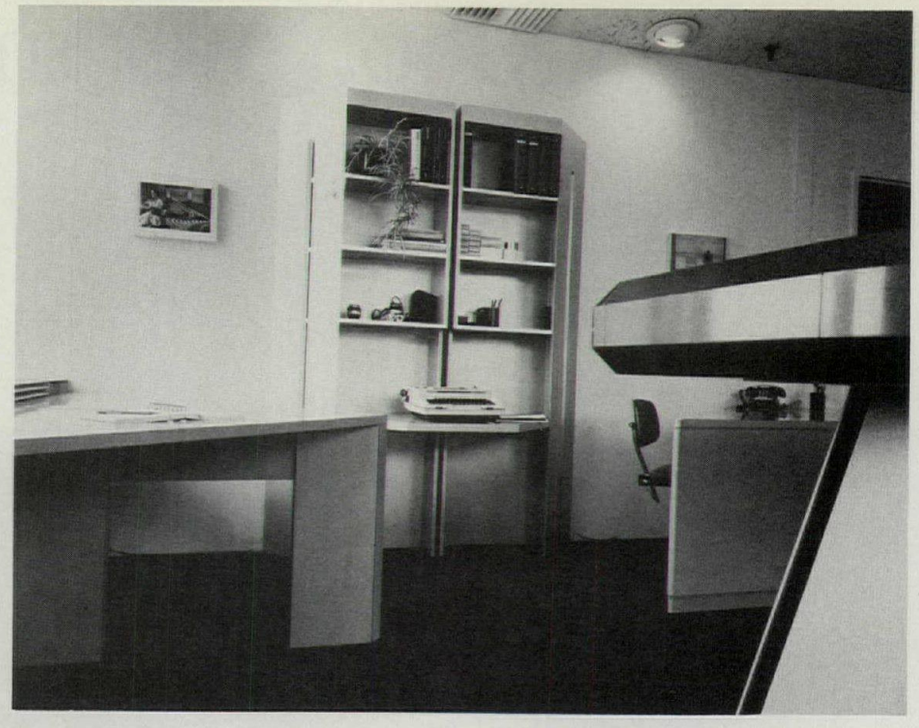
Flash Gordon invades Helveticaland in this episode by James Hong and Michael Sorkin.

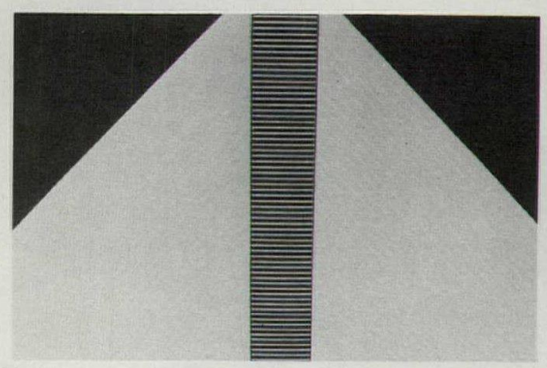
Outfitted in zoot suit materials, jagged projections, and streamlined surfaces, upstaged by a phosphorescent ship crash-landing on rugged mountain peaks, the room seems to recall the hypermemories of a younger fantasy. But in place of that vision's electric frenzy, the mood is quieter, restrained, more subtly animated by slight discrepancies. Colors don't quite match or blend. Parts of furniture seem not entirely connected, while the wholes seem only part of larger entities unseen. The spatial organization appears to have slid just out of sync. It is optical vibration on a dimmer switch turned low—calm but pulsating.

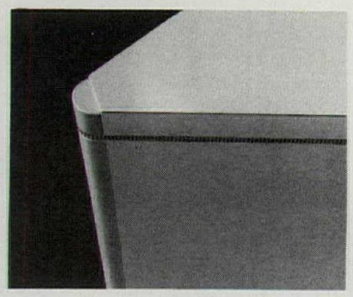
The firm of James Hong and Michael Sorkin is only one year old, and this is its first

Leo de Wys, Inc., New York









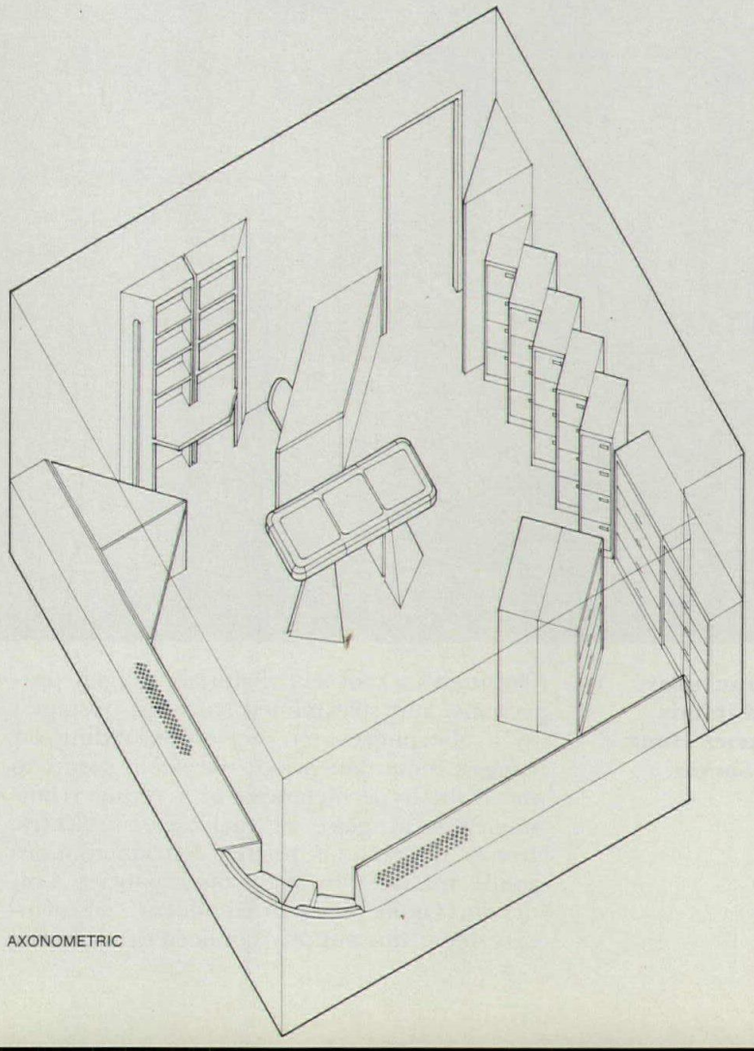
project. Hong is a Berkeley-trained architect with most of his experience in furniture design, including two years with Gae Aulenti in Italy. In New York, separate from the firm, he maintains a workshop that did the fabrication for this job. Sorkin is a teacher and writer, as well as an architect, and currently is architecture critic for *The Village Voice*.

Furniture was the entrée into this commission, which began as just a light table. It grew into a series of pieces, some fabricated, some transformed. Luminosity is a central motif, shiny surfaces in the foreground, matte behind or underneath. Slight variations are accentuated, both between materials and within each color range.

Gray/silver, for instance, appears in Formica (glossy with matte etched stripes) and epoxy in both satin and aluminum finishes. Magenta gleams from automotive acrylic lacquer, shines on epoxied file cabinets, and slides into deep red in the carpet. Baby blue provides a mirror-finish enamel for radiator tops, lightens to matte powder blue on walls and ceiling, picks up color in the ribbed rubber furniture insets, and changes texture again for the corner cushions.

Forms and relationships are angular, underscored by the occasional rounded edge. The bifurcation of most forms creates a series of ambiguities about physical weight and the integrity of each object.

Spatially, the objects are arranged with a distinct landscape sensibility. They form natural areas within the corner office in the slightly haphazard way of water or mountains. The angled entrance and clustering of furniture against back walls focus attention on the spectacular distant view. And the way in which the objects come off the walls in angles suggests an infinite extension of space behind. [Nory Miller]



AXONOMETRIC

Beveled edges, three-sided shapes, and furniture set askew form a pervasive angularity. Spatially, the rotated relationships not only establish an energetic tension between objects, but intimate subtle distinctions of areas within the room. Facing page: angled entry sign partition focuses attention on the spectacular corner view (left top); office area formed by worktable, reception desk, and bookcase (right top); edge of worktable with blue rubber inset to guard against chipping (left bottom); edge of rhomboid reception desk is rounded to prevent injury (right bottom). Another strip of blue rubber wraps around like a molding.



Data

Project: *Leo de Wys, Inc., New York.*
Architect: *James Hong and Michael Sorkin, New York.*
Program: *450-sq-ft corner office in classical revival highrise for agency that stores and distributes stock photographs.*
Major materials: *particle board, fiberboard, plastic laminate, epoxy, paint, lacquer, carpet, rubber (see Building materials, p. 307).*
Photography: *James Hong.*



Two loft apartments, New York

Handcrafted habitats

Giuseppe Zambonini's belief in the inseparability of design and craft—and his understanding of the lessons of Carlo Scarpa—are shown in two Manhattan lofts.



A fountain made from a broken marble slab occupies opening between bath (above) and kitchen (right). Dining table is at center of kitchen (opposite, top) and full-height opening leads to small balcony. Narrow gaps between partitions and building walls (opposite, bottom) focus attention on light and textures.



When a loft space is reclaimed for living, all that undifferentiated space can be a trap. It is too easy to settle for a kind of urban rusticity, with domestic appurtenances scattered against bare, rough surfaces, and it is tempting, on the other hand, to concoct an excess of complex cuteness or ordered monumentality.

When you step into one of the lofts by Giuseppe Zambonini, you sense immediately a controlled balance: the loft space remains visibly intact, with the roughness of its surfaces largely neutralized; the architecture inserted within it is rich yet unpretentious, evocative but not imitative, sharply distinguished from the original envelope yet respectful of it. Zambonini divides his space visually into roomlike volumes—though never quite closed compartments—and gives large, prominent areas to the usually banished activities of cooking and bathing.

What particularly distinguishes his work from that of other designers is the way he applies his convictions about the continuum of design and craft. His design work is closely integrated with two other activities: a small construction company that executes his designs and the Open Atelier of Design, a private school where a few dozen construction craftsmen, fledgling design professionals, join in a curriculum that links both areas and enriches them with lectures by international design figures. Zambonini clearly means to offer an alternative to degree-oriented education—with shorter, no-credit programs—and to "fill the gap between theory and practice." He believes that design concepts must evolve through rigorous drawing and redrawing, informed by a hands-on knowledge of how materials can be worked and connected.

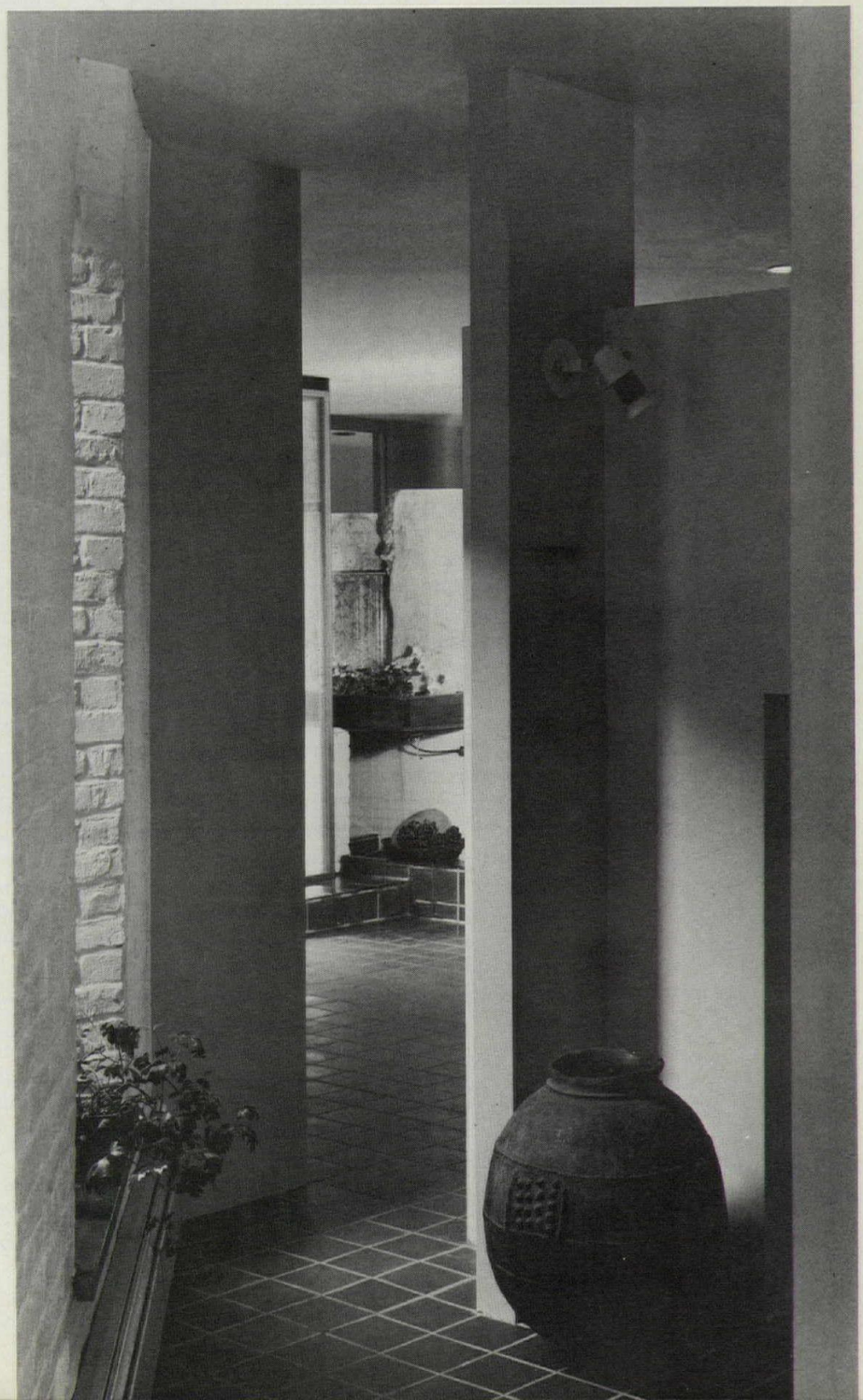
At the age of 39, Zambonini, who studied architecture in Italy under Scarpa, has already spent five years as dean of the New York School of Interior Design, then four years building up his design-teach-build practice. He is eager now to expand beyond existing walls to execute, for instance, an entire house.

The two examples of Zambonini's loft design and execution presented here show quite different applications of his general approach to the organization of interior space and an evolution, as well, in his own personal approach to materials and detailing.

Loft 1

The marble slab fountain (photos opposite) that divides the kitchen space of this loft from the bathing area sums up the character of the interior that pivots around it. The loft was designed for Zambonini himself and meets only his own requirements: the two functions sharing the plumbing need only a partial separation, with nothing to isolate the "happy sounds of bathing" from the rest of the loft; the little fountain-screen that does it sends a trickle of water down into a plant tray, then down into a lower shelf for washing and cool-



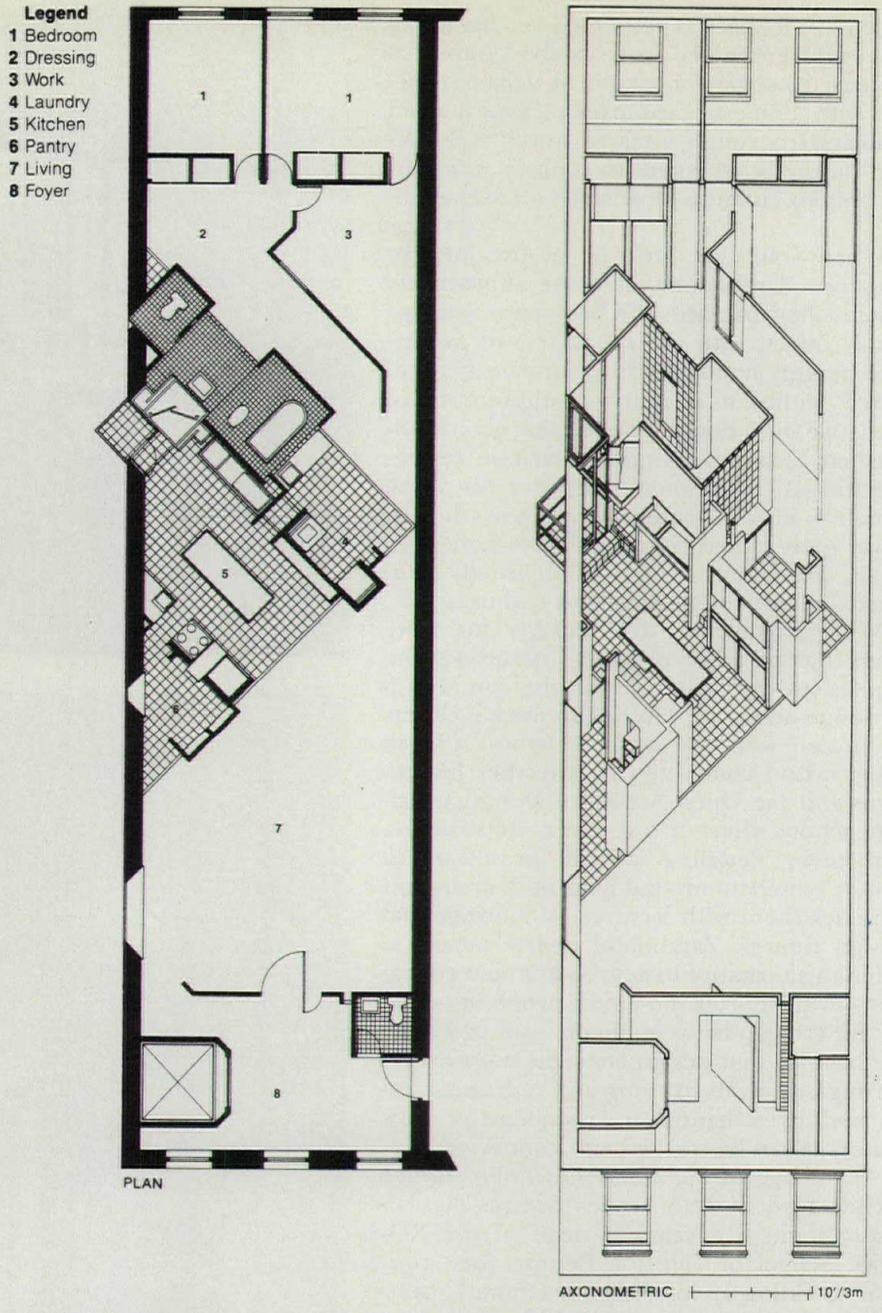


ing fruit, recalling rural life around Verona, where Zambonini grew up; the slabs of Rossa di Verona marble are pieces of that countryside—found in a Brooklyn junkyard.

Next to this personal four-square-foot *giardino*—and essential to its greenery—a tiny balcony, set half inside the thick brick wall and half outside, takes advantage of an accidental gap between buildings. Around the diagonal square of this balcony is a carefully designed cage of glass, thin pine members, and steel painted dark red (in balcony railing and brace at inner corner). The thin, meticulous pine framing bounds an ad hoc—but elegant—composition of doors, fixed glass, and small ventilation panels—even a flap exit for the cat. Zambonini feels that no more glass should be operable than is needed for ventilation and washing. Here, he has assembled his own finely detailed double glazing; a few tiny weepholes eliminate the threat of condensation.

Zambonini traces the diagonal twist of the balcony to the angle of the strongest mid-afternoon sun striking this spot, and he has lined up a series of openings—through the glass-block bath area wall and the partition beyond it—to accept that shaft of light. The diagonal balcony is also the origin of a set of partitions set at a 45-degree angle to the insistent geometry of the deep narrow loft. They occupy a special-use zone, defined by a triangle of dark brown Italian quarry tile, that stretches across the space and just kisses the opposite wall. These existing walls have been painted white, but their texture and irregular alignment are retained as a foil for the precise dividers the designer has set within them. On the ceiling, by contrast, the complexity of old beams and conduits has been masked by a blank plane of gypsum board. Where the long side wall has been pierced—at two places in addition to the balcony—the openings also run from floor to ceiling, with flared jambs repeating the diagonals—and reflecting the light in the manner of archaic window embrasures.

The low partitions that divide the central part of the loft are articulated by the cantilevered backs of various cabinets and closets. (Zambonini builds in storage, so that only a minimum of furniture is needed.) He has adjusted the proportions of these projections to produce pleasing sculptural forms, then painted inner and outer planes in two shades of lavender, a hue—mixed on site, as he feels they must be—that turns subtly bluish or rosy with changes in lighting. The cantilevers, incidentally, establish a true horizontal hovering above the irregular floor, with the uneven gap masked by shadows.

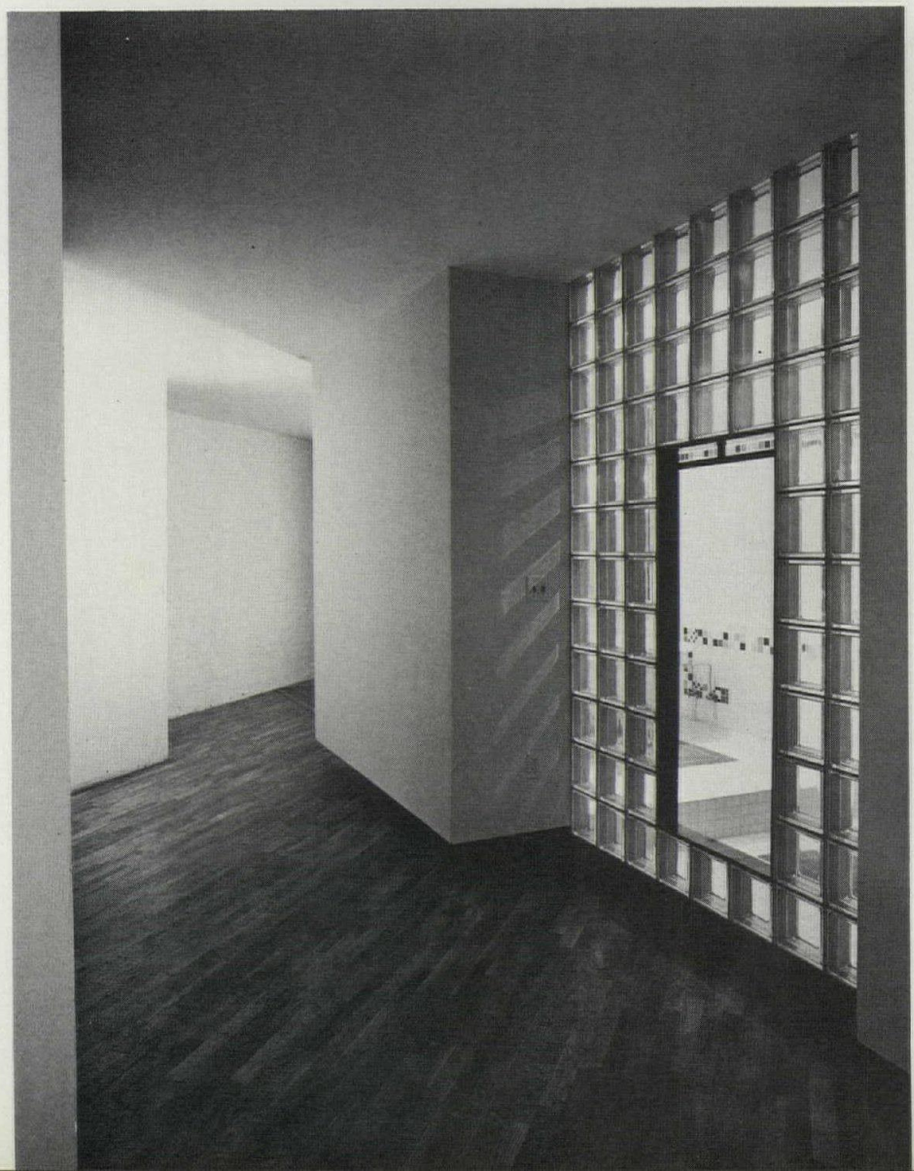


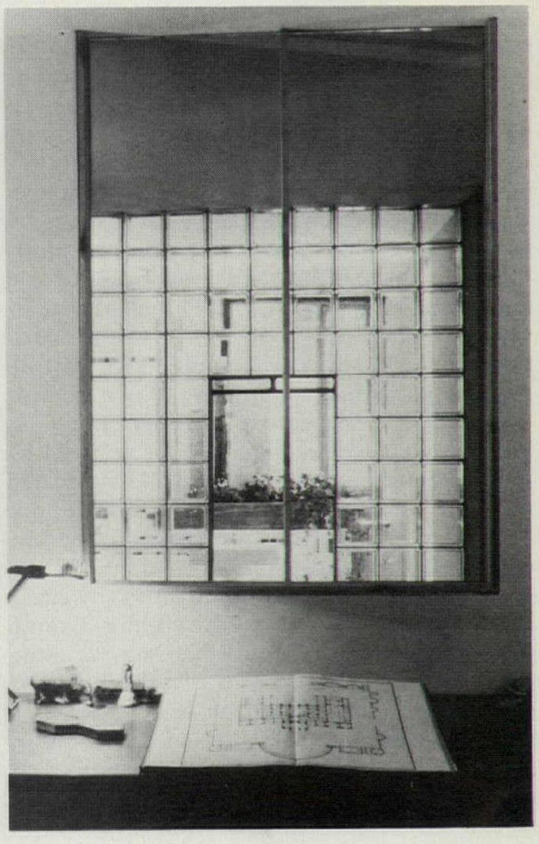
Transition from living room to more active spaces (drawings above and photo opposite, top) is signaled by cabinetwork along diagonal edge of quarry tile floor. Step-through opening in clear glass-block wall (opposite, bottom left) and window in wall of work space (opposite, bottom right) both line up with direction of sunlight from balcony opening.

Besides the marble fountain, Zambonini incorporated numerous idiosyncratic elements into this loft: a long wooden photographer's sink that reminds him of Italian farmhouse sinks; a tub on legs, which can be fed from the trickle fountain to fill overnight with "rested" water; the gray and blue wall tiles that "bubble" along the lines of the concealed piping. Though carefully laid out and detailed on paper, the elements of Zambonini's lofts are subject to adjustments as the work is executed by the designer himself and his team of craftsmen.

Although Zambonini owned this loft for four years, he never quite got the last element he wanted into place. The maple floor was laid only after he had sold it to new owners, for whom he is now making alterations. Already gone is a partition (shown in plan) that once set off a foyer at the elevator, so that one now enters directly into the big space, as in so many other lofts.







Two loft apartments, New York

Loft 2

A new Manhattan loft by Zambonini differs from the previous one in being about three years more recent and executed for a client. It is less personal, less tactile, and more complex. Floor levels shift and various planes of dropped ceiling follow a layout that is artfully juxtaposed to the partition plan; curves of variable radius are introduced—barely perceptible curves in the partitions, tighter ones in the soffits; space division is made changeable by opening and closing numerous pivoting doors; the number of paint colors increases—though restricted to tones of gray, rose, and violet.

Here, admittedly, the designer started with a more complex space, characteristic of the larger, later commercial structures now being converted to loft apartments. The L-shaped area was clearly marked off in bays by steel columns—clad in precast Tuscan fireproofing—and by groups of expansive Chicago-style windows, with massive pivoting sash. Zambonini made a point of respecting these bays in the layout of partitions which—here again—stop just short of the existing envelope.

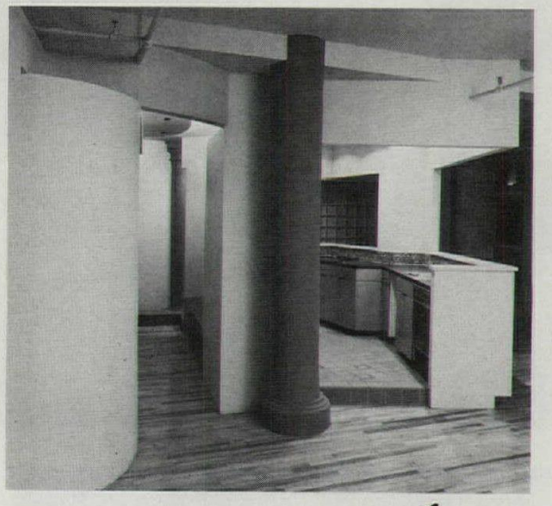
Here again, too, kitchen and bath are given prominent places in the plan. This kitchen is closer to New York apartment standard, but its raised volume juts vigorously into the serene geometry of the plan. The expansive bath shares a bay with a solarium/greenhouse, separated only by a glass screen and a strange cabinet backed with tiers of plant shelves. (Another compact bath serves guests who want privacy.)

The cabinetwork, screens, and other custom wood elements are meticulously detailed, with fine hardware, but their predominantly minimal forms—finished with paint and flat-finished laminate—are closer to American Modern detail than the Italian articulation seen in the earlier loft. The airfoil-shaped partitions, feathering down to fine wood edges, represent a high point in gypsum-board detailing. The large pivoting doors in the partitions, each with a gridded relief of bracing members on one side, are particularly handsome and help to set the cool, orderly visual context.

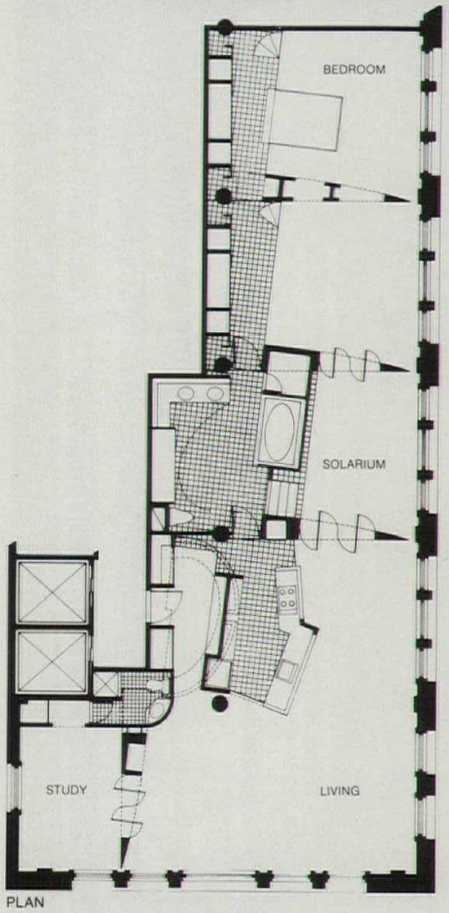
Forms get more agitated around the circulation node of the entry. Swooping around the violet-painted columns here is a pink-painted valance that embraces the entering guest and is seen from the living area as a central reference. The studied play of daylight, which this loft has in rare abundance, can be seen in the slot through this valance or in the curved prows of the partitions; after dark, an ample system of track lighting picks out certain planes and forms.

All of these effects could only be achieved through a remarkable intensity of design skill per square foot of space, through thoughtful evolution of the design during its execution, and for a client ready to support such a process. [John Morris Dixon]

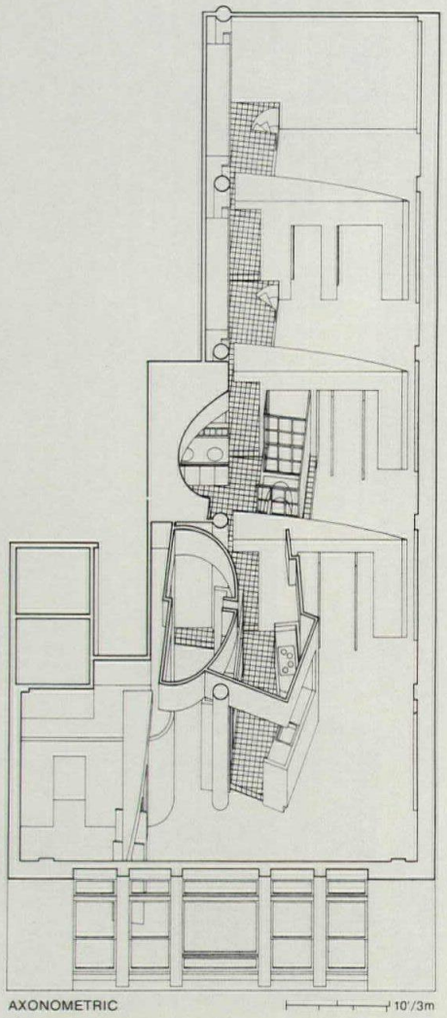




Double partitions of airfoil shape in plan divide loft along lines of original bays (above). Kitchen (left) occupies angular form projecting into living space; raised floor extends through bath and forms platform along storage wall in bedroom.

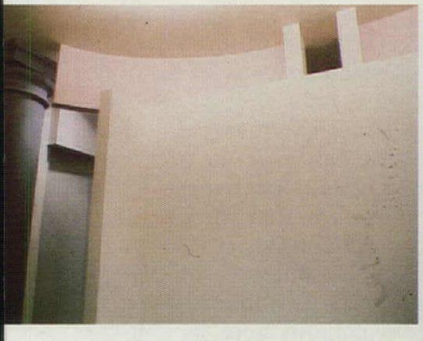


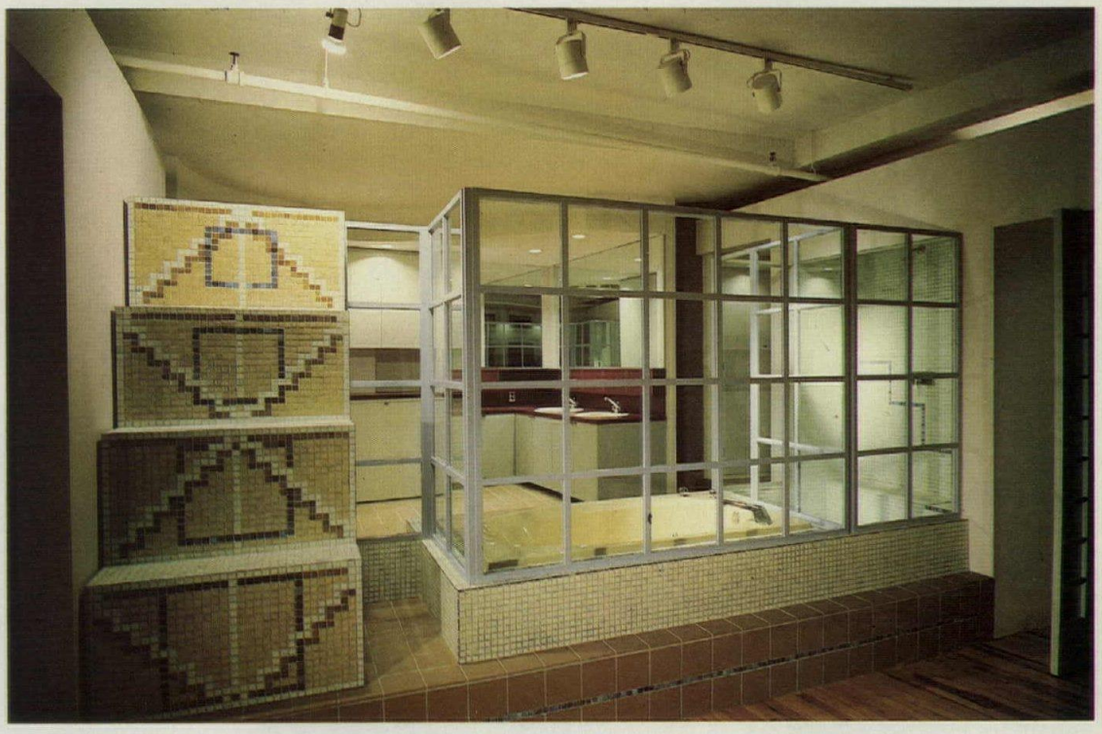
PLAN



AXONOMETRIC 10'/3m







Partitions of palest lavender (top) have pivoting doors of light gray. Stronger color occurs in core area, in violet columns and pink valance (above) around entry. Glass in gray wood frames encloses tub and shower (right); mosaic tile patterns appear in plant shelf, with insets in shower stall, bath and kitchen floors.

Data
Project: *Loft 1, Worth Street, New York.*
Architect: *Giuseppe Zambonini.*
Client: *self.*
Program: *floor of c. 1860 warehouse converted to 2200-sq-ft apartment for a couple.*
Major materials: *plasterboard, latex paint, white oak and quarry tile floors (see Building materials, p. 307).*
Contractor: *Open Atelier of Design (Giuseppe Zambonini, director).*
Cost: *$75,000; $35 per sq ft.*
Photography: *George Cserna.*

Data
Project: *Loft 2, Broadway, New York.*
Architect: *Giuseppe Zambonini.*
Client: *a couple.*
Program: *2500 sq ft on 8th floor of a 1910 loft building, converted to apartment.*
Major materials: *plasterboard, maple strip flooring, track lighting, custom wood cabinets.*
Contractor: *Open Atelier of Design (Giuseppe Zambonini, director).*
Cost: *$100,000; $40 per sq ft.*
Photography: *George Cserna.*

House,
Southern California

Sweet and sour

In Charles Moore's fifth home for himself, interest is focused on materials—some luxurious, some tacky, some totally anomalous.

The floors are made of 16-in. squares of natural-color particle board with 4-in. squares of green Spanish marble inlaid at the corners. The 31-ft flight of stairs, which runs diagonally down all three stories, has particle board treads with dark green French tile risers and edges of blond molded wood.

Storage closets are galvanized sheet-metal boxes with footlocker hardware. (The upper box swings away as a secret doorway to the bedroom.) More sheet metal is to be found lining the shower and the upper stair wall.

Beneath the corrugated metal, between double shelves that snake irregularly up the staircase, is another wall treatment of silver and gold foil squares. Chosen for the play of reflectivity given to the shallow recess, Moore and collaborator Tina Beebe later discovered that the squares are symbols of money burned in Chinese funeral ceremonies to insure prosperity of departed souls. The silver is laid over newsprint, and orange dye is added to make gold. When laying the squares on the wall, they left the newsprint and orange brush-stroke edges showing for a more intricate play of pattern and depth.

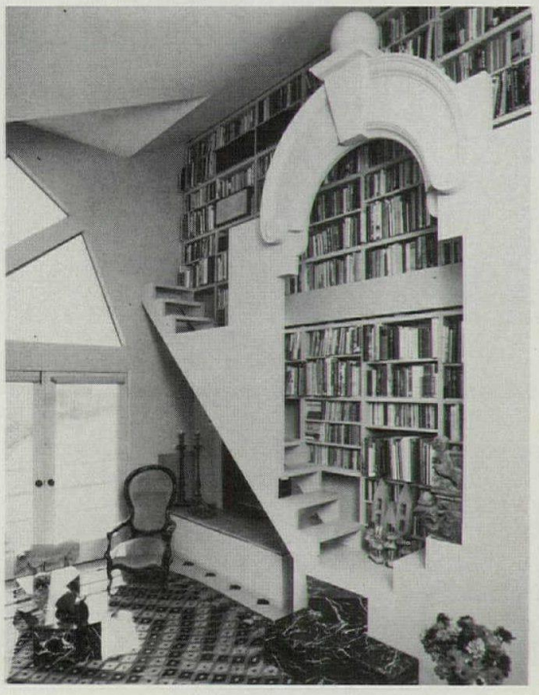
Opposite the metal walls of the staircase are ones covered in mirrored plexiglass. And as furniture, marbleized plastic laminate modular jigsaw pieces are used, as if interchangeably, as table and step in the roost. (Other furniture is built-ins and period pieces, overrun with Mexican accumulations.)

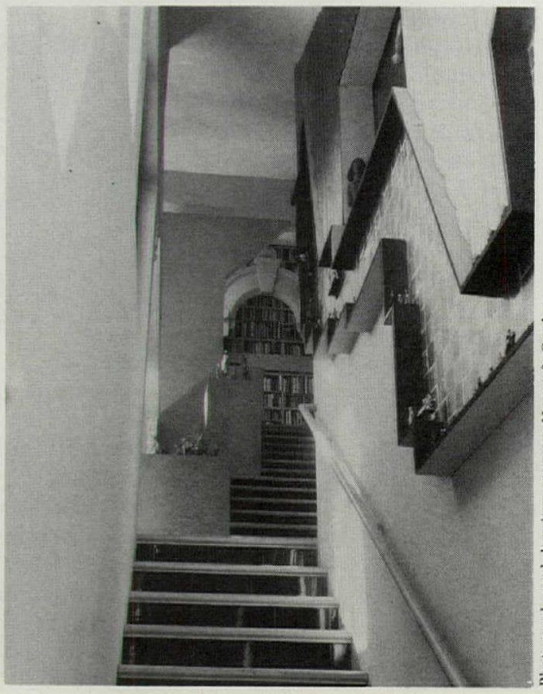
"Sweet and sour" is Moore's description of the "generally cheap with flashes of fancy" approach to finish materials. He'd been trying to use sheet metal for a while, but no client before himself would hear of it. While the house is full of odd historicist juxtapositions, scale shifts, and "Piranesi gone wrong" forced perspectives, it is this wide-eyed-who-says-so dive into the world of texture and luminosity that represents the latest, most energetic ingredient in this kaleidoscopic designer's current work.

There were earlier hints, but the direction really emerged full-force in Moore's Piazza d'Italia in New Orleans: its stainless steel capitals, neon edges, marble veneered on concrete, cobblestones next to slate next to granite next to mirrored tiles—all washed down, dribbled among, splashed, and set shimmering by water. (Interestingly, Moore's own description of the outsized stairway of his house is as a cascading waterfall.)

If Moore is not America's most refined and exacting architect, he has been one of its most inventive, influential, and perhaps even revealing. One wonders whether the prevailing fired-up obsession with material doesn't betray some larger presentiment of loss, as the buying of gold mirrors unstable and fearful times. If so, there is alchemy here, as well.
[Nory Miller]

Data
Project: *house, Southern California.*
Architect: *Charles W. Moore, architect, Los Angeles (Tina Beebe, collaborator on color and finishes).*
Program: *architect's own one-bedroom home, three stories.*
Major materials: *wood frame construction. Interior finishes: galvanized sheet metal, particle board, French tile, Spanish marble, mirrored plexiglass, gypsum board, plywood (see Building materials, p. 000).*
Consultants: *Richard Peters, lighting.*
Contractor: *Richard Chylinski.*
Interior construction and finishes: *John Johnston, Mick Buchanan.*
Photography: *Tim Street-Porter.*





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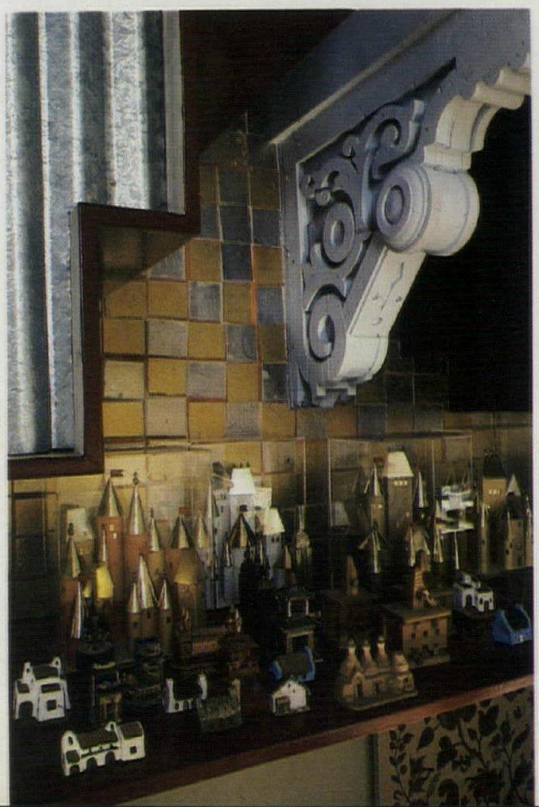
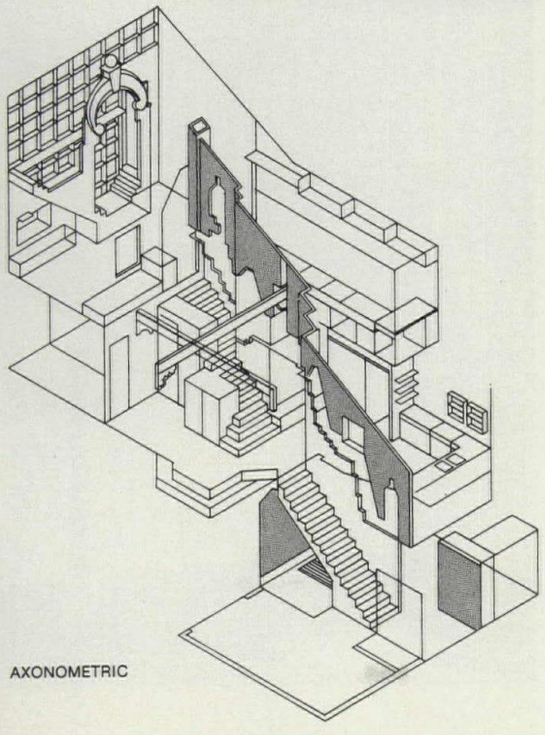




AXONOMETRIC

Sitting alcove with metal cabinets and unusual flooring (top); detail of stair wall (left). Facing page: the library "roost" (left) with its wall of books formed by a 19th-Century pediment saved from the wrecker's ball, and long view of the stairway, Moore's play on the Laurentian Library stairs (more stairs, less library).

Americana Hotel, Ft. Worth, Tx

Nature's way

In some rooms at the new Americana Hotel in Ft. Worth, motifs from nature became the design inspiration.

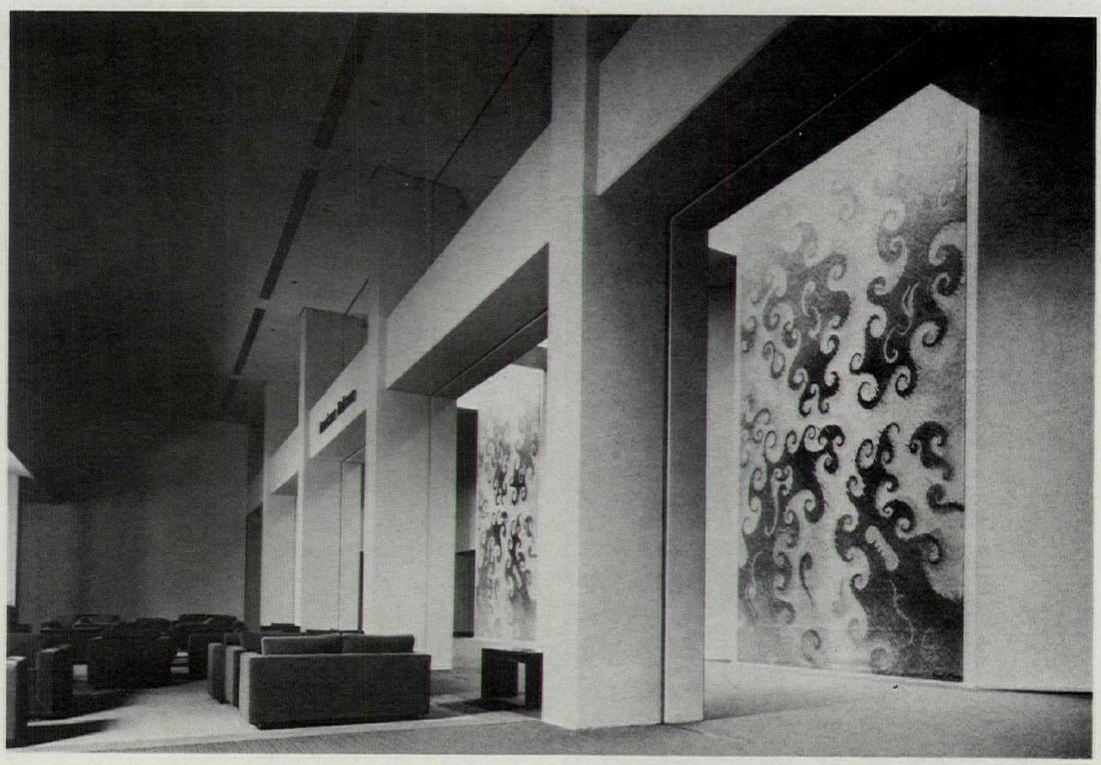
When Benjamin Baldwin was commissioned to do the interiors for the new Americana Hotel designed by 3D/International in Ft. Worth, Tx, he asked Roger Ferri to join the design team, which also included assistant Jonathan Warwick. The reasons Ferri was asked were that the job was too big, given the time constraints, for Baldwin and his assistant alone, and also because Baldwin had seen, and been impressed by, Ferri's exhibit of a hypothetical "Pedestrian City" at New York's Museum of Modern Art in 1978.

The responsibilities for the hotel's interior were divided up, but the three worked together as a team in constant consultation with each other throughout the entire design process. Consequently, it is not possible to say that any one person was totally responsible for any particular part of the design. However, Baldwin and his assistant were primarily responsible for all guest rooms, the coffee shop, a lounge, and the furniture and fabrics for the two main lobbies. These are done in the impeccable and refined style that has now become his well-known hallmark. Ferri took charge of the architectural redesign of the main lobbies, the design of the meeting rooms and Junior Ballroom, and the other portions shown here: the Main Ballroom and its prefunction area, and the gourmet restaurant.

A combination of three interests makes Ferri somewhat unique among that group of young designers now considered to be in the avant-garde. Whereas he makes considerable use of applied decoration, he never uses it simply for its own sake or for the sake of form alone. Rather, the design is always related psychologically or symbolically to the use of the space by the people who will be in it. The design inspiration always comes, sometimes quite directly, from motifs found in nature. To carry out these ideas physically, Ferri has developed an intense interest in the crafts of decorative arts, including mosaics, tapestry weaving and dying, plaster and metalwork, and upholstery, all of which are represented at the Americana Hotel.

Prefunction area

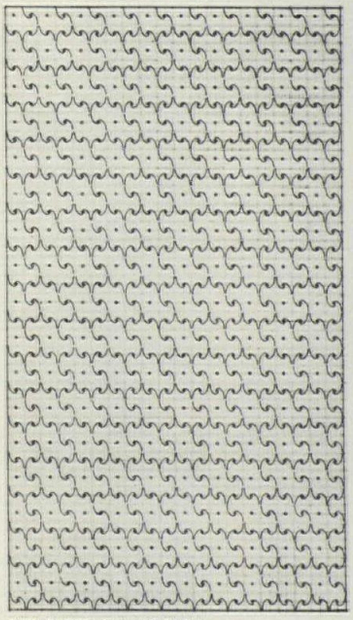
The main focus of the ballroom lobby, or prefunction area as it is now called, is a series of three identical wool tapestries, each measuring 30′ x 20′, and illuminated from above by wells of natural light. Ferri's design for these is based on turbulence patterns, such as found in air or water masses in nature. Besides their purely decorative function of enlivening large expanses of wall space, their purpose in the lobby is also to establish an iconographic link to or "anticipation" of the



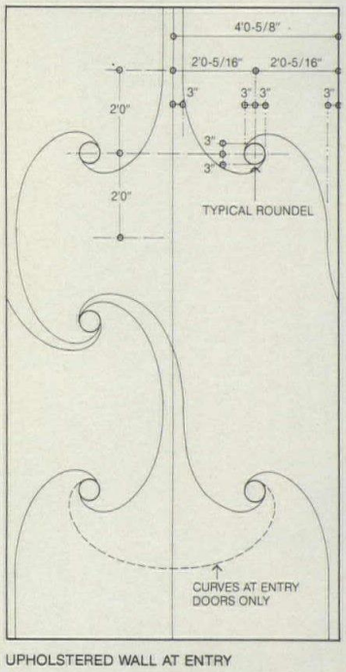
For the ballroom prefunction area, Roger Ferri designed three huge tapestries that were woven at the V'Soske mills in Puerto Rico. The design of these hangings was inspired by turbulence patterns found in nature, as when different air or water masses meet each other. Natural motifs are also used in other parts of the hotel, as shown on the following pages.



Americana Hotel,
Ft. Worth, Tx



REFLECTED CEILING PLAN



UPHOLSTERED WALL AT ENTRY

The turbulence pattern introduced in the prefunction area is repeated inside the main ballroom (these pages), but in a more formalized manner. The scheme for both the suspended acoustical ceiling and the upholstered walls (drawings above) was worked out on a 2-ft planning grid.



same theme found inside the ballroom, where it is interpreted in a much less naturalistic manner.

The ballroom

Because, as Ferri explains it, the ballroom is the setting for dance—for the rhythmic pattern of body movement in space—rhythmic patterns in nature became the departure point for an architectural design in subtle but constant harmonic motion. Inside the ballroom, the tubulence patterns of the lobby tapestries become highly formalized and ordered. Here, the design is worked out through a 2′ x 2′ planning grid in which the curves are rotated and flipped in relation to each other to achieve an unusual richness and complexity for the ceiling and walls. The ceiling is a deep grille of free-floating acoustic baffles that swirl around suspended light fixtures. Their undersides, Ferri explains, are cut to trochoid curves in the mathematical equation of ocean waves to suggest a sea in motion.

The ballroom can be divided into four distinct rooms, and to maintain the integrity of the space in any configuration, both the permanent and movable walls have been given the same treatment. The pattern of curves seen in the ceiling is here extended, but still planned on a 2-ft module, to form a three-tiered "screen" around the room from light tones at the bottom to dark tones where it meets the ceiling. The walls are padded, or upholstered, and white piping and roundels outline the design motif. At the entries, the pattern becomes three-dimensional and is formed into graceful, scalloped plaster frames around the doorways. The richness of all of these elements together compensates for the neutral tones, which are surely unusual for a ballroom. The absence of color, however, was the clients' wish; they wanted the guests to bring their own colors into the room.

Gourmet restaurant

Like the other rooms, the gourmet restaurant (page 188) also uses motifs from nature as a basis for design, but in this case the references are to botanical forms. In this respect, the restaurant represents a continuation of ideas Ferri had been developing earlier, as seen in the drawings for the MoMA show (page 188) and in those for the dining room of Lutèce restaurant in New York of 1976 (not shown). This space differs from those, however, in that the architect had to deal with some existing massive columns that could not be radically altered. Ferri turned these into huge lotus forms, but as the MoMA drawings show, they are not characteristic of the more lyrical quality of his other work.

The lotus columns rise from or next to a shallow reflecting pool surfaced in colored glass mosaic. Around this, small floor areas rise in terraces to create intimate dining spaces that seem to have been placed in a private little amphitheater. Thus, the sense of theatricality—of entering and leaving, of seeing and being seen—is heightened while at the same time the sense of intimacy is maintained.

The end columns, treated as budding flowers, support a dark, low ceiling, but the central column rising out of the pool becomes a full blossom whose six petals extend to support a hexagonal trellis system above. Beyond this rises a higher, illusional night sky. Ferri says the room, which is called "Reflections," is a fictive outdoor room, which utilizes water, masonry, and trellises to fully domesticate a benign climate for outdoor living.

Roger Ferri probably could not be considered part of today's group of Post-Modernists mainly because his design inspiration does not come from architecture itself or from historical allusion to it. He is like them, though, in showing considerable interest in the use of decorative elements. But both his decoration


EXIT
EXIT

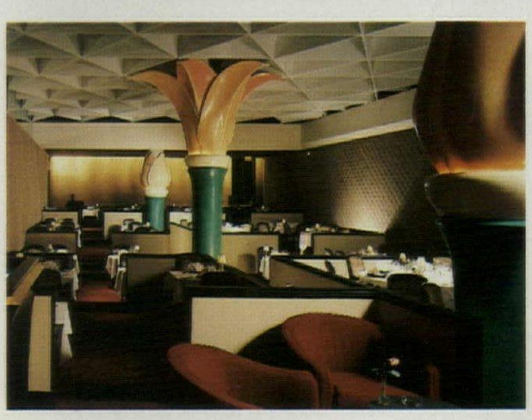
Americana Hotel,
Ft. Worth, Tx

Data

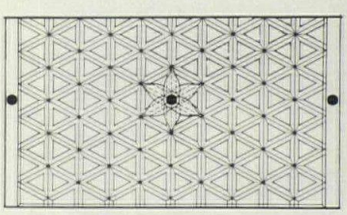
Project: *Americana Hotel, Ft. Worth, Tx.*
Interior design team: *Benjamin Baldwin, designer in charge; Roger Ferri, associate designer; Jonathan Warwick, assistant designer, New York and Easthampton, NY.*
Building architects: *3D/ International, Houston, Tx.*
Client: *Bass Brothers Development Company.*
Program: *interior design of new hotel, of which three rooms are shown here.*
Structural system: *cast-in-place concrete.*
Major materials: *tapestries in prefunction area; plaster door frames in ballroom, modeled by Albert Lachin & Associates; upholstered wall fabric and acoustical ceiling baffles in ballroom, installed by General Drapery; flower columns in gourmet restaurant, modeled by Albert Lachin & Associates, polychromed by Rambusch; mosaic pool tile in restaurant, installed by Rambusch (see Building materials, p. 307).*
Consultants: *CHA Design, lighting.*
Contractors: *Linbeck Construction Co.*
Photography: *Cervin Robinson.*



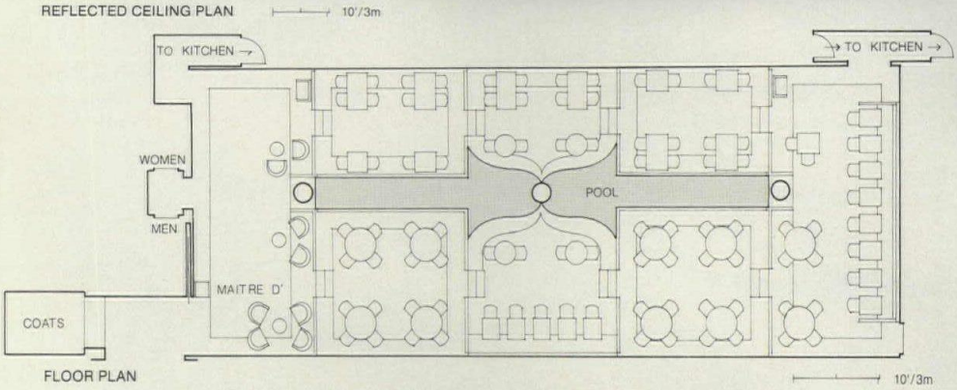
Botanical forms were the design inspiration for the gourmet restaurant (this page), where a huge lotus column supports a ceiling trellis system. This continues some of Ferri's earlier work, as seen in drawings for his MoMA exhibit of 1978 (right).







REFLECTED CEILING PLAN 10'/3m



FLOOR PLAN 10'/3m

and structural form seek to investigate and interpret the larger system of order and law that controls all natural phenomena. In this respect, he shares certain affinities with those, such as Buckminster Fuller, who are fascinated by what has been referred to as both the architecture of the universe and the music of the spheres. [David Morton]

On the hegemony of the ersatz

Michael Sorkin

Revival doesn't just mean vocabulary, says this critic, but a fundamental change in the definition of design.

There is a scramble among designers—egged on by larger social forces—to appropriate images from the past. This is not new: the world of "consumer" (i.e., producer) design has long been awash in a sea of the inauthentic, image of the artificial desires it invents for itself to satisfy. We are glutted with mansardic can openers, subway cars decorated with walnut-grain Formica, and hamburger stands on which roofs covered in plastic imitation cedar shakes symbolize the plastic imitation milk shakes served underneath. Such commercial imagery springs from an aesthetic of pure codes. Each component carries a heavy weight of meaning, detached from its sources and reattached to some ad-agency version of history. The vestiges of form come to stand for a vanished process. This licentious coding springs from the aesthetics of deceit. Just as Ronald Reagan's folksy B-movie effect obscures his frightening policies, so the petrochemical shingle disguises the mean impersonality of the environment it adorns. While Nancy's Beverly Hills decorator pretties up the White House, Ron risks the ultimate act of historicism: bombing us back to the Stone Age.

The Valhalla of mendacious environments is, of course, Disneyland. But everyone loves Disneyland—even Khrushchev wanted to go there. The danger is exactly in its attractiveness, in the way in which it impinges on the legitimate. As with Reagan, there is great charm of form, an apparent address to a broad range of genuine aspirations. After all, who could object to a clean and orderly environment consecrated to fun, to a compendium of seemingly benign images signifying a happy and integrated society? What one doesn't see are all those who have been excluded to create the atmosphere of happy homogeneity. Longhairs and poor folks are simply refused admission at the door. Behind the cute ⅝-scale façade of the Potemkin Village General Store lurks the ITT hospitality suite; the snow on the magic mountain is ferrocement.

Design more and more comes to be used like a drug, its final agenda not delight, but control. Instead of invention, there is simulation. In design based on "theme" or "mood," formal decisions proceed from the need to package rather than the impulse to explore. While such design might once have been congenially dismissed as kitsch, a new element of deliberation has lately crept in. Now bad taste has acquired the force of a moral imperative. The corporate-sponsored hegemony of the ersatz has been glommed onto as a kind of purification ritual, just the ticket to help slough off the onerous bonds of Modernism. Liberation is sought through the falsification of the genuine. The simultaneous rediscoveries of historical, commercial, and vernacular architecture have certainly led to some pretty dingy buildings. You know the ones: shed roof, supergraphics, and an entrance featuring two Ionic columns in antis. Aiiieeee! When I hear the word volute, I reach for my revolver.

In the glorious Post-Modernist revolution, all of these influences were considered to hold special values, if only the dynamite of anti-Modernism. But these new purposes were actually just thinly disguised versions of the old purposes. This new accretion of meaning to form was generously abetted by the arrival from Paris of a discourse that allowed simplified yet apparently rigorous conversation about the contents of all those forms.

As everyone became a semiotician, a terrible thing began to happen. Architects started to assume that since form was the repository of meaning, the invention of meanings fell within the architect's purview. No longer content with placing a stick figure in a skirt under the Helvetica letters spelling "ladies," designers began to produce projects so rife with studied symbolism as to make a 99th-degree Mason blush. Design received a body blow when it was discovered that architecture was, like yaws or the mumps, communicable.

The passage into high architecture of the icons of the marketplace has been one of the more startling chapters in recent architectural history. This transfer was facilitated by the shoveling on of heaps of irony, that old liberal favorite. Such a self-conscious distancing device, while ultimately the enemy of art, is certainly the great pal of polemic. Not that art can't proceed from polemic. It's just that so many Post-Modern ideologues spend so much time smirking at their own ironies, they forget that the stuff really is in bad taste and ugly to boot.

A more interesting and unambivalent irony is to be found in the so-called "new wave" sensibility, the well-behaved version of punk, a style of genuinely natural origins. Born as political rebellion, a response to the anomie of mass culture, it chose as its emblem forms and effects from the 1950s and 1960s, a period most proper designers considered well beyond redemption. It was a canny choice. Those, after all, were the times when corporate "consumer" taste was at its most schematic, exhilarating, and naïve; times when the fecund extravagances reflected in kidney-shaped pools and pink Cadillacs with tail fins *to here,* somehow coexisted with the frightening conformity of the man in the gray flannel suit and his office at Lever House. We may have been in the process of being trained to consume mass food at those proto-McDonald's but the architecture, encrusted in jukebox glitz, was utterly off the walls. In a period of unspeakably shabby values, a deranged aesthetic of conspicuous consumption became official.

That the streets of Manhattan fairly crawl with people got up as living embodiments of the visual values that their adolescences were consecrated to spurning is a political and social statement of prodigious magnitude. The rediscovery of the rawness and innocence of the period is the historicism of a progressive-thinking class, precisely the class most disenfranchised by the troglodytes currently in positions of power, a sect enamored of the conformity and repression at the core of the 1950s.

But wait a minute: now these values are in the process of reappropriation by the high culture. The ragged collagist look that once distinguished the punk rock magazines has been tidied up to the point where it can grace a layout in *Domus* or *Vogue.* A style plucked from the murky past by means of irony to serve as a polemical cutting edge is now stripped of its irony so that it can reenter the mainstream. Just the opposite of the way in which the motifs of ancient architecture were reintroduced with historicist sincerity only to gain their staying power by means of an ironical veneer. In the former, "bad" design is made "good" while in the latter, "good" design becomes naughty. Who's got the last laugh now? Or can revolution come from a barrel of monkeys? □

Michael Sorkin is an architect practicing in New York and architectural critic for *The Village Voice.*

[*While the author's opinions are not necessarily those of P/A, the connections he draws between design and political images are, we believe, important to consider.—Editor*]

Temple University Student Activities Center, Philadelphia, Pa

Halls of academe

Paul Gurda

In their new interiors for a student center, Friday Architects/Planners play on the school's name and the very concept of institution, using both graphic and architectural symbolism.



Paul Gurda, an architect with Smotrich & Platt, New York, was previously an architecture writer for the *Milwaukee Journal*.

Temple University misses self-definition as a place: it spreads across more than a dozen blocks of North Philadelphia without forming any pattern distinct from the street grid. Its buildings, many of them put up amid the free spending for education of a decade ago, either front the streets tightly or isolate themselves on disconnected plots, while around and among them lie the parking lots and traffic congestion endemic to an urban commuter school.

The Student Activities Center (Nolen Swinburne & Associates, 1969) sits at the putative heart of the campus, but though it held the bookstore, food services, and the movie theater, it never lived up to its name. This resulted in part from a misreading of the student body's needs, in part from a fortresslike design traceable to the security concerns of an era of student militance. Hungry students preferred to patronize the street vendors along Temple's main stem outside, so the elaborate kitchen set up on the Center's first floor gradually closed down. Temple finally turned part of the area over to a fast food franchise and invited Friday Architects to remake the rest into something more attractive to real student use than serving counters and dishwashing equipment.

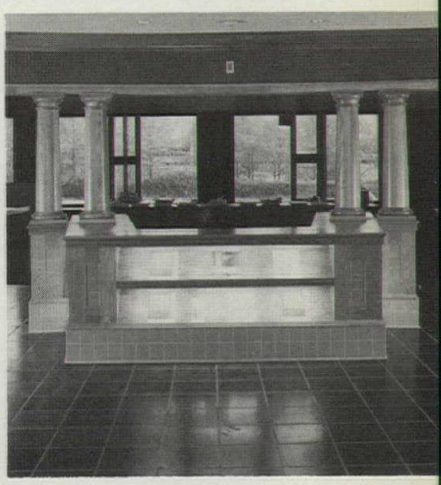
Friday set themselves a further task, to absorb into and magnify within the Center all of the visual symbols suggested by Temple's history and traditions. They perceived on the campus a shortage of the places and images that make a school environment memorable to those who experience it: the ivied quadrangles, the empigeoned founder in bronze, the cues to campus legend that students at other colleges seem to pick up by osmosis from their surroundings. Temple students arguably need these strong evocations even more, since they spend relatively few hours of the day at school. It came as logical to Friday that the one place programmed for students' own uses should be saturated with the things that make a campus campuslike.

They gutted the space assigned to them, and within the confines of the existing column placement, outlined what may be read as a much-reduced Beaux-Arts campus plan, in which the walls of surrounding rooms and pieces of built-in furniture serve as buildings defining the open spaces of the circulation and gathering areas, making a legible order within where none now exists outside.

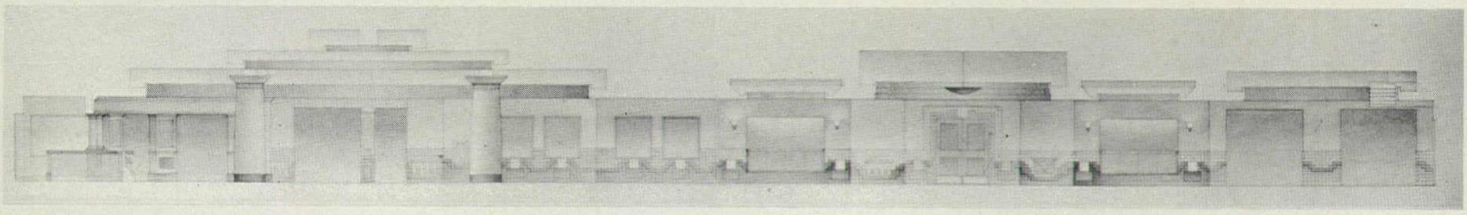
Around these down-scaled axial spaces, the







Spatial theme of axes and rotundas, with ornament in tile and oak, can be seen in views from Crossroads Room to main crossing (opposite) and across Forum just inside entrance (top). Information desk in Forum (above) has oak Tuscan columns. Recessed seat (left) is one of several along corridors.



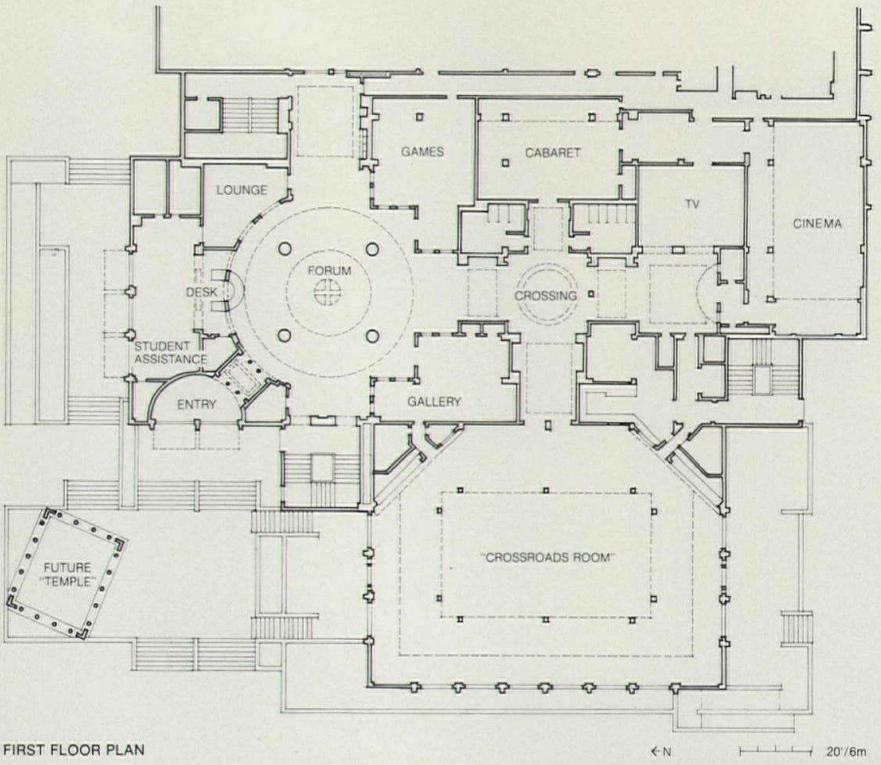
architects arranged their campus-signifiers: stucco rustication at the semicircular indented entry porch, massive columns in the main space, the "Forum," suggestions of domes and vaults in the ceilings, and tile decoration, besides bringing in such unassociated items as a movie marquee. The mixture of sources as well as the means of expressing the symbolic elements work consciously to undercut the tone of academic Classicism even as it is being established.

The Center's tile work demonstrates this throughout. Tile has been a favored Friday finish, providing color and pattern and requiring minimum maintenance. Their tiled surfaces in other places have often adapted Deco motifs, but here that tendency serves mostly as a sedate background for a series of diagrammatic illustrations of Templiana. The linked circulation spaces are banded with a wainscot, which repeats the school's standard images: the temple emblem, the owl mascot, the T-shirt initial, and others. A large university seal in mosaic in the floor at the crossing of axes acts as a master reference for the wall insignia. Interspersed among them are tile escutcheons, some bearing explanations of the emblems, some recounting Temple history and legend, some left blank for future dedications. Friday set these out of easy reading range, either midway up the wainscot or as keystones of tiled doorway surrounds, so that they might be discovered over time rather than insist on the attention of passersby. The architects intend that this use of ornament as passive propaganda should help encourage students to identify with the institution, allowing them in some sense to "own" the place.

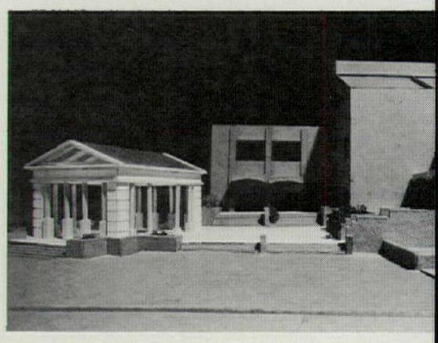
But this invitation to possession has another aspect, worked out broadly in the rendition of symbols and the color choices. According to Friday, the budget determined the size, the glaze, and the muted pastels of the wainscot tile: it was the cheapest available. They put the limited choice to work to tone the be-true-to-your-school message and at the same time give some charge to the tension between Institution and the simply institutional in students' understanding of Temple as a place. The washed-out shower room colors and the reduction of images past the level of cartoon (four-by-four tile permits no detail), while they depict themes of university life, inevitably recall for the students the environment of the more modest institutions they have left behind for Temple.

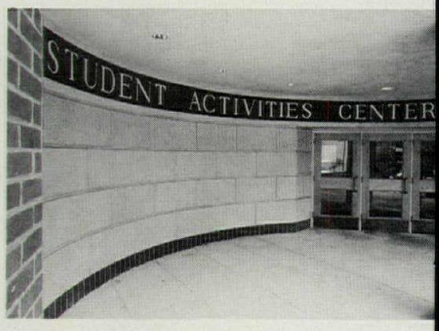
This Institution/institutional split in attitude carries throughout. The sturdiness of the Forum's sort-of Doric columns in red oak would signal "august establishment" except for their pastel tile bases and the big capitals held back from the ceiling, underlining the reality of a series of shallow gypboard soffits and not a heavy dome rising above. The tile itself, color aside, has its relative substance diminished by the way interior windows and alcoves are cut into it, revealing it as a thin layer of icing. Even where gypboard meets gypboard, paint was chosen to magnify illusion, to make reality even flimsier: the darkness of bench alcoves, for instance, is due not to any actual depth of a recess in a solid wall, but to the contrast in painted surfaces.

Friday's intent to scale down the trappings of University is projected most succinctly in the as yet unbuilt element that the interiors are meant to refer to: the temple itself. Since the school has never actually had a building like the one that appears on its seal, the architects will provide one, a small pavilion skewed across the Center's entry stair, a propylaeum a couple of steps above the major campus crossing. The temple, with columns of no discernible order (salvaged from a demolished Gimbels store) and a fiberglass roof, will mark for the first time a real center to the campus, a recognizable place to meet, the ultimate specific symbol for the school. It may be as well a symbol of a coming of age for a university secure enough in its identity to allow its representation to be mocked up out of found and cut-rate materials, willing to accommodate its image to Friday's manipulation of the means at hand. □

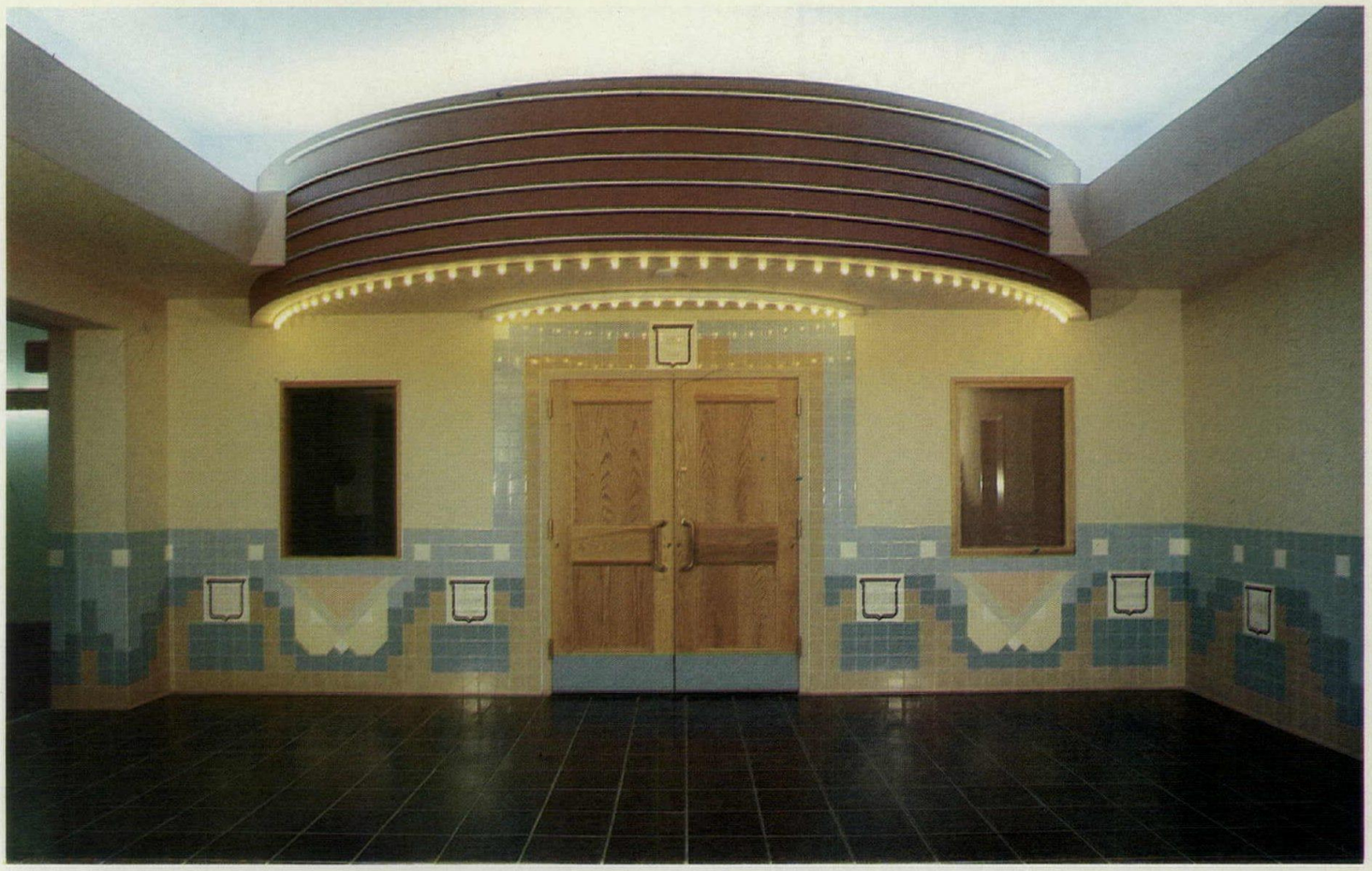


FIRST FLOOR PLAN





Temple-like pavilion (top photo) is planned to symbolize school and herald Classical layout inside apsidal entry (above). Axis leading to cinema marquee (opposite, top) leads through main crossing (opposite, bottom) with mosaic seal in floor.





Data

Project: *remodeling, Temple University Student Activities Center, Philadelphia, Pa.*

Architects: *Friday Architects/Planners, Philadelphia (project team: Frank Mallas, Donald Matzkin, David Slovic, Lynne Bensel, Stephen Bonitatibus, Bruce Cohen, Mary Herlihy).*

Program: *conversion of 18,000 sq ft on main floor of 1969 Student Center, from predominantly food service to various spaces, including cinema, cabaret, game room, meeting room, student assistance center, with new entry, lobby, and exterior decks; temple-like outdoor pavilion not yet built.*

Major materials: *gypsum board walls, ceramic tile wainscot, coved gypsum board ceilings, red oak columns and paneling, slate floor (existing) with mosaic tile insert (see Building materials, p. 307).*

Consultants: *Zimmerman, Wischmann (furnishings), G.T. Stephenson & Associates (electrical), Basil Greene, Inc. (mechanical), Raymond Grenald (exterior lighting).*

General contractor: *P. Agnes.*

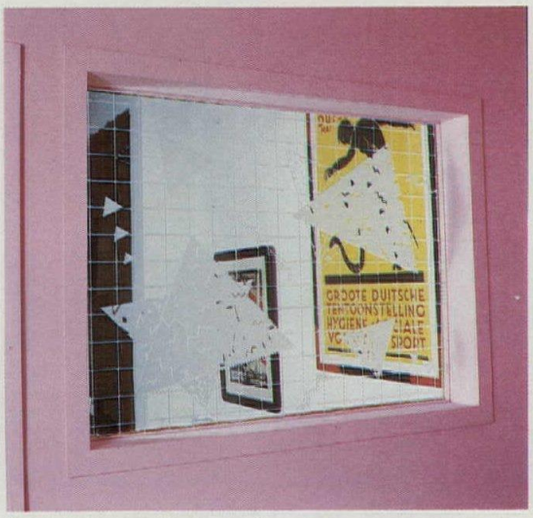
Costs: *$985,750; $55 per sq ft.*

Photography: *Robert Harris.*

Movables

As the 1960s in America seemed the decade of the highrise and the 1970s of the house, this decade is starting out as the decade of the detail: of the textures of surfaces, rhythms of ornament, shades of color and the prominence of objects.

*This page: **1** glass sandblasted windows by Christine van der Hurd in their 1920s–50s furniture store and studio, New York; **2** quilted and appliquéd chintz bedspread with pillows and hand-decorated lampshade by van der Hurd; **3** Dakota Jackson's pyramid desk. Facing page: **1** "ribbon" by Terrence Main, hydraulic swivel, laminated wood with lacquer and sandblasted aluminum; **2** "Domus III Series" by Diana Vietor, lacquered wood and metal; **3** "Shatters" by Carmen Spera, maquettes for reverse-painted and sandblasted glass tabletops; **4** "Primazoid 2" by James Evanson, laminated upholstered chair; **5** "Tendril" by Kit Grover, wall lamps of hand-cast, tinted concrete and copper stems; **6** "Nothing continues to happen" by Howard Meister, Baltic hardwood; **7** "Mesa" by Rafael Barrios, antigravity table in lacquered wood; **8** "Networks" by Terrence Main, spring wire mesh with heat-fused epoxy coating; **9** "Alex" by Ted Zavon, aluminum and rubber; **10** "Portable Floor" by Fred Smith, hand-painted canvas impregnated with plastic and wax coated; **11** "Trapezoid" by James Evanson, wood and plastic laminate; **12** "Photon Generator" by Terry Fugate-Wilcox, multi-stemmed aluminum lamp with nickel finish and heat-sensitive dimmer; **13** ceramic plates by Paul Nelson; **14** "Homage to Bugatti" by Steve Ditch and Molly Amsler, wood and lacquer.*



Robert McCabe

1



Robert McCabe

2



Chun Y. Lai

3

Generational subcultures, pop and conceptual art, back-to-the-earth lingerings, aesthetic protest, and "liberated lifestyles" have contributed to a lively production of alternative American design in recent years.

If post-war design equated sleek abstraction with good taste, post-Pottery Barn seeks agitation, subverts early abstractions as nostalgic imagery, and approaches the subject of taste with the bluntness of an avenger. Post-war furniture had a certain polished restraint about it. The new work runs from crude to licentious, and the only stops in between are through time tunnels.

For the purposes of organization, all objects found in shops are shown on the first two pages. Those found in galleries are labeled "furniture by artists" on the third page. And furniture by known architects is grouped on the last page.

All three show an interest in the rediscovery and exploration of materials: from junk materials—wire mesh, concrete, cardboard —to precious materials (Buchsbaum's onyx and brass sink), unexpected juxtapositions (Burton's galvanized steel and mother-of-pearl table), or even new forms of simulation (Graves's silkscreened "inlays"), to traditional woodworking.

The imagery is often pulled from the past, not all of it from design. Some is deliberately architectural (Williams and Tsien's thrones as buildings, Burton's column tables and rusticated chairs). Some is deliberate kitsch (Ditch and Amsler's bowling pin table). Animation is important, injected into the work through warped geometries, patterning, analogy to growing things, or by actual movement.

Much of the furniture here has parallels in Italy and other European countries, some of it dating back at least a decade, and all of it taking its cue from the art world. The rhetoric (reiterated by some of the Americans) is a kind of Dada Pop: design as a starting point for personal metamorphosis; the revelatory value of innocence and accident; the symbolic significance of the banal. Furniture to shock, frighten, calm, amuse.

For others, transgression of sensibilities plays no role, only disengagement of the mechanisms of progress. If function-minded and forward-looking ergonomics is the rightful heir of modern design, these objects are the unorchestrated objections, determined that design owes as much to the senses, emotions, and intellect as to the anatomy.

[Nory Miller]



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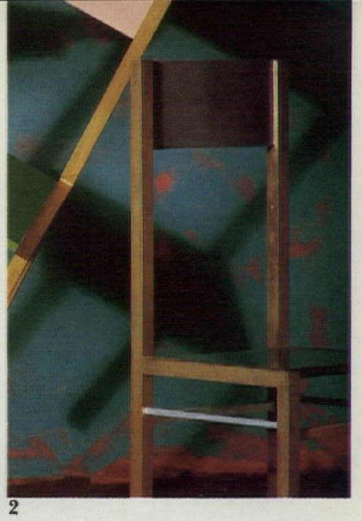

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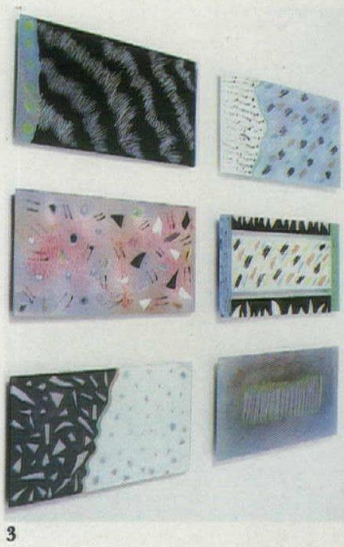

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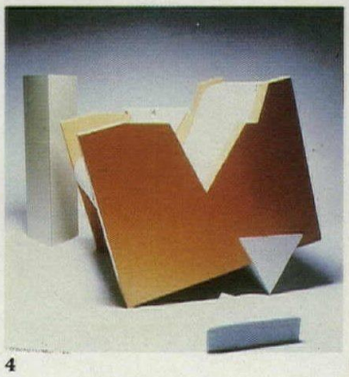
Tobi Seftel



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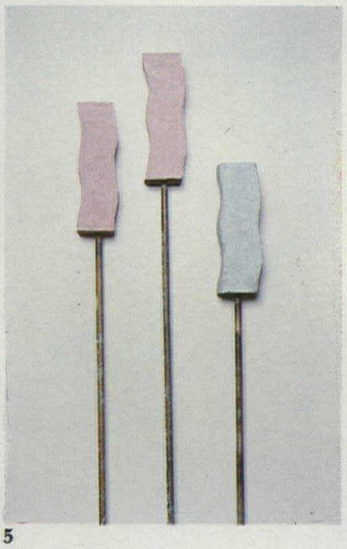

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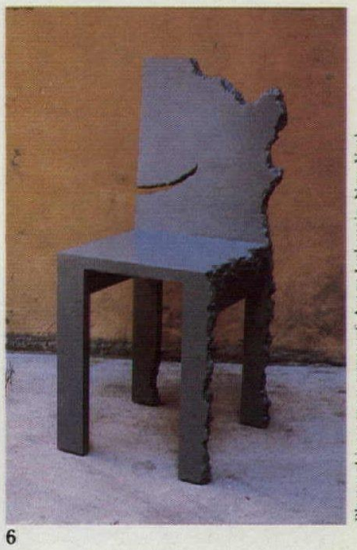

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Photos this page courtesy of Art et Industrie, New York



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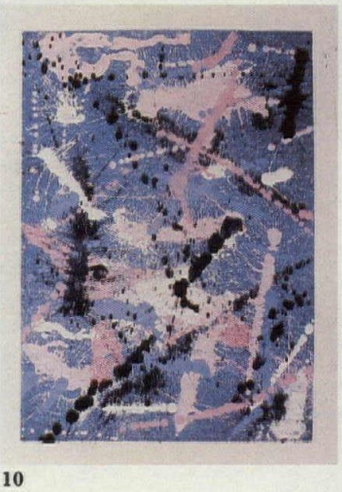

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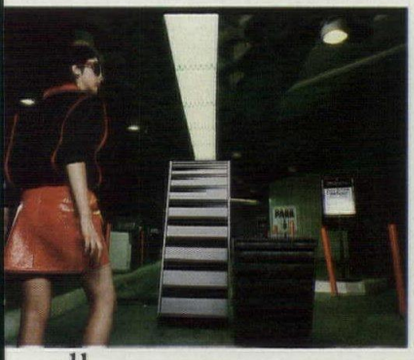

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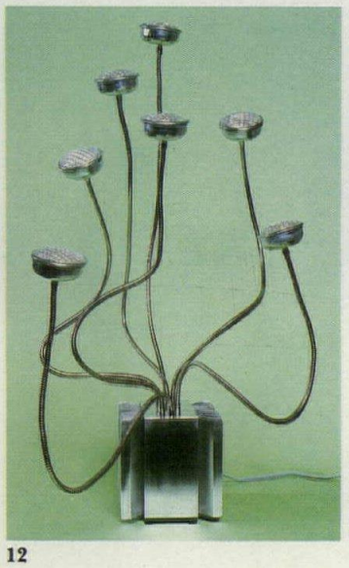
Robert Walker



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Tobi Seftel



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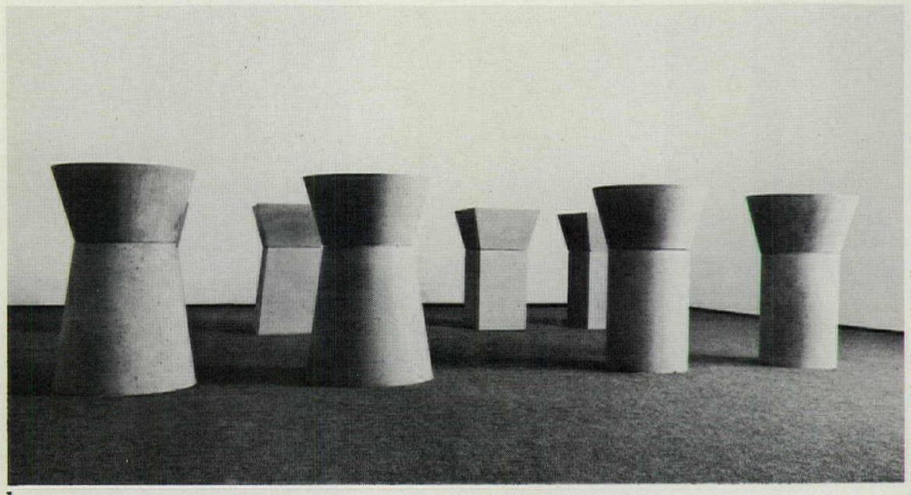

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Courtesy of Max Protetch Gallery



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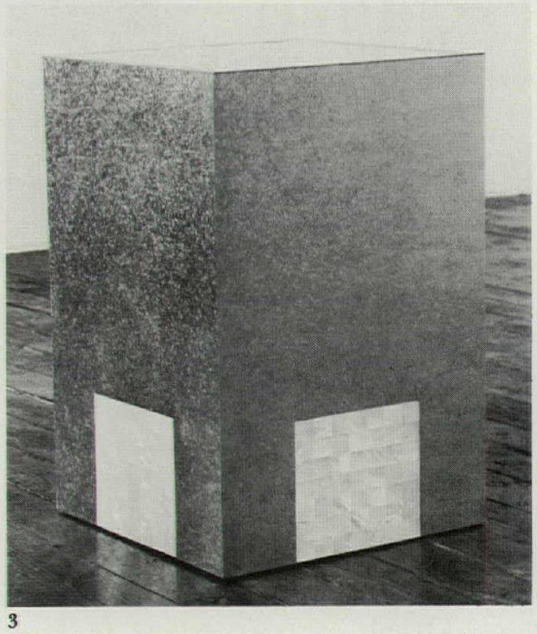
Courtesy of Max Protetch Gallery



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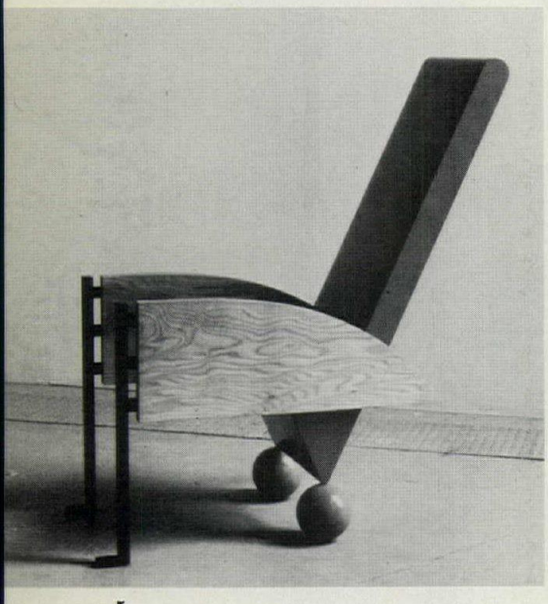

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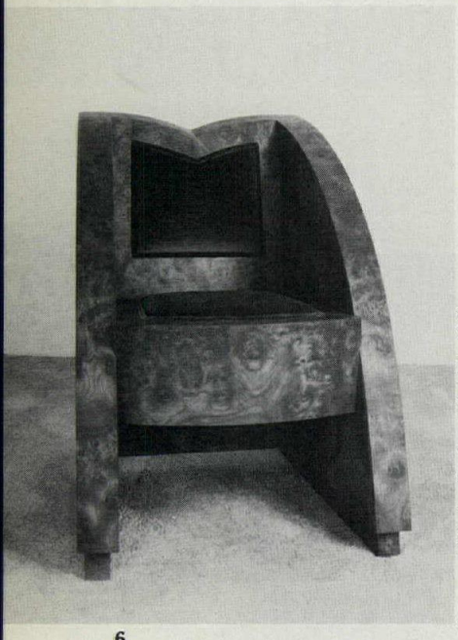
Courtesy of Marian Goodman/Multiples Gallery



4

Eric Pollitzer, courtesy of Leo Castelli Gallery

Throughout this century, artists have occasionally designed furniture. Over the past decade, however, as distinctions between fine and applied arts became ever more contested, artists' furniture has become the subject of exhibition and review. The work varies in the balance struck between usable furniture and commentary, but all rely on familiar association creating a more vivid link with the audience. ***1*** *paired concrete tables by Scott Burton;* ***2*** *Burton's rock chairs;* ***3*** *a mother-of-pearl and galvanized steel table by Burton;* ***4*** *leather sofa by Jack Chamberlain;* ***5*** *reclining chair by Robert Guillot;* ***6*** *chair by Larry Bell, Carpathian elm veneer and velvet. Not unrelated is the "revived" arts and crafts movement;* ***7*** *"Volcano" by Pennsylvanian Andrew Willner, a table in mahogany and maple.*



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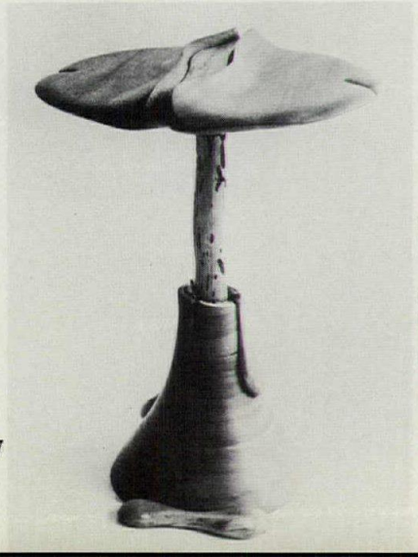
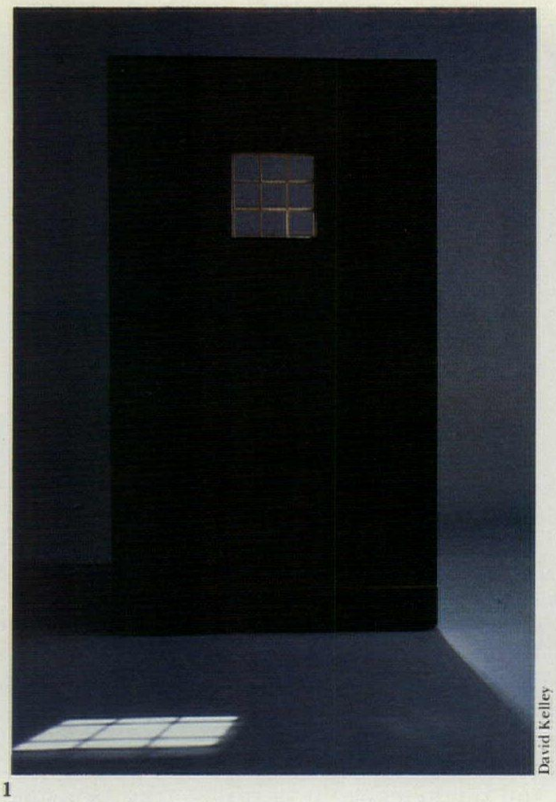
Courtesy of Marian Goodman/Multiples Gallery



7

Courtesy of The Workbench Gallery

Americans who have made their reputations as architects more and more are turning to designing furniture as well, some of it custom and some for the marketplace. ***1*** *Tod Williams and Billie Tsien designed this chair for Asia Society's offices in New York;* ***2*** *rug by Robert A.M. Stern for a house in New Jersey;* ***3*** *onyx sink for a loft in New York by Alan Buchsbaum. Legs are smooth brass pipe, bowl is hammered brass;* ***4*** *Michael Graves's table for Sunar. The pattern can be inlaid (with bird's-eye maple, ebony, and mother-of-pearl) or silkscreened (in various color schemes);* ***5*** *"Tables by the Slice" by Frank Gehry and Richard Saul Wurman, being marketed by them as The Furniture Brothers. Soon to be released: sofas and desks by the slice.*



David Kelley

1



David Kelley



E. Stoecklein

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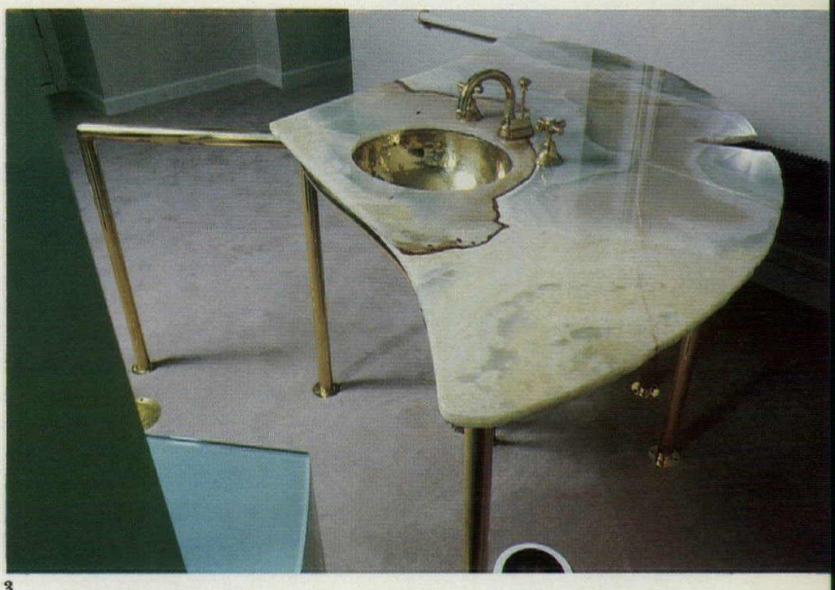

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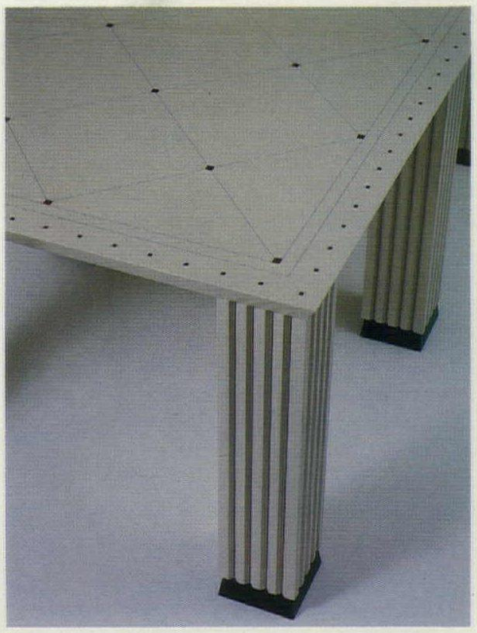


4



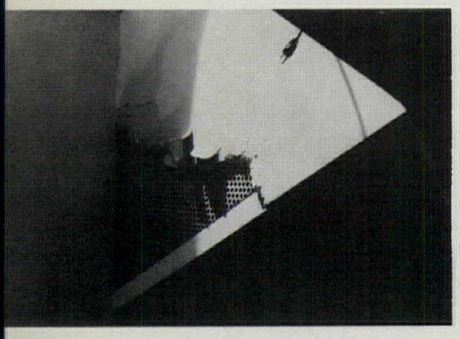
5

Gould/Sargent Condo, Santa Monica, Ca

Sartorial sleaze

George Rand

Coy Howard's interventions into a graceless condominium are intended to evoke kinesthetic and psychological perceptions. The author calls the apartment: 'An appointment with the unconscious.'



Torn gypsum board at the entrance to the unit is a key to the kinds of transformations to be encountered.

George Rand is a psychologist and associate dean of UCLA's Graduate School of Architecture and Urban Planning.

The Sea Colony condominium is a $200-per-sq-ft, $350,000-per-unit project in Santa Monica, Ca. The five-story white stucco buildings, with their landscaped lawns and steamy Jacuzzis, form a hard edge against the soft molded beach nearby. The apartments themselves are tiny by L.A. standards. The benefit is the beach and an in-town area where the city-loving art and communication elite seem to have moved. The apartments themselves are not outfitted for the conspicuous consumer. They are small, gawkishly proportioned, and questionable in environmental amenities.

Coy Howard was commissioned to redesign one of the units by Renee Gould (policy analyst and ex-Planning Commissioner of Santa Monica) and screenwriter Alvin Sargent ("Ordinary People"). Both are in their second lives, with children in their twenties. Their pact in living together is based on a serious commitment to psychological clarity and humorous avoidance of mawkish, self-pitying emotions.

Having already made a financial and emotional commitment to buy, Renee Gould visited the complex's furnished model: "Tears came to my eyes. It was so sterile. The loft looked like a ledge, reached by a flimsy staircase. The kitchen looked like a motel. All the clichés were there. A long chandelier hung over something that was designated arbitrarily to be a dining room. Vents were everywhere, placed, it seemed, for the convenience of the installer and designed to defile every architectural feature."

Coy Howard realized that he could not change the whole apartment; everything was connected to everything else on a giant string. What he wanted to do there was "to touch a few things." As in past work, he treated architecture more as sculpture than the construction of continuous visual space. With small manipulations of objects throughout the "scene," the mind is encouraged to create a space of its own. The space created by the mind is a personal space, an experiential question-raising space, not the boxlike Euclidean study of planes, lines, surfaces, and angles.

A new and powerful "no-holds-barred" relationship began to develop between architect and clients. Not the annoyed put-upon wrestling match of clients calling at three A.M. with change orders. Not the demagoguery of the tyrannical architect telling people they don't know what's good for them. But a mature exploration by people who agree that the "nuts and bolts" of architecture can be assumed so that they can get on with exploring the deeper reaches of their intuition and experience. For the clients the task became to "keep the eye moving," to make an inert space alive. This necessitated a breakdown of the concept of walls as container and objects as contents. Rather than fight the frame, Howard merely decanted interest away from it, in a manner not unlike that of Art Nouveau. Morris, Gaudí, Mackintosh, Voysey all had love for the immediacy of the crafted object. Here, the architectural transformations are all kinesthetic, and at the scale of work done by the human hand. In one corner of the living room, the ceiling droops almost inconspicuously a few feet towards the floor. It is a small gesture, reminiscent of John Soane's breakfast parlor, but treated as a fragment, not a motif in a composition. Howard describes going over to the corner and reaching upwards, as if for the pull cord on a window shade. There is an empathic quality.

For each transformation there is a story about how the design process became an active pursuit of perceptual structure. One might think of the result as a series of unrelated illusions connected filmically to obscure the existing box-structure, but not hide it. Just as the film on the screen does not eliminate the surface, but draws you into another illusion, so Howard's architectural elements operate as montage images to draw the experience into the paper-thin walls of the gypboard box.

He saw the need for a strong, forceful image of a hearth in the apartment rather than a drawstring grating across a thin opening. Like the sinewy, sensuous images of Art Nouveau, the fireplace becomes a dialogue of incompatible objects: a deep "hole" carved out of a beautiful slab of marble. The top of the marble has been shredded to echo the shape of the mountains that are invisible, but off to the immediate north. The mantel is a unique sculptural piece of rusted iron, welded together partly on the site. The power of this ensemble is actively sexual, the power of bent, tortured steel and the hot, cauldron-like organ-shaped hearth, a cherishing celebration of the female principle of the hearth.

The television stand in the bedroom is a





TV shelf in bedroom (top) applies rusted iron like bent cardboard. Fireplace (above) has welded iron frame and steel grate hearth, against backdrop of "torn" marble.

Gould/Sargent Condo,
Santa Monica, Ca

sculptural gesture not unrelated to the works of Richard Serra. It reveals something to the structurally naïve user about an architectural concern. In Southern California, most buildings are what Howard calls "bastard" buildings, wood framed with bits of metal attached at sensitive joints as insurance against earthquake damage. That quality of make-do mixtures is recalled in this piece.

The bedroom cabinet was approached similarly. It started out as a pragmatic piece, but when the wood elements did not line up properly, Howard seized the opportunity. He added purple dye to glue and putty and nourished the irregularities of small holes in the joints and surfaces artistically. Then he created a painting on the remainder as on a conventional drawing surface.

The heart on the cabinet is an emblematic affirmation of the clients' involvement with one another and the design. Throughout the project there are instances where he attempts to transform imperfections into extensions of the spirit of the project the way a jeweler fills openings and compensates for the eccentricities of gemstones with glowing metals.

The staircase began, as Howard says, as "a little wimpy thing." It had to become an object in its own right, which was done by magnifying the size of the handrail and making it out of heavy rusted steel. This gives it a serpentlike quality with a powerful spiral gesture in its own right, independent of the treads and risers. The treads were made out of hardwood, very carefully crafted. Each step on these maple members heightens the sense of privileged access to the loft, rather than seeming part of a mere ladder to the attic. To add more sense of grandeur, Howard cut a channel up one of the walls across the roof. It is a small way of piercing the armored linearity of this long, boxlike apartment. Were the gesture too dramatic (say a curving or dancing expressionist gesture), it might call attention to itself and be too saccharine to take in.

Finally, at the entrance to the apartment a Howard trademark: a ripped and broken piece of gypboard. This is a critical gesture to Howard because it offers guidance to the visitor going in that the concerns of the apartment are painterly and sculptural and have to do with line, shape, surface, and the specificity of materials and objects rather than demonstrating the functional and formal organization of space. Breaking the gypboard is convenient, economical, and reversible. It also shows something of the need to balance the rational and the ecstatic, the romantic or instinctive side of architecture with its classical and canonic side. Some of the things that were done in the apartment were relatively spontaneous efforts. Working with artists moonlighting as tradesmen, Howard was able to marshal spontaneous craft skills that would be hard to obtain on the open market.

For Howard, ripping and rending pieces of his architecture is a form of physical theater or a new performance art. He works with materials and tries to merge the incompatible. There are broken pieces, metal cuts, mixes of rigid and tempered materials courting disaster. Taboo zones dealing with sexuality and acts of destruction are accepted. "The making of art," says Howard, "has to do with playing with things that society finds taboo at any given moment." Many of the images have sexual overtones: slitting, things in pairs, gestures of layers removed and unveiling, gestures relating to body postures.

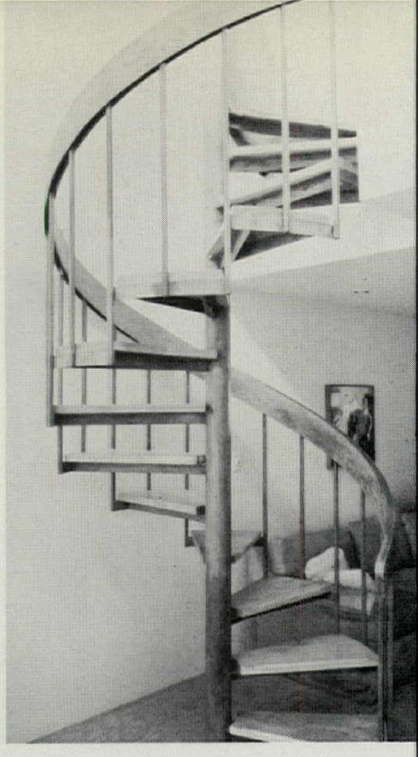
Howard refers to this aesthetic as "sartorial sleaze," the contrast between the ennobled and placid vision of the rational mind and the seductive decadence of the shadow side of the personality. His work is not nihilistic; it is menacing and yet elegant, always an adroit balance of forces between ego and id.

As a matter of process, Howard is developing a discipline, an "acted out" engagement with objects that helps him to explore form. He uses actual photographs of people, taken in many casual positions, in design, attempting to make forms onto which people can project their own sense of weight and structure. Among the metaphorical images he uses repeatedly are "wrap" vs "cap" or rooms whose sense of enclosure comes from walls versus ones whose sense of enclosure comes from the roof. Another is "crash" vs "slash"—the moving of two bodies toward each other in which the bodies can be equal or one can take over and penetrate the other. A third is "prop" vs "pounce," which describes acts of aggression in the different kinds of dominance by one body over another.

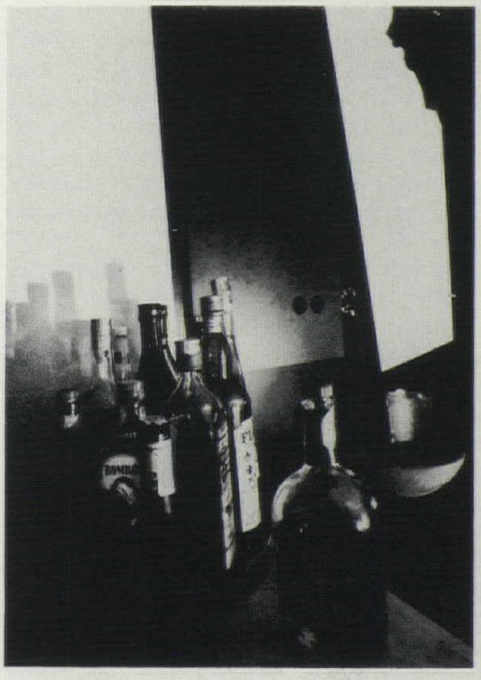
Progressivism and the modern movements in art and science nourished the belief that explicit communication was possible and that we could solve problems by thinking clearly and rationally about them. The main requirement for this rationalism was strict separation of mind and body. The modern psychologists took the ordering of the mind as a subject of study. They viewed the mind as a "black box" or a dark complex of mental machinery. This view of mind is a kind of parallel to the "white box" architectural idea of rational man's desired habitat.

Howard's and his clients' concept is in direct confrontation to this. They see the inanimate world in a very animate way. Howard describes physical things as having a power and force of their own. Sargent describes a world where there are little voices in the crevices and corners. For them the interventions in the condominium were a way of exploring what faces, what voices, they felt and heard; an opportunity to give things the life they sensed in order to exist for themselves and others in this very different way.

Says Howard, "You arrive without any particular expectations. But you leave with questions." □

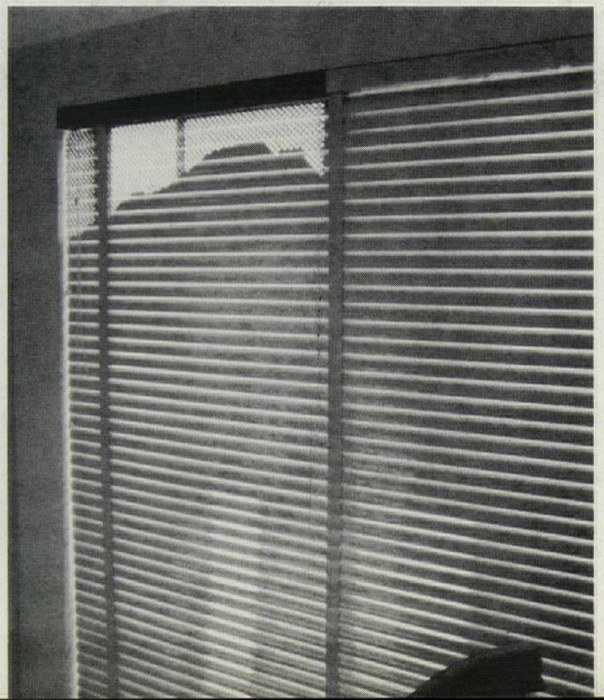


Spiral stair (above) has continuous railing of rusted iron, treads crafted of maple. Bar cabinet (near photos, opposite) has unexpected shape, support, and surface pattern; kitchen wall cabinet (background of photos) has one door apparently askew. Bedroom cabinets (top right, opposite) have "shredded veneer" with color worked in, heart cut-out appliquéd at center. Blinds (lower right, opposite) appear to be eaten away by perforated area at top.









Data

Project: *Gould-Sargent Condominium, Santa Monica, Ca.*
Designer: *Coy Howard, Venice, Ca; Robert Hartstock, associate in charge.*
Program: *modifications to 5th-floor unit in new condominium development, to "make this schlock place wonderful."*
Major materials: *paint, resilient tile, carpet, lighting, custom cabinetwork (see Building materials, p. 307).*
Contractor: *Richard Jackson.*
Photography: *Coy Howard.*

Henley House,
Los Angeles, Ca

House by hand

John Chase

Proving that handcrafted care is being reconstituted in our era, this house in the hills of Los Angeles brings the Southwest to an unlikely environment.

Tiles for the tub (opposite page) were molded on the concrete form before they were cut, numbered, glazed, and fired.

John Chase is currently writing on architecture in Los Angeles.

The site is the perfect in-town retreat, eight acres atop a ridge looking out over Benedict Canyon, above Beverly Hills. The commission is archetypical Hollywood, a haven for an entertainer-composer. The theme of the house is the native and colonial architecture of the American Southwest, posed as both an ironic and a sincere counterpoint to the hubbub and commercialism of the city below. The designer is also a poet, who sidestepped conventional architectural training and began his career building fireplaces.

The result is "Sonora," a veritable museum of latter-day craftsmanship where the Southwest god's-eye motif is in the details, along with the hand-beaten copper sinks and the art-glass lamps. The entrance to Sonora is through rugged brick gates leading to a turnaround, which is largely enclosed by white stucco garden walls. A gate on the left opens onto the entrance courtyard, and a gate on the right opens onto the path to the pool. On the slope below this path are the solar panels that heat the water for Sonora. From most viewpoints, the house appears as a low, rambling, white stucco mass, punctuated by chimneys and the circular tower above the hot tub.

The plan places a library, master bedroom, and sauna suite at right angles to a main wing with the living room, dining room, kitchen, bedroom, and bathroom lined up in a row off the entrance hallway. The dining room is raised above the living room, connected spatially to both the kitchen and the living room. The interior of the house is dominated by richly textured ceilings of cedar and juniper latillas. These small round latilla poles are split in the living room and bedroom ceilings. The vigas (ceiling beams) in these two rooms radiate outward from massive carved kingposts.

Interior walls are plastered and painted white, and floors are dark Mexican machiche wood that is slashed with occasional lighter stripes. The furnishings are a comfortable mix of built-in couches, 1940s rattan furniture with jungle-print upholstery, Indian rugs, and a Wurlitzer juke box.

There are three courtyards adjoining the house: an entrance courtyard, a small garden at the rear of the sauna, and a terace with a fireplace in between the living room and the master bedroom. This terrace overlooks the pool where an Eastern moss garden meets a Wild West cactus and succulent collection. The tortured mounds of Japanese gardens, so popular in Southern California during the 1950s and 1960s, are here combined with the miniature scale and delightfully overloaded detail reminiscent of a freewayside miniature golf course. The water appears both at actual scale as a swimming pool, and at a fantasy scale as a landscape of mountains surrounding a lake.

Sonora was built over a period of four years from 1976 to 1980, by a team that included 300 craftsmen and laborers. The house was designed in close collaboration between client Don Henley and architect David Sawyer. Sawyer and Henley wanted the house to exhibit a sense of personal history and a reverence for the Southwest's past. Henley is originally from Texas, and Sawyer operates his office in New Mexico, so that the house became an expression of their love for the Southwest. The spirit in which the house was designed is related to that of the Spanish Colonial Revival style, which is so ubiquitous in Southern California. While the Spanish Colonial refers to a mythical colonial past, Sonora refers to a mythical Southwest culture, a mixture of Hispanic, Indian, and frontier references. Both client and architect are aware of the humor inherent in the adoption of these references for Sonora. "There is a lot of irony in the house," observed Sawyer. "Here is a lavish, hand-built house sitting atop Beverly Hills. Yet at the same time this lavish house has rustic hand-peeled roof poles."

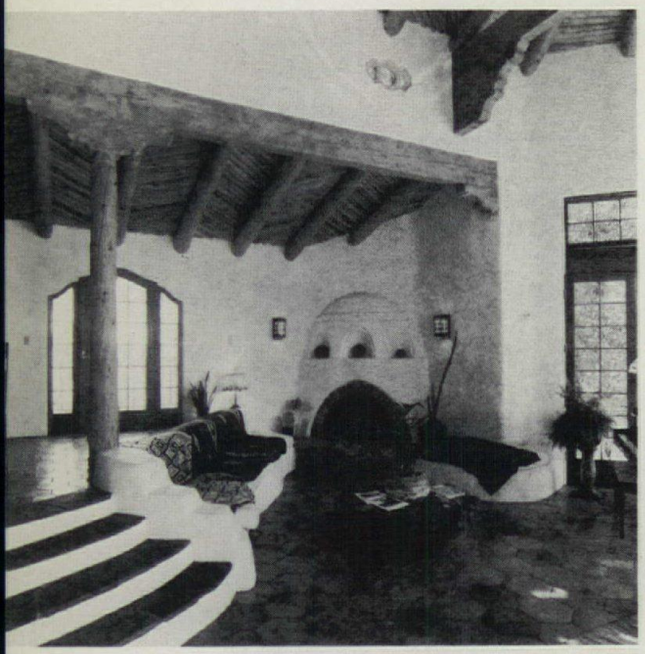
Sawyer's background is typical of many designers with an interest in traditional building forms, who work in the outlying areas of the West. His architectural training came through first-hand experience. Sawyer's degree is not in architecture, but in creative writing, a Master's from Johns Hopkins. "I'm not an architect as a specialist," said Sawyer. "I have a feeling that the act of specialization tends to engender tunnel vision." His other interests help him to maintain an awareness of the living aspects of architecture that often get overlooked, he believes.

Sawyer's first exposure to architecture came as a teenager, when he helped his father build barns in Vermont. In 1970, he moved



Henley House, Los Angeles, Ca





to Santa Fe and began to make "a name for myself as a builder of fine fireplaces." In 1975 he was called to California by the design and building firm of Gilbert & Chang to work on the fireplace at singer Bob Dylan's house and the interior of comedian Cheech Marin's house. Sawyer began work on Sonora as an employee of Gilbert & Chang. Robert Gilbert of Gilbert & Chang is a former sculptor, and the work of the firm reflects his interest in arts and crafts. The firm has built more than 30 houses in picturesque storybook styles in Southern California. They have assembled an army of craftspeople who can make almost any detail. The Art Nouveau pattern saltillo tiles designed by Sawyer were manufactured by Gilbert & Chang.

The expert workmanship of the details in Sonora, and the number of craftsmen that could be found to execute these details, suggests that the argument that there is no one to carry out handcrafted design details properly is specious. The builders of Sonora were able to employ handicrafts because it was important to them.

"You don't have to have fancy stone windows and art glass," Sawyer pointed out. "I have seen the same feeling that was achieved in Sonora achieved in New Mexico by owner-builders who really cared about what they were doing." It is a thought that suggests that architects and clients who place a low priority on craftsmanship and fine detailing are as responsible for the death of the applied arts as increased labor and material costs.

If Sonora is representative of any one time period it might be the late 1960s and the early 1970s. The Whole Earth Catalog interest in alternative technologies is shown by the use of the hollow stucco walls filled with pumice rock for insulation. The popularity of consciousness-altering drugs is embodied in the peyote button motif found on the front door. The 1960s interest in colorful artifacts from the past integrated into contemporary environments in an ad hoc casual manner is present in the melange of new and old stained, etched, and beveled glass in Sonora. The more sensual enjoyment of physical pleasures, such as bathing and nudity, is symbolized by the Art Nouveau hot tub.

The fanatic attention to detail, which is the real meaning of Sonora, can also be viewed as the 1960s version of the Craftsman style. Sawyer and Henley followed the Craftsman dictum that it is permissible to lavish attention only on the parts of a building that have a functional purpose, such as a laundry room vent or a fireplace damper handle.

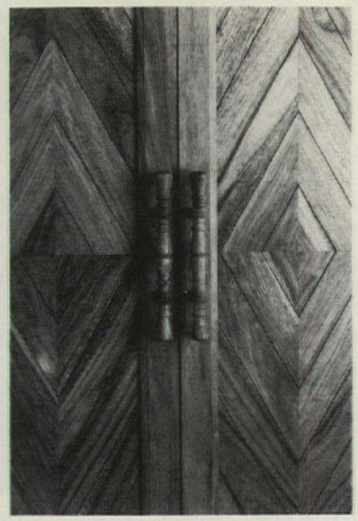
A fascination with process is evident in Sonora, in the valuing of production means that are difficult rather than easy. The objects that require the greatest care in their fabrication are the most highly prized. An example is the Art Noveau style hot tub. A layer of clay was wrapped around the concrete form of the tub, and tiles were then cut into this layer. The tiles were removed, numbered, glazed, fired, and returned to their original positions. Except for an occasionally self-conscious, self-congratulatory awareness of their own ingenuity, the craftsmen and designers of Sonora often seem to achieve an almost Japanese sense of subtlety and ritual in the details.

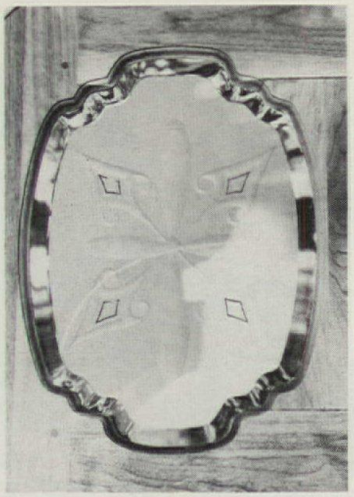
This concentration on details, not surprisingly, comes to dominate the house itself. In the great teens, twenties, and thirties, Spanish Colonial Revival houses of sophisticated Southern California architects such as George Washington Smith, Wallace Neff, or Roland Coate would have subordinated these details to a stronger overall design.

The eclecticism of the details—the turn-of-the-century Mueller light fixtures, the toadstool-like covers for the outdoor lights, and the Art-Nouveau touches—borders on kitsch.

Reyner Banham has compared the neutral stucco box buildings of Los Angeles to functional hamburgers with symbolic garni. Sonora could be likened to one of those "organic" veggieburgers so relentlessly loaded with cult health ingredients as to be nearly inedible.

The value of Sonora should not be underestimated, however. If the architects of the 1980s can learn to work with gifted craftsmen, such as those who built Sonora, they may be able to bring a renewed richness to interior design. □

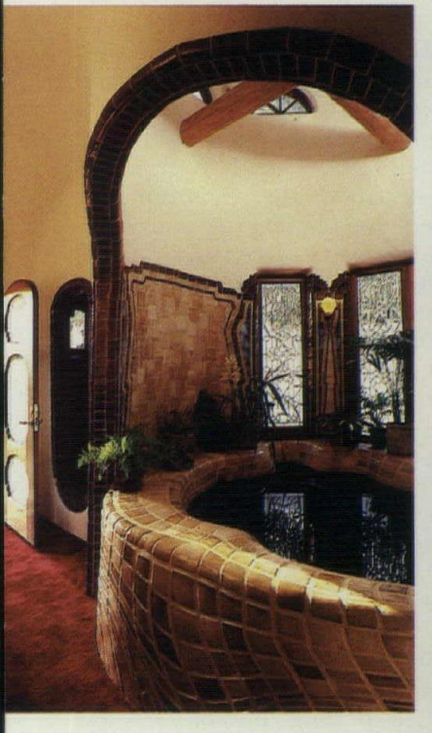


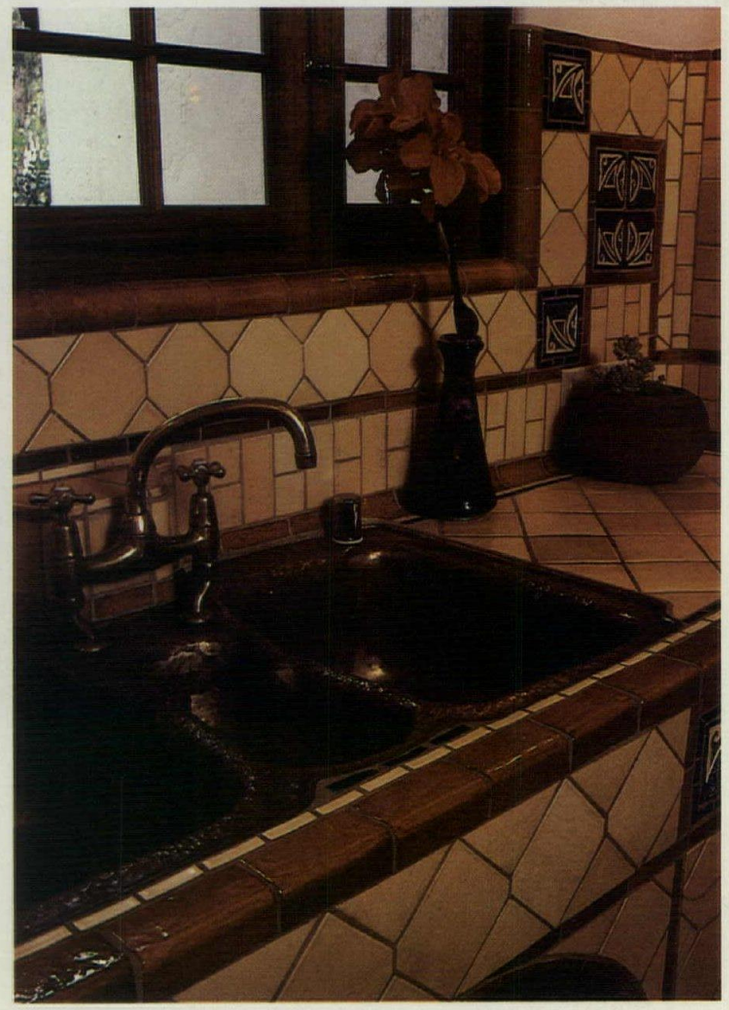




Details all over the house show hand work and infinite attention. The sink, for instance (opposite page, lower right), is hand-beaten copper. Garden walls of white stucco (top left) and white painted plaster interior walls (lower left) interplay with wood structure and roof.







Data

Project: *Sonora, Los Angeles.*
Architect: *David Sawyer in collaboration with owner Don Henley and the design and build firm of Gilbert & Chang.*
Major materials: *cedar and juniper beams and latilla poles, stucco, plaster, ceramic tile, Mexican machiche wood floors.*
Photography: *Tim Street-Porter.*

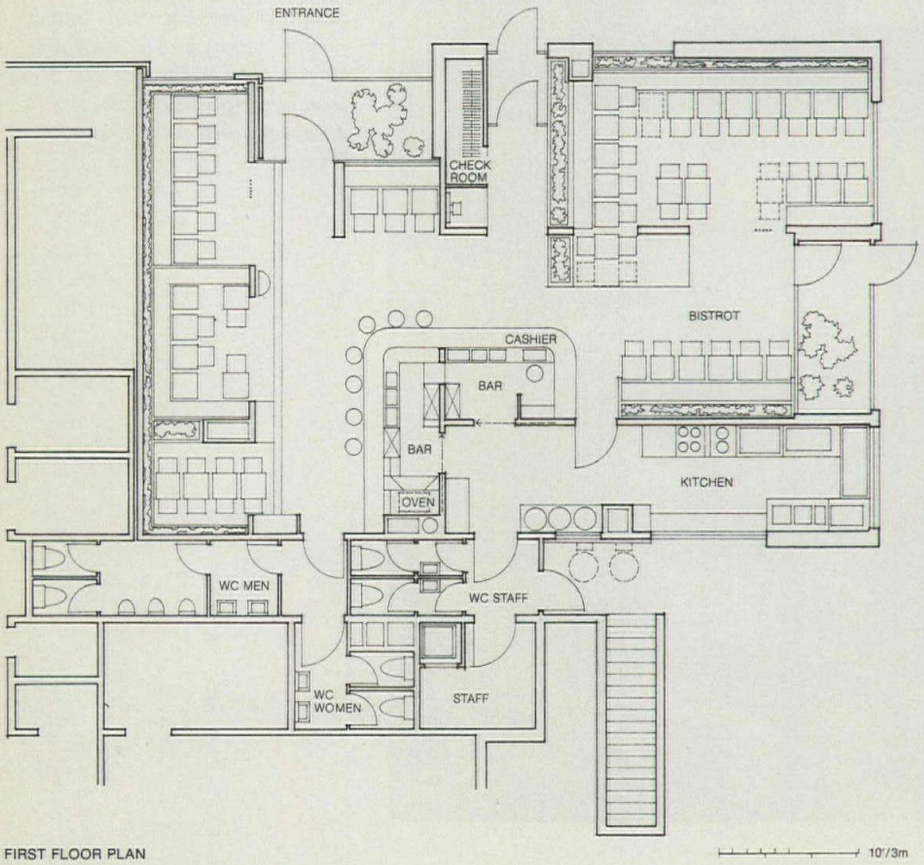
Restaurant, West Germany
Mural, Quogue, NY

Knowing pretensions

By varying means, a French architect creates effects of depth and Surrealism.

Unlike some other designers who make trompe l'oeil an integral medium in their work, architect Jean-Pierre Heim does not strive for realism in his interpretations. Working with interior designer Christine Feuillatte, Heim moves instead into the surreal. (Heim and Feuillatte are Parisians who spend a large amount of time each year in New York.) Perspective and seemingly interchangeable two- and three-dimensional elements combine to produce some of the depth and mystery associated with a Dali and/or Di Chirico.





FIRST FLOOR PLAN

In this restaurant in Frankfurt, West Germany, trompe l'oeil plays no part; instead, the designers applied and attached three-dimensional items. Classical forms and trellis work—real, applied, and painted—characterize the Bistrot 77 Restaurant, which divides into two different parts. One area is nearly straight Classical, with square fluted pilasters, Corinthian capitals, and a cornice with dentils. The floors are marble, and walls are painted to look like marble with beige veining. Semicircular arches over each of the paired entry doors are turned into an implied barrel vault, formed by connecting them with nine tubular rods. Other illusions of barrel vaults are the applied trellis work segments with false perspective on the exterior and the entry greenhouse.

In the second part of the restaurant, the Classical pilasters are reinterpreted in skeleton form by seven pairs of red bars. These phantom pilasters seem to be supporting their Corinthian capitals, between which are lattice and red neon arches. White lattice also covers the ceiling, and white tile is used on the walls of this section as well as the exterior façades.

Carrying the Classicism outside, Heim has placed a plaster statue of Diane de Gabes in front of the lattice "vault" which recedes in one-point perspective. The restaurant sign and a line tracing and connecting both the false and real arches are both rendered in red neon. No structural changes were made in the ground floor of the otherwise undistinguished building.

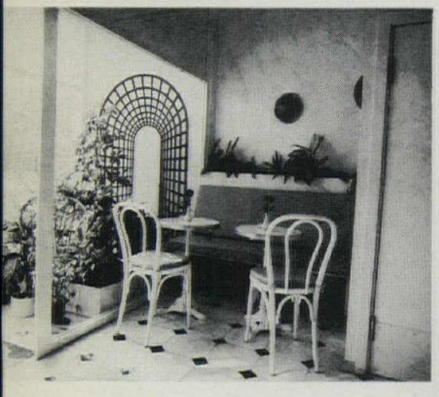
For all of its classicizing, Bistrot 77 is less typical of the body of Heim's work than the room shown on p. 209. Although false perspective is used in several locations, it is not the dominant device here. Instead, the play of straight Classicism against the interpreted version serves to achieve a bright, cheerful atmosphere with no small amount of wit. Bistrot 77 pretends, knowingly.

Corinthian capitals (above and right) are spotlighted and seem to hover over phantom "columns." White lattice and red neon form the arches and ceiling finishes.











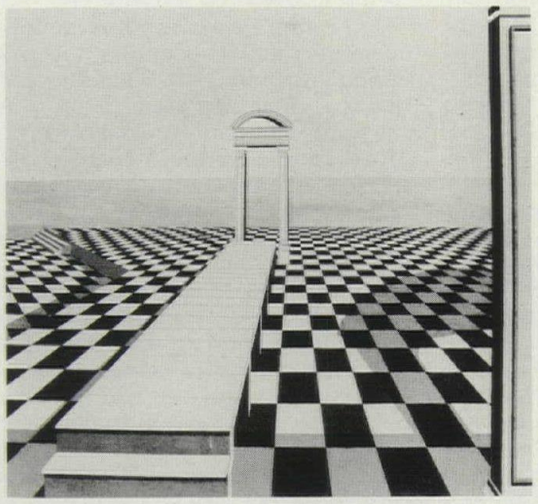


Mirrors behind Corinthian pilasters (top and left) make boundaries unclear. Spaces vary from sedate dining room to cocktail corner overlooking greenhouse-vestibule (photos, far left). Restaurant is inserted into ground floor of a not-so-fanciful Frankfurt apartment block (above).

Mural, Quogue, NY
Working around two windows and an existing small red-brick fireplace, Heim created a fantasy landscape. Two trompe l'oeil Classical "doors" spring from the baseboard heating units to surround the windows. The view from the windows is the real deck leading to the swimming pool, with woods beyond. The mural depicts a fictitious deck leading to a checkerboard ground plane, which is crossed by another deck ending, not quite centered, in a third Classical portal. Beyond the checkerboard's abrupt end line, a desert band goes to the implied horizon line, above which is sky.

On a foreground level, two three-dimensional elements reinforce the spatial deception. A freestanding windmill, according to Heim, symbolizes mystery and immensity. The fireplace is embellished by a decomposing wood brick wall "supporting" a trompe l'oeil platform, which also "rests" on the central portal on its way to the phantom structure at the left end.

Heim's recent work has ranged from apartments and lobbies to stores and restaurants, both in Europe and the U.S. Most has included a combination of trompe l'oeil and three-dimensional objects. Heim and Feuillatte continue to practice their art on both sides of the Atlantic. [Jim Murphy]



A sense of immense distance is introduced by trompe l'oeil mural and freestanding windmill.

Data
Project: *Bistrot 77, Frankfurt, West Germany.*
Architect: *Jean-Pierre Heim; interior designer, Christine Feuillatte.*
Major materials: *marble floors, painted lattice.*
Photography: *Francis Rambert.*

Data
Project: *house in Quogue, NY.*
Architect: *Jean-Pierre Heim.*
Major materials: *paint, wood fireplace "bricks," steel windmill.*
Photography: *Francis Rambert.*

Three coins in the water cooler

Robert Miller

Interior design as urban stage set is more and more common, but the author has questions about the play.

MONTEPAZZIANO, Italy—*Officials in this historic Tuscan hill town today unveiled plans, by Neo-Rationalist architect Aldo Grossi, to transform the Renaissance town square into a model of a typical floor of an American office building. Repaved in vinyl asbestos tiles, the* piazza *will contain rows of gray metal benches representing desks, with topiary "wastebaskets." An existing* campanile *will become the "elevator core." Venetian blinds will cover the façade of the 15th-Century cathedral.*

Alas, Montepazziano! Ravaged by invasions, plagues, and tourists, and now this! But worst of all, by the time its *piazza* is completed, the typical American office could be an Italian hill town. Increasingly, urban design, or something that looks like urban design, is finding its way indoors. The "office as town" has appeared in the work of Paul Segal Associates, Stanley Tigerman, Steven Holl, James Stewart Polshek, and Voorsanger & Mills, in the past published year. The "layered look" of cut-out openings that Charles Moore refers to as "advanced fenestration" puts Moore and his followers in the buildings-within-buildings bag, and Moore's house typologies often imply urban design in plan as well. More explicit (and surreal) is a house design by the Agrest/Gandelsonas team, in which the main living space is an abstracted four-sided "town square." Studio Works' South Side Settlement (P/A, Feb. 1981) uses two such "squares," one indoors and one out. Closer to the mainstream, 19th-Century galleria mania has made the literal appearance of an all-weather "outdoors" almost routine. Shoppers hardly notice that full-grown trees, Parisian kiosks, and shingled mansard roofs are not normally found indoors.

In fact, the blurring of indoor-outdoor boundaries, part of the revolution of Modern architecture, is by now as ubiquitous as a sliding glass door. The house built around a live tree is past being a cliché. But a condominium built around a grove of painted, gypsum board trees, like Graham Gund's in Boston, is something else again.

This "something else" has even more impact when it happens at the office. Architectural follies are all right for vacationing skiers, or wards of the state, but business is business. Why is Ford Foundation's real garden turning into Voorsanger & Mills's glued-on Central Park?

The standard critical explanation presents an apparently unanimously felt need to restore meaning to architecture. Universal space no longer works. Users cry out for an identifiable place, for typologies related to their urban environment, or at least to somebody's urban environment. Only an *architecture parlante,* capable of communicating the specialness of place, mood, and character, can defeat the speculative office building's crushing *anomie.*

Are these corporate and institutional clients, then, simply enlightened patrons, correcting Modernism's architectural mistakes? While this is not inconceivable, their motives deserve further examination. Palladio's Teatro Olimpico in Vicenza is probably the place to start. The Mannerists, fascinated with theater, asked the viewer to accept walls as outdoor façades, and a cloud-painted ceiling as the sky. But the Olimpico is more than a complete Roman theater under roof. Beyond the proscenium, wooden street scenes in forced perspective were completed by Scamozzi after Palladio's death in a near-successful attempt to upstage (actually, downstage) the master. Palladio's call for "suspension of disbelief" was not confined to actual theaters, of course. Nearby, villas like the Barbaro were frescoed (here by Veronese) with illusionistic Roman architecture, "skylit" trellises, and even a *trompe l'oeil* dog.

Forgoing a discussion of politics and economics in 16th-Century Vicenza, it is enough to note that Palladio's patrons needed their working farm-villas because of economic reversals in Venice. More generally, the Veneto shared in the loss of innocence of the Mannerist era—the era so often compared to the mid-20th Century. Palladio's society relished both scholarly allusion and illusion in a wordly-wise, unstable time. More practically, it valued ways of continuing its grand style on an uncertain income.

With a sophisticated work force's increasing reluctance to take 9-to-5-nose-to-grindstone as given, management is led to disarm and delight its potentially cynical audience, to reinforce a sense of each job's specialness. Corporate image and corporate reality are being asked to merge in new and intriguing ways.

Moreover, the office as a big, inhabited machine is surely in decline, to be replaced by smaller, electronically linked groups. Yet the reduced office must still convey the organization's prestige and management's advanced outlook.

These needs—conveying specialness through theater and conveying superiority on a budget—are our needs, as much as those of Palladio's clients. Hollywood, starting with illusionistic movie palaces, through several editions of Disneyland, has made us experts in creating self-contained environments, with typologies to burn. Architects are a little stuffy about this sort of thing, but if Olmsted could dream up names for Rambles and Sheep Meadows, we can surely learn to make Accounting Allées and Personnel Pergolas. Indeed, Robert Hammell has suggested that this kind of place-making is what "office landscape" was really about all along, and that the recent indoor townscapes represent a natural evolution from rural to urban.

The other need—being impressive on a budget—goes somewhat more against the American grain. So far, only supergraphics have attacked the traditional boundaries of U.S. office design: straightforward ostentation and understated Good Taste. Now, the game is that of the Palladian villas, an accomplished reverse snobbery. Painted and pasted-on architecture is tastefully inexpensive, but conveys the patron's knowledgeability just as effectively.

Knowledgeability about *what* is another question. Palladio and Veronese, and their patrons the Barbaros, shared and delighted in a rich world of mathematics and mythology. Voorsanger & Mills and their patrons at NYU, as Nory Miller pointed out (P/A, Oct. 1980), have nothing much more to say about NYU than that it is in New York City. Given the growing scope and ambition of corporate communications and architectural theory's passionate, albeit one-sided, love affair with language, corporate design is capable of conveying content on the scale of grand opera, instead of delivering monosyllables out of Marvel Comics.

Before this happens, designers will have to soften their adversary stance, both toward corporate values and toward the inevitable horizontal trays of space that offices will continue to come in. There is still a hint of bitterness at the discrediting of *real* urban design. Insisting that offices are villages—villages with 8 ft-6 in. cloud cover—may be too hostile and too dumb.

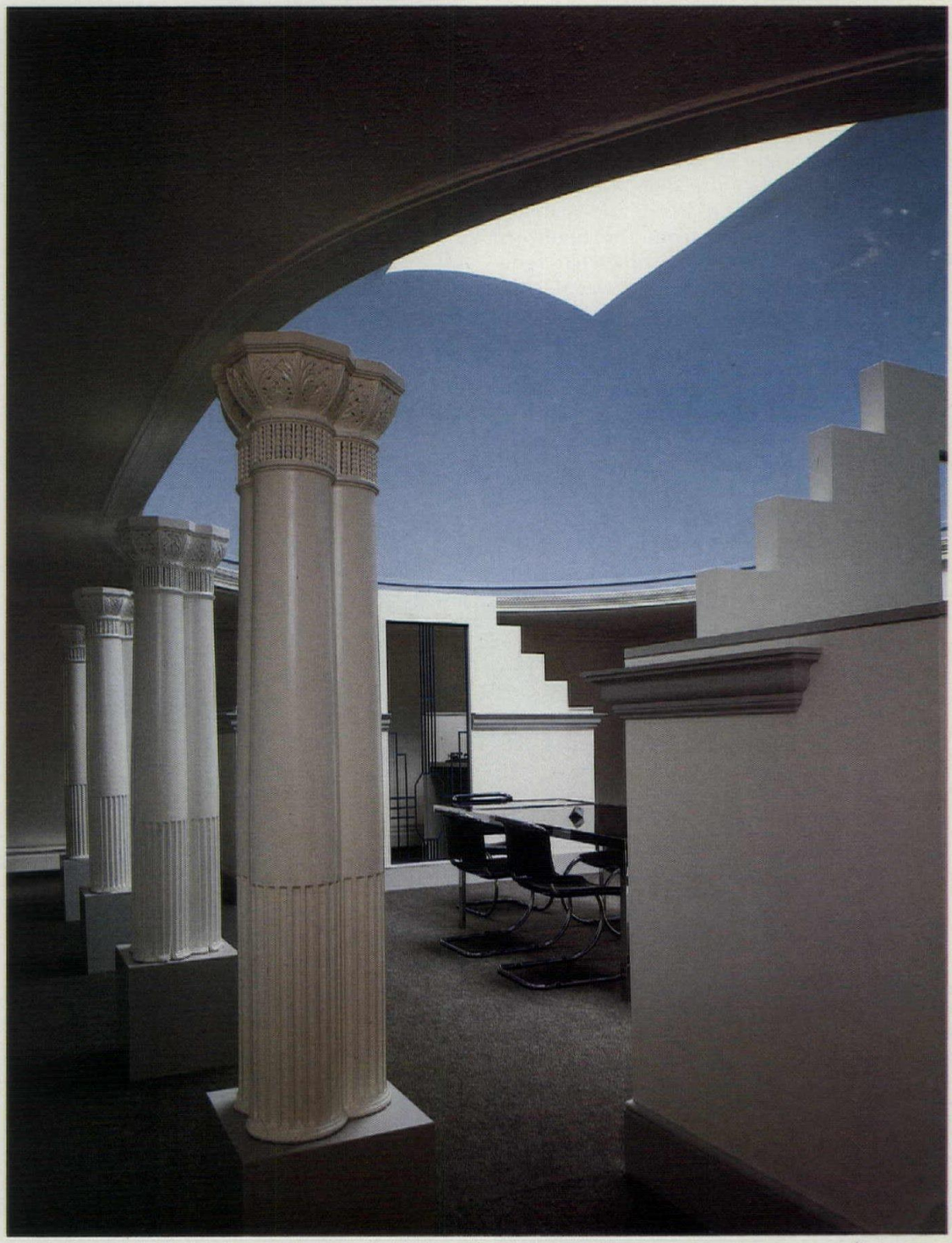
But the indoor urbanists are successfully showing that "universal" space can accommodate more than floating display panels and supergraphic zaps. Like Palladio and his clients at the Accadèmia Olimpico, the architectural communicators and the corporate communicators should now get together for lunch and figure out what they really want to *say.* The results—with or without a Tiepolo sky—could be amazing. □

Robert Miller is a Washington, DC, architect and an account executive at Hill & Knowlton.

Shope Reno Wharton Offices, Greenwich, Ct

Under the blue, blue sky

Three young architects recreate an outdoor forum, out of the blue, under a dome, for their own offices in Connecticut.



The central conference room (right), skylit and domed, is defined by a row of found columns along one side and stepped screen walls at either end.

One can imagine the scenario: the toga-clad elders emerge from their workplaces, to convene in the open-air forum and discuss the day's news under the sky's blue orb.

Then, one can imagine the architects recreating this scenario in the design of their offices: fragments of a colonnade, lengths of classical molding, suggestions of sun-bleached stuccoed Mediterranean walls are gathered together under the blue skylit dome—a veritable forum for young architectural elders.

Not so, say the architects, though their eyes twinkle at the thought. They simply had functional requirements, to which they responded. They had leased premises for their newly organized office in a 1918 building at a busy intersection in Greenwich. They needed drafting space, a conference room, and a reception area. The strip of street-side windows cast soft northern light, and the parallel structural wall stood at a convenient distance from the exterior wall to insert drafting tables between them. This left the central area free for use as a conference room. Its dome was the most valuable given feature in the space, and they did not wish to violate it.

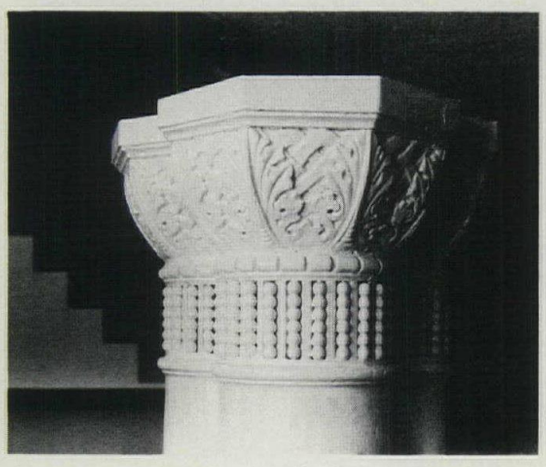
Quite simple. And the design emerged.

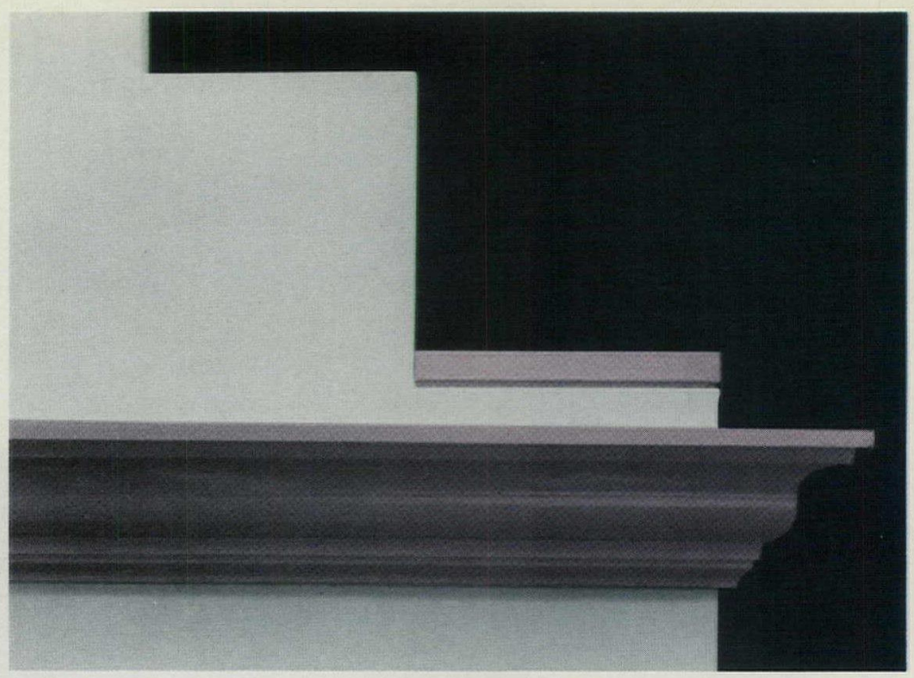
Well, a few more things happened on the way to the forum. They found beautiful wood molding languishing in somebody's barn; salvaged columns from the old Norfolk town hall en route to the scrap heap; and snatched a pair of metal grilles from the Stamford Wrecking Company, grilles somewhat reminiscent of their favorite C. Rennie Mackintosh. And they incorporated the grilles in screen walls to provide partial privacy for the conference room, ending the walls with nine-inch steps, as nine inches furnished a convenient module for the room. That the steps provide a perfect foil for the domed ceiling, and that their scale contrasts beautifully with the delicacy of the dome's stepped edge, the pierced Byzantine column clusters, and the applied wood molding . . . well, that was just by chance.

The architects built the project entirely with their own hands, using cheap materials —gypsum board, paint, inexpensive carpeting. They even reused the wood studs from partitions they demolished.

They do acknowledge a *few* psychological motives. As young architects wishing to establish themselves, they wanted to create a presence in their conference room—unusual, but not evocative of any specific period. Also, they chose blue, well, because white wouldn't show off the dome's form as a color does; besides, blue is, well, playful.

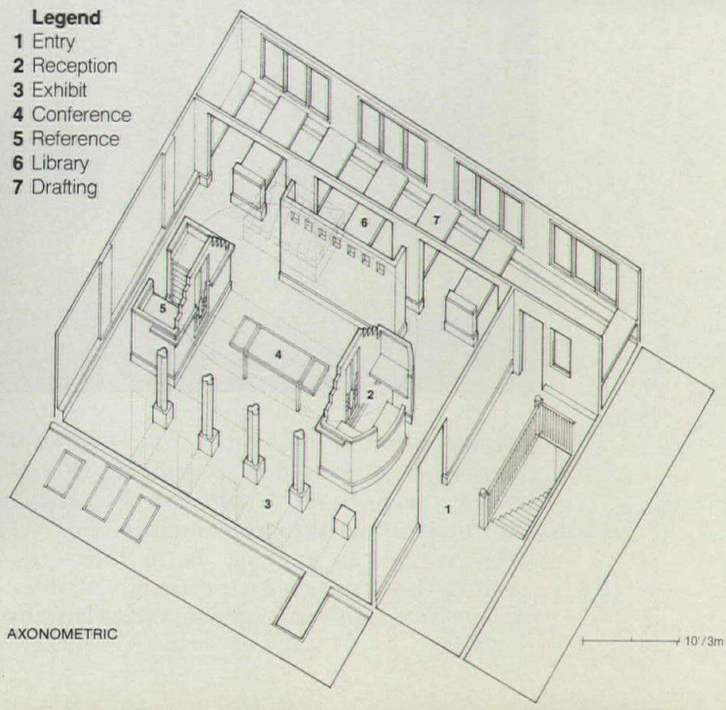
But urban? Well . . . perhaps subliminally. [Susan Doubilet]







Legend
1 Entry
2 Reception
3 Exhibit
4 Conference
5 Reference
6 Library
7 Drafting



AXONOMETRIC

A pair of found metal grilles (right) is set into the stepped screen walls of the conference room (below).

A found wood molding (facing page, top) is applied to the screen walls. The receptionist's area (opposite page, middle) follows the outline of the curved dome. Nine-inch-square perforations in the long conference room wall reflect the module of the screen wall's steps, and enhance the connection to the drafting area beyond. Four clustered columns (far left) have a Byzantine flavor.





Data

Project: *architectural office for Shope Reno Wharton Associates, Greenwich, Ct.*

Architects: *Allan Shope, Robert Reno, Bernard Wharton.*

Program: *an office with five drafting stations, a reception area, conference area, library and files, and an exhibition space. Located in a 1918 building, originally an inn, with a dome whose integrity was to be preserved.*

Major materials: *gypsum board, wood trim, paint, carpet, incandescent ambient lighting, fluorescent task lighting.*

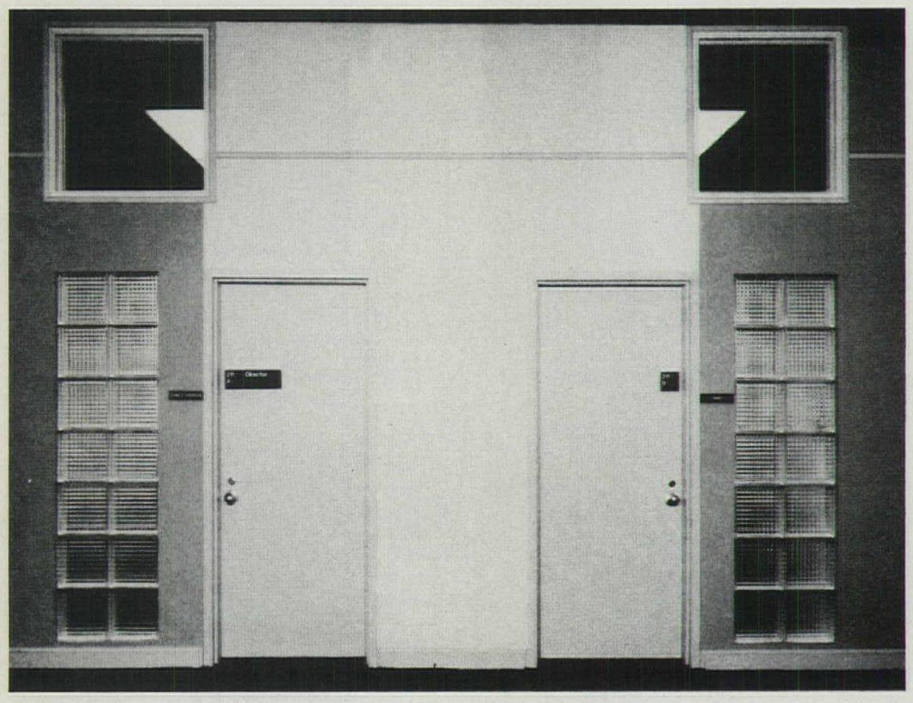
Cost: *$20,000; $14 per sq ft.*

Photography: *Bernard Askienazy.*

Lewisohn Hall renovation, Columbia University, New York

Intimate urbanity?

A renovation of a Columbia University building draws inward the elements of the McKim, Mead & White campus.



Facing page: Administrative offices (top) are entered via a "pavilion," pierced to heighten the connection to the building's perimeter. "Rusticated" cabinets embrace the study hall entrance pavilion (middle).
This page: The Womanspace offices (above) reflect the "pavilion" idea by changes in color. The café/lounge (right) is punctuated by passage pavilion.

Data
Project: *Lewisohn Hall renovation, School of General Studies, Columbia University, New York.*
Architect: *Mostoller/Wood, NY.*
Program: *ground-floor study hall, lounge/café, admissions office. Some areas on other floors.*
Major materials: *painted gypsum board, wood trim, glass block, carpet; recessed incandescent and pendant metal halide lighting (see Building materials, p. 307).*
Consultants: *Fisher-Marantz, lighting.*
Photography: *Langdon Clay.*

Somewhere between the classical ideal of the great City of Mankind and the individual's need for reassuring enclosure lies the middle ground where people meet publicly, indoors, to interact with dignity and warmth. The appropriate tone for such a middle ground was sought by architects Michael Mostoller and Tim Wood in their renovation of Columbia University's Lewisohn Hall, and they chose as model for their project the McKim, Mead & White Columbia campus with which they, as professors, are familiar. They took the lessons they learned from the campus, itself a sheltered microcosm of urbanity, and transformed them for the more introspective, smaller scaled situation of an interior.

Lewisohn Hall, designed in 1905 by Arnold Brunner, a former assistant in the McKim office, had been altered once before, in 1962. The Mostoller and Wood renovation for the School of General Studies was limited to the ground-floor spaces and to some areas on other floors. The results of this modest, low-budget job can certainly be called pleasant; most interesting is the opportunity it gives us to consider how we now choose to set ourselves within spaces with aspirations of grandeur, with symmetrical organizations, and with intricate decorative details.

The lessons of MM&W

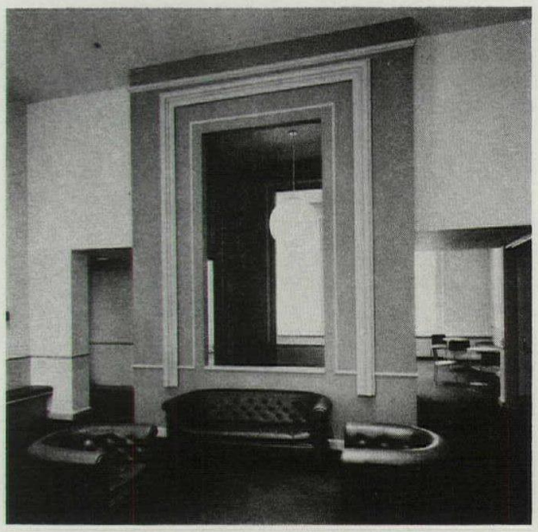
The architects read the campus architecture as a three-level hierarchy: the major elements of the buildings themselves, discrete cubic volumes of brick that organize themselves around exterior spaces and slide by each other at the corners of these spaces; the intermediate pavilion elements of the porticos; and the limestone detail elements such as windows, corner rustication, and cornices.

Mostoller and Wood incorporated the first level, that of cubic volumes, by clearing the spaces of the lowered ceilings installed (to increase lighting levels) in the 1962 renovation, thereby re-creating the lofty, solidly rectangular spaces that always clearly reveal the firm perimeters of the building's volume. They reflected the second level by inserting rectangular pavilion forms in various ways, as seen in the photographs. The third level is represented by fanciful wood moldings that reflect the unusual fanciness of Brunner's design. The moldings engage the wall itself within the cornice and within square panels, enjoining the wall to express itself on a different plane, Michelangelo-style.

Colors are softened versions of the sun-washed warm-toned brick and pale gray limestone of the campus buildings.

The lessons considered

In adapting a well-grounded system to a new scale of uses within a 20th-Century framework, the architects feel that they are



furthering a tradition based on solid concepts that will not fizzle with the next sigh of fashion. Michael Mostoller suggests that the ordering approach can be used at architectural scale as well as at that of interiors, and believes that today's context calls for a geometrizing of details; in fact he wishes that he had experimented further with the transformation and personalization of the wood moldings. Mostoller cites Raymond Hood's Daily News building, with its portal pavilion and its geometric details, as an example of the updating of a similar hierarchical system at a large architectural scale.

Indeed, it is at the level of major and intermediate elements that the Lewisohn Hall renovation is most successful. The architects have freed the original well-proportioned rooms and inserted discrete cubic volumes in the 19th-Century manner, while allowing a 20th-Century interpenetration of spaces. It is a freewheeling and personally interpretive transformation. At the level of details, however, the manipulation is achieved with less originality. The moldings, though playful, have a cartoon quality too facilely applied, too often, in recent architectural projects. The greatest interpretive stretch in the renovation details occurs in the storage cabinets in the study hall. Here, the corner rustication of the surrounding campus buildings is elongated horizontally as wood panel reveals, with an unexpected streamlined result.



Interior urbanity considered

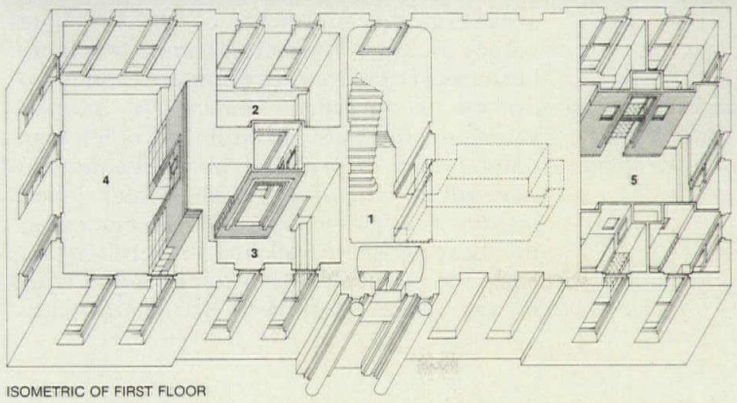
The 1962 renovation of Lewisohn Hall lowered ceilings to enclose people in a textured Scandinavian-type environment. The current renovation liberates the lofty spaces, and does so in a manner that creates a stage set of grandeur and urbanity. Why the striking contrast in approaches?

The architects postulate several motives. First, they admit to a desire to sublimate urges to build larger commissions. But it goes beyond that. They were educated in the 1960s, when emphasis was placed on urban design as the important scale of endeavor for architects, and urban patterns became implanted in their minds. Furthermore, Mostoller believes, the post-war period was characterized by a need for security, resulting in the design of low, comforting, and earthily-textured environments. By contrast, today we have the confidence to stand tall, and to aspire toward grandeur.

At the same time, Mostoller isolates two tendencies—the wish for monumentality, achieved most poignantly by Rossi's stripped forms; and the wish for domestication, accomplished by the application of softening details. Teetering at the very juncture of these two points, the monumental and the intimate, lives the most sophisticated expression in interior design, achieved, for example, in the Empire style.

In this most simple and merely pleasant of projects, Mostoller and Wood have exposed a corner of the question: where does the juncture occur? [Susan Doubilet]





ISOMETRIC OF FIRST FLOOR

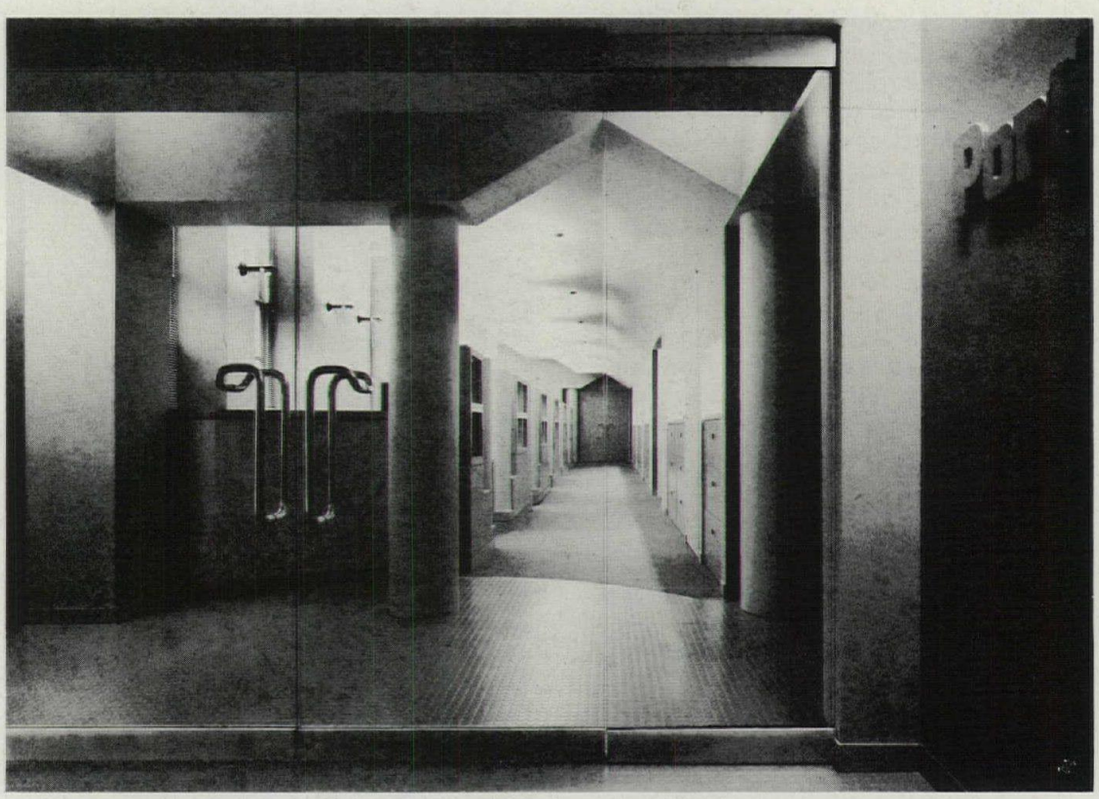
Legend
1 Stair, lobby
2 Café
3 Lounge
4 Study hall
5 Administration

Offices, near Chicago

Urban office

David Greenspan

Remodeling the front of a 1940s factory into a binuclear arrangement, the architects employ urban images to furnishings.



Inside an unprepossessing brick factory building in a light-industrial fringe area near Downtown Chicago, architect Stuart Cohen (with Sisco/Lubotsky Associates) has resolved the problem of designing new offices for two separate but interdependent companies. The solution derives its strength and suavity from its being at once a straightforward solution to the duality of the program and to the space as found, while introducing a swatch of urban fabric into an interior space.

In basic terms, the plan is L-shaped, with two corridors meeting and overlapping at the entry space. At the end of each corridor are the offices of Marvin Klein and Warren Weisberg, the presidents of the two companies. Because Weisberg's company is in the business of research, development, and production of specialty chemicals (a "private" function), the path through the other company, which is involved in marketing and sales of the chemicals, is given hierarchical priority as a "public" space. Existing openings in a bearing wall paralleling this primary axis allow the private corridor to be read as equal to the other secondary circulation paths. "Thickening" this wall to provide niches for filing cabinets further reinforces this reading.

The urban character of the plan grew from Klein's desire to use an open office landscape system for the sales and marketing offices. Cohen realized that, semantically, the result would not be that of an open landscape, but an urban streetscape. The corridors thus became thought of as "streets" and the entry space as a public square; the hierarchies could be explained in terms of a main street and side streets. But the image was still incomplete. So Cohen went about the task of designing the furniture that makes this office so unique. Each work station is conceived of as a little townhouse, whose entry is defined by laminated plastic gateposts (which also serve to conceal the ambient lighting); oak shelving designed as double-hung windows gives each employee a view onto the "street."

David Greenspan is Chicago correspondent for P/A and contributing editor to *Inland Architect*.

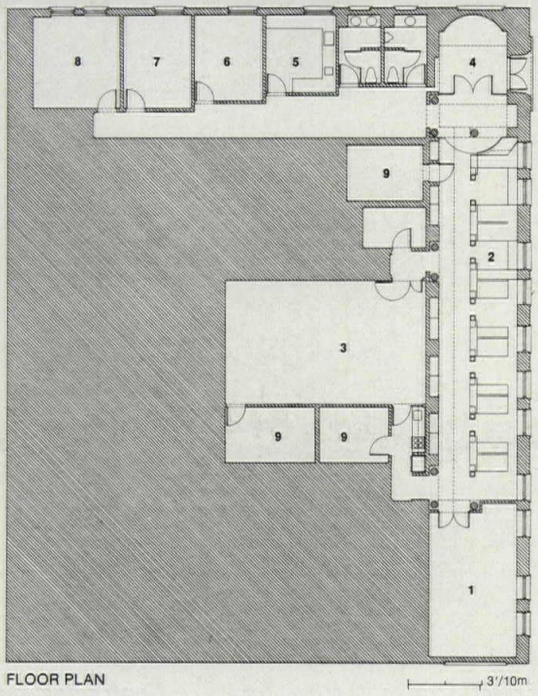




The sectional development of the open office area was based on conditions existing in the found space, and thus runs perpendicular to the main street. Lintels in the bearing wall were set at 7 ft, while the window heads were at 11 ft-6 in., so the ceiling is "folded" in section to mediate between the two. The street itself is defined by two columns "supporting" a voided pediment at both the beginning of the street and at the door to Klein's office; furthermore, one of each pair of columns, in line with the gateposts of the work stations, defines the boundary between circulation and private space.

The other column of the pair is a residual part of the thickened wall, and is again paired to define the secondary corridors. The long private side street through the R&D offices is treated quite differently from the major space. Here, the offices are staggered to bring relief from the length of the corridor and are more enclosed than those along the main street.

Except for Weisberg's office and the lavatories, the staggered wall does not reach the ceiling, however, and fluorescent tubes, placed on the diagonal, slip over the wall to emphasize the openness. Although Weisberg's office is the last along the corridor, the door that terminates the processional axis in fact leads to the factory where he spends most of his time.



FLOOR PLAN

Legend
1 Sales partner
2 Salesmen
3 Conference and training
4 Entry
5 Quality Control Lab
6 Bookkeeper
7 Secretary
8 Production partner
9 Storage

From the main entry (opposite page), the view is down the sales work area "street" (above), where architectural elements define each salesman's office, like individual "townhouses."

Offices, near Chicago

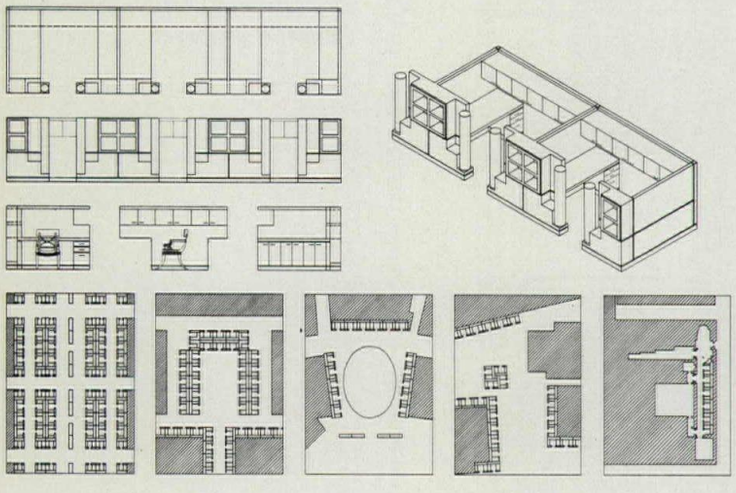
The shades of purple and silvery gray used throughout were chosen to lend an air of quiet elegance and corporate solidity. In the public space, the purple defines the existing shell into which Cohen's (gray) interventions were inserted, and so appears in the niches and above the "pochéd" wall in the vestibule. Along the side street, part of the staggered wall was existing, so the purple is used to emphasize that wall as a datum line.

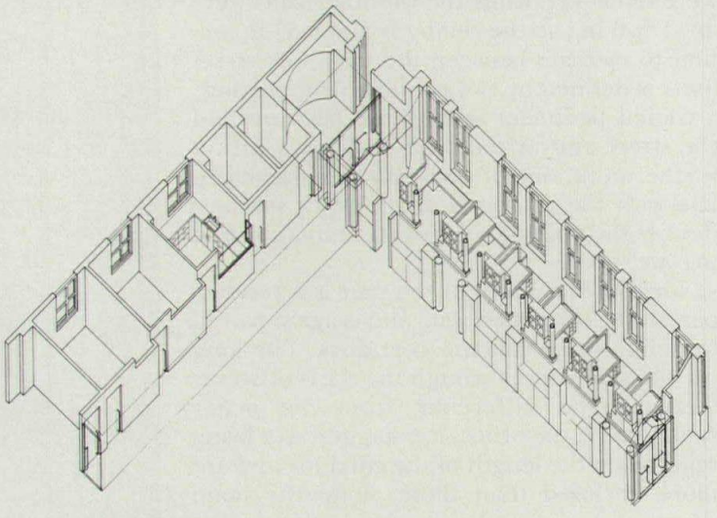
In the end, however, the success of this project lies less in its use of urban metaphors than in its fulfillment of the clients' desires. And on this score, Cohen has succeeded admirably. Marvin Klein cannot mask his enthusiasm. "It has given us the image we've always wanted—one of being innovative and progressive, but also established and substantial. Even customers and distributors that we've had for years have changed their attitudes. They think we're really on our way now, and it's helping the business."

As for the urban image, Klein says that the townhouse metaphor per se is less important than the uniqueness of the design. "Ordinary run-of-the-mill steel partitions would have cost just as much," he said, adding, "I couldn't believe it. We thought we were humoring Stuart until the bids came in. Top-of-the-line steel systems were $1000 more per work station! Here, we have not only a custom look, but the warmth and richness of wood." Weisberg, as is his nature, was more reserved, but noted that he had "never seen an office like ours, let alone in a factory."

But the success of Cohen's intervention can best be summed up by Klein. "I was skeptical that design could really do anything for us, but I thought it was worth a try. Now, I'm a believer." □







To the right of the entry is the diminishing corridor toward the production partner's office. Above, optional arrangements for sales furnishings.

Data

Project: *corporate offices for a small chemical company.*
Architects: *Stuart Cohen with Sisco/Lubotsky Associates; Kathryn Quinn, project architect; drawings by Stuart Cohen and Richard Rudman.*
Major materials: *gypsum board, paint, rubber tile, wood custom work stations.*
Contractor: *Anthony Peters General Contractor.*
Photography: *Sadin/Karant Photography.*

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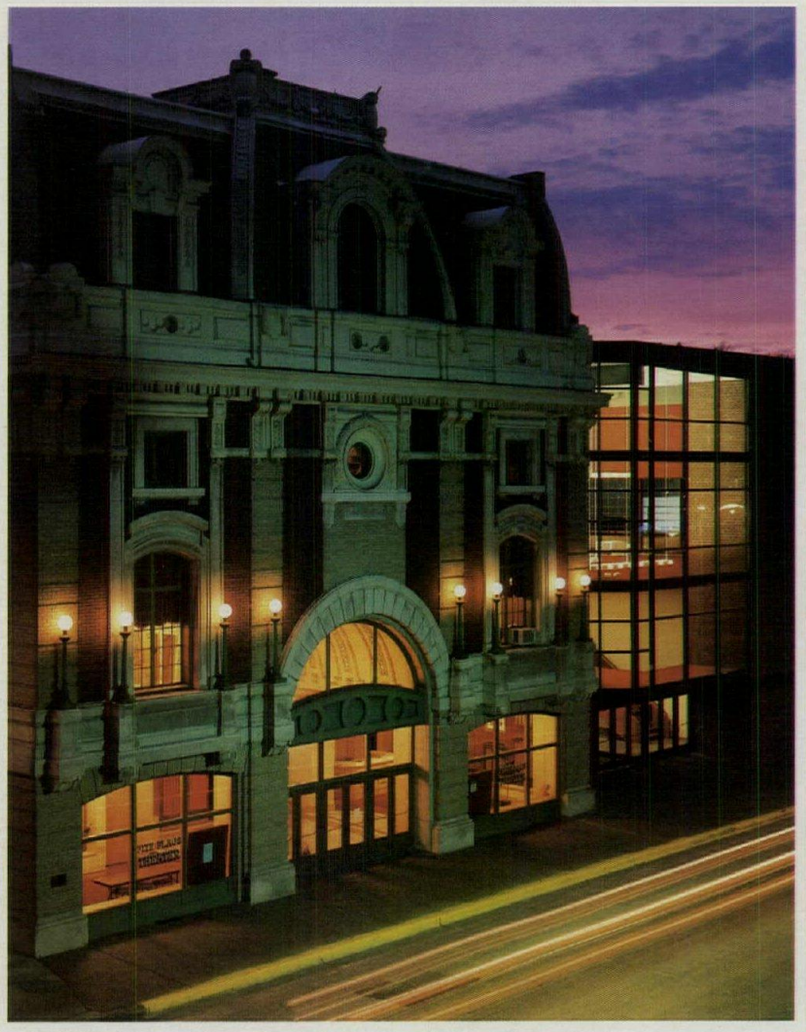



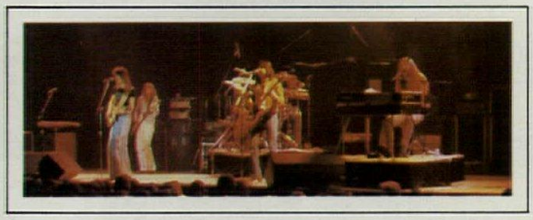



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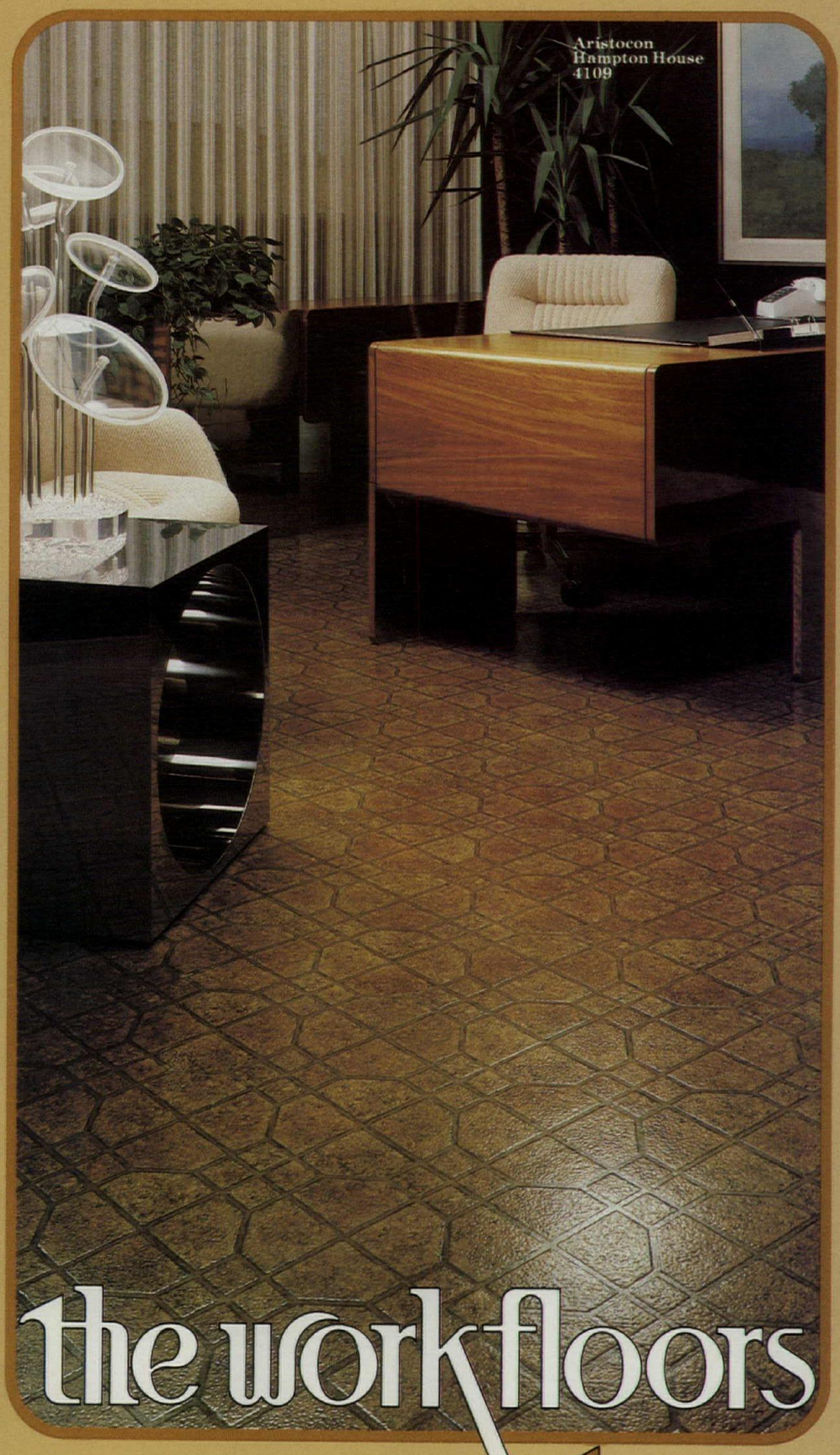

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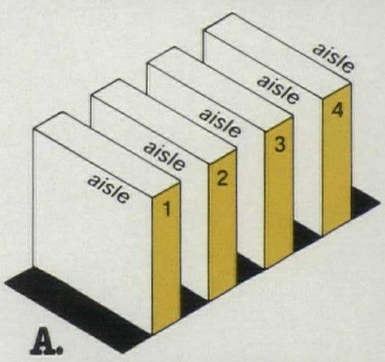

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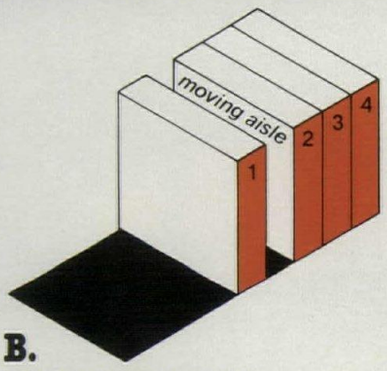

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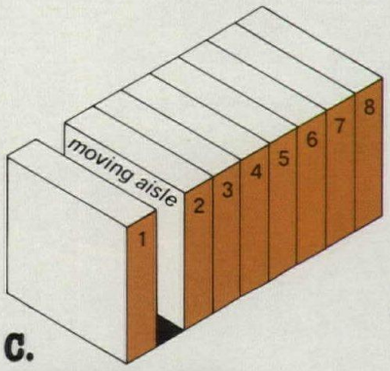

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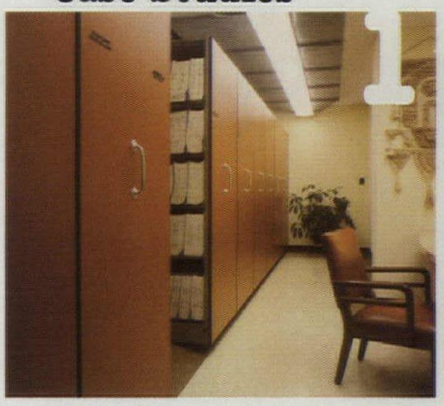

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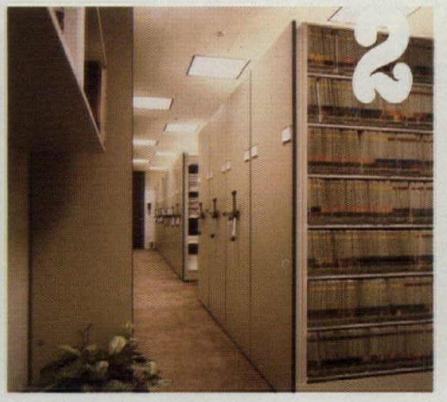

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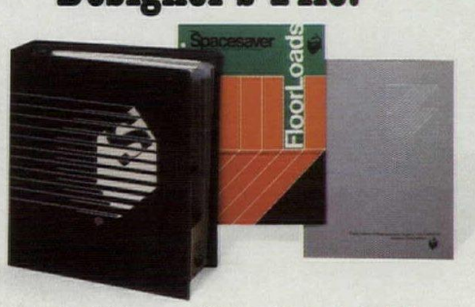

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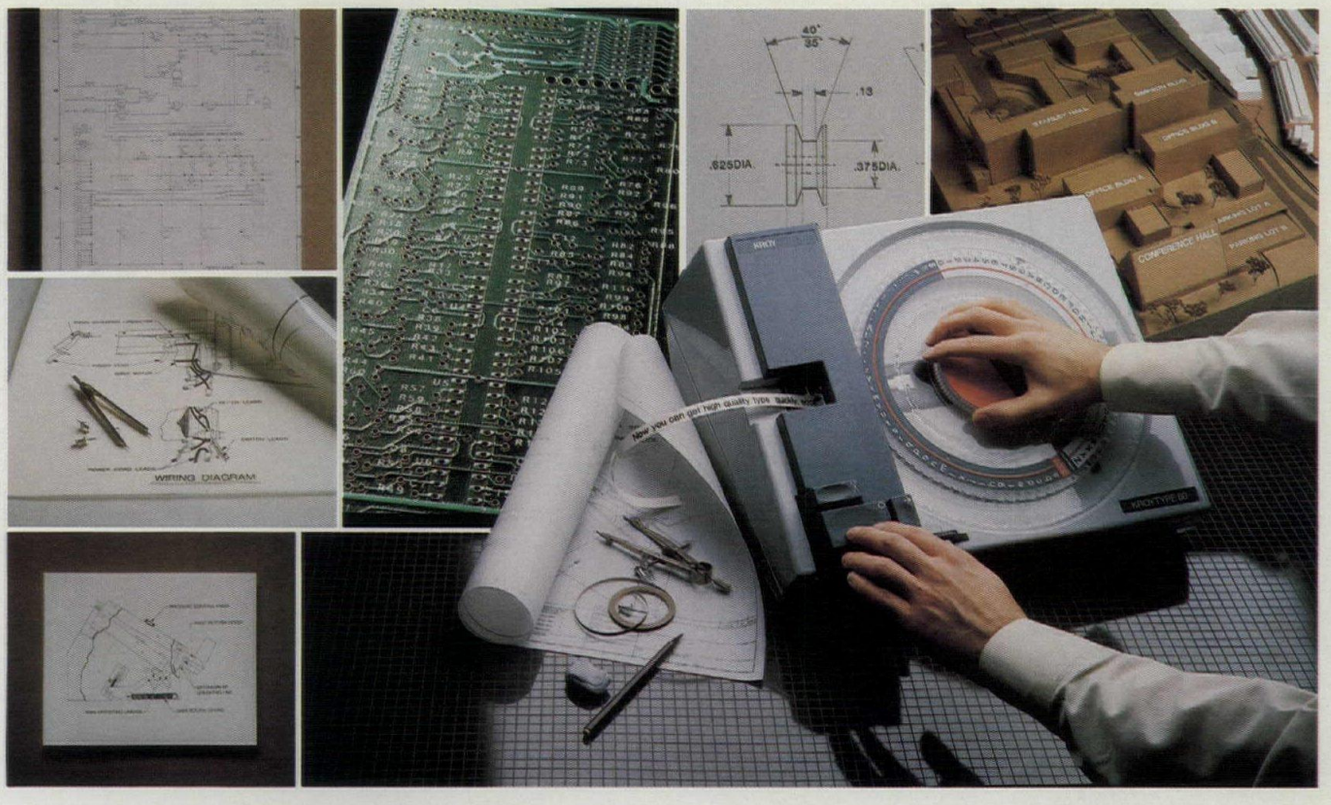

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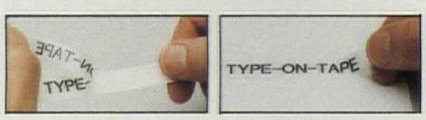

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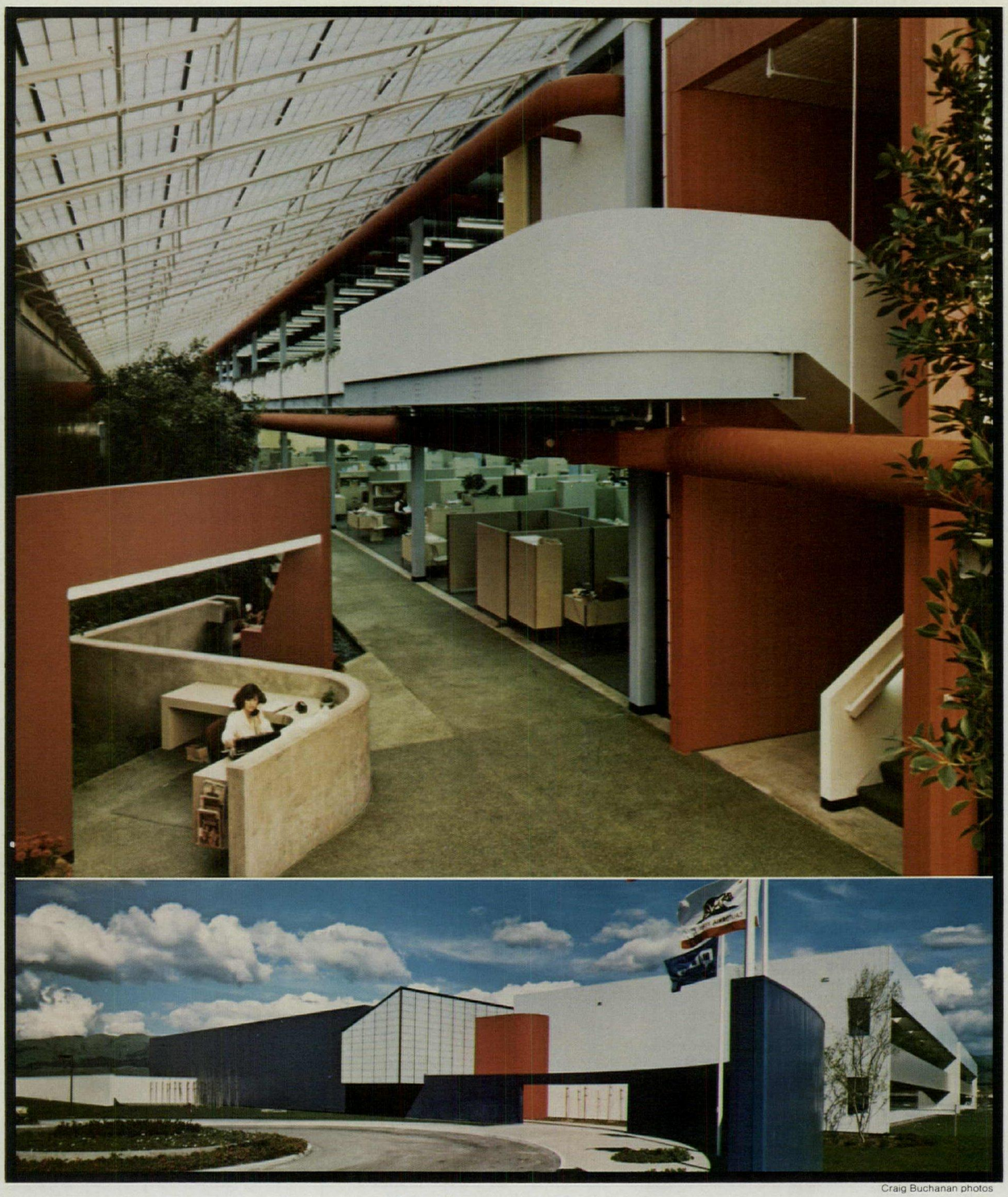
Qume Corporation Facilities, San Jose, CA *Architect:* Hawley & Peterson, Palo Alto, CA *Owner:* Qume Corporation, San Jose, CA



Craig Buchanan photos

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Strong forms and bold colors give the Qume Corporation facilities in San Jose, CA, a distinctly un-factorylike appearance. On the outside, Inryco/wall IW-11A panels in postal blue and boysenberry are curved in graceful contours to break up the geometric rectangles of long, low sandstone beige walls.

Inside, the same type of panels in boysenberry and suede brown frame a skylit garden atrium between office and plant areas. Qume Corporation wanted a pleasant atmosphere for its employees, and the design team won a 1980 AIA Honor Award in providing it.

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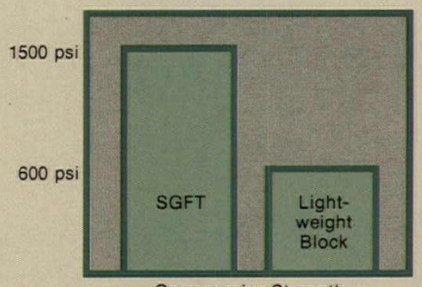

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Insulating glass: Testing and certification

Alvin D. Skolnik, FCSI

In the last two decades, the sealed insulating glass industry has evolved a product certification program that aids in specifying quality products and obtaining a high standard of performance.

Alvin D. Skolnik, FCSI, is Director of Research and Specifications, Skidmore, Owings & Merrill, New York.

When the Sealed Insulating Glass Manufacturers Association (SIGMA) was formed in the early 1960s, its members agreed that an important need in the industry was to have a means for identifying and maintaining quality standards. To accomplish this, they introduced a certification program. Though in existence for a few years, the program did not enjoy the widespread acceptance SIGMA members had hoped for in their attempt to "police" their own industry. Perhaps this was due to the opinion held by many that the members were serving as their own judge and jury, and the question as to whether or not a member's "non-complying" product would be recertified undermined user confidence. In the late 1970s, SIGMA wisely voted to disassociate itself from the certification program. This led to the formation of the Insulating Glass Certification Council (IGCC). While SIGMA continues to operate, it does not certify but, rather, endorses certifying organizations such as IGCC. Through publication of a glazing practices manual and by providing its membership with a technical forum, SIGMA continues to serve the industry.

IGCC has promulgated, and now administers, a certification program, which is rapidly gaining acceptance in the industry. It voluntarily allows a participating manufacturer to enter into a license agreement with IGCC, thus establishing the mechanism through which a complying manufacturer may be authorized to certify and label his units with the IGCC mark.

The technical basis that defines the quality of the units is the ASTM E6 P3 "Proposed Specification for Sealed Insulating Glass Units" which, as of this writing, does not yet enjoy status as a standard. Administration of the program is accomplished by an independent and impartial administrator, who acts as a sole judge of compliance. The administrator makes unannounced routine inspections at the manufacturing facility, witnesses fabrication of prototype specimens, compares current production with the product authorized to use the ICGG label, and verifies that specimens fabricated for testing in the second and subsequent years were produced in accordance with the construction originally certified. All testing is performed by an independent laboratory whose facilities are also inspected by the administrator and approved by the IGCC certification committee. The administrator may also witness any testing at his discretion.

The IGCC Certification Committee, in addition to other responsibilities, establishes guidelines and interpretations, determines the applicability of the specifications in questionable situations, approves test laboratories, and designates which specifications are in effect for the purpose of product certification.

The manufacturer, under a licensing agreement with IGCC, will be authorized to use the permanent label on a particular model following successful prototype testing. Thus, manufacturer/licensees certify their products, affirming them to be constructed similarly to the specimens that passed the testing and inspection program.

As stated previously, the technical basis of the program is the *proposed* ASTM E6 P3, which provides for the evaluation of test specimens by accelerating the water vapor transmission through the sealing systems into the desiccated air space. Test performance requirements that there shall be no frost or chemical dew point of a specimen when measured at −20 F after accelerated weathering test and that there shall be no fog visible after the fogging test are based on the maximum permissible water vapor content remaining in the air space after testing.

Dew point testing is provided for by reference to ASTM E546. Accelerated weathering is tested by one of two optional methods: proposed ASTM E6 P1 (which tests seal longevity) or E6 P2 (which tests seal durability). On the basis of replicate tests, specimens are then classified as Class C, Class CB or Class CBA, the last being the most stringent.

While such provisions can provide the specifier with *some* basis for defining quality control other than by proprietary designations, there is still much to be learned and evaluated by the industry so that a correlation between tested units and production units (preferably following periods in service) can be established. Data gathered from in-plant and field testing could be extremely valuable. Statements in the proposed ASTM standards refer to additional data being collected and ". . . the suitability of these test methods will be further evaluated as the analysis of test results is completed."

The IGCC published certification guidelines permits the manufacturer/licensee latitude for certain changes to the glass, spacer, desiccant, and sealant used in units while still permitting certification and labeling of a unit with the same IGCC number. There are, however, certain changes to these components that are *not* permitted unless retesting is performed for new certification. It behooves the reader to become familiar with these guidelines.

While the test methods and standards represent reasonable procedures and criteria, there is still considerably more that can and should be done to make their use under this program even more meaningful. Perhaps its most significant aspect is the willingness of a manufacturer to voluntarily participate. This suggests at least *some* measure of commitment to basic quality control in the fabrication of insulating glass units. □





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Glassoline

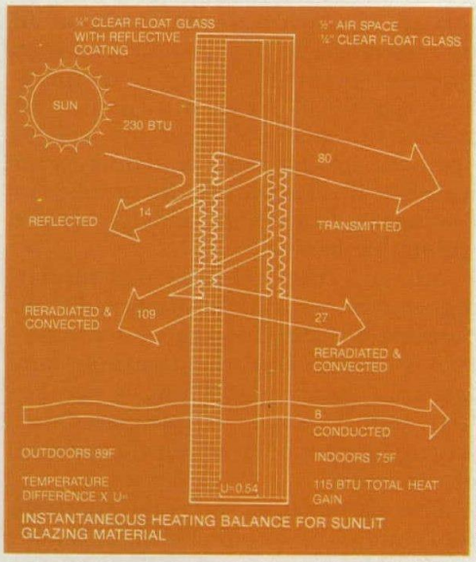
One way to keep the inflation rate and rate of increase in oil prices from careening out of sight is to reduce the demand for energy. A good multiple glazing strategy does for windows what the Japanese did for the combustion engine.

It seems so simple: let the light in, keep the weather out, and maintain the view. The solution to the problem is often also deceptively simple: two or more sheets of transparent glazing materials, often glass. In reality, with today's technology, optimizing the daylight, heat exchange, and view through a window represents a problem of great complexity irrevocably intertwined with the total building design. It is a problem that for the most part defies generalities, but at least not description. It is a problem whose design methodology is only now emerging, and the solution generated is nearly impossible to truly optimize for cost purposes. This is the stuff of which articles are made.

Within the last decade, energy consciousness in buildings has meant a revolution in window strategies. Ten years ago we might have seen a single pane of glass, window blinds, and/or curtains in a typical building. The monolithic glass was manufactured in a number of different tints, with various reflective coatings. The glass choice was based primarily upon the visible characteristics of the glass: what does the outside look like from within the building; how is the interior perceived from the exterior; how does the surface of the glass relate to the quantity, color, and texture of the surrounding building materials? Do we like what we see?

The R-value of the glass was of course of interest, but was the result of the glass choice not the cause. Whatever Btu's were delivered to or from the building through the glass were quickly digested into the mechanical equipment chugging away for building comfort.

To be honest, the cooling benefits of reflective glass occasionally played a substantial role in the selection process even in the 1960s. Where the surface was primarily glass, the building had to consider the option even before the energy roof fell in.



AAMA

With wind, air temperature, and sun on one side and the air-conditioned building interior on the other, the role of the insulated window in energy exchange is a significant one.

When the first energy shock of the 1970s hit, the immediate impulse was predictable. Control the heat loss and gain through the "worst" thermodynamic element in the building—the glass. Eliminate the glass on the north or windward side of the building, reduce the amount of glass everywhere else, and double up on the glazing. The Sealed Insulating Glass Manufacturers Association (SIGMA) reported 204 million square feet of sealed insulating glass sold in 1974.

What happened shortly thereafter is that the crisis mentality changed to an opportunity mentality. Doubling the glass had side benefits. The interior face of the glass sandwich was cooler in hot weather and warmer in cold weather, reducing condensation problems and allowing people to sit closer to the exposed glass in greater comfort. In residential construction, direct solar gain was turned into a plus. The greatest benefit in commercial buildings, however, was the concept of daylighting with windows. The task with window design became not only how to reduce the disadvantage of the glass, but how to increase the benefits. SIGMA predicts this new interest will increase the sales of sealed insulating glass to over 480 million square feet in 1981.

No technology exists in a vacuum. While building window designers were awakening to the advantages of daylighting, lighting product manufacturers were inventing ways to improve task lighting while cutting down electrical consumption from over five watts per sq ft to under two. While reducing the lighting energy consumption, they were also cutting down the heat contribution from office lighting. A similar revolution in control systems was automatic dimming and energy optimization in general throughout the building. The inconsistency of light level from a natural source makes light dimming and the automatic control capability an ideal match for sophisticated daylight design in large buildings.

Coupled with the general increase in insulation in buildings and the new relevance of thermal mass in design, the window manufacturers paid closer attention to infiltration loss and sealants, condensation control, and thermal bridging, all of this while gearing up to accommodate the new market in double- and triple-paned windows.

It makes no sense at all to increase the R-value of a wall and then lose all of the heat through loosely fitting window frames or poor window design. Thermal breaks had to be incorporated into metal mullion designs to keep the heat from using the metal as a means of transfer. The strategy also reduces the potential for condensation on the mullion itself.

During this same period, the plastic window frame was imported from Europe with its thermal welded joints, encapsulated air spaces, and low thermal conductance. The frame sections are stock items because of the high cost of extruding dies, and they are not generally used in curtainwall construction.

The importance of the support system for the glass cannot be underestimated. Both the size of the glass area and the type of window mullion used will be given new emphasis in the newest ASHRAE Handbook of Fundamentals for calculating window R-values. In fact, the frame does not always detract from the R-value. It may add to the thermal resistance of the total window and even influence the choice of glazing when cost variations for exotic glass are small.

Still more important, it is the glass support that permits and controls the possibility of wind- and sun-shading devices outside the window, the inclusion of sun- and heat-control devices and strategies within the window, and the location of interior heating devices at the window as well as the position of interior shading devices or thermal shutters. Even the color of the window mullion affects the performance of a window.

What about the glass?

New technology is no stranger to the glass industry. The combination of many different types of glass in multiple glazing strategies has increased the number of options many times. It has also meant inclusion within the "sandwich" of those coatings and products that could not withstand the abrasion of weather or maintenance on the glass face.

As the name implies, multiple glazing involves the incorporation of more than one lite of glass, separately spaced and supported, in the same window opening. The kinds of glass used may be different or the same; the space between the glass is filled with air or another gas. The double glass and space between reduce conductive and convective heat loss over a single lite by about 50 percent. When the sun is not beating directly on the window (and at night), the space between the glass serves as an insulating layer whose temperature lies somewhere between the temperatures inside and outside the sealed building. When the sun shines on the glass, the temperature within the encapsulated space can be higher than either the exterior or interior air temperature.

There are three alternatives currently available for sealing the edges of the glass components. The solution most commonly found in curtainwall construction is a double-glazed unit which is organically sealed and encapsulates an air space with a desiccant to control the possibility of cavity condensation. It is usually considered structurally at least half again as strong as a monolithic lite, and may be assembled on demand either by the glass company or occasionally by the window manufacturer.

In smaller windows it is possible to use double glazing with a welded glass edge. The welding technology has been used since 1952. Because of the complexity of production, however, this kind of glass is usually restricted to stocked windows. The space encapsulated within the all-glass surfaces is filled with carbon dioxide. The gas is used instead of air to reduce convection losses in the cavity.

The third possibility, which is used commonly for operable, unsealed units, is a system of air vents from the encapsulated air space to the exterior of the assembly. Allowing the window to "breathe" lowers the air space temperature slightly all year and greatly increases the adaptability of the unit to operation, maintenance, and options for retrofits. It does reduce the number of coatings and materials available for use within the window.

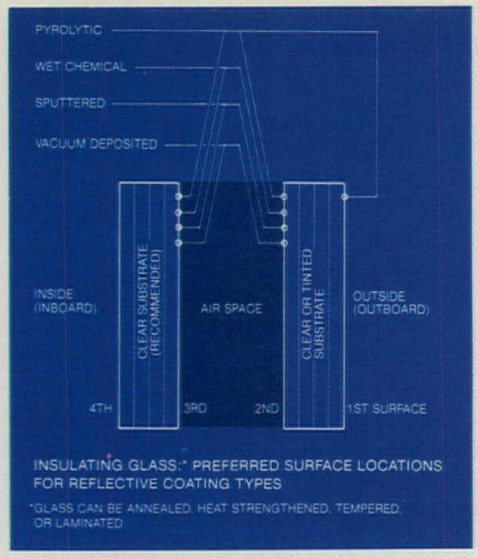
The surfaces of the glass in an insulating window are usually numbered from outside to inside: the outermost lite surface is number one, the innermost surface of a double-glazed unit is number four. In this fashion, a triple-glazed unit has surface number six on the interior of the space.

The glass that serves as the substrate for coatings can be either clear or tinted. In double glazing, regardless of the coatings used, the recommended interior substrate is clear glass. The outer lite may be tinted or clear. Tinted glass can reach higher temperatures and therefore have greater thermal stresses. It had a history early in its development of problems with heat entrapped between the glass and daylight control devices used within the building. Even the location and color of the blinds or drapes can have such effects on glass with a low shading coefficient. The tints universally available are gray, green, and bronze; colors from different companies do not match. The glass may be annealed, tempered, heat-strengthened, or laminated when structural loading, internal heat stress, or building use demands.

When coatings are added to glass, they are usually designed to reflect a greater percentage of the light and heat that strikes the glass. The use of a reflective coating does not eliminate the possibility of useful daylight. There are five conventional coatings used to make clear or tinted glass into reflective glass (see diagram above).

"Reflectance in glasses is more a function of the metal applied than the process used," explains Dr. Donald J. Vild, director of Architectural Products and Services-Research at L.O.F. The metal is rarely mentioned in a glass catalog. What are mentioned are the color and performance characteristics of the various glass combinations. Many reflective coatings also have insulating value. Usually glass that is coated is ¼ in. thick. The conventional air space in commercial application is ½ in.

Besides the reflective characteristics of the glass, the R-value and shading coefficient are very important determinants of the glass performance. Using ¼-in. glass and ½-in. air space the (winter) R-value currently available in double glazing ranges from 2.04 to 3.45. The shading coefficient varies from .08 to .91. A single lite of ¼-in. glass has an



The four types of reflective coatings commercially available are as follows:

Pyrolitic: *Chromium-based, this coating can be used on surface 1, 2, or 3, but is most commonly found on the exterior, or first surface. It can be fire-fused to the glass on the assembly line (or on a separate line) and therefore is economical to produce. It has only moderate reflective properties (.33–.37 outdoor daylight reflectance). It can be applied to tinted glass or clear glass.*

Vacuum deposited: *The most expensive coating, it is usually chromium or chromium and chrome oxide, although gold and silver have also been used. The vacuum method produces a high reflectivity (to .44 outdoor daylight reflectance) and is usually employed on the second surface and only occasionally the third.*

Sputtered: *These coatings produce a more subdued reflectance than the vacuum method and are less expensive for the same surfaces of use. Stainless steel and chromium are used in combination for the conventional application, but one advantage of sputtering is the great potential for using exotic materials.*

Wet chemical: *The coating has to be used on the second or third surface and is preferred on the second surface for better shading coefficient. Copper, nickel, and aluminum are used (as well as other metals). The reflectance range is roughly the same as for the vacuum and sputtered methods.*

R-value of .88 and a range of shading coefficients from .21 to .95 depending on tint and coating. With more layers of glass, the R-value obviously goes up and the shading coefficient can go down.

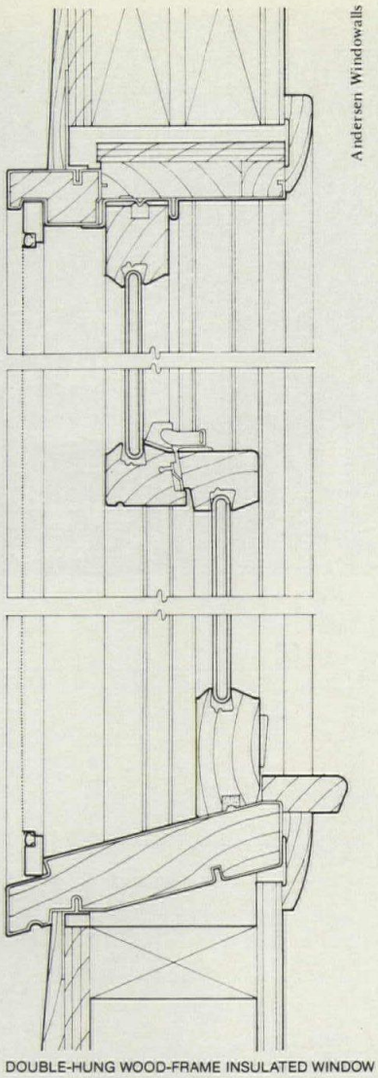
Color: The number of surfaces available for coating and their possible positions have a significant effect on the appearance of the insulating glass. It is not the appearance of colors from the inside out that is altered, as compared to a single lite of the same color, nor the color of the draperies seen on the inside from the exterior, but rather the reflected color of the glass. The color of the sky or the neighboring structures in a building can be greatly altered by multiple glazing. Placing a reflective surface in front or behind a tint yields a different color. As Stephen Selkowitz of Lawrence Berkeley Laboratory explains: "Just the fact that you have two more reflective surfaces means the reflection will be stronger." When the reflectance of the assembly changes, the time of day at which the mirror shifts from the outside to the inside will change. Manufacturers recommend full-scale mockups for truest prediction of the eventual color on the building.

In residential application, clear glass is by far the most common solution, and often glass with a sealed edge is used. In cold climates, reflective glass is rarely used because solar heat gain is usually desirable and because a glass that is mirrored from the inside at night is not usually desired.

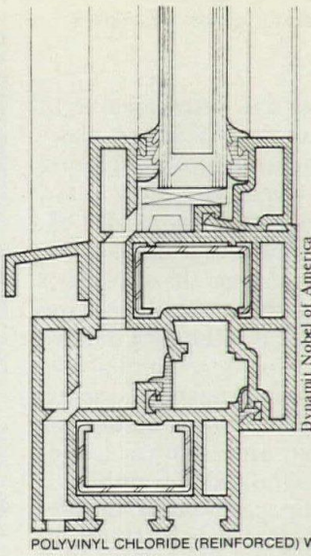
Every glass type has size and strength limitations that must be observed to avoid expensive special treatments. Insulating glass also means more need for support, more weight for transport, more handling, and more refuse than monolithic glass. The variety of options increases the potential and possibility for using more than one glass type on a single building. In addition to the greater range of coatings made possible by multiple glazing and the increased range in color, the space between glasses provides an opportunity to incorporate other materials that could enhance the performance of the sandwich.

The new glass sandwich

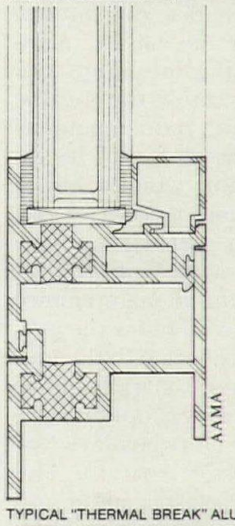
Plastic films: One recent innovation is the addition of thin plastic films. The films are designed to have a very high solar transmittance and serve to increase the number of air cavities within the insulating window without much increase in the mass of the window. The resulting section is much lighter in weight and thinner in section than a triple- or quadruple-glazed glass unit. Weather Shield Mfg. has the only such window units currently on the market. They employ a film manufactured by 3M Company, which only slightly decreases the solar transmittance from a double-pane clear-glass window and sig-



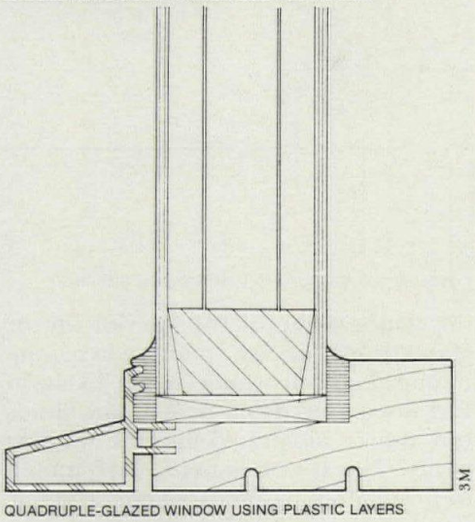
DOUBLE-HUNG WOOD-FRAME INSULATED WINDOW



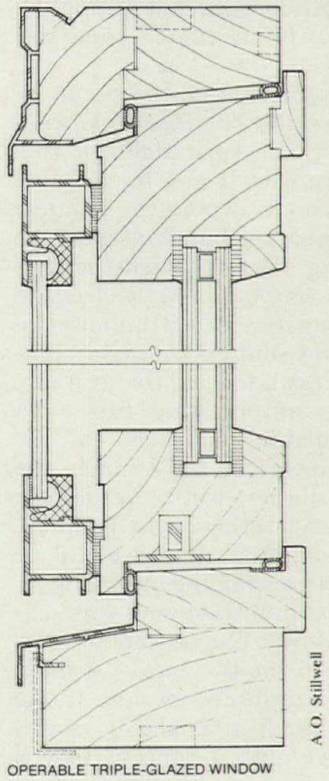
POLYVINYL CHLORIDE (REINFORCED) WINDOW FRAME



TYPICAL "THERMAL BREAK" ALUMINUM MULLION



QUADRUPLE-GLAZED WINDOW USING PLASTIC LAYERS



OPERABLE TRIPLE-GLAZED WINDOW

The performance of insulating glass is significantly affected by the design of the window frame and its material properties. The window frame and mullion types illustrated above demonstrate the variety of materials and how they accommodate multiple glazing. Also shown is a typical welded glass unit (top left), organic sealed units (top right), a triple-glazed operable unit, and the new quadruple-glazed unit with plastic film (above).

nificantly reduces the ultraviolet light entering the building. Such a glass-and-plastic combination unit, containing two plastic film layers and clear glass, has a projected winter R-value of 3.85. Because it is conceived as a method for improving the insulating characteristics of the window without sacrificing the solar gain potential, it is thought to have its greatest application in residential use. The R-value is approximately the same, but the solar transmission is higher for the film-integrated unit than for a conventional all-glass multiglazed unit.

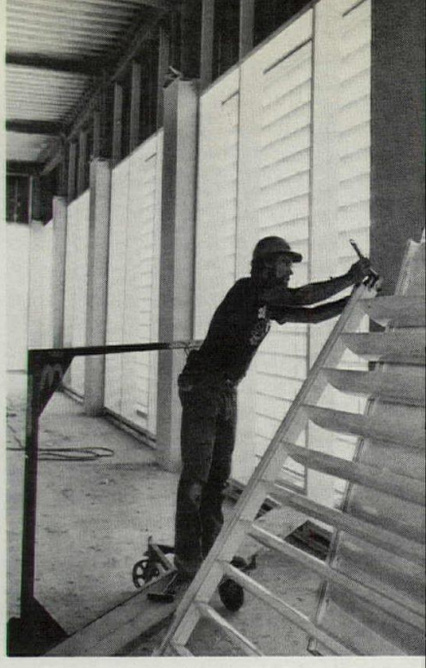
Subdividing the cavity into thinner layers can also be accomplished with integrated operable shades or window blinds. By including the blinds, manufacturers claim closing the blinds can have the effect of increasing the R-value by about 20 percent and reducing nighttime long-wave radiation loss. The incorporation of operable window blinds also allows the occupant to control privacy and the shading coefficient of the window (for summer sun). The strategy minimizes the problem of maintenance for the blinds and also includes the possibility of directing reflected light and heat to the ceiling, floor, or walls of the space. A great variety of options are available. Blinds can be two-colored or covered with a reflective surface. The frame can be wood, plastic, or aluminum. Some products permit raising the blinds; most are in vented, operable window units.

The blinds or shutters used can be quite large in scale. The Hooker Chemical Building (P/A, April 1980, p. 102) when it is completed will be the first building that incorporates shutters within two separate building skins. In winter during the day, light sensors coupled with mechanical and electrical load-measuring devices will optimize the operation of the shutters. At night, shutters will be closed, locking the heat into the building and creating two independent insulating air layers at the building perimeter. In the summer, the closed night shutters will keep the heat out of the cool interior of the building. During the day, the air space will be vented to avoid having the insulating air space overheat in the summer sun.

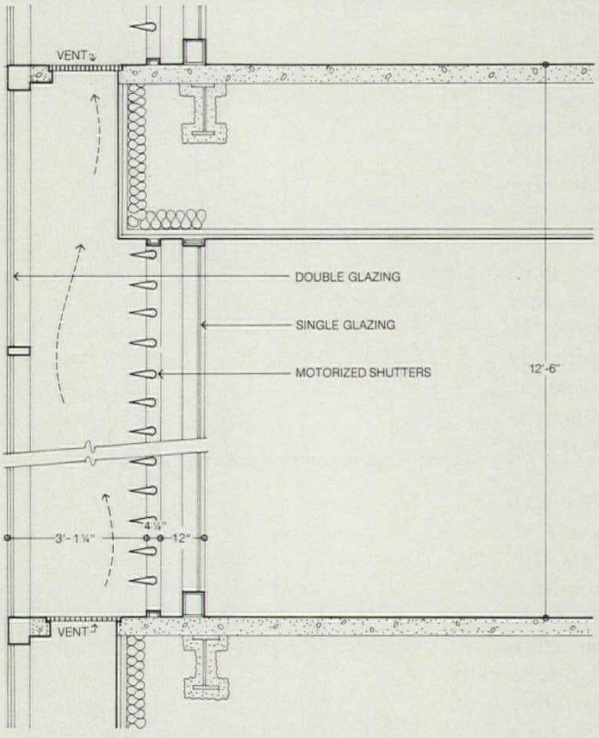
Air flow windows: The concept of moving air between the two lites of glass in an insulating window is not new. In the mid-1950s, Swedish engineer David Sodergren patented a concept that is now generally known as the "air flow" or "exhaust air" window. His concept connected the window frame to the mechanical system and basically uses the space between the glazing as part of a return air duct. By so doing, the need for perimeter heating is eliminated and the temperature of the interior lite of glass drops to the point where the human body in winter is not likely to feel discomfort from it. Window blinds can also be integrated into the window cavity. The system is particularly suited to hospital applications where large air flows are needed and recirculation is not permitted. The window, being researched at the University of Utah, is manufactured in Sweden by Carda Windows. The distributor in the U.S. is A.O. Stillwell Company in Buffalo, NY.

A similar passive system has been under investigation at the Environmental Research Laboratory of the University of Arizona. Two sets of sliding glass doors are installed, and window blinds are suspended in the space between the glass. In winter, the ensemble works as a

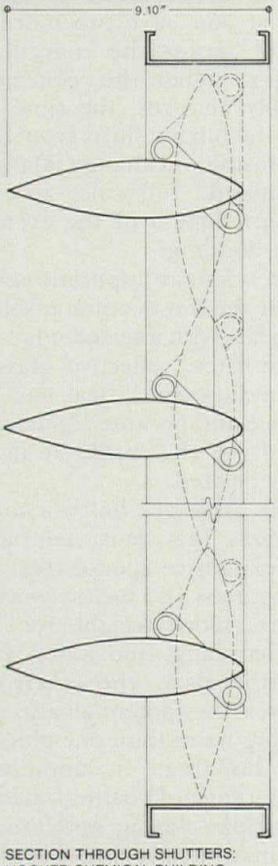




Photos: Patricia Layman Bazelon



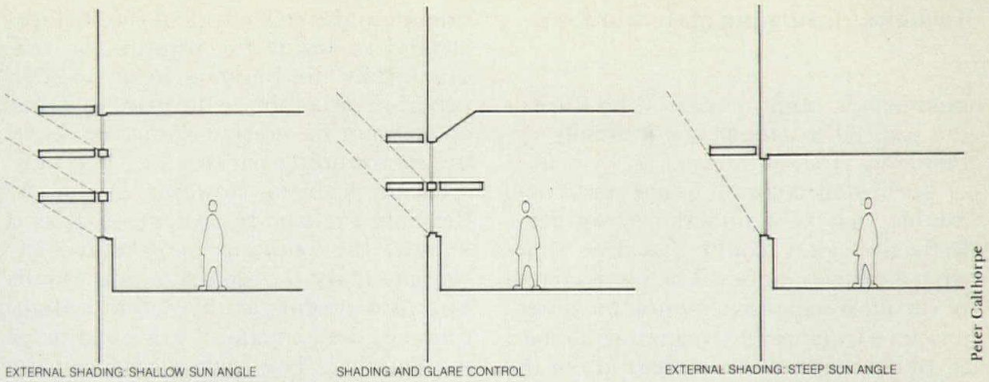
TYPICAL FLOOR SECTION: HOOKER CHEMICAL BUILDING



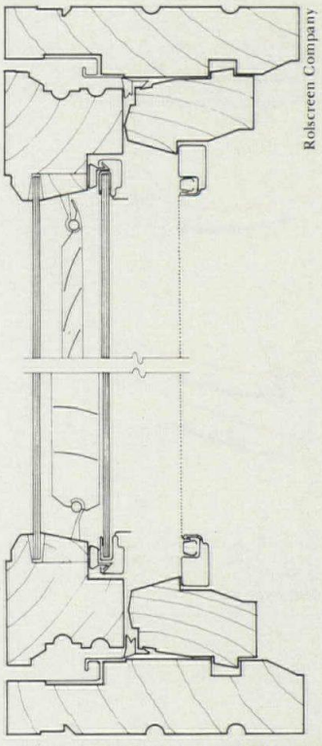
SECTION THROUGH SHUTTERS: HOOKER CHEMICAL BUILDING

The Hooker Chemical Building, Niagara Falls, NY, is shown above under construction with double skin and shutters. The exterior skin is double glazed, and the interior skin is single. The space between the glazing permits room for venting, shutters, and access for maintenance reasons. Although the skin solution is identical on all four sides of the building, architects Cannon Design, Inc., have incorporated an intricate monitoring and control system which will allow each façade to react separately to optimize energy consumption. The shutters are adapted from a standard damper design and span the full module width. They are curved to splay the reflected daylight deeper into the office space.

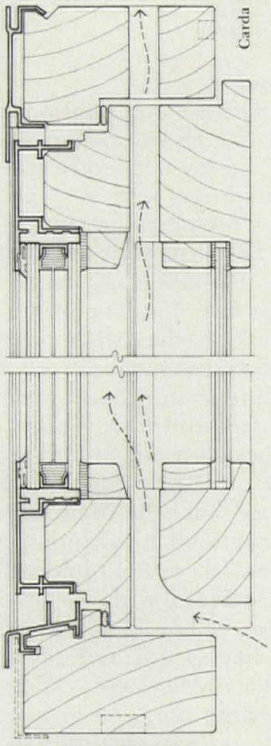
(At right) Controlling heat gain and glare can be accomplished with light shelves. The sun's heat can be excluded in months where it is an energy liability. Daylight can be reflected from the shelf to the ceiling of the space. A higher ceiling can admit more light but needs careful attention to aperture and shading design. The interior shelf can be used as a reflector and a glare barrier as well. (Below) The integrated window blind, exhaust air window, and Beadwall all represent ways to increase multiple glazing performance.



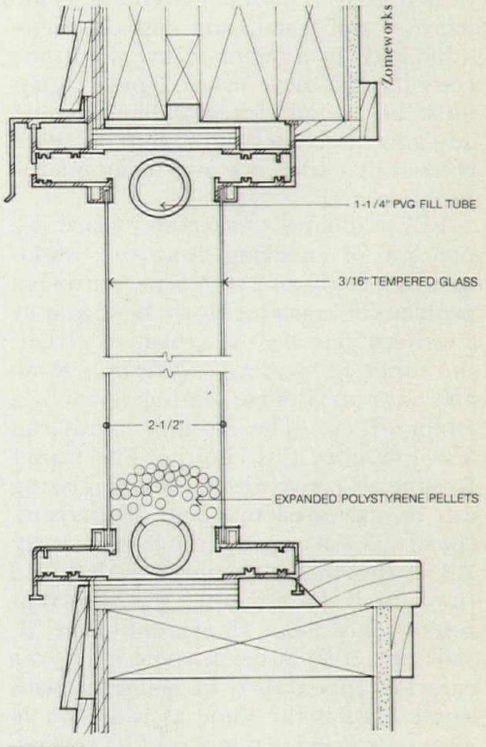
BUILDING DAYLIGHT CONTROL STRATEGIES



OPERABLE WINDOW WITH INTEGRATED BLINDS



THE EXHAUST AIR WINDOW



BEADWALL

solar collector with the interior window ajar; in summer, both doors are ajar at opposite ends of the opening, and overpressurization from evaporative coolers exhausts air through them.

Beadwall: Another option, which has been invented in recent years, has been the possibility of enlarging the air space and filling it on demand with expanded polystyrene beads. The system, called Beadwall, is manufactured and engineered by Zomeworks in Albuquerque. For panels 2½ in. thick, the R-value can vary from 1.5 with the cavity empty to 8 with the volume filled with beads. Tempered glass $^{3}/_{16}$ in. thick is recommended for the application. Says company president Steve Baer: "It's not something we recommend for most commonplace installations. It does solve a helluva lot of problems." Blowers and storage capacity must be provided with the window unit to accommodate the pellets when they are not in use in the window space. The manufacturers of conventional window systems eye Beadwall with considerable skepticism. There is no question, however, that the option of incorporating insulation materials into the cavity is a direction worth pursuing; sliding shutters also may be a possibility.

Heat Mirror: The other major direction for research is more chemical in nature. Coating technology has produced "Heat Mirror" (P/A, April 1981, p. 179), a low emissivity coating, which can be applied to glass directly by the sputtering technique or to plastic film and either adhered to glass or suspended between the glass lites.

All warm bodies radiate to the environment. The hotter the body, the shorter the wavelength. The new coating effectively reflects longwave, low-temperature radiation back into the space from which it comes, improving the effective R-value of the glass assembly. Normal glass absorbs such radiation and passes the heat to the cooler environment. The Heat Mirror also cuts down on UV transmission. For the moment it must be used within the cavity in a hermetically sealed environment. The coating on glass will soon be marketed by Guardian Industries, Carleton, Mi. The film is being produced by Southwall Corporation of Palo Aalto, Ca.

Others: Other chemical developments and innovations are taking place. Low-iron-content glass will permit more solar transmittance. A solar energy transmittance over .91 is now available in low-iron float glass from General Glass, New Rochelle, NY. An experimental glass under consideration is a photochromic glass that will automatically darken in sunlight (like the sunglasses now do). The problem for the moment is that the glass darkens in summer and winter. In Europe, research is underway for improving the efficiency of the air cavity with use of various gases.

How to choose

A description of the available choices is only half of the story. The other half is explaining how to choose. One criterion, of course, is the *appearance* of the glazing strategy. The second is the *performance* from a lighting and ther-

modynamic point of view. The third is the *cost*. All of them are mutually dependent.

The installed cost of tinted glass could double that of monolithic clear glass. Reflective glass could cost five times what a clear unit does. The installed cost of the most expensive monolithic tinted, tempered, and reflective glass could be 5 to 10 times the cost of a clear lite of the same thickness, which is just simple annealed glass. A double-glazed unit could increase the installation cost of monolithic glass by a factor of five, and then costs for the more exotic types of glass must be added. Integral blinds could add another 20 percent to the cost. With costs at that scale, we must examine the problem itself.

LBL's Selkowitz explains, "Glare is a problem of knocking down the brightness by a factor of 2 or 3. Sun control is a problem of knocking down heat gain by a factor of 5 to 10." As explained earlier, the range of shading coefficients available with just double glazing varies by a factor of 10. (The integral blinds can also influence this choice.) The winter R-value of conventional double glazing can be increased by about 70 percent. (Beadwall will improve the R-value to 8). All of this in the perspective that in a curtainwall, for example, the glass represents only about 15 percent of the installation cost. Also, in some cases, the exterior appearance of solutions with single glass is the same as with double glazing, so performance and its cost becomes the prime target.

If the solution is reduced to the point of the opening itself, many glass companies and some window and curtainwall companies believe they have the answer: the computer. Although they do not use the same computer program and all have, for the most part, created their own version, they are all based upon ASHRAE methodolgy and are therefore similar in intent. They entail a simplified description of the building envelope with its construction, occupancy, location, orientation, and most important, the square footage of glass area, lighting choices, and window management option chosen. Such programs are ideal for a curtainwall building of simple geometrical form. The result will be an itemized list including preliminary cost estimates of that glass company's available options, complete with an initial cost estimate and a life cycle approximation of fuel consumption over a 20- or 30-year period.

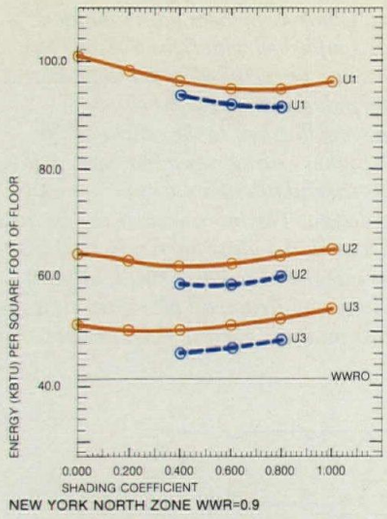
Although extremely valuable for a "rough-cut" analysis, such programs rarely are able to input in detail the actual configuration of the building façade or position of the glass within the façade. They often do not take into consideration the reflectivity of the surfaces around or inside the window, or self-shading by the building. And no such program can evaluate the glare that may or may not be present from the sky or the surrounding parking lot. The most difficult problem, however, is that by the time the square footage of glass is known, the building may be too far along to make the most significant kinds of improvements, namely, the configuration of the plan and the orientation of the building. This is the domain of the architect, and few manufacturers will be able to take the time to do this kind of analysis free of charge.

The design process

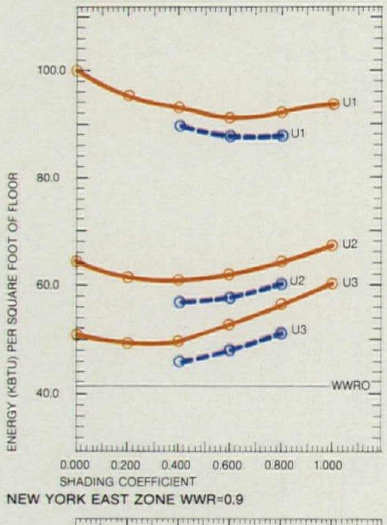
For certain building types and locations, the lighting load can consume well over 50 percent of the energy needed to use the building. Buildings with a high internal load create the desire to rid the building of heat. If the majority of the load is external, the task may mean keeping the cold or heat out. The prime choice becomes, at the earliest stage possible, the kind of surface to volume relationship the building should have, how it should be oriented, and how the site can be used to best advantage. What plan configuration will have the most favorable influence on the building energy performance, and most important, what use demands of the building affect these choices? We all wish the task were simpler. As Selkowitz puts it: "Everyone would like to say, 'O.K. I've got a program for a 100,000-sq-ft office building with a certain site, and in less than a week, how can I narrow down all

(Right) The graphs show the kind of rough cut data a computer can produce early in design. They describe comparative annual zone energy consumption at the perimeter (within 30 ft) of a multistory office building in New York City. Consumption includes heating, cooling, fan motors, and lighting needs (at two watts per sq ft). The perimeter wall is 90 percent glass with no external shading. For daylight utilization, operable interior shading with a shading coefficient of 0.6 is used 80 percent of the time. Visible transmission of the glass is taken as a constant 80 percent; depth of usable daylighting assumed as 15 ft, with 70 percent dimming possible. Daylighting is energy efficient in all orientations. Benefits increase with glass insulation values. Note the decreasing advantage of multiple glazing and the increasing economic influence of window management with more lites of glass.

Legend
No daylight utilization
With daylight utilization
U1: Conventional single glazing
U2: Conventional double glazing
U3: Conventional triple glazing
WWRO: No glazing, R 10 perimeter wall



NEW YORK NORTH ZONE WWR=0.9



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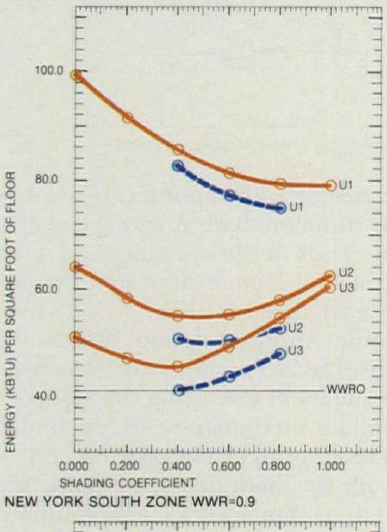

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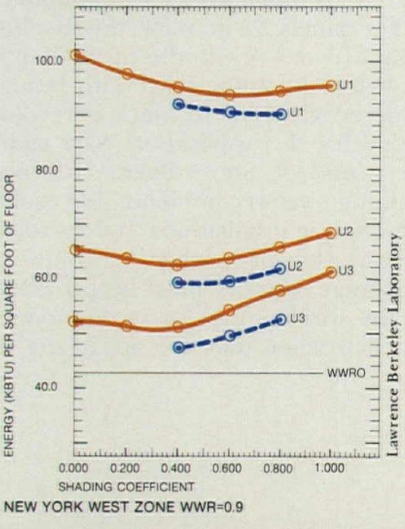
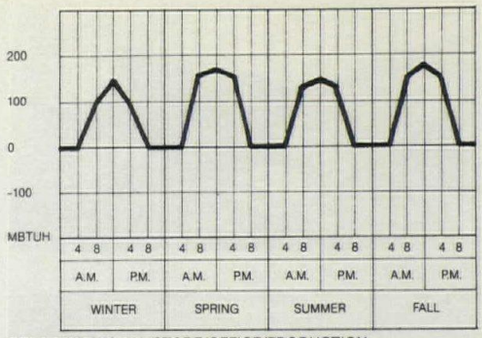


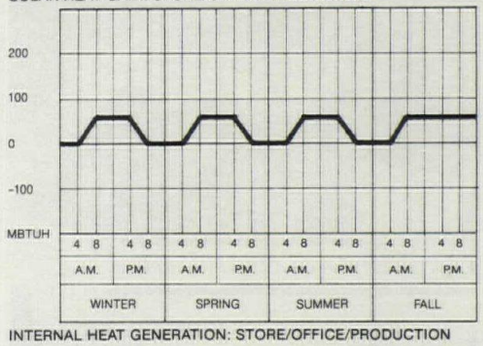
NEW YORK WEST ZONE WWR=0.9

Lawrence Berkeley Laboratory

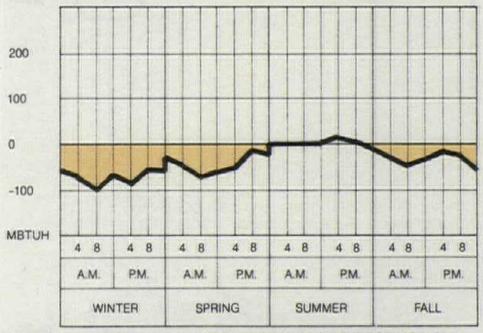
COMPARATIVE ANNUAL ENERGY CONSUMPTION IN PERIMETER ZONES FOR A MULTISTORY OFFICE BUILDING IN NEW YORK CITY



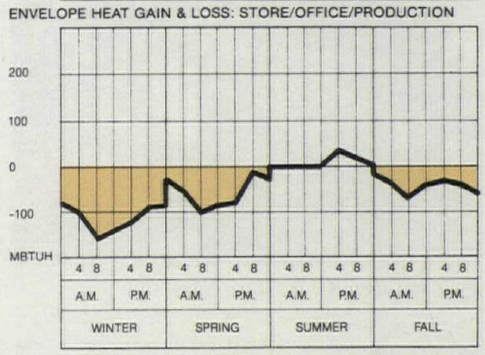
SOLAR HEAT GAIN: STORE/OFFICE/PRODUCTION



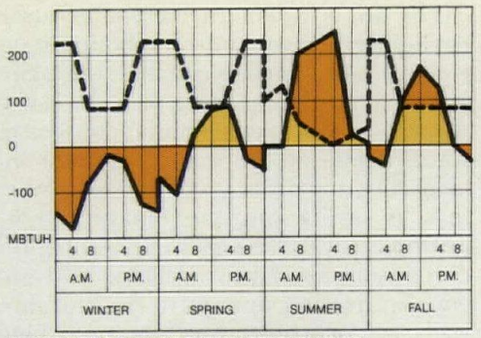
INTERNAL HEAT GENERATION: STORE/OFFICE/PRODUCTION



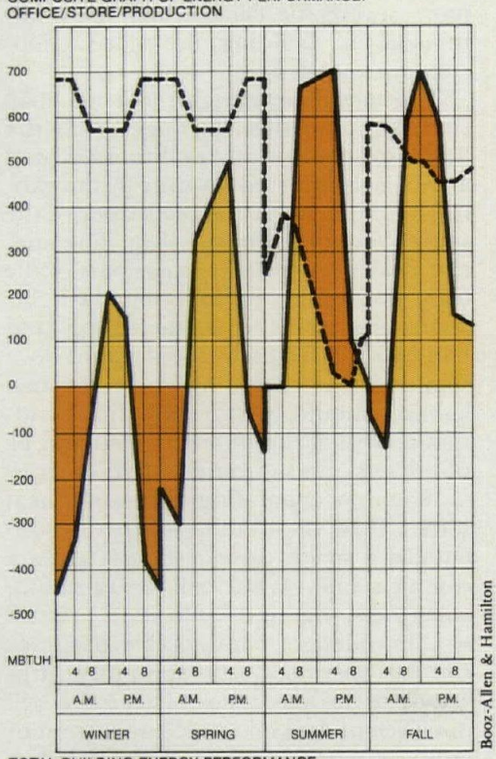
ENVELOPE HEAT GAIN & LOSS: STORE/OFFICE/PRODUCTION



VENTILATION HEAT GAIN AND LOSS OFFICE/STORE/PRODUCTION



COMPOSITE GRAPH OF ENERGY PERFORMANCE: OFFICE/STORE/PRODUCTION



TOTAL BUILDING ENERGY PERFORMANCE (ALL THREE ENERGY USE GROUPS COMBINED)

Booz-Allen & Hamilton

A recent publication entitled Energy Graphics *has been prepared by Booz Allen & Hamilton of Bethesda, Md, for the Department of Energy. Its sole purpose is to explain a computer and manual methodology for making initial planning decisions. By looking at the building program, it is possible to cluster those spaces with similar use schedules, similar ranges of temperature employed, and similar amounts of heat generated. Those functions with such similarities are divided (by* Energy Graphics*) into energy use groups (EUG). A preliminary assumption is made as to the geometrical configuration and the envelope characteristics of these use groups.*

The annual external temperatures involved and the annual insolation that falls on the building surfaces throughout the day are graphed for a typical day in each season. The use-group functions also can be evaluated for their contribution to the interior load on the building. These graphs will affect the geometrical choice of configuration of the use group itself. The annual and daily solar heat gains are then graphed for each energy-use group as are the envelope heat gain and loss, and ventilation gain and loss.

A separate composite graph of the four energy components is made for each energy-use group, and then a single composite graph is constructed for the total building showing its overall energy performance. A clear understanding of this graph will yield a good first cut understanding of the role the different energy components will play in the building design.

The architect is not obliged to follow the course that such information provides. He will, however, at an early stage of the design be able to tell the building owner what energy price a non-energy-based configuration will have.

Although such analysis can be done on a large computer quite rapidly, it is certainly possible, given more time, to obtain such information more simply. The Booz Allen manual explains this procedure in some detail. Only a small calculator is necessary.

of the possibilities. I just want to focus on the few options that I know in the end, when I do the detailed cost analysis, will be the most effective. I don't want to waste time on choices that are simply 10 or 15 times too expensive.' " Such a method does not yet exist.

If the building is large enough to entail energy savings of significant magnitude, the accuracy of the first decisions will probably have a major influence on the nature of the energy contribution the building will make as a whole. In this case, a computer simulation parametric study may be the only way to deal with the problem. (The two studies shown here demonstrate the value of the computer.)

For simpler generic building types, such as office buildings and single-family houses, such analysis may be unnecessary to begin with. Enough experience and understanding of the thermodynamic performance of the building may be known or the use may be so dominant in its effect on the external form that the analysis is only of passing interest, and strategies may be obvious. On the other hand, the interrelationship between the different functions of the building or between the building and its site may be so complex that a continual reference to such information is indispensable.

Whether or not to perform the initial analysis or how much to perform is clearly a judgment call of the architect. Regardless of judgment, the decision has a tremendous effect on the glazing strategy, most significantly on daylighting. If, because of the attractiveness of daylighting, the building form is pushed into a "finger" solution or an atrium (depending on the climate), the question becomes how to maximize the advantage of the daylighting on the cross section of the building. Knowing that the strategy will ultimately have cost ramifications, the other chore is to try to integrate the daylighting strategy into the structural and mechanical decisions, so that all of these aspects can have cost benefits. In other words, to maximize the daylighting, clear glass at least must be considered. Shading from wind, sun, and glare can be very effectively accomplished with either deep insets of glass or external protrusions of the building. Reflective surfaces can be optimized around the window and within the room.

Such decisions are interrelated. The "glare" of the exterior is related to the brightness of the interior. If the interior is all dark surfaces, the view to the exterior through clear glass may be quite undesirable. As Scott Matthews of Van

der Ryn, Calthorpe & Partners points out, "The human eye can accommodate 10 to 1 or even 20 to 1 contrast ratios without discomfort." Matthews continues: "The issue of glare is overplayed. If we use external shading or light-colored blinds to cut out a view of the glare source, if the surfaces in the room are kept light, if you don't face people toward the window, we don't consider glare from clear glass a problem." He further cautions that on a clear day the ground can be the major source of glare.

These decisions are not simple ones, but they are extremely important later when cost values are applied to glazing. Raising floor-to-floor height to accommodate deeper penetration of daylight, adds to the air-conditioned volume of the building. Increasing the perimeter to increase daylighting adds to the building's first cost. It is very rare, when the bidding begins, that the cost estimator can evaluate how much the duct size or equipment size has been reduced if the alternate larger system has never been designed in the first place. The complexity of the initial decision often has overriding considerations of site, functional needs, or client desires, and a direction for the building configuration can be assumed.

Daylight modeling

If daylighting is a considerable goal of the glazing, the architect is faced with another serious problem: how much daylighting will the windows allow, and what about quality? No one expects a large contribution of daylighting much further than 15 or so feet into the building, but how much can be expected at that level? Leaving out dumb luck, there are three significant ways to get the estimated answer. A scale model of the space can be constructed and measurements made to correspond with the finished building. A full-scale mockup can be constructed and actual measurements made throughout the day, year, and change of seasons. (A corollary of this approach is to use a building with similar building section configuration and similar climate and make actual measurements.) The third method is to use some sort of computer model. For large buildings, combinations of these methods are the most likely solution. From both the architect's and owner's point of view, the question is how much the design process will cost and how much it will affect the initial cost and life cycle cost to make it worth the trouble. Sometimes the energy question is reduced to the energy in the body of the architect rather than the building. In any case, a daylighting number must come from somewhere.

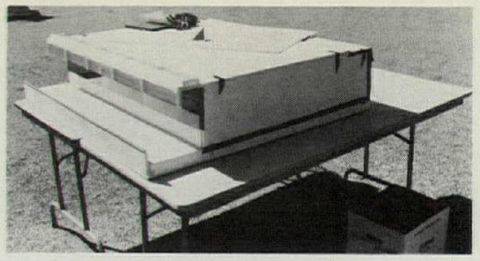
For an architect to include natural daylight effectively into the building, it is most likely necessary that the skin analysis and the building plan development must take place simultaneously. In some cases, an outside consultant is analyzing the skin while the in-house firm is laying out the building. For example, there are a growing number of curtainwall specialists available and an equally growing interest in the curtainwall performance specification. The more severe the climate and the more unusual the building, the more a consultant is needed.

The mechanical engineer is no small contributor to this marriage. Both the lighting and the air-conditioning load are directly affected not only by the glazing solution, but by the occupancy of the space determined by the plan. The interior designer is often a major part of the team as well. The interior daylight-control devices, such as the drapes and blinds, are affected by the daylight decision as is the choice of where the task lighting should be (for an office building) and what the orientation should be of the desks to the various light sources.

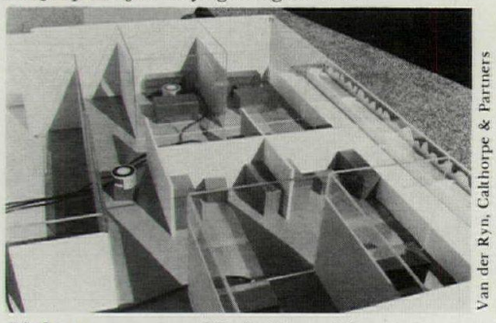
When incorporating the sun's heat rather than or in addition to the sunlight in a space, the question is again a complex one. While air stratification, earth berming, and infiltration are still soft knowledge, considerable accuracy can be obtained with computer programs of various types. There are still insufficient data on site measurement of building performance to be able to tell how accurate energy predictions from a computer will be. For the purposes of analysis of options, however, the computer is proving very effective indeed.

Conserving energy or money?

Even the large sophisticated computer is equipped primarily to estimate annual energy consumption of a building over its lifetime, not the initial cost of the options available. When costs of glazing strategies by themselves are compared directly with energy consumption over the life cycle of the building, the elaborate architectural solution very rarely pays off. That is, for an office building, if the curtainwall in reflective glass is compared with an elaborate façade with interpenetrating shading devices, the curtainwall first cost will most assuredly be cheaper. It is only when the daylight design has been thoroughly integrated into the building and the life-cycle benefits, as well as cost savings in equipment, are considered that these solutions can begin to compete. There are some subtleties pro and con that are impossible to calculate. How often will the lighter wall surface need painting as op-

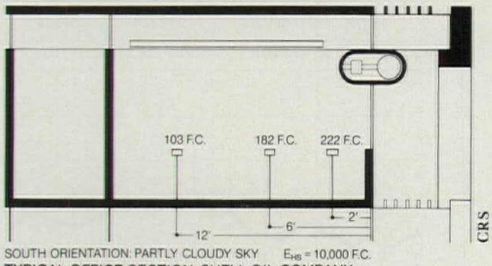


Rooftop test for daylighting model.



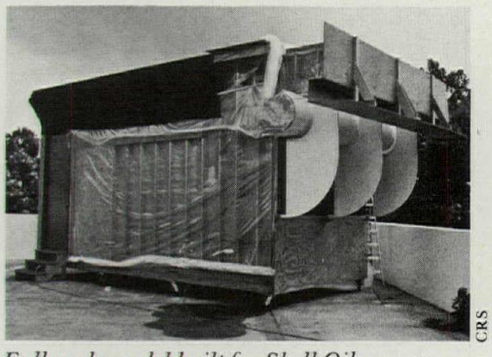
Van der Ryn, Calthorpe & Partners

Light sensors record light in model.



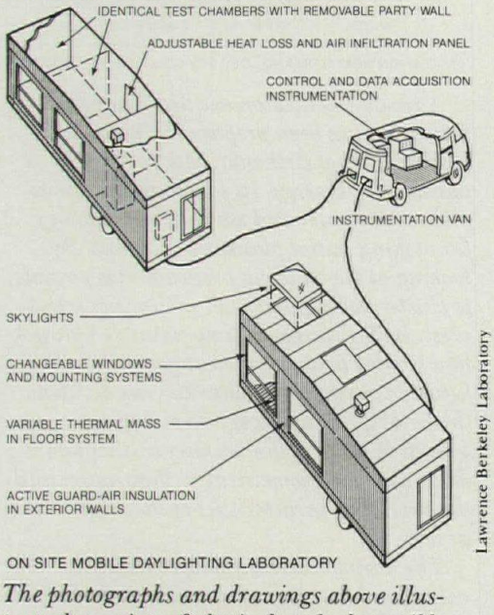
CRS

SOUTH ORIENTATION: PARTLY CLOUDY SKY E_{HS} = 10,000 F.C.
TYPICAL OFFICE SECTION: SHELL OIL COMPANY
WOODCREEK EXPLORATION AND PRODUCTION OFFICE



CRS

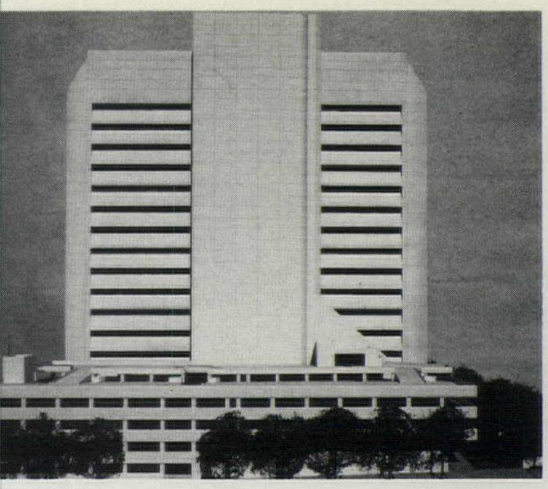
Full-scale model built for Shell Oil.



ON SITE MOBILE DAYLIGHTING LABORATORY

Lawrence Berkeley Laboratory

The photographs and drawings above illustrate the variety of physical methods possible for predicting daylight levels to insert into computer programs for energy analysis. The Shell building is designed by Caudill Rowlett Scott, Inc.



Leo A. Daly / PPG

The Northwestern Bell Corporate Headquarters in Omaha, Ne (above), demonstrates a growing interest in using different kinds of glass on the different façades of a building. Architect Leo A. Daly employs bronze reflective glass in triple-glazed units on the east, south, and west façades and triple units of matching color but higher transmittance on the north side. The shading coefficient of the windows on three sides is estimated at 0.18 while on the north it is 0.38. The U-value of the windows on all sides is very close to being the same (winter nighttime U-value around 0.30). The skylights are also triple glazed and bronze in color but use heat-strengthened laminated glass.

posed to a darker one? How much is saved in maintenance by putting the blinds inside the window?

The problem really starts to get fuzzy when the real world bids on the building. The actual bid may be based upon simple installation costs, or it may involve other overriding needs to procure the particular job by a contractor. The complexity of the solution could quite likely push up the real material or installation costs. In short, the costs actually bid for the work may or may not coordinate with the costs estimated when design decisions are being made.

The other very significant issue is that of the building use. Says Alan Sloan, of Cannon Design Inc., "The biggest problem is that we don't know how a building is used." Unless the building is very accurately monitored and precisely controlled, use is nearly impossible to predict (P/A, April 1980, p. 147). The actual use may negate or supplement the attempt to design a good glazing system. The only real measurement most buildings will ever have is the actual monthly fuel bills, an imprecise standard at best. In energy life-cycle costing, the error is generally on the side of the owner. Terrible building management improves life-cycle performance of an expensive energy option.

When cost is a large issue and accuracy of prediction is also needed, there is often no alternative but to keep glazing strategy simple. The simpler the strategy, the more likely is the performance of the glazing interrelationship with the rest of the building to be predictable. Four simple strategies traditionally fall out of the myriad possibilities.

Forget daylighting: Reduce the area of glass down to that necessary for emergency egress and view, thus minimizing the heat gain and loss through the window. In other words, pretend it is a poorly insulated wall.

Use a curtainwall: Enclose the building with a curtainwall, and control the lighting and air conditioning either with glass type or mechanical equipment.

Window management: Use clear glass and control heat loss, glare, and daylighting with either manually or automatically operable louvers, shades, or drapes.

External shading: Determine how much light and solar heat that enter a building can be completely controlled by using physical protrusions, either fixed or operable, on the exterior of the building. Wind is also controlled, usually simultaneously, as is glare. Clear glass is probably the solution, with multiple glazing the choice.

Selkowitz offers one other solution: "If you are a clever enough designer and you know your systems and materials well enough, you can probably make any dumb design work." In other words, either choose the right optimum strategy from the start, or pick a strategy and make it work for you. The Selkowitz optimism is tempered by a thorough understanding of the physics involved at the level of glass technology as well as laboratory testing and site testing. He is part of the Energy Efficient Window Program of Lawrence Berkeley Laboratory. Research is divided into three categories. The material sciences segment works on the applied physics of glass and plastics. A second group works on optimal ways of combining materials, including component testing and computer modeling. The third group specializes in computer analysis as well as full-scale testing on buildings and test structures.

In spite of the difficulty making generalizations on this subject, Selkowitz is willing to make a few that may provide some guidance in making a glazing choice:

"Tinted glass is, by itself, a good solution for glare control. It is not a good solution for sun control. In commercial buildings, if you go to a very low transmissivity glass for sun control, there is a significant reduction of useful daylight. In the northern part of the country, single glazing is going to pay a penalty both in perimeter heat and comfort. A great percentage of the time in a cold climate, double glazing will be clearly preferable to single, and triple will do better than double. Where the triple is cost effective relative to double is not always clear.

"Without adequate sun control in a commercial building, you are likely to have a severe overheating problem if the windows are any size at all; the corollary is to use either clear glass and shading devices or put the control in the reflective glass. It is possible to design the outer 10 or 15 feet at the perimeter so that you save on the lighting consumption for half or two-thirds of the year. If you do that and pay attention to heating and cooling, you should come out ahead as far as energy goes. You may want enough control of the transmittance to provide some glare control in the glass itself, and for your peak solar control you will probably see an operable shading device.

"Don't look at glazing as a separate component. In order to look at the question, is solar gain useful, you have to look at what the rest of the building is doing behind the glazing. You have to look at the question of glazing optimization in the context of the entire building."

Ten years ago, the windows through which we observed the world were literally different windows. At this rate of technology development, by 1991 we will have still another kind of glass to look through. We are always looking at windows as well as through them.
[Richard Rush]

Acknowledgments
We would like to thank the following architects, researchers, organizations, and manufacturers for sharing their information with us: AAMA; AISI; Airco; Andersen Windowalls; The Anderson Group; Booz-Allen & Hamilton; Cannon Design, Inc.; Capitol Products Corp.; Caradco Corp.; Caudill Rowlett Scott, Inc.; Leo A. Daly; Disco Aluminum Products Co., Inc.; Dynamit Nobel of America, Inc.; The Ehrenkrantz Group; Flat Glass Marketing Association; Ford Glass Division; General Aluminum; Gerkin Company; Globe-Amerada Glass Co.; Graham Architectural Products Corp.; Guardian Industries; Hurd Millwork Co.; Lawrence Berkeley Laboratory, Stephen Selkowitz, Richard Johnson; Libbey-Owens-Ford Co.; Marvin Windows; PPG Industries, Inc.; Rolscreen Company; SIGMA; Southwall Corp.; A.O. Stillwell Co., Inc.; 3M Company; Van der Ryn Calthorpe & Partners, Scott Matthews; Weather Shield Mfg., Inc.; Zomeworks.

For product and literature information related to this article, see p. 286.

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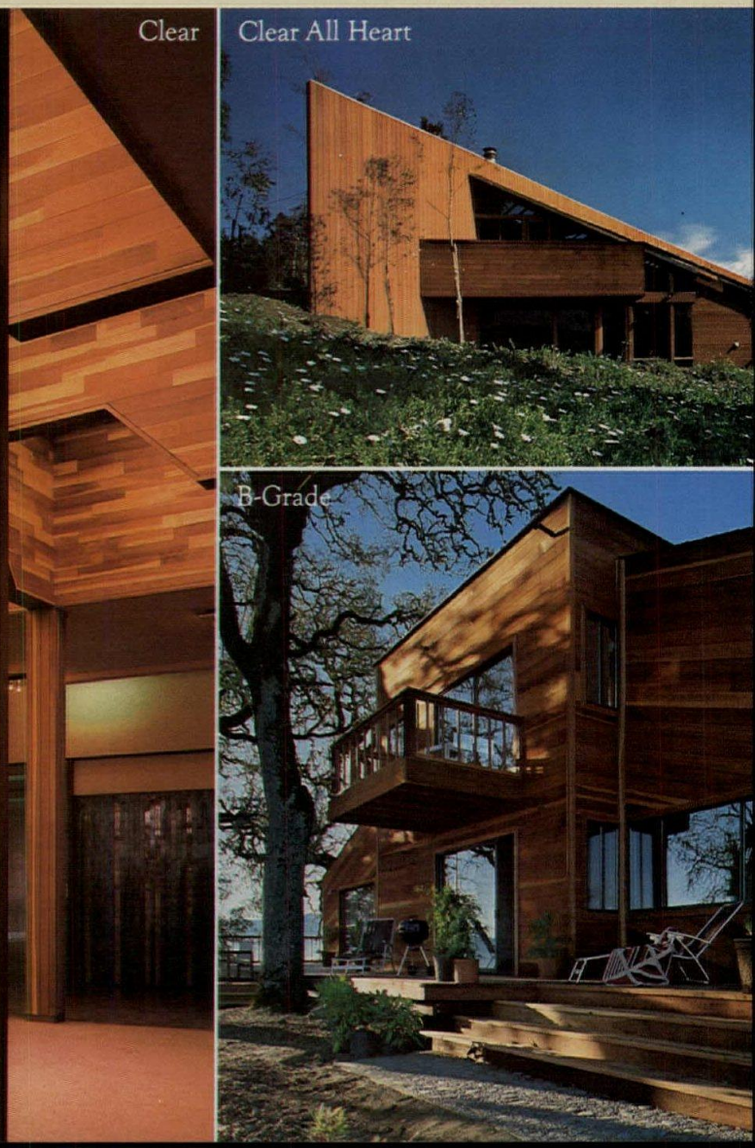



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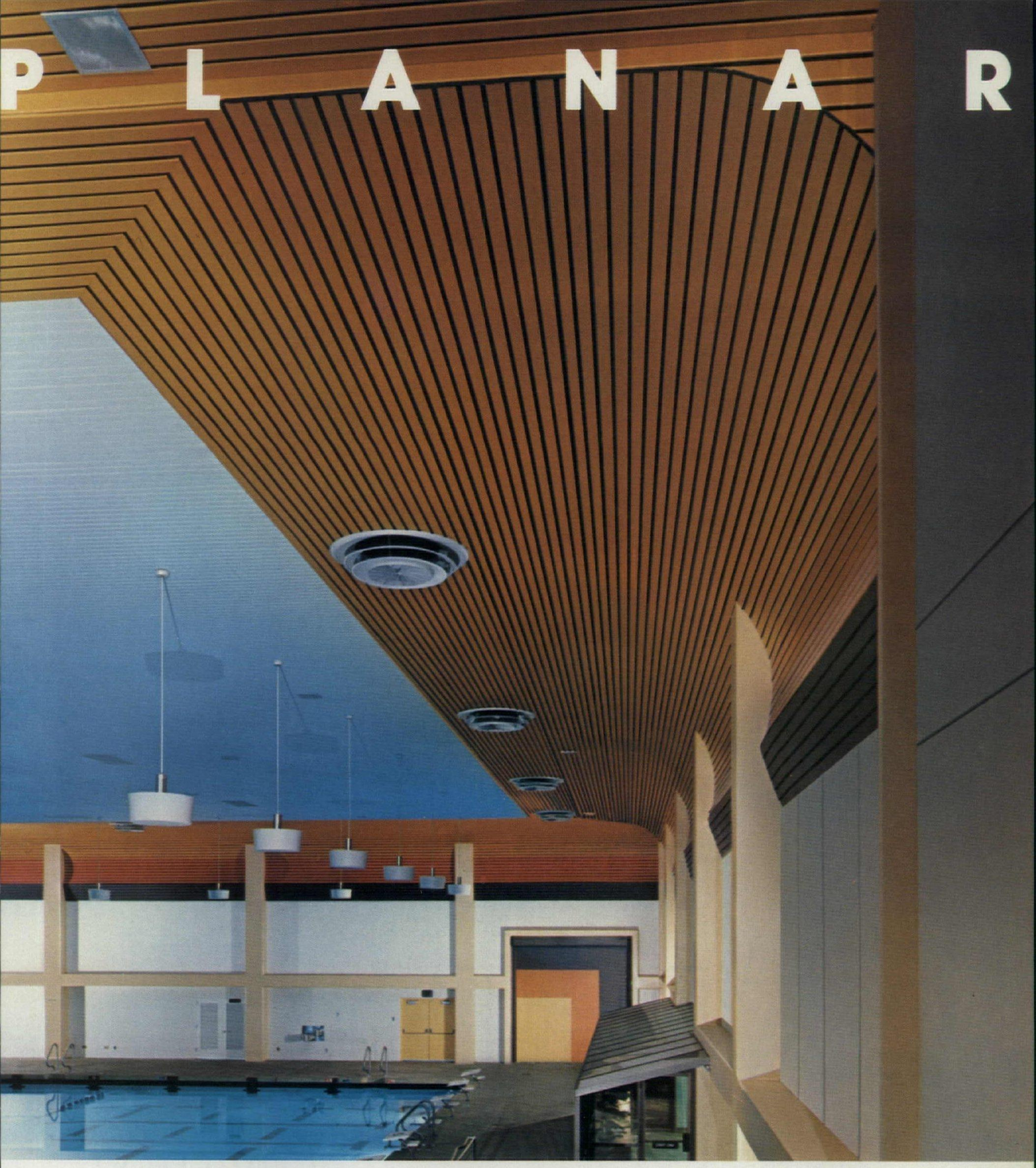

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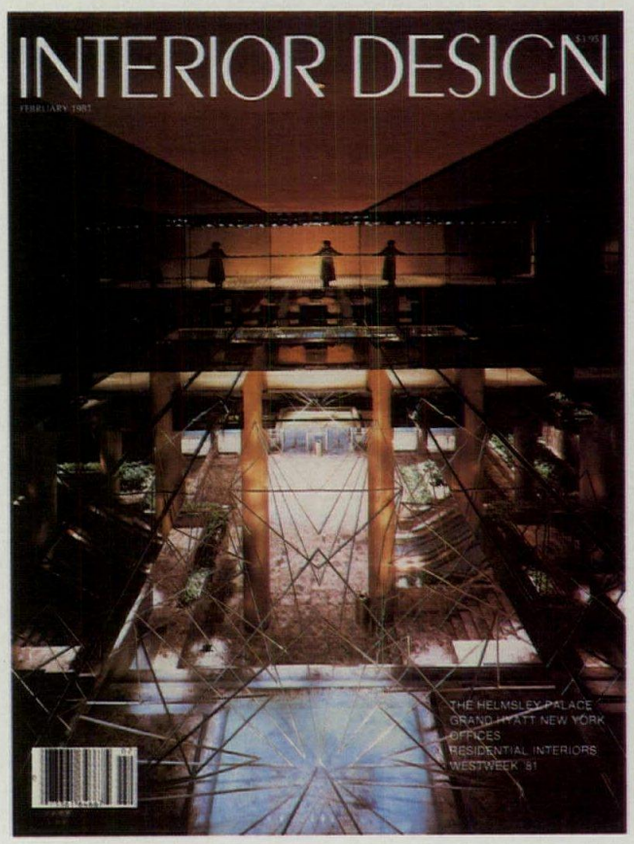

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Validity of minimum multiacre zoning

Norman Coplan

Some courts consider minimum multiacre zoning to be discriminatory, and therefore invalid. Others base their decisions on intent and find instances where it is justified.

Minimum multiacre zoning for residential property use was traditionally subject to attack on the ground that its objective was aesthetic and that such an objective did not constitutionally fall within the "police power" of the municipality. As aesthetic and environmental objectives were gradually recognized and accepted by the courts of the United States as legitimate concerns of the municipality, and the promotion thereof falling within its constitutional power, the attack upon minimum multiacre zoning shifted to other grounds. The claim was and is now made that such zoning is discriminatory and exclusionary, preventing low and middle income families from acquiring a home in a particular area because of the high cost of the minimum acreage required. When the intent of such zoning is established as exclusionary, the offending ordinance will be declared unconstitutional. Some courts have concluded that such zoning *per se* is exclusionary and therefore invalid. Other courts, however, have upheld minimum multiacre zoning, even if its effect is exclusionary, if that was not its intent and its objective was otherwise valid (e.g., *Kurzius, Inc.* v. *Incorporated Village of Upper Brookville,* 434 N.Y.S. 2d 180).

In the above-cited case, the Court considered the validity of a village ordinance that created, in certain areas of the village, minimum lot requirements of five acres. This ordinance was adopted following the adoption by the village of a comprehensive master plan. The plaintiff, who was challenging the ordinance, had purchased a 60-acre tract and was desirous of developing the same in less than five-acre plots. The property purchased by the plaintiff was located in an area characterized by estate-type development and generally bounded by properties developed on a large-lot basis.

The Court pointed out that under the Village Law, zoning regulations must be made in accordance with a comprehensive plan and only for the promotion of the health, safety, or general welfare of the village. If, stated the Court, an ordinance was enacted for an exclusionary purpose or ignores regional needs and has an unjustifiably exclusionary effect, it will be invalidated on both constitutional and statutory grounds. The Court indicated that since there was an absence of proof of any exclusionary purpose and a further absence of proof as to any disregard of regional needs, the issue to be determined was whether five-acre minimum zoning was exclusionary *per se.*

The Court described the indicia by which the validity of the statute should be measured, stating:

"Upon parties who attack an ordinance . . . rests the burden of showing that the regulation assailed is not justified under the police power of the state by any reasonable interpretation of the facts. 'If the validity of the legislative classification for zoning purposes be fairly debatable, the legislative judgment must be allowed to control.'

"The zoning power, when properly used, is an effective means to promote the public welfare. Large-lot zoning has also been used to achieve this end, and minimum acre lot restrictions have been upheld on several occasions for varying reasons . . . including, most recently, the preservation of open-space land and the protection of a municipality's residents from the ill effects of urbanization. . . . We realize, of course, that large-lot zoning may also be used as a means to exclude persons of low or moderate income; and as we have stated before, we will not countenance community efforts at exclusion under any guise. . . . The tests for determining when large-lot zoning has been used in an impermissible manner are suggested by . . . our concern for balanced and integrated communities, as well as our concern that regional needs be met. . . . First, the local board is required to provide a properly balanced and well-ordered plan for the community. Secondly, in enacting the zoning ordinance, consideration must be given to regional needs and requirements. . . . It required a 'balancing of the local desire to maintain the status quo *within the community and the greater public interest that regional needs be met.' "*

The Court concluded that the plaintiff had failed to show any improper purpose in the adoption of the zoning ordinance, but rather the record indicated that the purpose of the ordinance was to preserve the open-space areas of the village, which, ruled the Court, is a legitimate goal of multiacre zoning. Further, the Court concluded that the plaintiff had not demonstrated either that the ordinance was not enacted in accordance with a comprehensive master plan or that regional needs were ignored in formulating the ordinance. The Court said:

"There was no proof that persons of low or moderate incomes were foreclosed from housing in the general region because of an unavailability of properly zoned land. In fact, there was no showing of need in the village for lots of less than five acres. . . . We recognize that area zoning of this nature might in some circumstances not here present tend to prevent some individuals from making use of zoned land, just as any zoning ordinance tends to prevent certain other desired uses. Therefore, in order to withstand a claim of the potential for an exclusionary effect, these ordinances must be motivated by a proper purpose. The contrary has not here been demonstrated."

In its decision, the Court recognized that some courts have found multiacre zoning to be *per se* exclusionary and thus invalid. It found this principle unacceptable, however, in view of what it perceived to be the legitimate purpose of such zoning, pointing out that the United States Supreme Court had noted that "a quiet place where yards are wide, people few, and motor vehicles restricted are legitimate guidelines in a land-use project addressed to family needs." □



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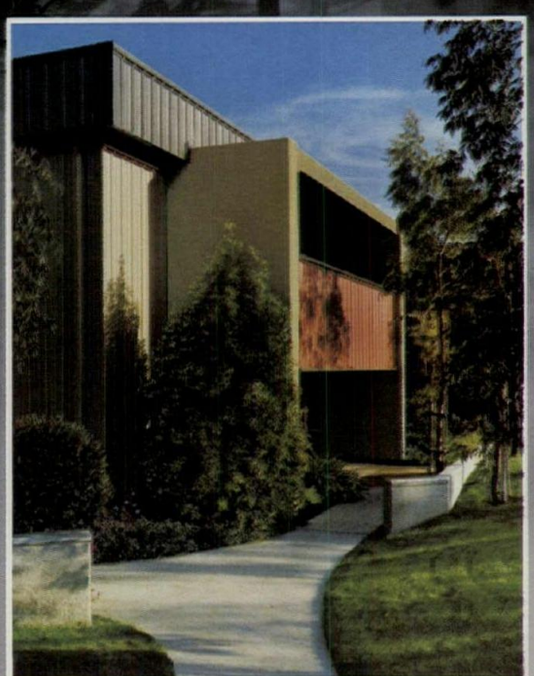

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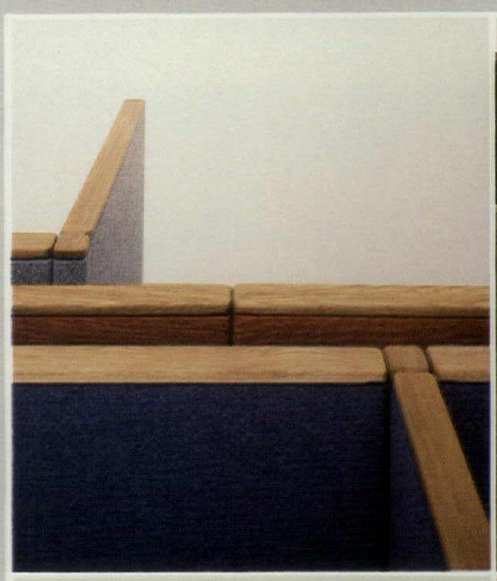

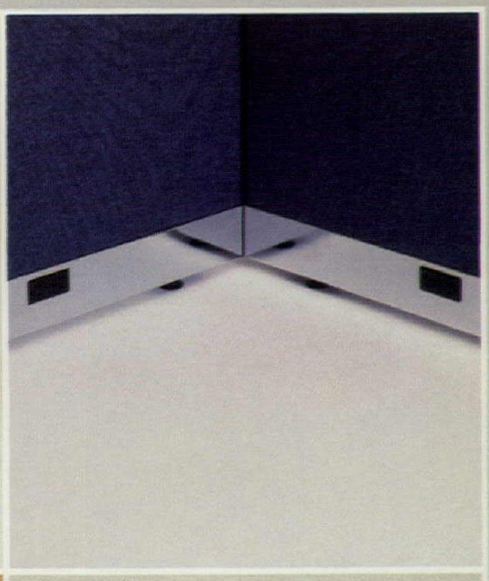

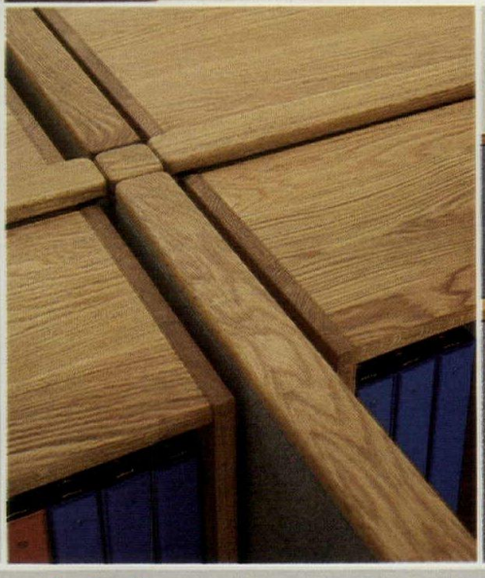
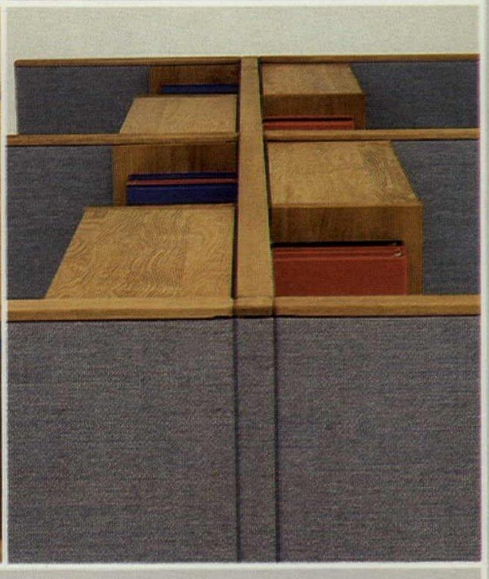

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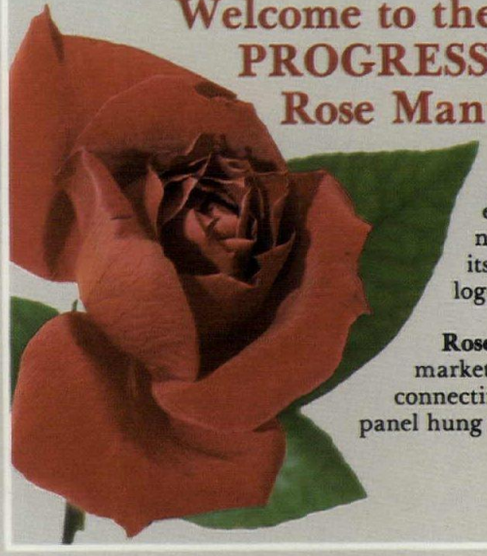

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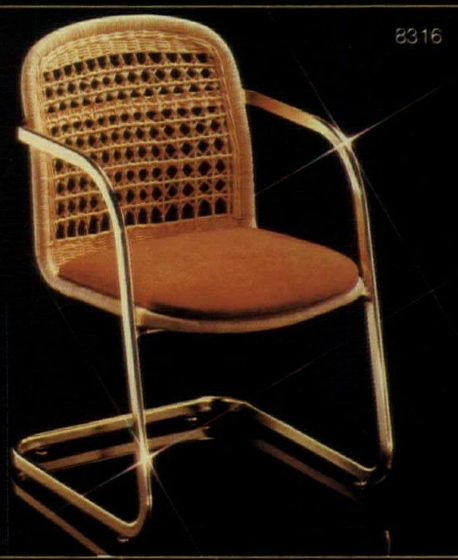





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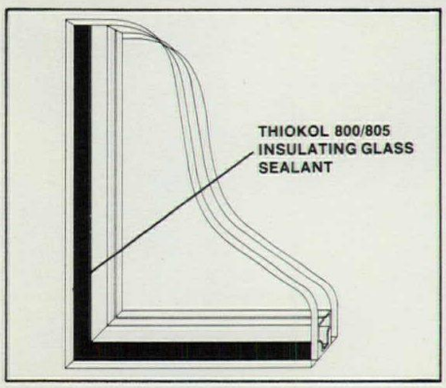

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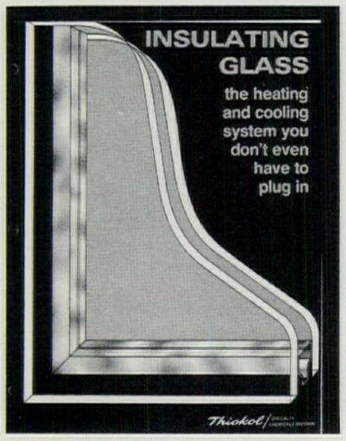
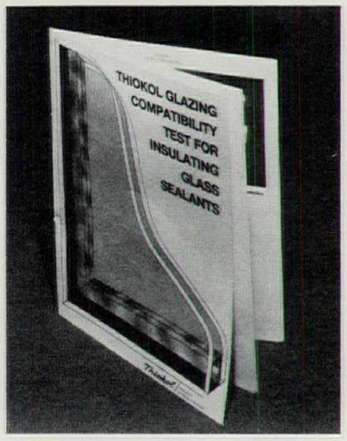
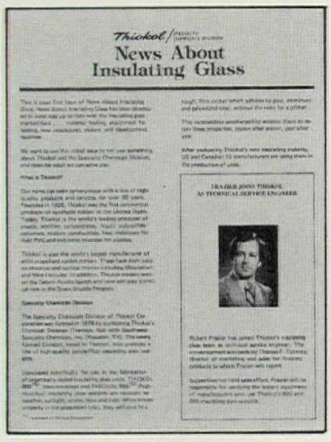


Attractive brochure describes insulating glass including Thiokol 800 and 805 insulating glass sealants.



Description of Thiokol test method for determining the compatibility of insulating glass edge sealants with standard glazing compounds.



Four page insulating glass newsletter for architects. Provides information on test methods, sealant test, new procedures, etc.

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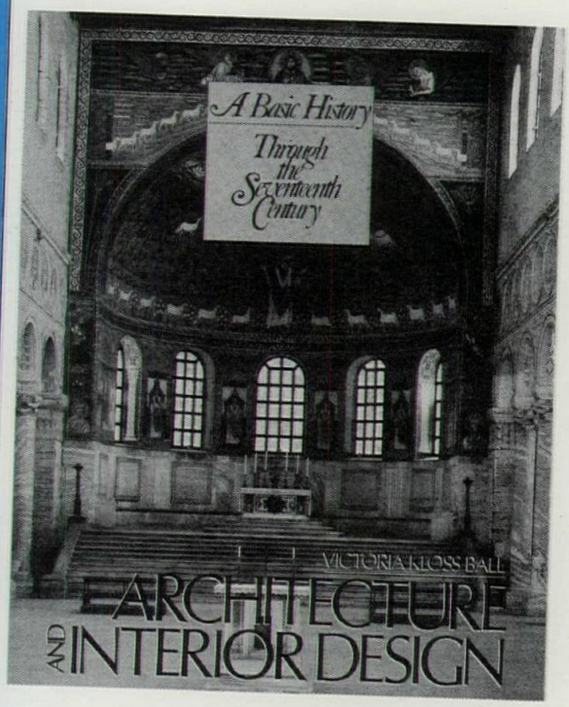
Inside architecture

Books



Architecture and Interior Design: A Basic History Through the Seventeenth Century, *448 pp., illus.;* **Europe & America From the Colonial Era to Today,** *442 pp., illus.; by Victoria Kloss Ball. New York, John Wiley & Sons, 1980. $45 per volume, $80 per set, cloth; $27.50 per volume, $50 per set, paper.*

Reviewed by Reed Benhamou, Assistant Professor, Department of Creative Arts, Purdue University.

The traditional approach to the history of interior design and architecture has been to treat each independently. Occasionally, an architectural critic or historian has expanded the literature by studying both the exterior and the interior of a structure; but there has not been a general survey of these two aspects of architecture in combination.

With the two volumes of *Architecture and Interior Design,* Professor Ball undertakes to relate the two areas. The work has received immediate and enthusiastic acceptance by interior design educators, who have long believed that such a text is desirable. Their desire is understandable, but their enthusiasm is misplaced.

The literature on interior design and architecture is now so extensive, and the documentation so complete, that new presentations can rarely be distinguished by content alone. Approach, organization, and manner become important adjuncts to the information. These elements are of particular importance for historical overviews which by their nature cannot specialize by period and must appeal to a largely naïve readership. Professor Ball's survey is disappointing by these standards. Her promise of an integrated approach is only partially kept; her organization confuses as often as it enlightens; and her manner of writing provokes the editorially squeamish.

The tone of Professor Ball's presentation can be most charitably described as uneven. She ranges from the colloquial ("their real fun quality," "the class name for") to the

[*Books continued on page 264*]

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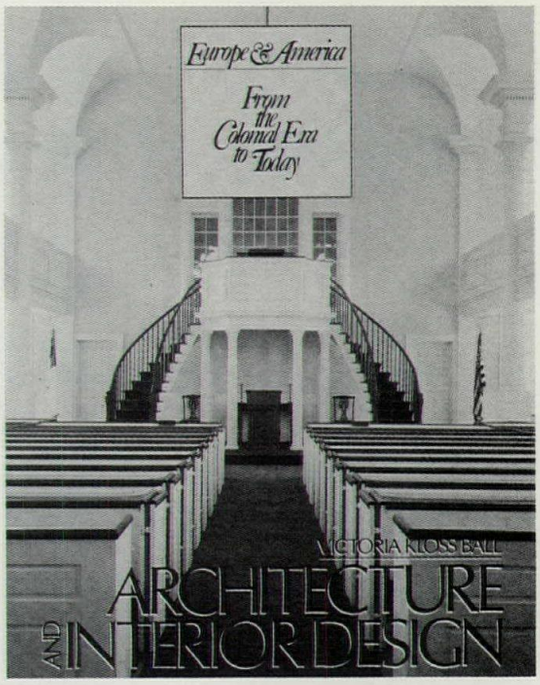
Books continued from page 260



archaic ("devious are the ways," "a-building for another century"). She mixes metaphors ("the new kernel within the old matrix") and misuses terminology ("an escape psychosis"). She is sometimes arch ("Incidentally, Queen Elizabeth played the virginal"); and frequently melodramatic ("Louis XV did indeed forget to tend his garden at a time when the soil was heavy with weeds and thorns. The result . . . was terrifying, and many parasitic and beautiful orchids were doomed in the process").

She has a tendency to read more into structure than it deserves ("this suave curve was favored in Egypt and may be indicative of a national tranquil disposition"); and to strain for prototypes (from a Cretan throne "just a little sharpening of contours, breaking of cymas, and cant to the back, and the France of Versailles is upon us").

She commits occasional errors, none serious of itself but disturbing as an indication of scholarship. In saying, "In 1738 he [Papillon] wrote the article on *papier peint* for the encyclopedia edited by Didero [*sic*] and d'Alembert," she misstates the date and the name of the article. She also does a disservice to Papillon in crediting him with the development of wallpaper, since his article makes it clear that he had nothing but contempt for the process.

Her descriptions are filtered through a Bauhausian aesthetic, which imbues them with inadvertent arrogance. She describes Mesopotamian metalwork as a process in which "precious metals were often combined with other materials, sometimes running the danger of appearing gauche to modern taste"; and she scolds Renaissance artists: "There is considerable question about the aesthetic propriety of painting an approximation of an easel picture on such utilitarian clay objects." She reproaches the "odd condonance of faking that all Baroque people seem to have tolerated"; but pardons the 19th Century: "That its forms were often mere surface artificiality . . . we can now acknowledge and forgive."

There is no glossary. Terms are well defined in the text, but the definition is impossible to relocate.

One of the organizational liabilities of Professor Ball's text is that the wealth of information is more often presented by century than by period. Chronology and style are nearly synonymous until about 1700, but after this time, styles are concurrent and ephemeral. Real confusion begins with the chapter on 18th-Century France (three styles, 70 years), reaches a pinnacle in the chapter on the 19th Century (seven styles, four countries), and then recedes with the abbreviated 20th Century (the two decades since 1960 are not considered).

[*Books continued on page 267*]



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Books continued from page 264

The weakness of the final chapter, which ought to be the culmination of the work, may be related to Professor Ball's ambition. An author who presents the history of architecture, interior design, furnishings, glass, ceramics, textiles, metals, and wall treatment from the paleolithic to the present is bound by the nature of the task to treat at least some of the topics superficially. And since Professor Ball's ordering is vertical rather than horizontal, the reader must progress through each century several times, once for each of the many topics. This becomes especially tedious in the chapter on 18th-Century France—everything, including the various categories of furnishings, is provided a separate genealogy.

Categorizing the information has the further effect of negating the author's prefatory promise "to refute the seemingly prevalent idea that architecture and interior design are autonomous arts." The implication—reinforced by the title's conjunction—is that architecture and interior design will be discussed as complementary manifestations. Granted, this is a complex task; but it could have been accomplished by analyzing structural and nonstructural elements to demonstrate how they contribute to a total stylistic environment. Instead, architecture and interior design are discussed separately—although related by location within a chapter.

The attention given the decorative arts—a third of the text—raises a question about Professor Ball's concept of interior design. She herself says that "the unique business of interior design is to implement architecture by qualifying the spaces for occupancy in the manner intended by a preordained program." The definition is meaningless for most historical interiors since the "programs" were not recorded for posterity. This point aside, even advocates of the decorative arts can question how the surfeit of general information contributes to the author's expressed purpose. Readers would be better served by learning how these arts were used to implement architecture and qualify spaces.

The architectural history that forms the backbone of the text is provided through descriptions of famous structures, from which Professor Ball generalizes about the period. Readers unfamiliar with the various buildings may be confused by her tendency to ricochet between the general and the specific. Also, the thoroughness of the descriptions varies considerably. (The Petit Trianon receives several pages, the Baths of Caracalla get a sentence, and the Palazzo Pitti is included in a list of "some Italian Renaissance houses.") Floor plans and interior surfaces, presented separately, do not always relate to the analyzed structures, further weakening the promised symbiosis.

Architecture and Interior Design is being offered as a text for interior design history classes. As an educator in this area, Professor Ball should be familiar with the confusion which this topic generates in undergraduates. Offering a confusing text to those unable to distinguish baroque from rococo or Roman from Greek is counterproductive. Nor would the work seem eminently useful to others in its potential audience—architects, designers, scenographers, and planners. All would be better served by reading Banister Fletcher's *History of Architecture* in conjunction with Sherrill Whiton's *Interior Design and Decoration,* and drawing their own conclusions about the relationship of exterior to interior.

That the libraries contain so many overviews of architecture and interior design history does not mean that there are no contributions yet to be made in this area. Most histories would benefit from consideration of socio-architectural questions (such as the reciprocal effects of social convention, spatial form, and furniture layout; or the relationship of form to culture and social change). They could draw attention to the longevity of many styles and forms, such as the constantly recurring klismos, and analyze the factors that encourage this reappearance. They could give overdue attention to the commercial styles of this century, which constitute "design" for much of the population both here and abroad. They could analyze the impact of social class upon stylistic choice from a historical point of view. And they could, as Professor Ball tried to do, integrate interior design and architecture. Had she succeeded, her text would have been a welcome addition to the literature. □

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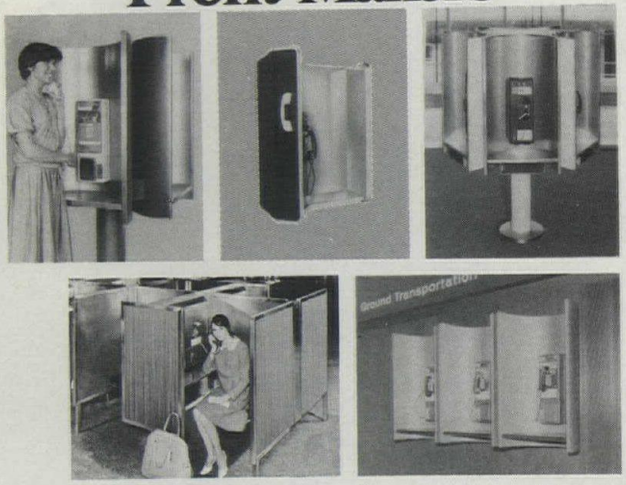

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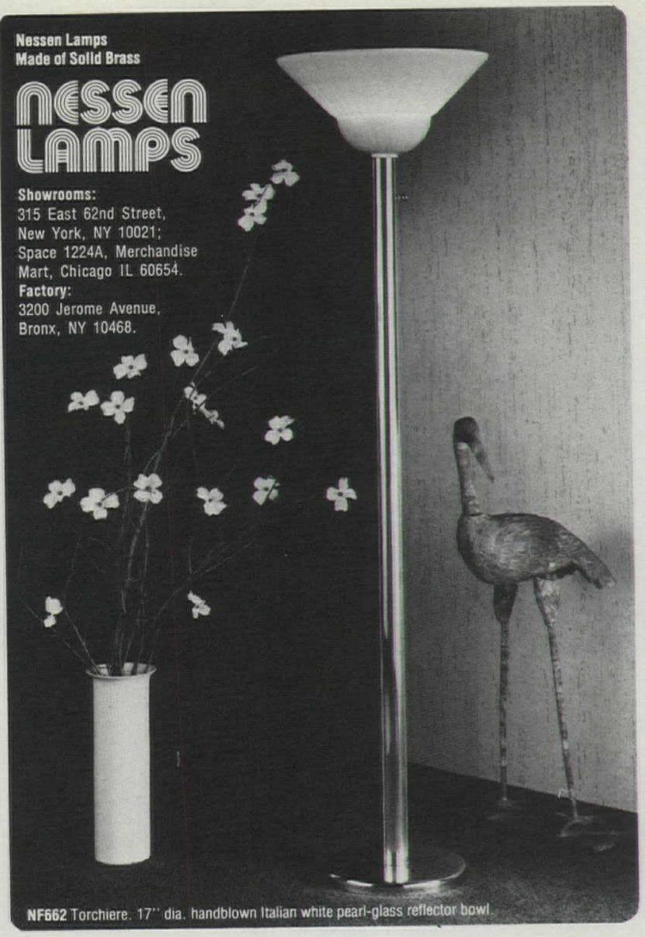

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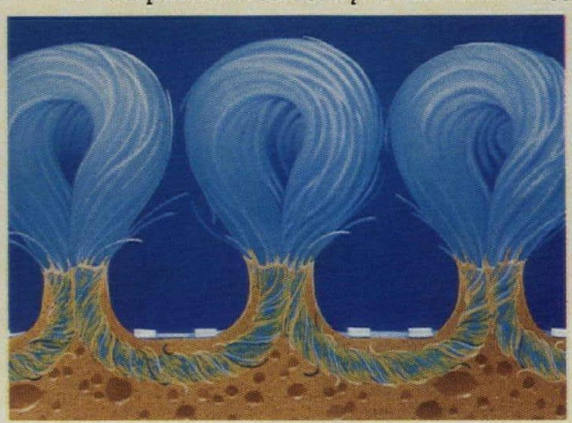

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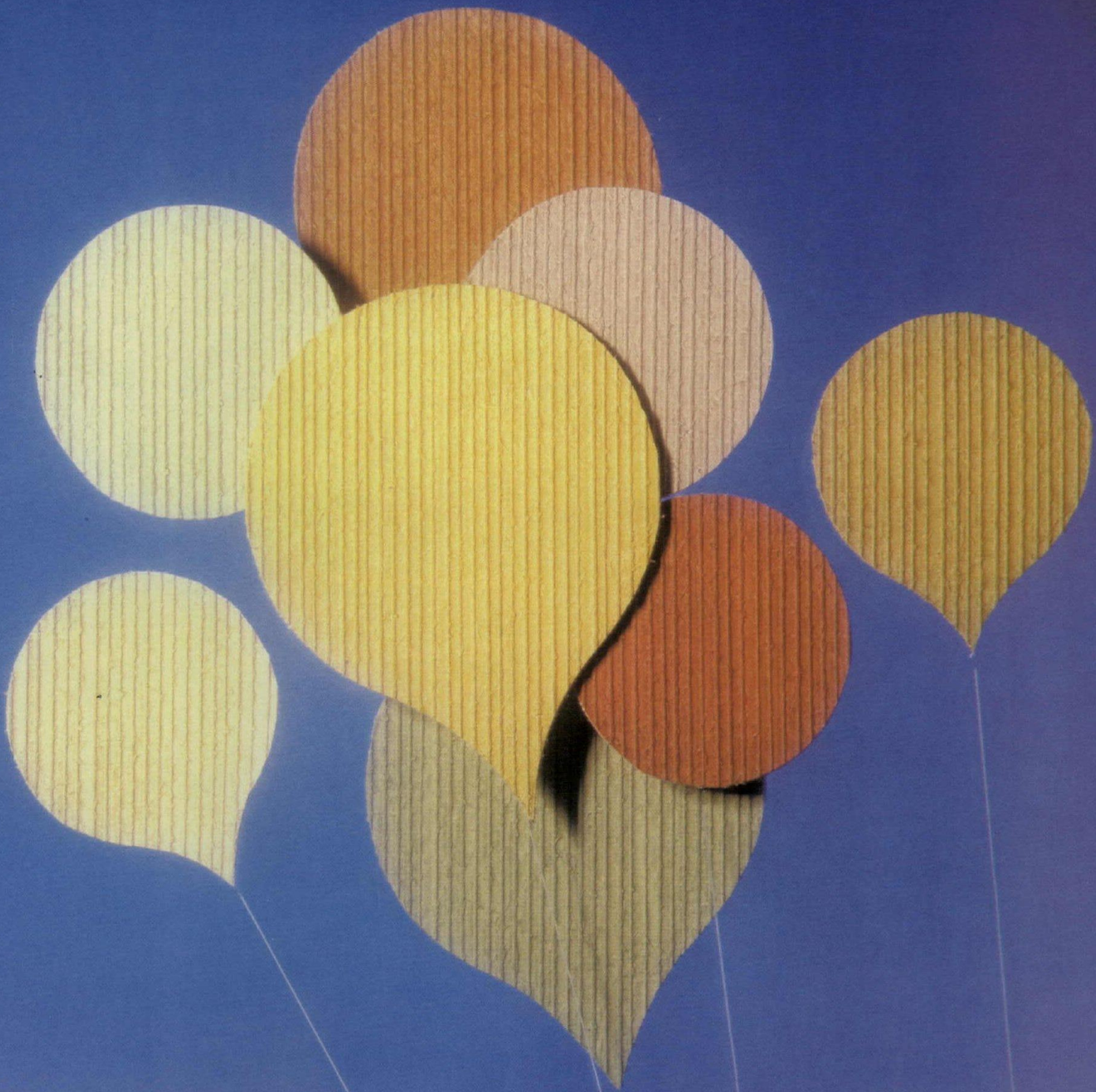

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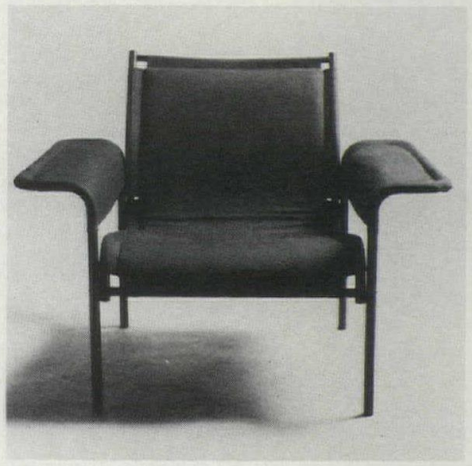
Products and literature

The following items are related to the general theme of this issue, interiors. They are grouped here for the convenience of the reader.

Interiors products

Uni-Stool™ is available in 13 styles with colorful enamel or polished chrome finishes, bright upholstery fabrics. In both high and low versions (some with adjustable height), the stools are offered with firm or upholstered seats, footrests, and some with backrests. InterRoyal Corp.
Circle 135 on reader service card



The Plymo chair, from Sweden, has a removable padded canvas sling stretched over a tubular steel frame. Designed by Bror Boijie, it comes in high-back or low-back versions, with or without casters. Frames are finished in orange, red, or green epoxy, matched to the colors of covers, which have been treated for water and stain resistance. A + B America.
Circle 136 on reader service card

Moulage seating, designed by Robin Jacobsen, consists of an armless unit, a corner unit, and an ottoman for flexibility of arrangement. Down-filled cushions and bolsters provide seating comfort. Karl Mann Chicago.
Circle 137 on reader service card

The Corporate Collection of office furniture is made up of two groups: Executive Series and Management Series. Desks, credenzas, files, and conference table are made of solid oak, with drawer fronts having recessed side pulls. Chairs to suit various office needs have solid oak frames, padded seats and backs. Fully upholstered and wood-framed lounge pieces are included in the collection. Adden Furniture.
Circle 138 on reader service card



Liisberg chairs, designed by Henrik Liisberg, include arm and armless ganging chairs, arm and armless stacking chairs. The shell is contoured to provide comfort and is hand-upholstered over foam cushioning. Frames are of laminated oak hardwoods. Executive Office Concepts.
Circle 139 on reader service card

HUG dining group wicker collection, with matching wicker table pedestal, was designed for the contract market by Michael Wolk. The group also includes lounge, two- and three-seat units, couches, and modular pieces. Cushions are custom fitted. Systema, Inc.
Circle 140 on reader service card

The BioStool, available in two heights, with or without arms, is suitable for drafting table work. It has a dual axis back that both pivots and rotates, while providing lower back support, and is equipped with a foot ring. Upholstery fabric choices for seat and back include wool, nylon, and polyester. American Seating Co.
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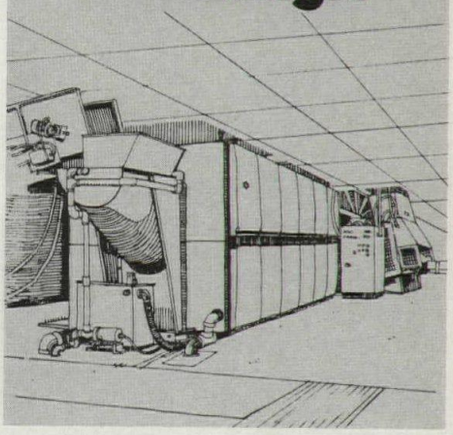
Single-pedestal conference table, by Paul Mayen, has a ½-in.-thick clear glass
[*Products continued on page 279*]

Whose high volume, automated washing system installs under 10' ceilings?



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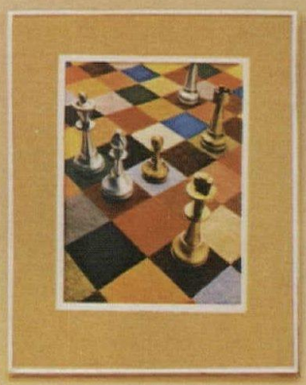
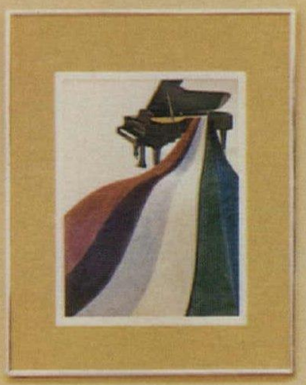
Stage shelter at the University of Miami, Florida
Architect: Todd Jonas, AIA
Photo: © Steven Brooke







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Products continued from page 275

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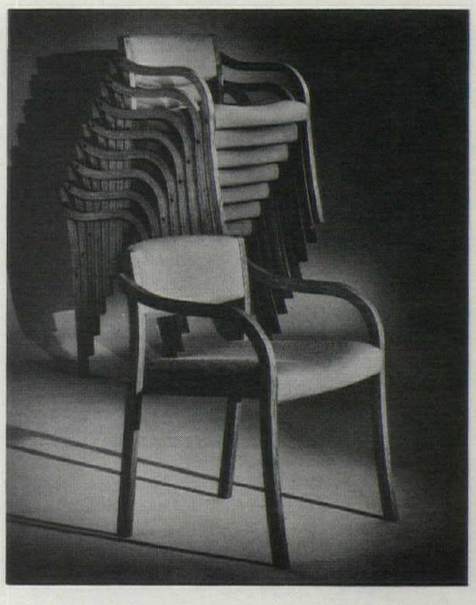

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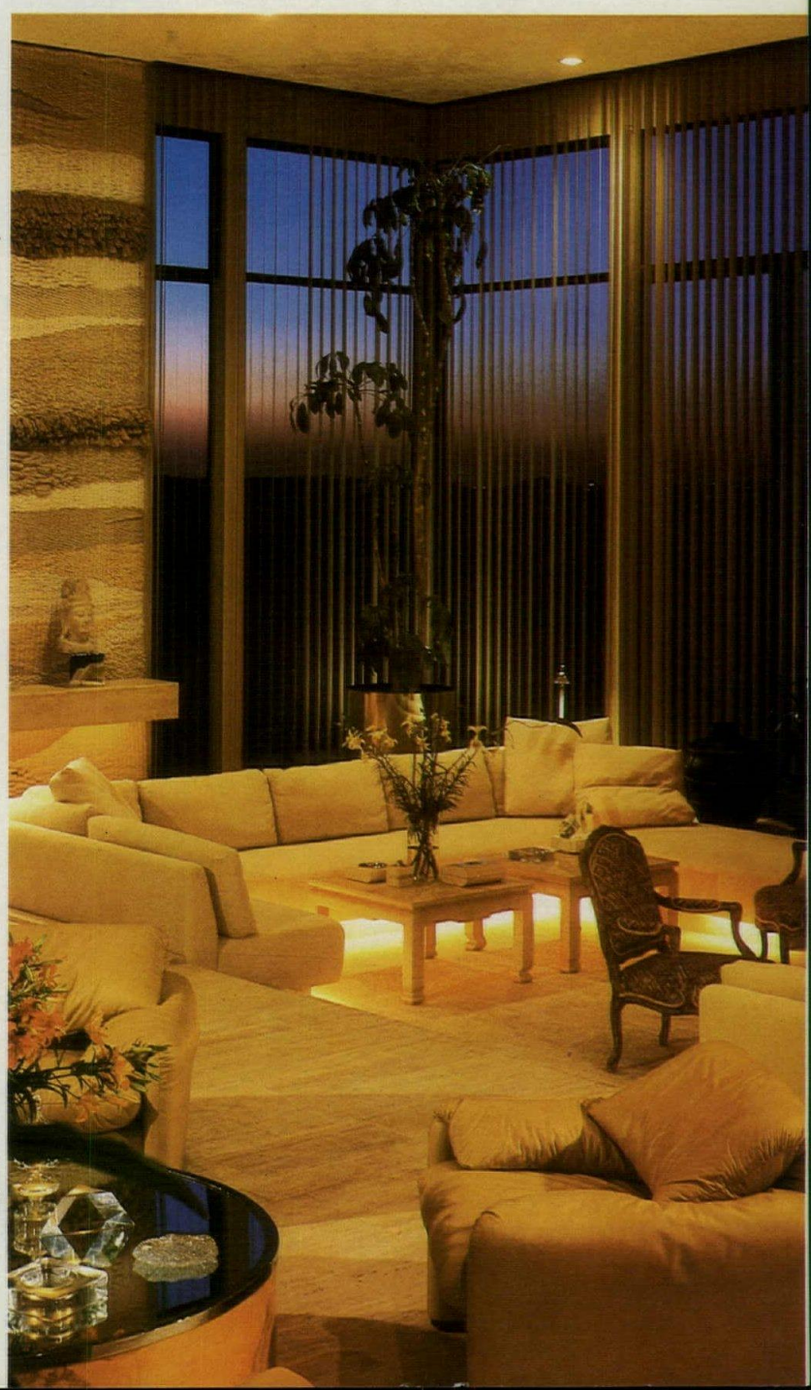

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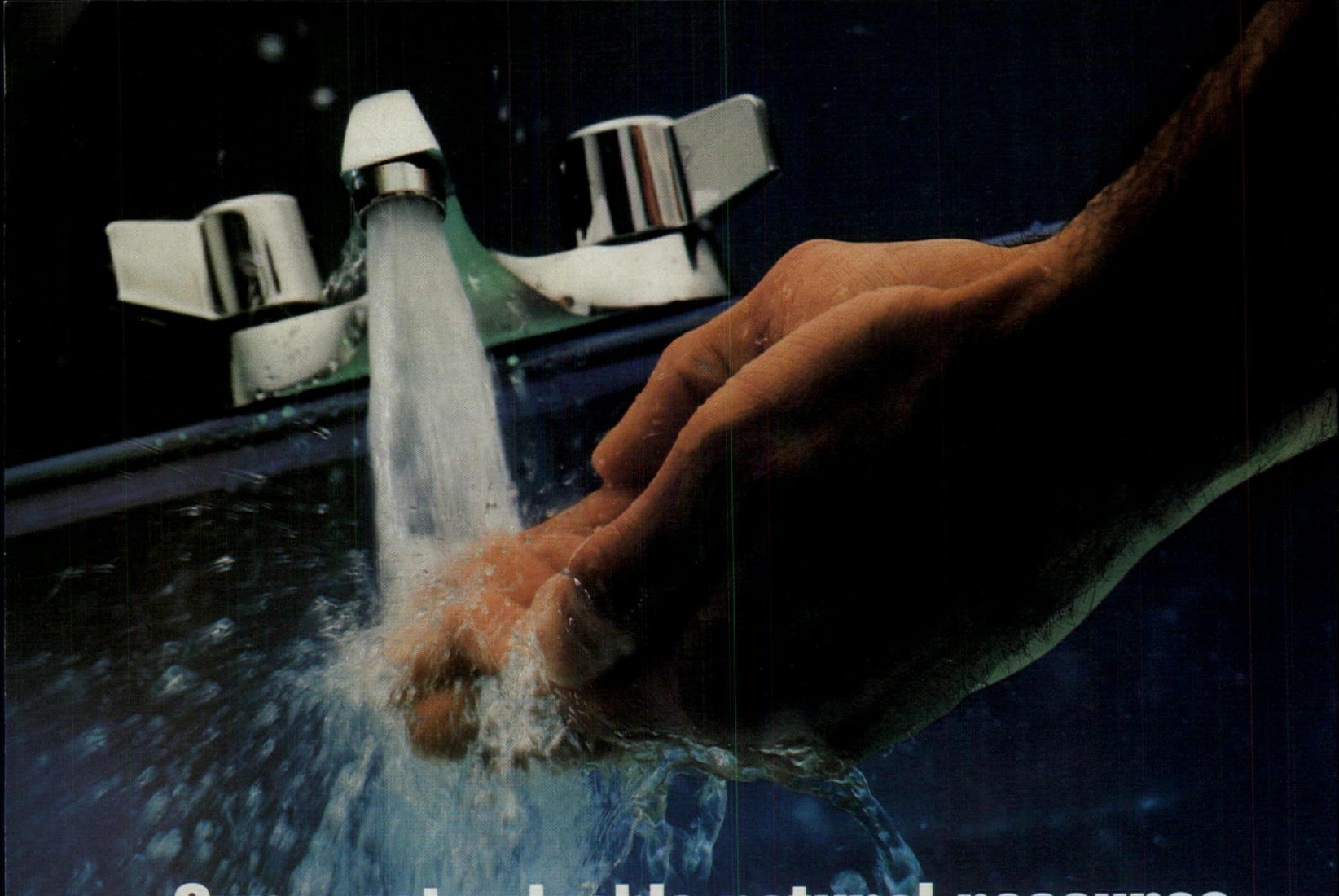

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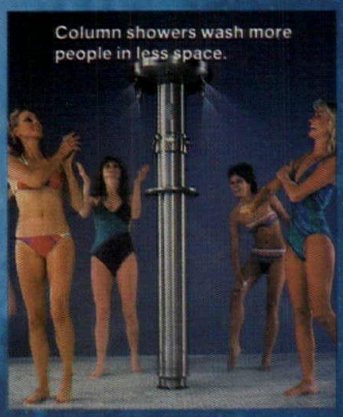
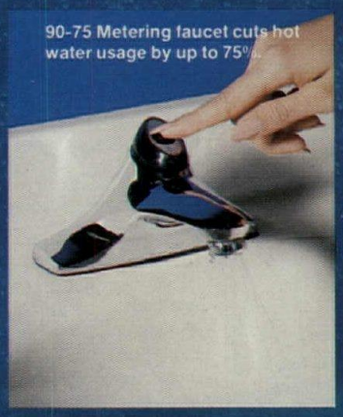


Column showers wash more people in less space.



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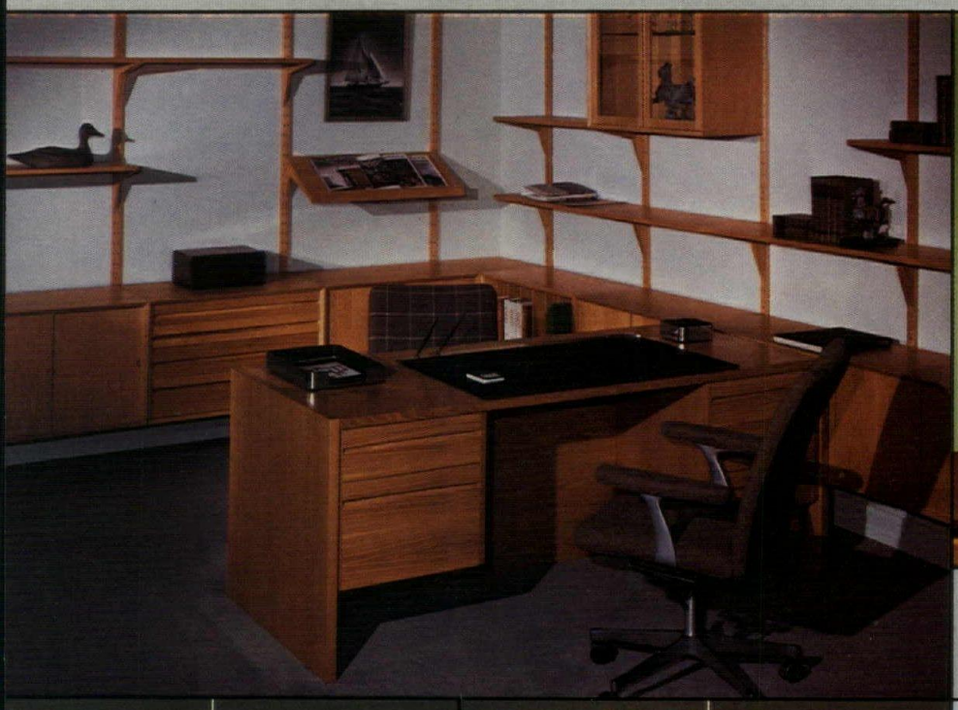











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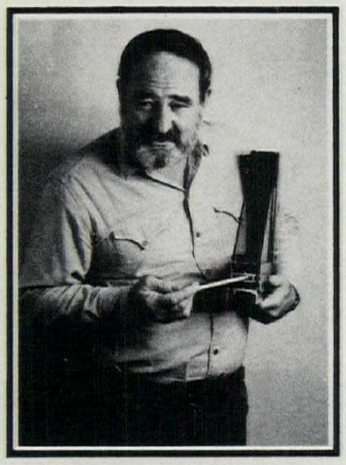

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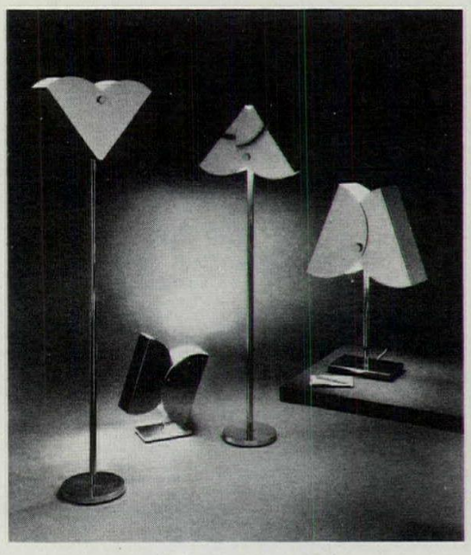
Products continued from page 279



Twilight series lamps in two table model heights and a floor version were designed by Ken Stevens. Removable shades pivot to direct light up or down. The telescoping floor lamp stem adjusts from 55 to 71 in., depending on the angle of the shade. Finish is either polished chrome or polished brass. Koch & Lowy, Inc.
Circle 200 on reader service card

Interiors literature

Integrated Multiple Power and Communications (IMPAC) is a six-wire, three-circuit electrical/communications distribution system that provides up to 13 duplex outlets per circuit. Designed for the company's Two.0 open plan office, the system is powered by the building's permanent wiring, either through a junction box or an overhead source. Wiring is concealed behind cover plates that snap into place. A four-page color brochure describes and illustrates the system and its installation. Panel Concepts, Inc.
Circle 201 on reader service card

'Directory of Undergraduate Programs in Interior Design' appraises two-, three-, and four-year programs in the U.S. and Canada. Updated from an earlier survey by the Interior Design Educators Council, the directory is the work of Professor Nikke Joan Henneke of Louisiana State University. It includes data on degrees offered and the number of students and faculty involved in the undergraduate curriculums. Copies of the 64-page publication, at $7 each, are available from The Foundation for Interior Design Education Research, 242 W. 27 St., New York, NY 10001.

Gamma series office seating, produced under license from Dreipunkt, Germany, is illustrated in an eight-page brochure. Conference chairs have upholstered or wood arms and either legs, sled bases, or swivel bases. Executive chairs are low- or high-back and have
[*Literature continued on page 286*]

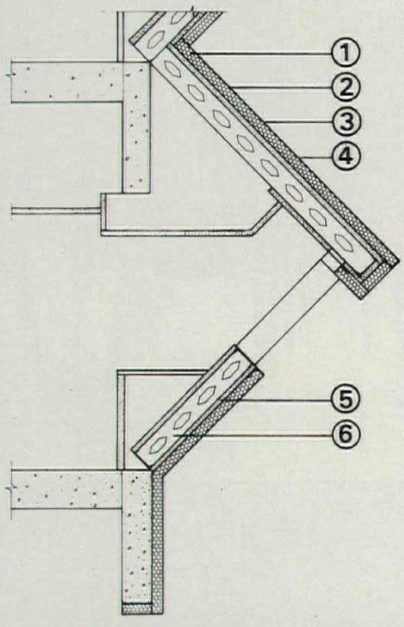
dryvit SYSTEM, INC.
OUTSULATION®

Panelization: the key to fast construction.

Dryvit brought a remarkable extra benefit to the construction of the Allergy Clinic (facing page): a fast erection schedule that not only saved time but cut overhead. It took just 5 months to build the clinic from scratch. Exterior grade gyp. sheathing attached to steel stud panels were pre-fabricated and trucked to the site. The Dryvit System was then field-applied to provide a smooth seamless skin.

Look for Dryvit in the General Building File of Sweets Catalog under Section 7.13/Dr.

Cross-section of a typical panel shown:



1. **Dryvit Insulation Board:** expanded polystyrene with optimum insulating characteristics. Board sizes, thicknesses and shapes are available as required by design.
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4. **Dryvit Quarzputz™ Finish:** one of four finishes available. This synthetic plaster material has high bond strength, integral color and an applied texture that provides a weather-proof jointless exterior surface.
5. **½" Exterior Gyp. Sheathing**
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OKLAHOMA ALLERGY CLINIC — ARCHITECTS: Bozalis & Roloff



Energy efficiency was but one criterion the architect wished to meet in this building. Another priority was the creation of a clean environment for allergy patients.

Both goals were met on a cost-effective basis by Dryvit Outsulation, the massive exterior insulation and finish system.

Outsulation provided an unprecedented thermal barrier that maximizes energy savings. At the same time, it gave the exterior a joint-free monolithic finish. A beautiful finish that is crack-resistant and maintenance-free.

What's more, by incorporating Dryvit foam shapes as part of the System, windows of this clinic could be recessed as well as slanted to avoid direct sun and wind penetration.

Another Dryvit product, The Finisher®, was put to use on the garage portion of the building. It allowed this cast concrete wall to be color-matched perfectly to the rest of the building.

Dryvit Outsulation is a unique System backed by thirty years experience here and abroad. Thousands of buildings from schools to high rises, stores to office complexes stand as witnesses to its success. Outsulation works for this allergy clinic. Let us show how it can work for you. Call or write, stating your application: new construction or retrofit.

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In all of these, to solve client problems quickly and cost-effectively, we apply the most sophisticated technologies available. Computerized techniques for evaluating alternative structural systems, and generating cost–benefit analyses. Fast-track scheduling techniques for accelerating major projects during construction. State-of-the-art dynamic and seismic analysis capabilities, using proprietary software tools.

That may explain why the GKT name has become our most valuable asset. And yet now we're changing it to Cygna. Why?

Mainly because we've grown, along with our sister company, Cygna Energy Services (formerly EES). With close to 350 employees in 10 offices, we can now offer the strength of our combined resources. And still keep our small-company responsiveness, through the continued direct involvement of our principals.

Separately, as GKT and EES, we've been building a name for ourselves for years in structural engineering and energy services. Together, we plan to make Cygna even stronger than the sum of its parts.

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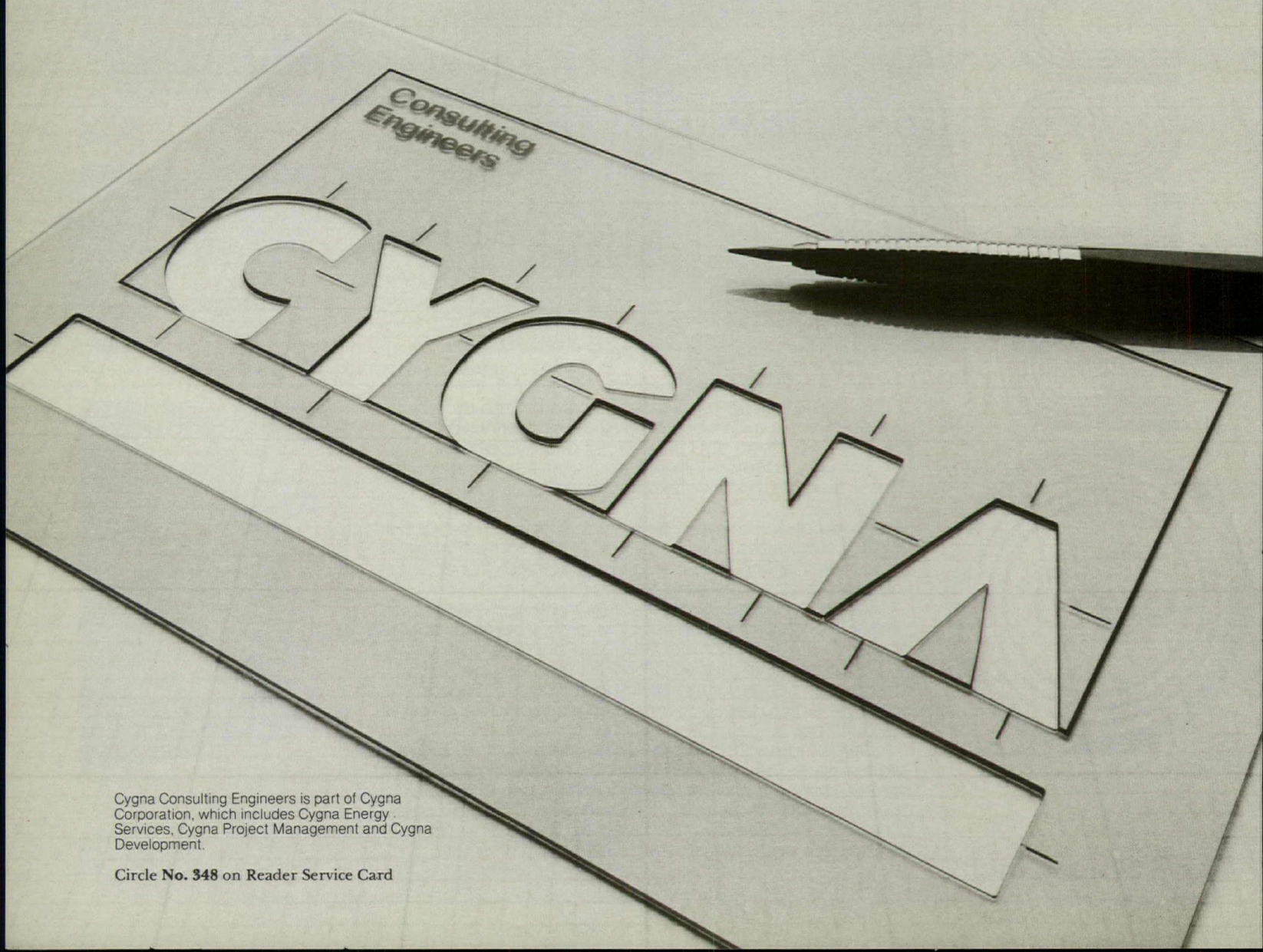

Cygna Consulting Engineers is part of Cygna Corporation, which includes Cygna Energy Services, Cygna Project Management and Cygna Development.

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That's why Guth's new Reflections system is modeled after such perfection.

Reflections delivers uniform illumination from an optical system so unique, it's patented. It generates maximum light output 35° above horizontal and not directly above the fixture. This means better utilization of lighting energy... Fewer fixtures...And lower operating costs.

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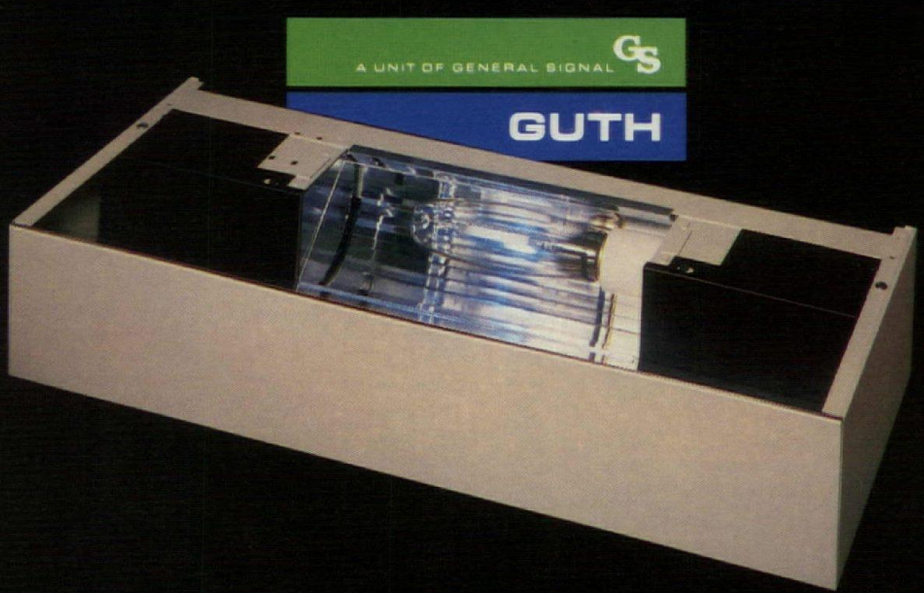
We learned plenty about indirect lighting from the Moon. Now we want to show you what we learned.

For a demonstration circle the number on the left. For a catalog circle the number on the right. Or write Guth Lighting, P.O. Box 7079, St. Louis, Mo. 63177. Phone 314-533-3200.

For Demonstration Circle No. 375 **For Information Circle No. 376**



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Literature continued from page 282

adjustable tension seats, telescoping pedestals, and dual wheel casters. Upholstery is leather or fabric. Davis Furniture Industries.
Circle 202 on reader service card

Carpet catalog offers a comprehensive selection of carpeting for commercial and residential uses. Featured are 12-ft, in-stock Wilton, Axminster, and velvet weaves. The catalog is available to designers and architects, at $10, from Stark Carpet, 979 Third Ave., New York, NY 10022.

Seating for professional healthcare, designed by Milo Baughman, is illustrated in an eight-page folder. Included in the group are chairs and recliners with solid oak arms, upholstered seats and backs. An occasional chair, also available as loveseat or sofa, converts to a bed. Thayer Coggin Institutional, Inc.
Circle 203 on reader service card

Spiral and circular stairs, for both interior and exterior applications, are shown in a full-color, 20-page catalog. Descriptions are provided for treads, platforms, spiral and well rails, and balusters. Duvinage Corp.
Circle 204 on reader service card

Acrylic panels with the look of stained glass can be used for ceilings, dividers, screens, window inserts, graphics, or signs. Some fit into standard 2′ x 2′ ceiling grids; others are domed. There also are "crystal" modules. Folders illustrate in color some of the many designs available and explain custom design services to meet color and size requirements. Envel Corp.
Circle 205 on reader service card

The following items are related to the technics feature on insulating with windows. They are grouped here for the convenience of the reader.

Window products

Solarcool® bronze reflective glass transmits 34 percent of the sun's heat, compared with 84 percent for clear float glass, according to the manufacturer. Besides a reduction in air-conditioning load, the glass offers reduced glare and reduced transmittance of UV light that contributes to fabric fading. Solarcool is also available as tempered safety glass for sliding patio doors, entrance sidelights, and other similar applications. PPG Industries.
Circle 206 on reader service card

Thermal III triple-glazed windows Series 3800 use an interior pane and sealed, insulating Spaceglass® (two panes of glass hermetically sealed), with a 1⅝-in. dry air space between. The horizontal slider windows have a condensation resistance factor of 69, substantially above the minimum standard of 35. A single-hung version, Series

[*Products continued on page 292*]

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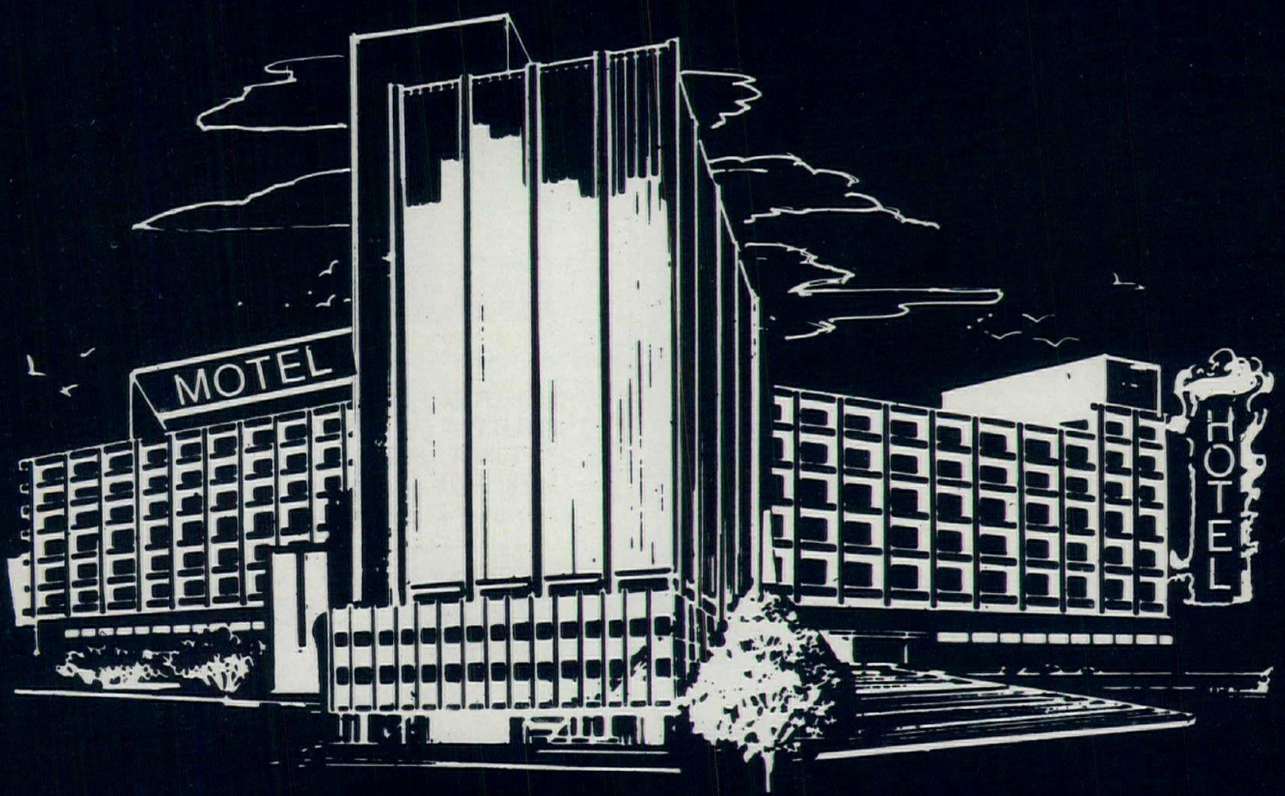

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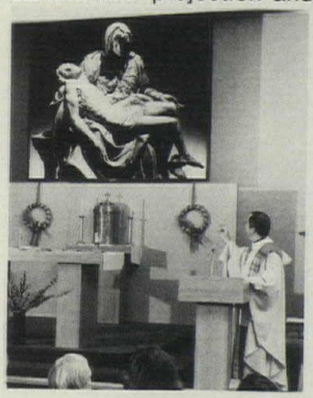

Da-Lite, as the nation's leading projection screen manufacturer, provides complete specifications plus size and viewing angle guidelines, picture surface information, wiring diagrams and vital installation basics. To learn more, start with Sweet's catalog (USA: 16.8a/Da, Canada: 16com/DAL). Then write us for the name of your nearest Da-Lite Audio-Visual Specialist Dealer.

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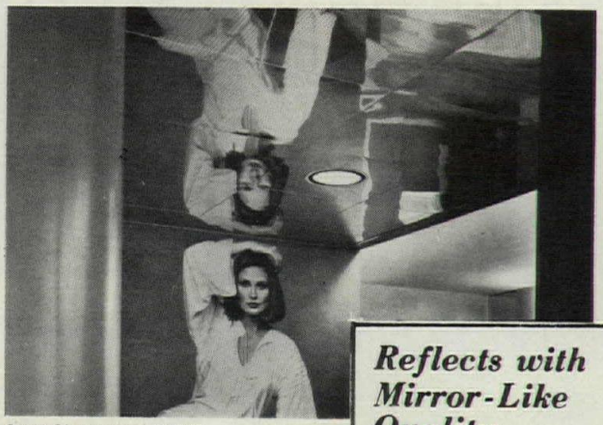

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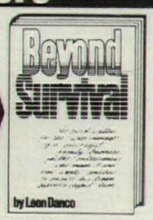

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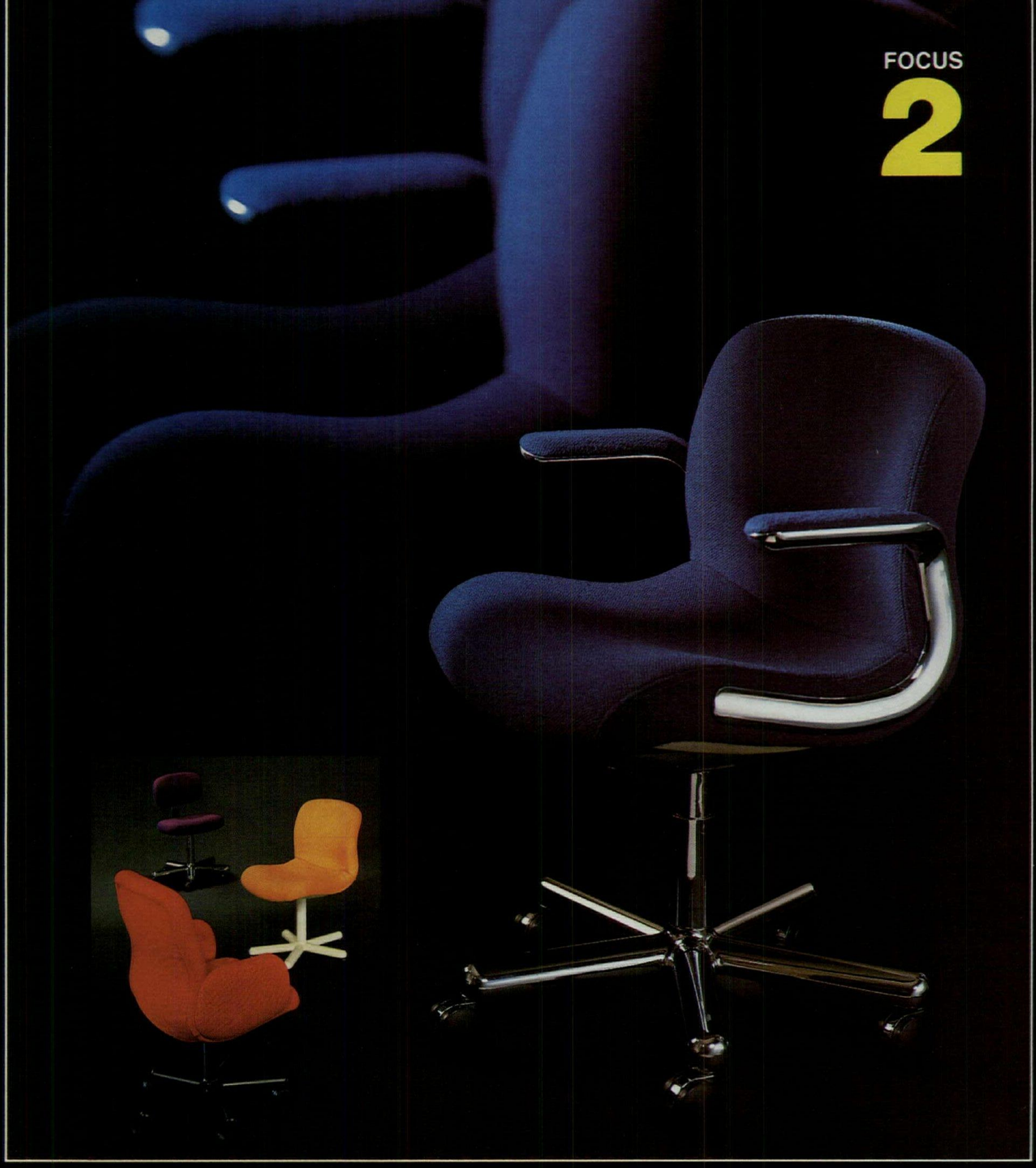

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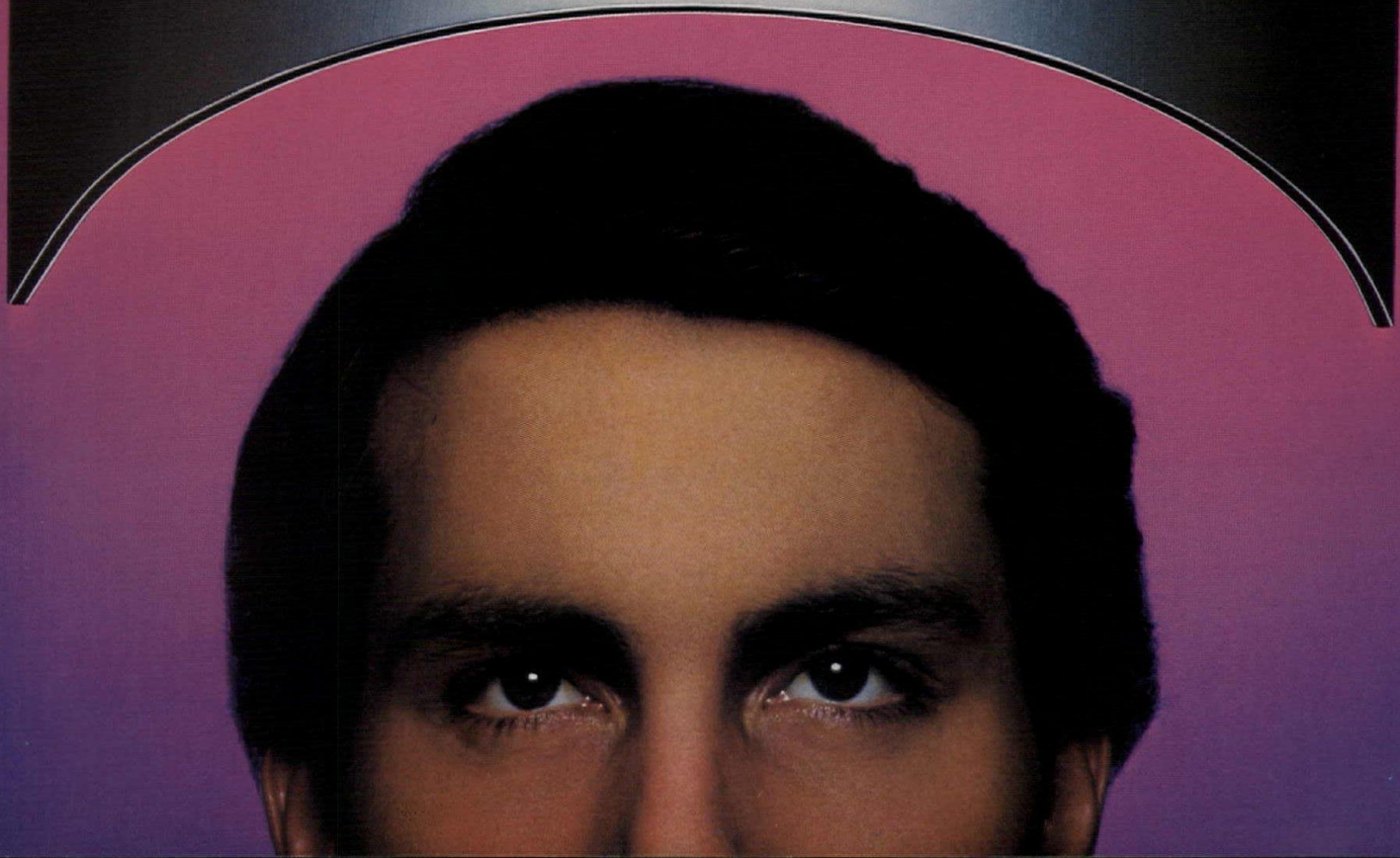



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Call your Bell Business Service Center today. And put in a communications system that's designed to make sure you don't miss important calls.

The Horizon system by Western Electric: Information Management from the Bell System.

The knowledge business

Products continued from page 286

3900, is also available. General Aluminum Corp.
Circle 207 on reader service card

Sealair® Isolock® thermal windows have a thermal block that provides a barrier between outside and inside frames and also provides condensation control. Isolock permits glass to be placed to the front of the frame for a flush appearance. Window designs include projected, casement, top hinged, drop head, and pivoted styles. The Kawneer Co., Inc.
Circle 208 on reader service card

SolaireFilm wood windows and doors use SunGain®, a passive solar film having high optical quality, developed by 3M Company. Said to be as effective as triple-pane glass in retaining solar heat gain, the film replaces one or two of the inner glass panels without a major sacrifice in the sun's heating energy. The film is also said to reduce fabric fading by screening out ultraviolet light. Weather Shield Mfg., Inc.
Circle 209 on reader service card

Vinyl-Prime™ solid vinyl replacement windows have a U-value of 0.46 and Condensation Resistance Factor of 57. Available in either white or dark brown, they never need painting. The windows come with ¾-in. insulating glass, full perimeter weatherstripping, and multicavity frame construction for maximum insulation. Windows are equipped with full-frame fiberglass screens. Binning's Building Products.
Circle 210 on reader service card

Energy Guard™ thermal barrier windows have stainless steel hinges and white bronze hardware. Styles in the group are project-in, project-out, top hung, casement, and vertical pivot. They are available with complete panning systems for remodeling or as integral components in curtainwall systems. Modu-Line Windows, Inc.
Circle 211 on reader service card

Clad casement windows have prefinished aluminum members fitted into pine sash and frames, which are aluminum clad. One-inch insulating glass and two independent weatherstripping systems add to the energy efficiency of the windows. Options include electrostatically applied finish in white or brown and one-inch triple insulating glass. Hurd Millwork Co.
Circle 212 on reader service card

SolarWhite toplighting panels are made up of prismatic glass blocks, each supported by an insulated, extruded aluminum grid. Exposed joints are weather sealed. U-factor of the hollow, evacuated glass units is said to be less than half that of conventional skylights. Heat loss is reduced in winter, and condensation is virtually eliminated, says the manufacturer. Blocks are 12″ x 12″, approximately 3″ deep, consisting of smooth top glass lightly etched on the inside, fibrous glass screen inside, and prismatic bottom face light, etched on the inside. Clear glass is also available. Circle Redmont.
Circle 213 on reader service card

Window literature

Window catalog describes double- and triple-glazed windows with double weatherstripping. Windows are wood, treated to resist rot and decay, with aluminum-clad exteriors available. The illustrated 36-page catalog offers several styles and sizes, and includes patio doors. Drawings and photos show construction details. Marvin Windows.
Circle 214 on reader service card

Trocal® vinyl, multichambered windows have each chamber sealed to provide an air pocket that helps to insulate against heat conduction and moisture condensation. The windows, available in seven colors, are described in an eight-page brochure that shows detail drawings of the frames and illustrates some of the many styles available. Tables of physical properties and test results are included. Dynamit Nobel of America.
Circle 215 on reader service card

A heating/cooling savings calculator estimates possible savings in both Btu and dollars when storm windows are used. Savings can be calculated for air conditioning or heating based on gas, oil, or electricity as fuel. Calculators are $5 each and can be ordered from Architectural Aluminum Manufacturers Association, Technical Information Center, 35 E. Wacker Dr., Chicago, Il 60601.
[*Literature continued on page 304*]

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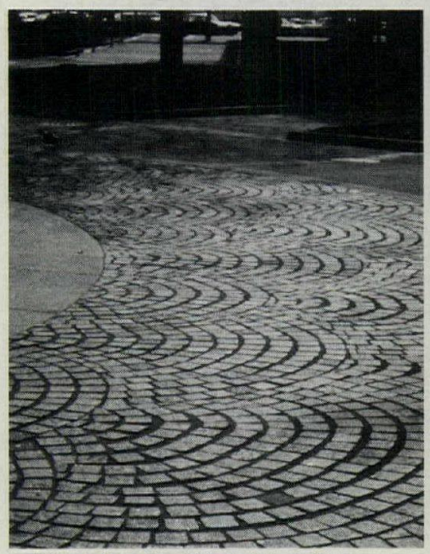
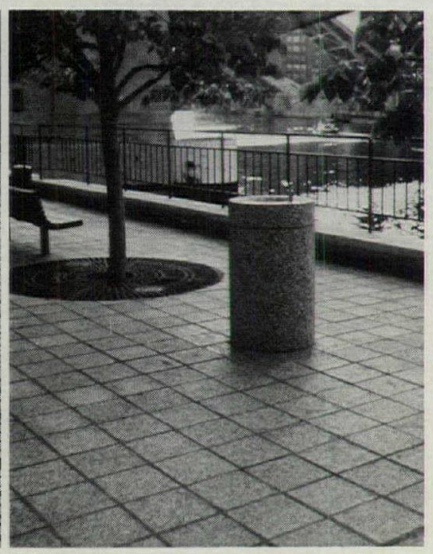
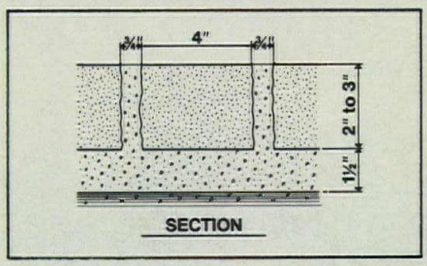
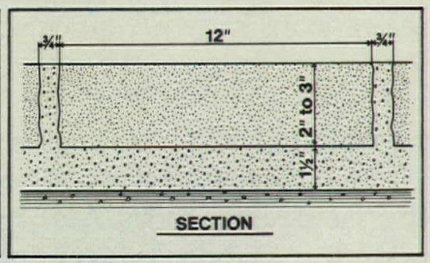


Architects: Lawrence Halprin & Associates



Architect: Joe Karr & Associates, Chicago, IL





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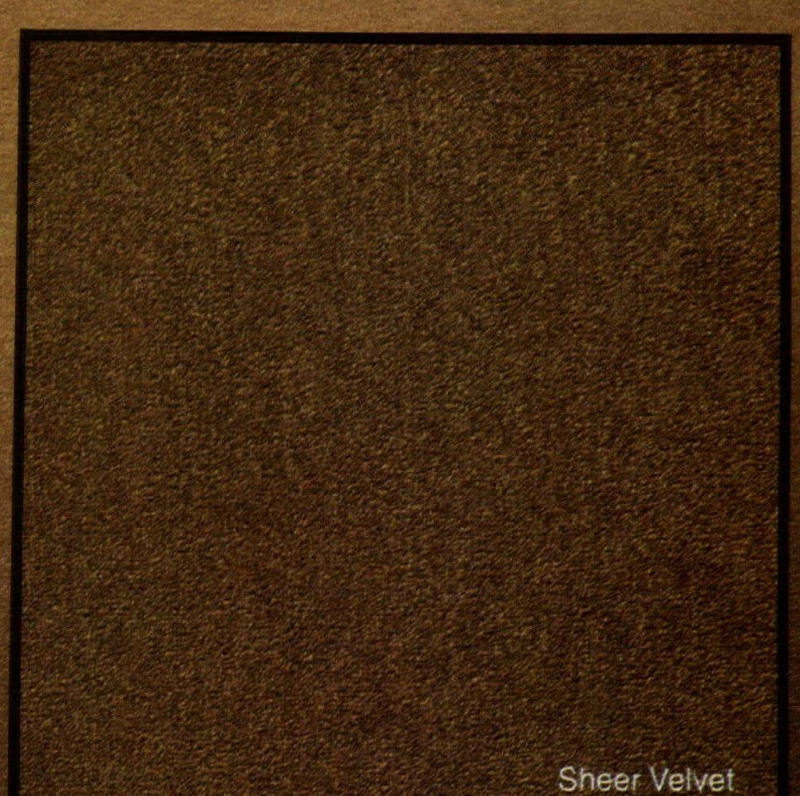

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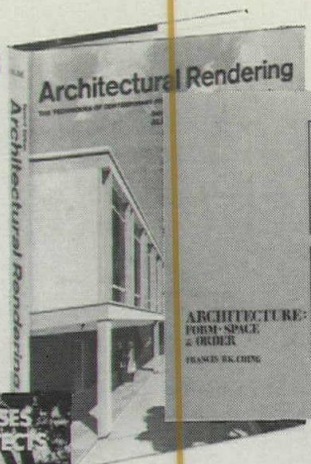

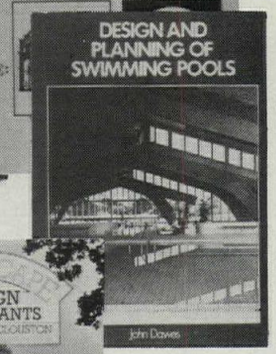

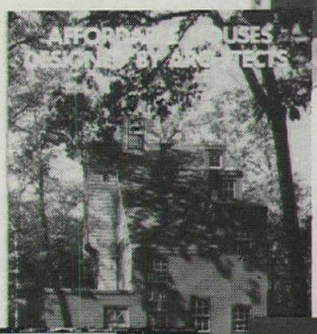

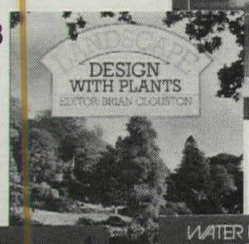

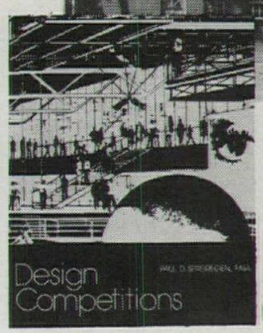

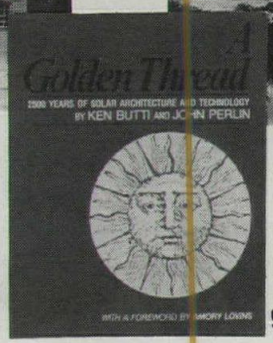

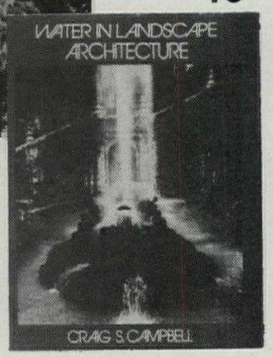

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By Albert O. Halse, 326 pp., illus., 2nd edition, 1972 . . . $44.50

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By A. W. Lees with E. V. Hyen,
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By Barbaralee Diamonstein, Editor
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By Herbert Swinburne,
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This first-of-its-kind book shows architects and engineers how to analyze and estimate the costs of building construction during the design stage when the potential for controlling costs is greatest.
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19 Architectural Stained Glass

Edited by Brian Clarke
234 pp., illus. . . . $32.95.

The contributors to this book (through their stunning designs) emphasize stained glass as a constructivist art form, taking it out of its medieval ecclesiastical context and putting it into a contemporary framework, both secular and architectonic.
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By Robert W. Gill,
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This paper-back edition is a copiously illustrated guide to the techniques and methods of rendering, including sections on perspective, projection, shadow, reflections, and how to draw cars, ships, aircraft, trees, and human figures. The author also describes the very wide range of instruments and equipment currently in use.
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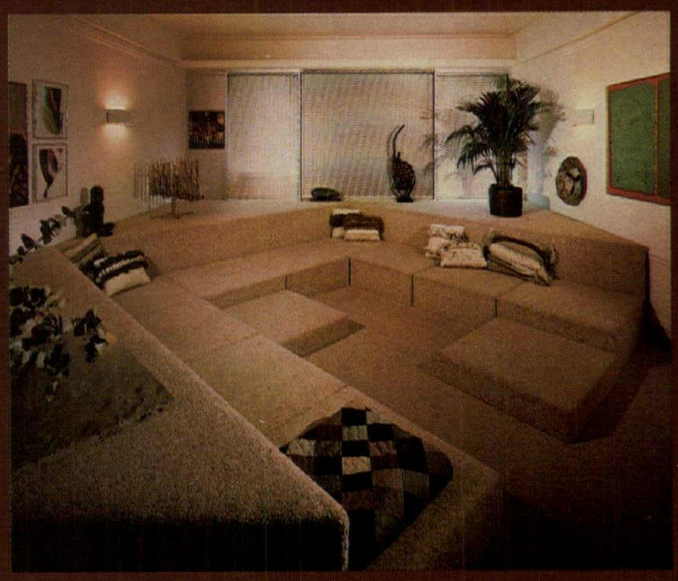



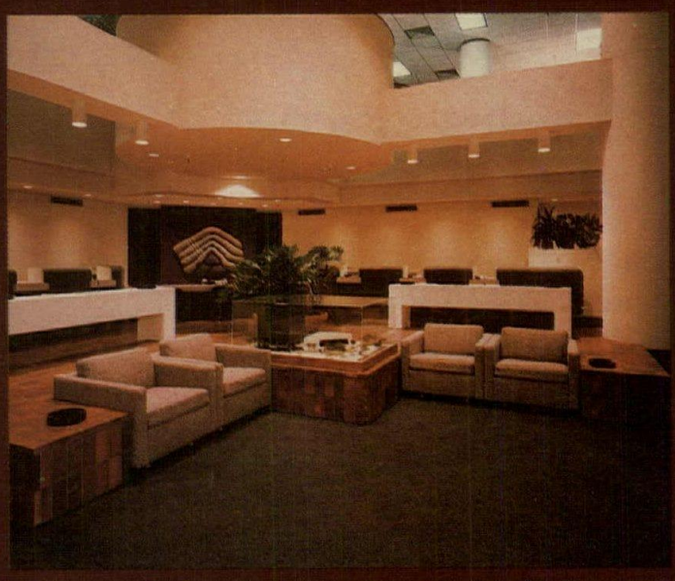



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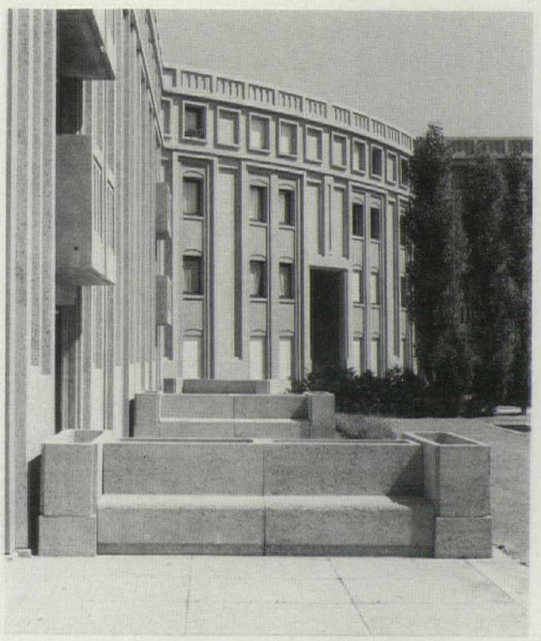
P/A in October: The new Classicism



Deidi Von Schaewen

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The principles of Classical architecture are being taken seriously again, by designers in the U.S. and abroad. After decades of tongue-in-cheek quotations from Classical sources, we are now seeing some scrupulous efforts to capture the spirit of the originals, sometimes even to get the moldings accurate. P/A will present a thoughtful look at two distinct ways to approach Classicism today, introduced by portfolios on today's most admired precursors: Schinkel representing the scholarly approach, Lutyens demonstrating the freewheeling interpretation.

Technics for October will take up plastics, the ubiquitous material whose virtues—and continuous evolution—can too easily be overlooked. The emphasis will be on the use of plastics for glazing, including skylights.

P/A in November will, for the fifth consecutive year, focus on preservation and reuse of existing buildings. This year, the editorial features will cover a number of renowned landmarks that have just been rehabilitated —among them Sullivan's Wainwright Building in St. Louis, Schinkel's Altes Museum in Berlin, Corbu's Salvation Army building in Paris, and the Arizona Biltmore Hotel, which looks like a work of Frank Lloyd Wright—however murky the records. Two Technics articles in November will take up interior daylight controls and the preservation of a now-historic material: concrete.

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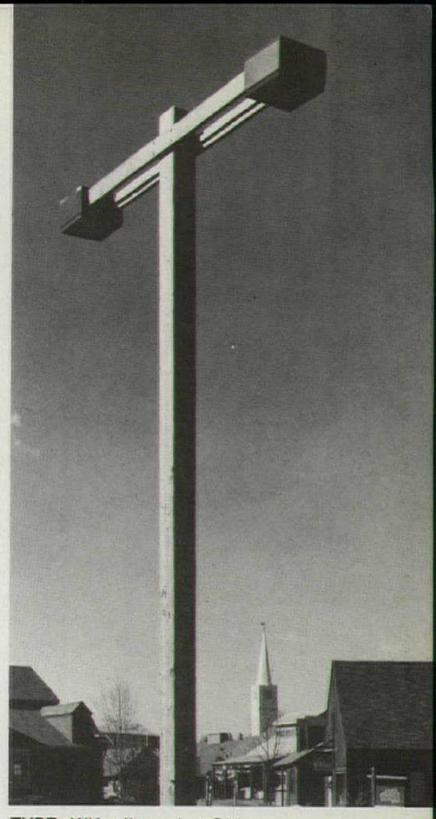

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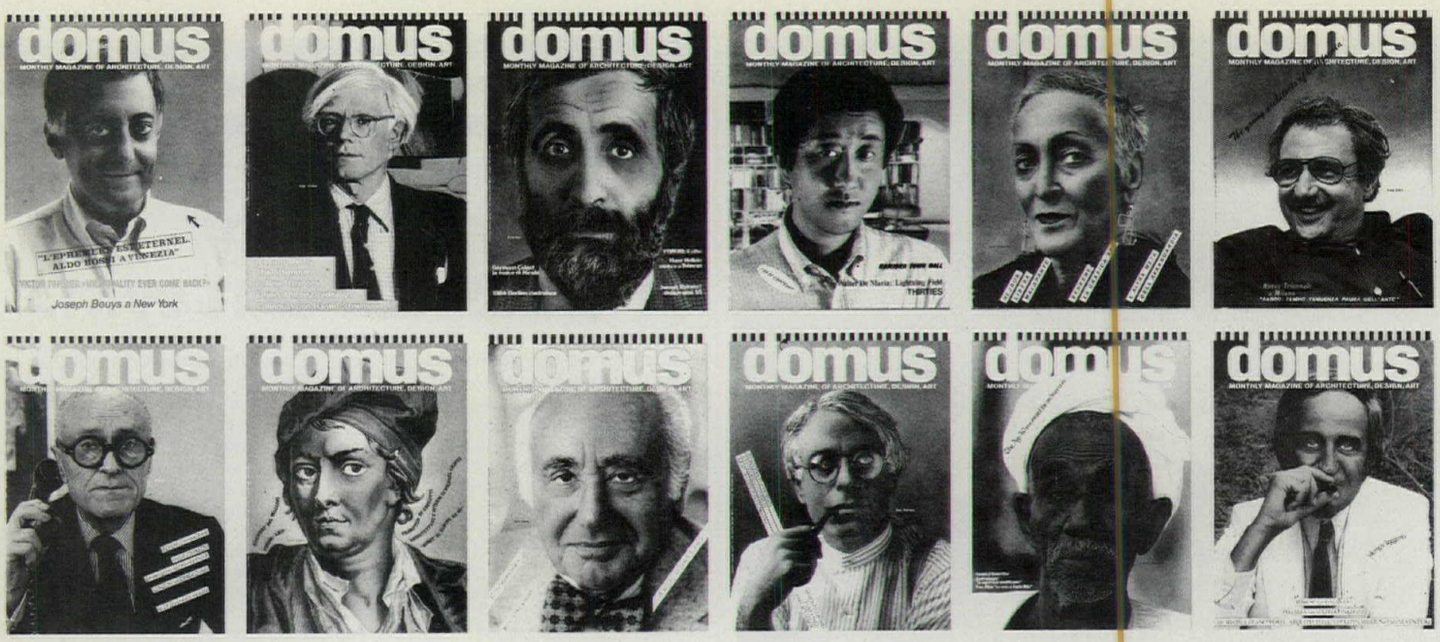

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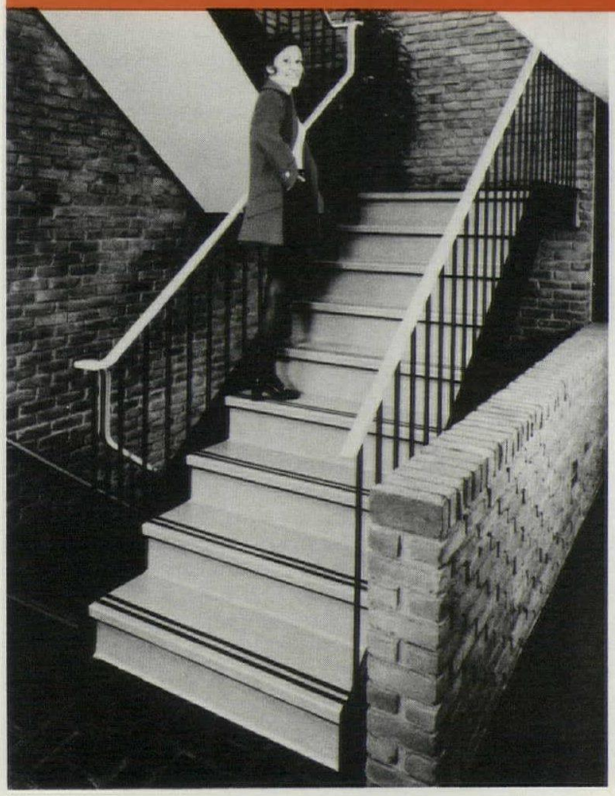

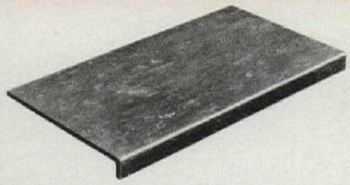

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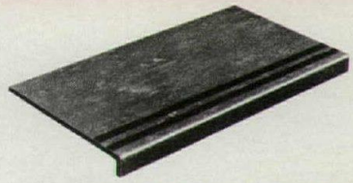

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Literature continued from page 292

'Recommended Glazing Practices for Insulating Units over 20 sq ft in Area' discusses problems encountered in the installation of large area glass sections. The 12-page brochure includes information about curtain wall movement, building structural movement, glazing and handling. Estimating, negotiating, and control procedures for insulating glass are provided. PPG Industries.
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'Aluminum Curtain Wall Design Guide Manual' is a 188-page guide consisting of nine sections. Originally published as individual volumes, the sections have been revised and combined into one publication. Information is provided about curtain wall types and systems; pressure-equalized wall design; gaskets; sealants; installation; finishes; and energy conservation. The manual is illustrated with photos and diagrams and includes data in graphs and tabular form to support the text. Copies at $24 each can be ordered from Architectural Aluminum Manufacturers Association, 35 E. Wacker Dr., Chicago, Il 60601.

Sunglas® reflective glass brochure compares the performance of Sunglas with that of clear and bronze glass, both monolithic and insulating. Information includes U-value, shading coefficient, relative heat gain, transmittance, and outdoor reflectance. According to the manufacturer, it transmits 40 percent more daylight than comparative products, reducing the need for artificial lighting. Ford Glass Div.
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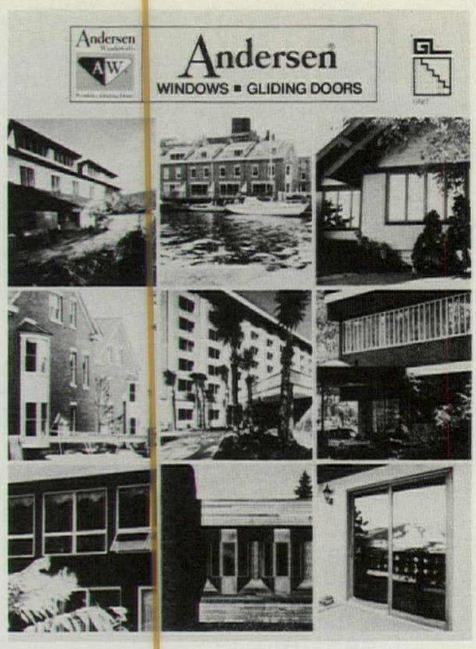

Gliding doors with triple-pane insulating glass panels are among new items featured in a 52-page catalog of windows and gliding doors. Tables show insulating values of single-glazed, double-paned insulating glass, double-glazed and triple-glazed windows and doors. Heat gain values are shown for clear glass, tinted glass, reflective glass and triple glazing. Andersen Corp.
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'Selection Guide for Architectural Aluminum Windows' is a reference for selecting windows to suit specific installations, either new or retrofit. It outlines design considerations, describes window types and important design features, and reviews performance requirements. Installation guidelines are provided. Copies, at $10 each, are available from Architectural Aluminum Manufacturers Association, 35 E. Wacker Dr., Chicago, Il 60601.

'Energy Saving Windows/Doors' is a 28-page catalog explaining company's line of single-hung and rolling windows that have insulated single, double, and triple glazing. Patio doors have single, insulated, triple, or quad glazing. Also shown are replacement and retrofit windows for conserving energy. Detail drawings, specifications, and size charts are included. Capitol Products Corp.
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Other products

Interior door frames of extruded aluminum are available in Imperial™ series that install at ceiling height only and Royal™ series that install at ceiling height or less. Both types are available with or without matching fire-rated sidelights, doors, and hardware. Standard finish is bronze paint, but bronze anodized, clear anodized, and special paint finishes are available. Howmet Aluminum Corp.
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[*Products continued on page 307*]



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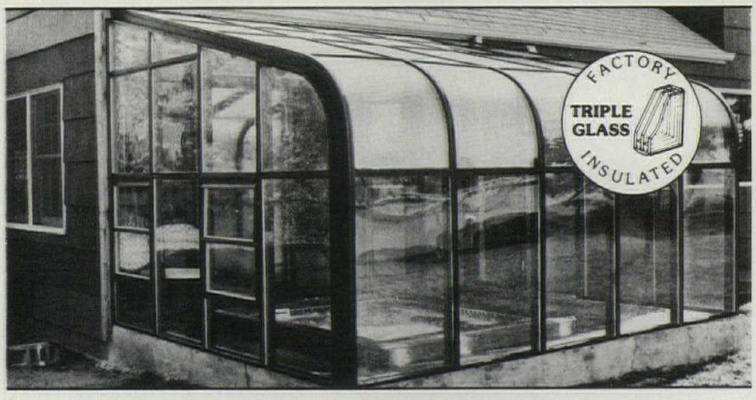

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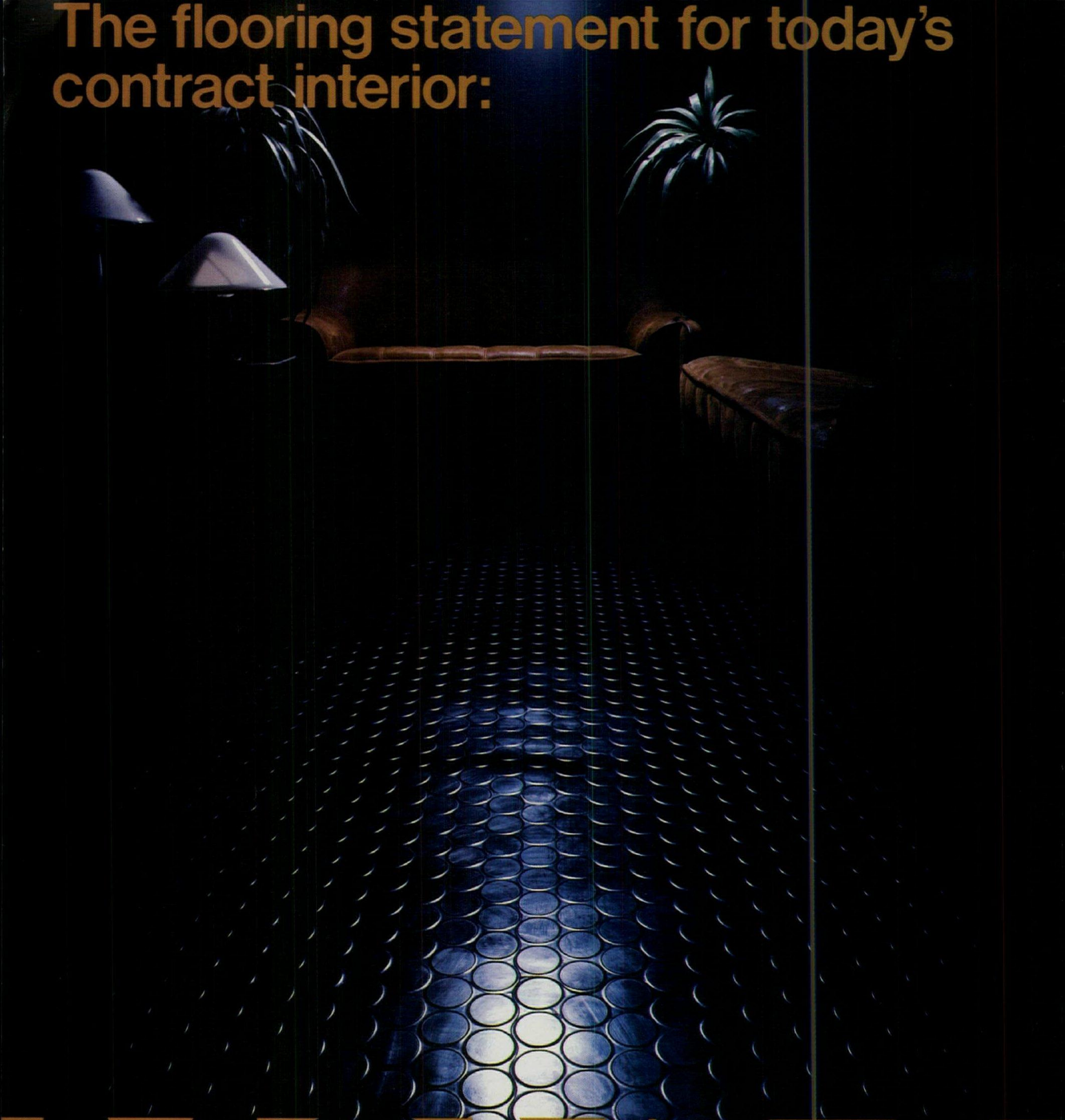

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Products continued from page 304

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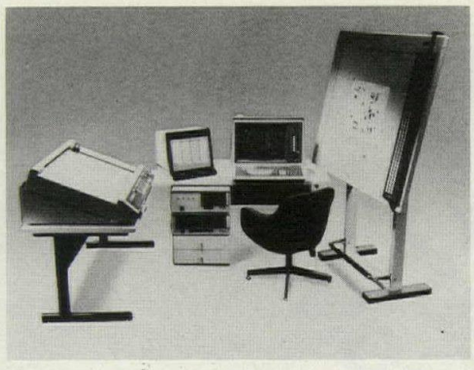

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Circle 221 on reader service card

Other literature

Gacoflex waterproof foam roof coating systems, described in a six-page brochure, include urethane and acrylic coatings that "breathe" and Hypalon® coating that acts as a moisture barrier. Two aliphatic topcoats provide a high-glass, color-retaining, reflective, soil-resistant finish. Gaco Western, Inc.
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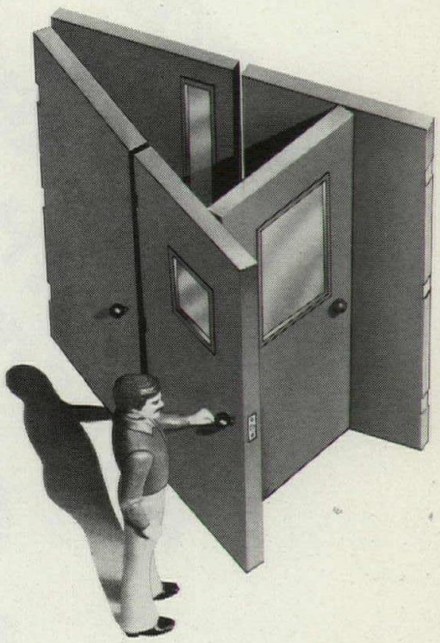
Enclosures for public restrooms include floor-supported and ceiling-hung toilet compartments (of baked enamel on metal, stainless steel, and plastic laminates), shower cabinets, and partitions. They are described and illustrated in a 12-page brochure that also includes accessories and shows detail drawings of hardware. Plans show layouts to accommodate wheelchairs. Suggested specifications are also provided. General Partitions Mfg. Corp.
Circle 223 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.

China Club, Los Angeles, Ca (p. 156). *Architects: Sampei Abe, Tokyo, Japan (U.S. representative office, Sy Chen, Los Angeles).* Wall murals: Paul Fortune and Pator Sato. Custom-designed handrail: Interior Systems, Inc. Skylight: Aluminex, Inc. Floor tile: International Tile. High-tech lights: Industrial Revolution. Furniture (designed by Sampei Abe): Rattan House. Sound systems and compact speakers: Pioneer.
[*Building materials cont. on p. 313*]

A is for Amweld



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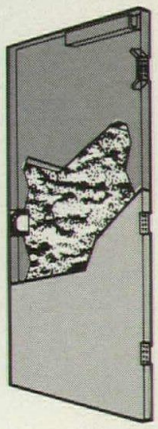

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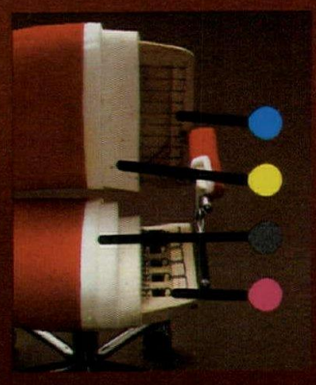

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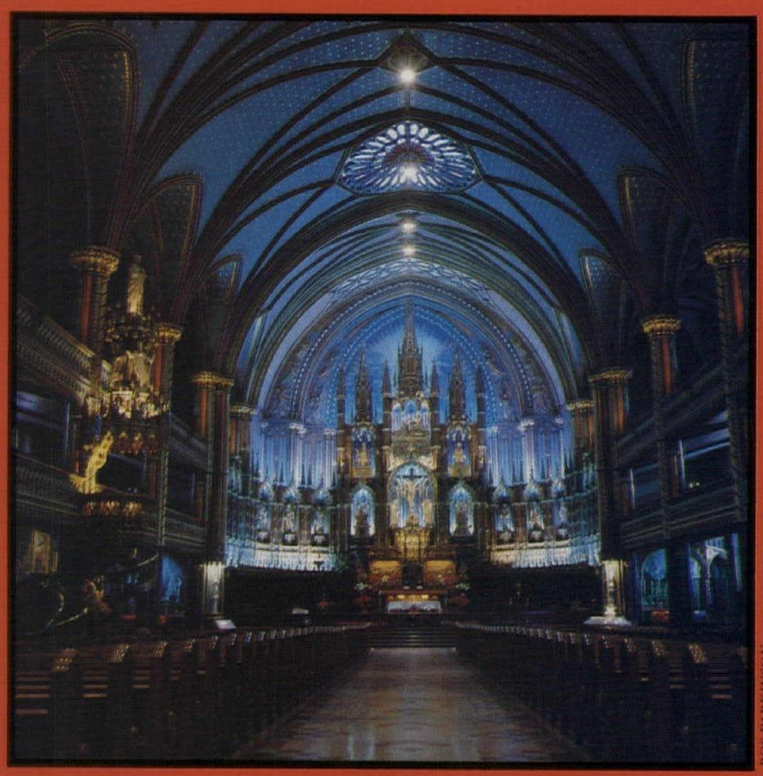

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Building materials cont. from p. 307

Leo de Wys Photo Agency, New York (p. 173). *Architects: James Hong and Michael Sorkin, New York.* Paint: Benjamin Moore. Acrylic lacquer: Du Pont. Epoxy: Peterson Chemical. Plastic laminate: Formica.

Loft 1: Loft on Worth Street, New York (p. 177). *Architect: Giuseppe Zambonini.* Latex paint: Red Mills. Plasterboard walls and ceiling: USG. White oak strip flooring. Italian quarry tile flooring. Carpet: Edward Fields. Dining table: custom by Open Atelier of Design. Lounge (Bastiano by Tobia Scarpa): Knoll. Dining chairs (Arco, made by Cassina): Atelier International.
Loft 2: Loft on Broadway, New York (p. 180). *Architect: Giuseppe Zambonini.* Plasterboard partitions: USG. Maple strip flooring. Track lighting: Lightolier. Custom cabinetry by the Open Atelier of Design.

House, Southern California (p. 182). *Architect: Charles Moore, Los Angeles.* Paint: Devoe; Pratt & Lambert. Tile: Knoedler Fauchere.

Americana Hotel, Ft. Worth, Tx (p. 184). *Building architects: 3D/International, Houston, Tx. Interior design team: Benjamin Baldwin, Roger Ferri, Jonathan Warwick.* Limestone: Intrepid. Marble: St. Laurinet. Carpet: Bigelow Sanford. Restaurant wall fabric: Maharam. Restaurant ceiling: Terstep (Zerodec). Tapestries: V'Soske.

Temple University Student Activities Center remodeling, Philadelphia, Pa (p. 190). *Architects: Friday Architects/Planners.* Flat and semigloss paint: M.A. Bruder & Son. Red oak paneling: Boyertown Mills. Red oak columns: Somerset Door & Column. Ceramic tile wainscot: American Olean. Ceilings, 2 x 2 lay-in "Nubby": Owens-Corning Fiberglas. Vinyl-asbestos floor tile, 1 x 1: Armstrong Excelon. Mosaic tile floor medallion: American Olean. Fluorescent lighting: Keystone, Neo-Ray. Ceiling incandescent lighting: Kurt Versen. Wall incandescents and pendant dish: Visa. Office furniture: Steelcase. Oak tables (gallery): Gunlocke. Oak chairs (gallery): Paul Bunyard. Oak upholstered lounge chairs: Monarch. Chairs (Crossroads): Krueger Matrix. Screening room seating: Irwin Seating. Drapery: Design Tex. Acoustical panels: Alpro.

Lewisohn Hall, Columbia University, New York (p. 214). *Architects: Mostoller and Wood, New York.* Paint: Benjamin Moore, Pratt & Lambert. Carpet: Lee (of Du Pont Antron III fiber). Lighting: Omega (recessed incandescent downlights and wallwashers); Lam, Inc. (pendant HID, metal halide). Desks: Laminates Unlimited. Lateral files: GF Business Equipment. Cabinets: ICF. Tables: Howe Furniture. Seating: GF Business Equipment, Gordon International, Helikon. Upholstery: Thonet.

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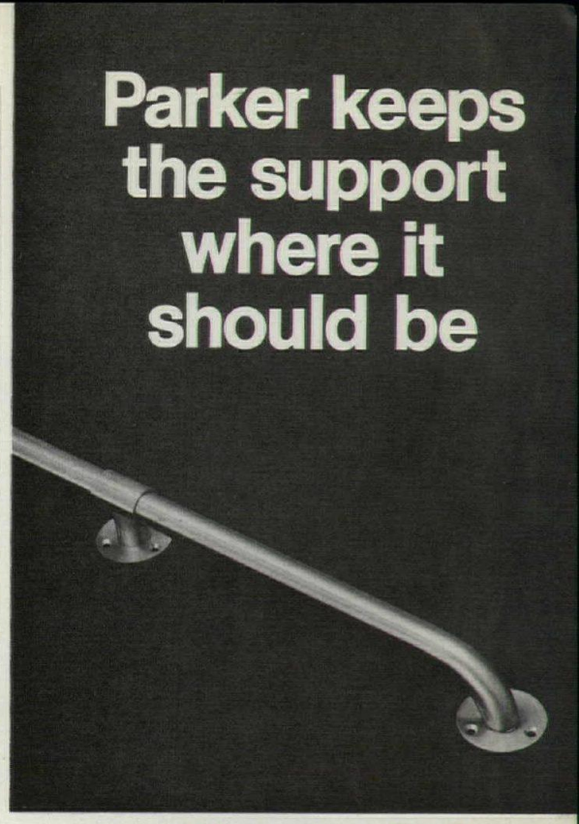

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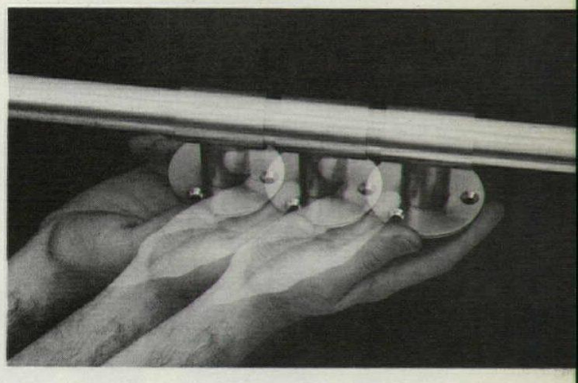

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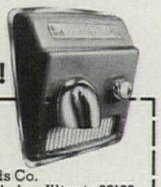

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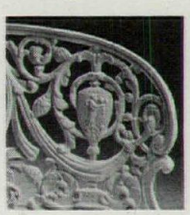



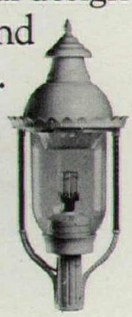

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Chicago: Marshall Field & Co., Contract Division
Highland Park: C.A.S. Office Interiors

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Indianapolis: Business Furniture Corp.

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Dallas: Stewart Office Supply Co.
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Salt Lake City: Salt Lake Desk

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Lynchburg: Litton Office Products Centers
Norfolk: Litton Office Products Centers
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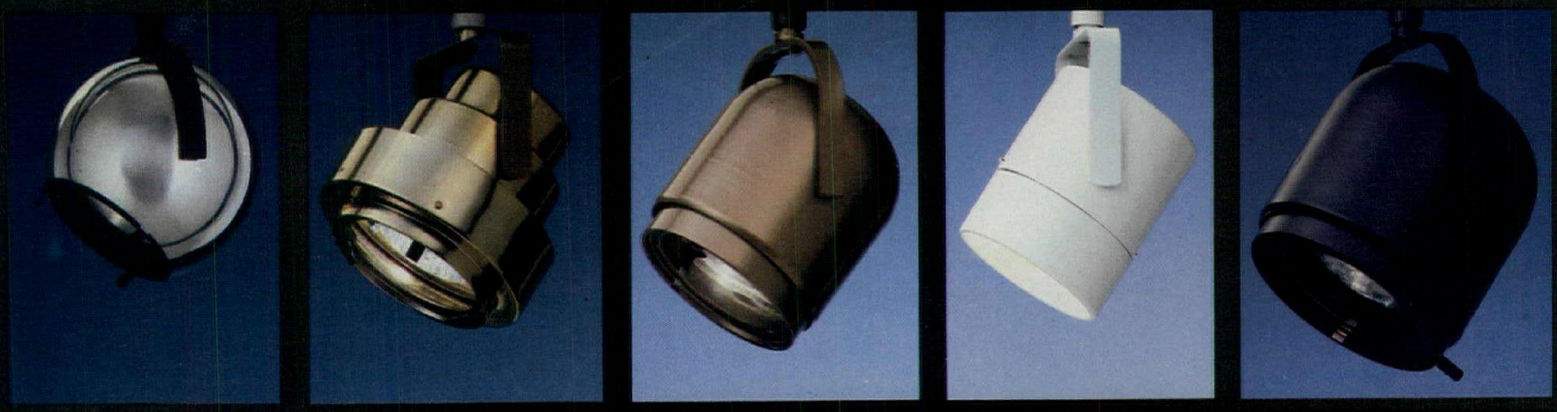



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