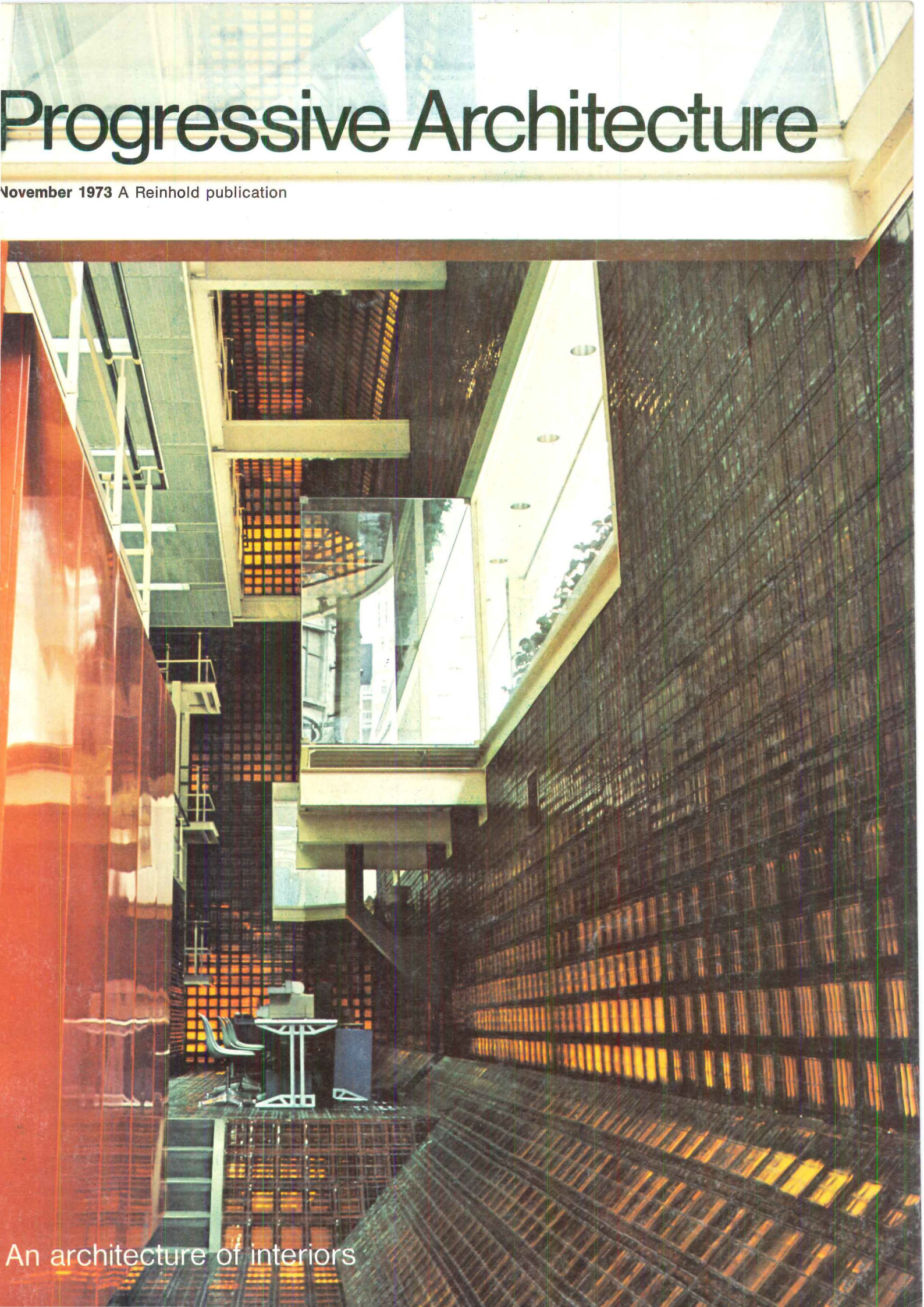
Progressive Architecture

November 1973 A Reinhold publication



An architecture of interiors

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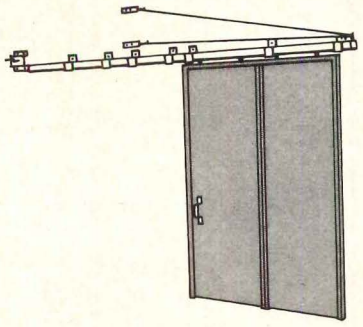

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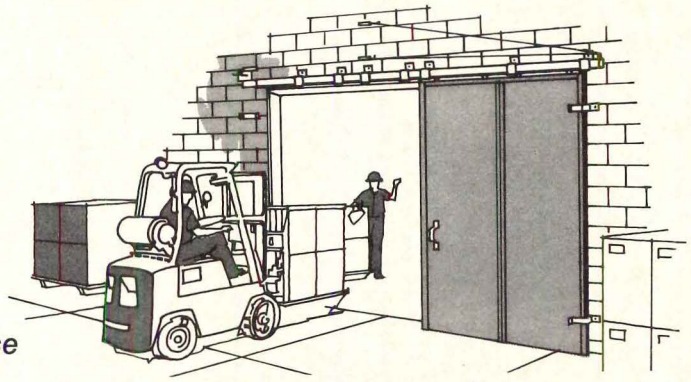

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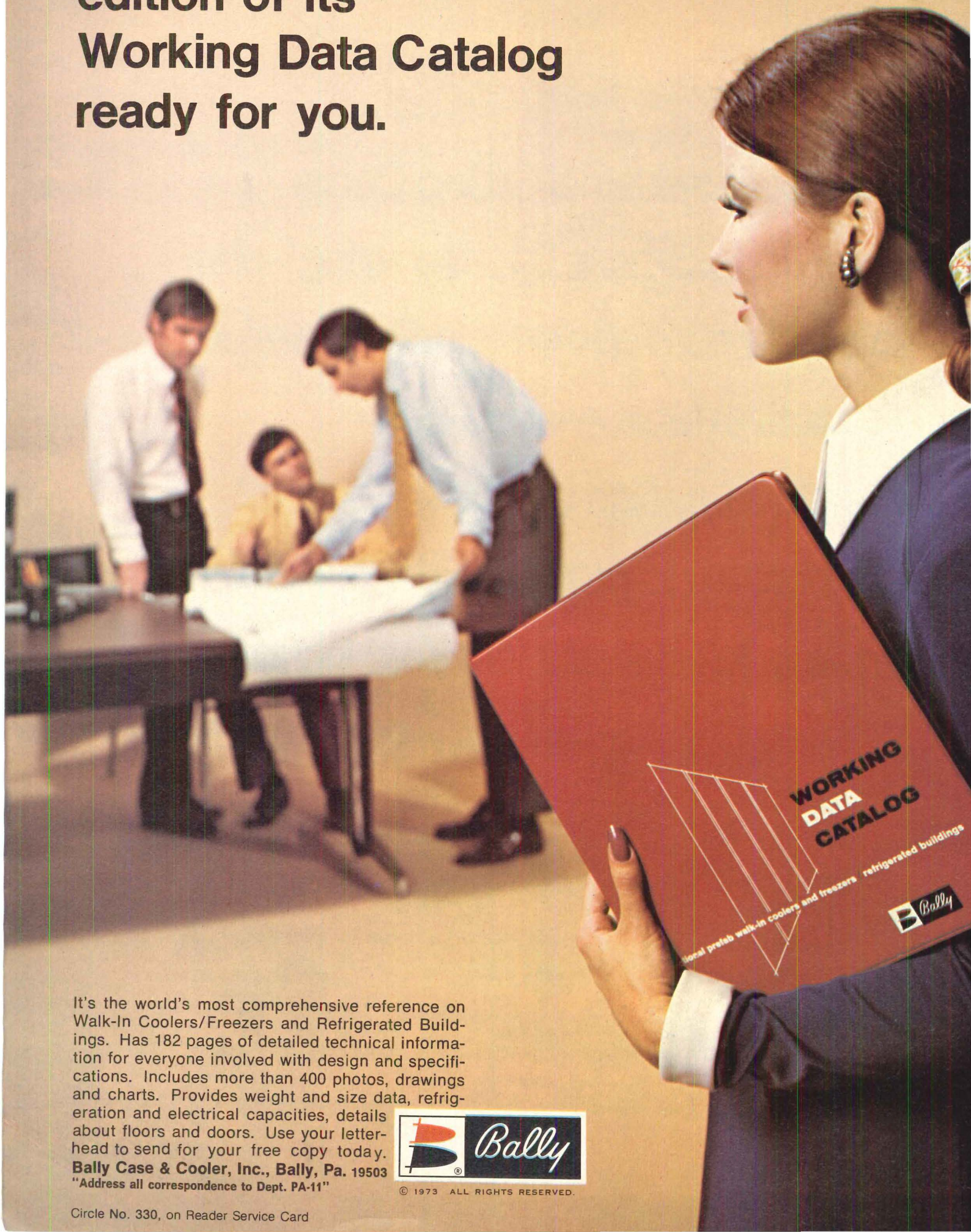

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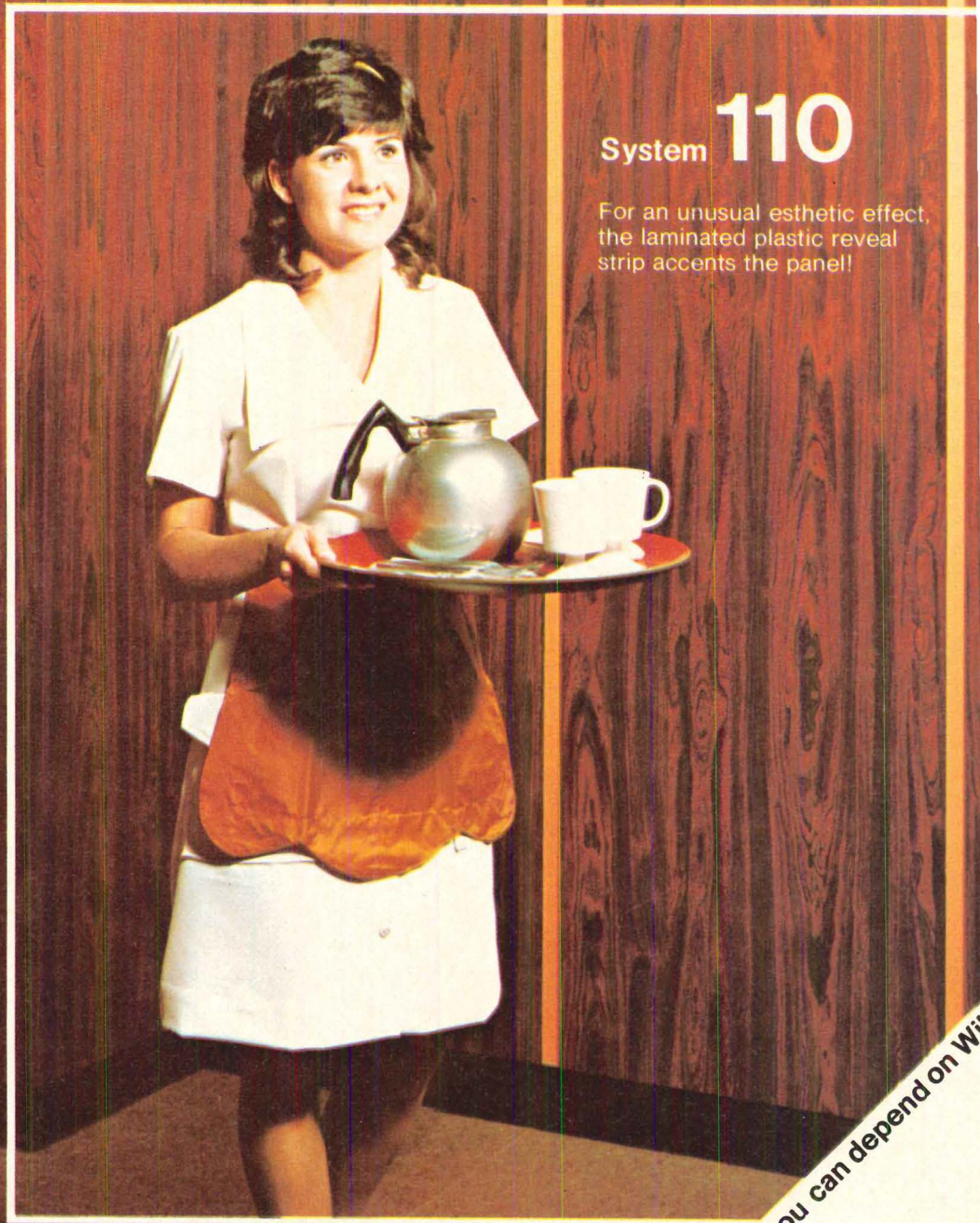
November 1973

Progressive Architecture

An architecture of interiors

Cover: A glass and brick enclosure in an older building (p. 86) is the new main office for the Municipal Bank of Buenos Aires. Photo courtesy of the architects.

There's a Wilsonwa



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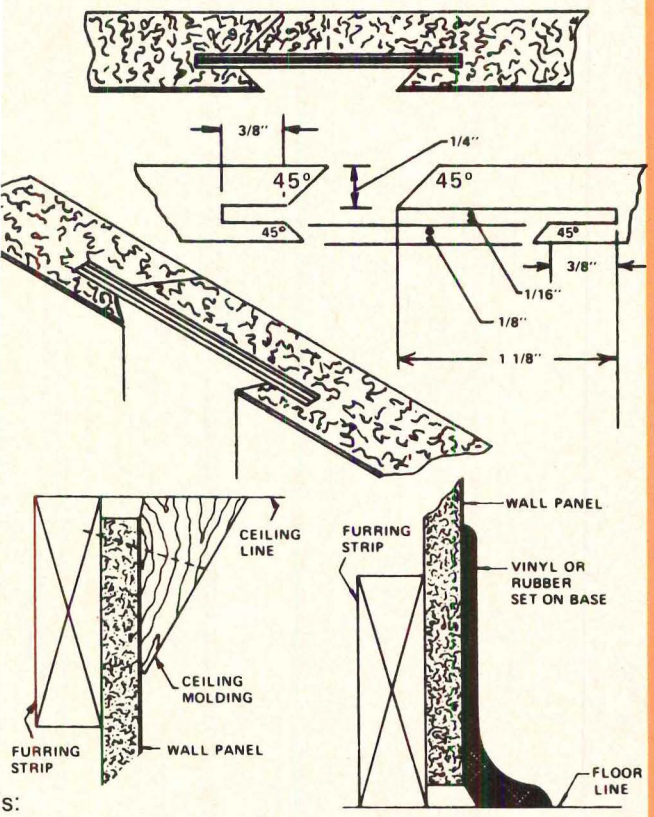

s:

ness: nominal 7/16"

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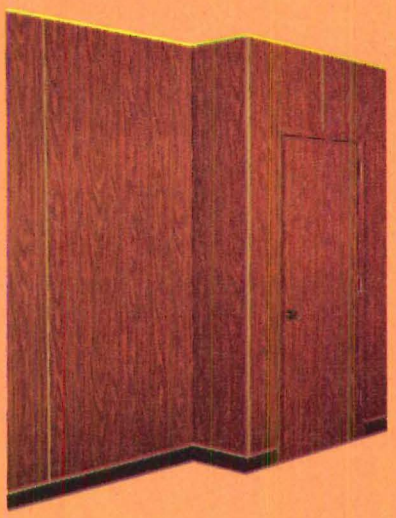

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's from readers

ews

ph for a genius

s an overdue epitaph to an unsung
unrewarded genius, Paul Chelazzi,
n Engineer Architect who, according
offical reports, passed away in his na-
'erugia, Italy, a few years ago.
ng before the profession as a whole
n to recognize the value of the use of
on members and the suspension prin-
in structures, Paul Chelazzi was turn-
ut ideas in that field and airing them in
c.

the time, regular practitioners who
ened to notice his publications con-
ed him a crank and gave his writings
t shrift.

om the time that the idea of suspended
tures started to catch on, many of his
s have been realized in structures with
ecognition whatsoever to him.

aders of Progressive Architecture with
memories may recall a series of ar-
s by Mr. Chelazzi in the period
–60. Among the ideas presented there
the so-called "Suspenarch." The ba-
tructure consisted of an arch above
the suspended cable below—the arch
st being used to balance the cable ten-
Most bridge engineers would recog-
the arrangement as nothing more than
w form of the well-known tied arch.
ever, it was a completely new concept
uilding designers and many highly
ified and widely recognized engineers,
should have known better, dismissed
asic idea as producing an unstable
cture.

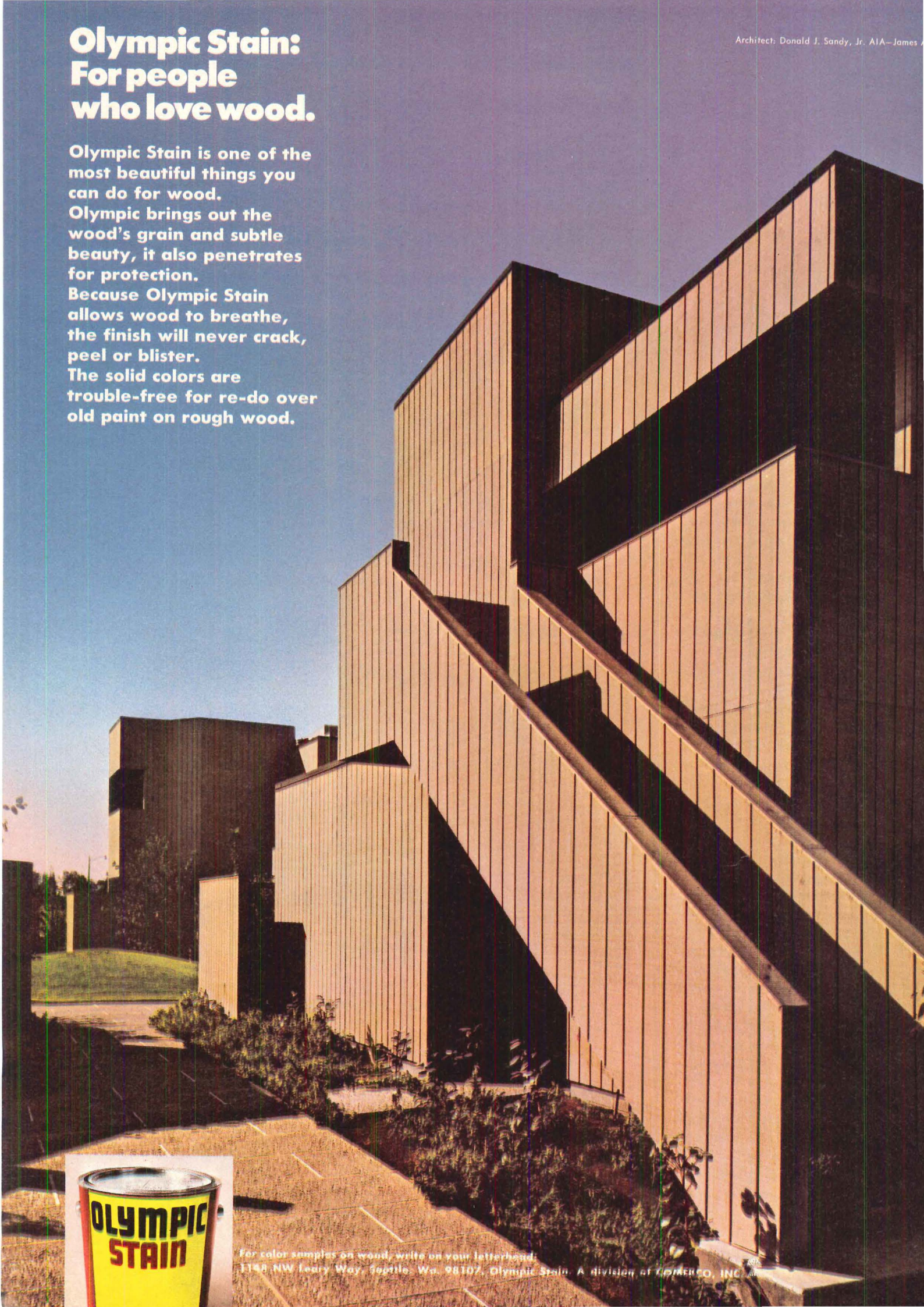
is whole subject comes to mind now
use of the new Federal Reserve Bank
ding at Minneapolis. The main support
he entire building, in its future, finished
, includes a perfect example of the
enarch. The article which caught the

tinued on page 9]

Olympic Stain: For people who love wood.

Architect: Donald J. Sandy, Jr. AIA–James

Olympic Stain is one of the most beautiful things you can do for wood.
Olympic brings out the wood's grain and subtle beauty, it also penetrates for protection.
Because Olympic Stain allows wood to breathe, the finish will never crack, peel or blister.
The solid colors are trouble-free for re-do over old paint on rough wood.



For color samples on wood, write on your letterhead: 1148 NW Leary Way, Seattle, Wa. 98107. Olympic Stain. A division of [illegible] CO., INC.

continued from page 7

s attention appeared in the June
ssue of Acier-Stahl-Steel, the Bel-
ublication. However, the story had
usly been published in many Ameri-
urnals. I hope this can be published
some little recognition to a genius
ould never slow down enough to let
ıes catch up with him. I was privi-
to be closely associated with Paul
zzi during several years. Many of his
ıeeded harnessing and taming to
hem really practical, but many of the
ideas were completely sound in con-
and my own imagination was greatly
ed by the association. Also, I had the
ure of being instrumental in making it
ole for him to carry his message to
college campuses and I do not doubt
ıe imaginations of many students of
eriod were fired by his contagious en-
sm and creative thinking.
Birdsall
ulting Engineer
York City

Lighting design
Some issues of *Progressive Architecture* are worth their weight in gold. . . . Your September issue on lighting is so very valuable that I must make some effort to get it into the hands of our students.
William S. Oliver, Chairman
Architectural Technology Department
Onondaga Community College
Syracuse, N.Y.

We have been involved in the lighting business for many years and I have never seen such a fine issue—especially one edited by architects—on lighting design.

It would be interesting to see what type of lighting your staff works under.
Blair Perkins
Oklahoma City, Okla.
(Please, don't ask. Ed.)

Congratulations for the excellent presentation of some long needed insights on the importance of light and vision in architectural education. I believe, however, that the need for visual education is even broader than you indicate.
Gerald B. Ewing
Norfolk, Va.

Eloquence and clarity
I want to thank you for your thoughtful article on Unity House in August. You were able to sum up many of the ideas we had and you did it with eloquence and clarity.
Lo-Yi Chan
Prentice & Chan, Ohlhausen
New York City

Shot in the arm
As a P/A reader, I have greatly enjoyed the lively new format and the variety—particularly the piece on Ant Farm and the awards history (June issue). What a shot in the arm to the usually gray and somber architecture world!
James Wines
New York, N.Y.

Introducing
the new Briggs

conserver

'iggs brings you an everyday answer to the growing essure for cutting costs, saving water, reducing waste.

e idea of a closet using less water has been around. And now ggs has found the way to make it work . . . simply . . . most efficiently. The secret of the new Briggs Conserver two-piece water closet is in its alanced'' design . . . the balance of less water *and* positive flushing action. The volume of water needed has been reduced, yes . . . actually 30% less an most ordinary two-piece closets. Yet because of the way ggs has designed the Conserver, there's *no* loss in operating efficiency. The Conserver saves. And it works! Already it's an important factor where ving water is not only desirable, but required. It's ideal for stitutions, motels and hotels; and for high density apartment areas here less waste is important. You'll install it in single family homes, o . . . especially in areas of high water and sewage rates. *Everybody* likes e everyday savings (water and money) the Briggs Conserver offers. Choose from two syphon jet models, elongated front or a round front design. oth are available in all Briggs decorator colors, and black or white.

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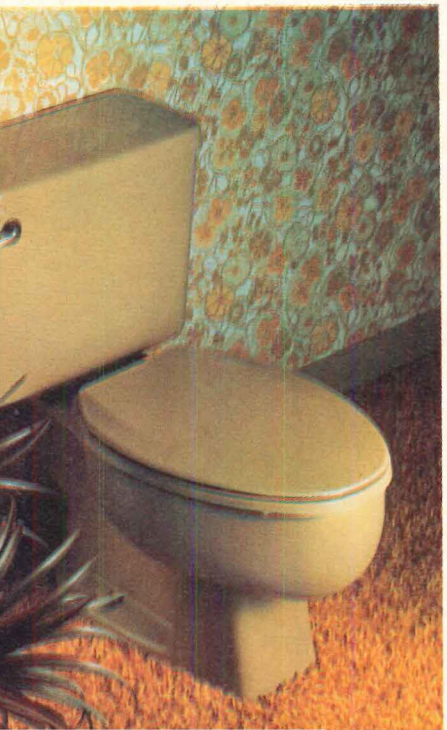

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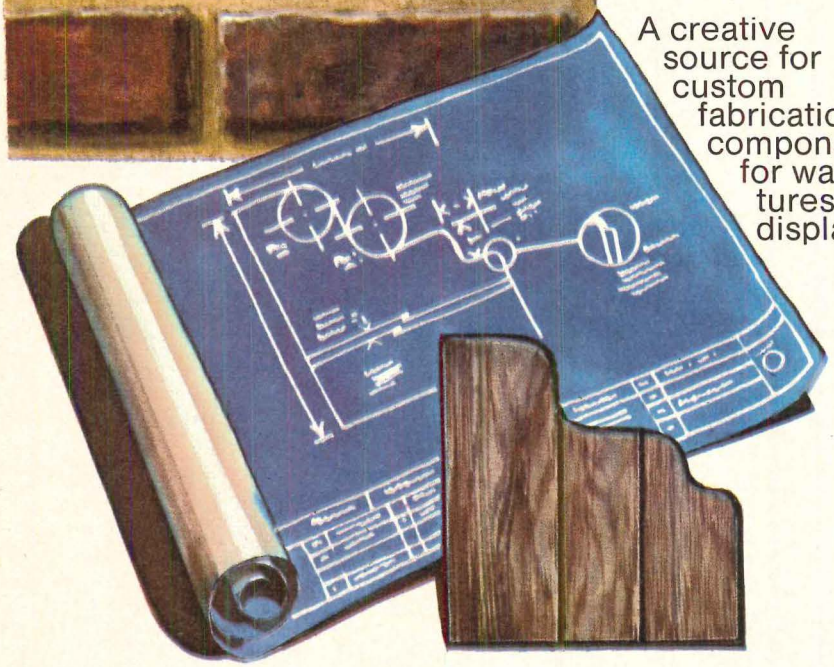

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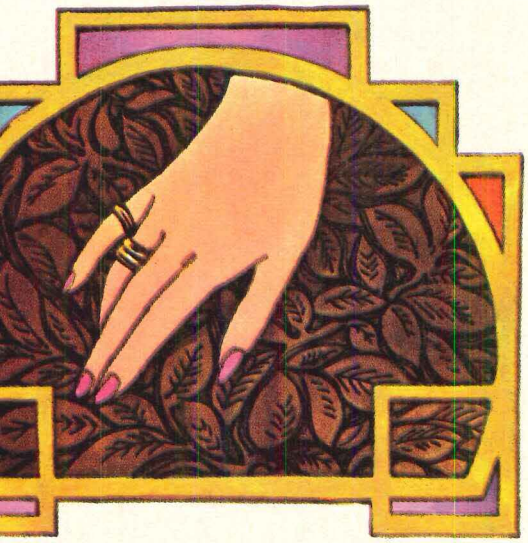

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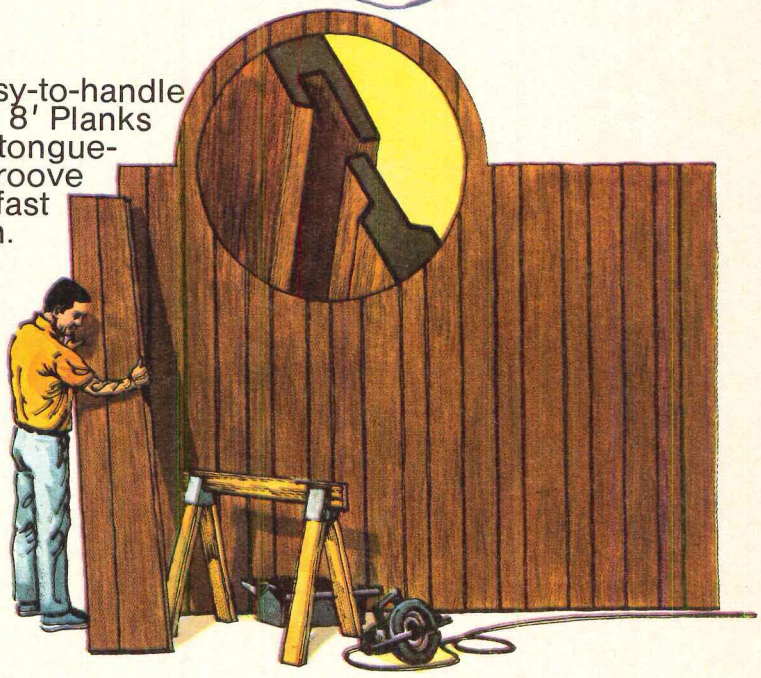

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about walls?
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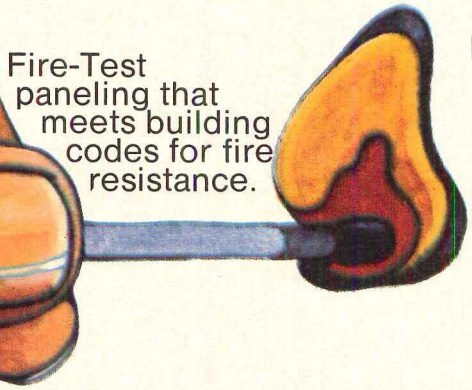

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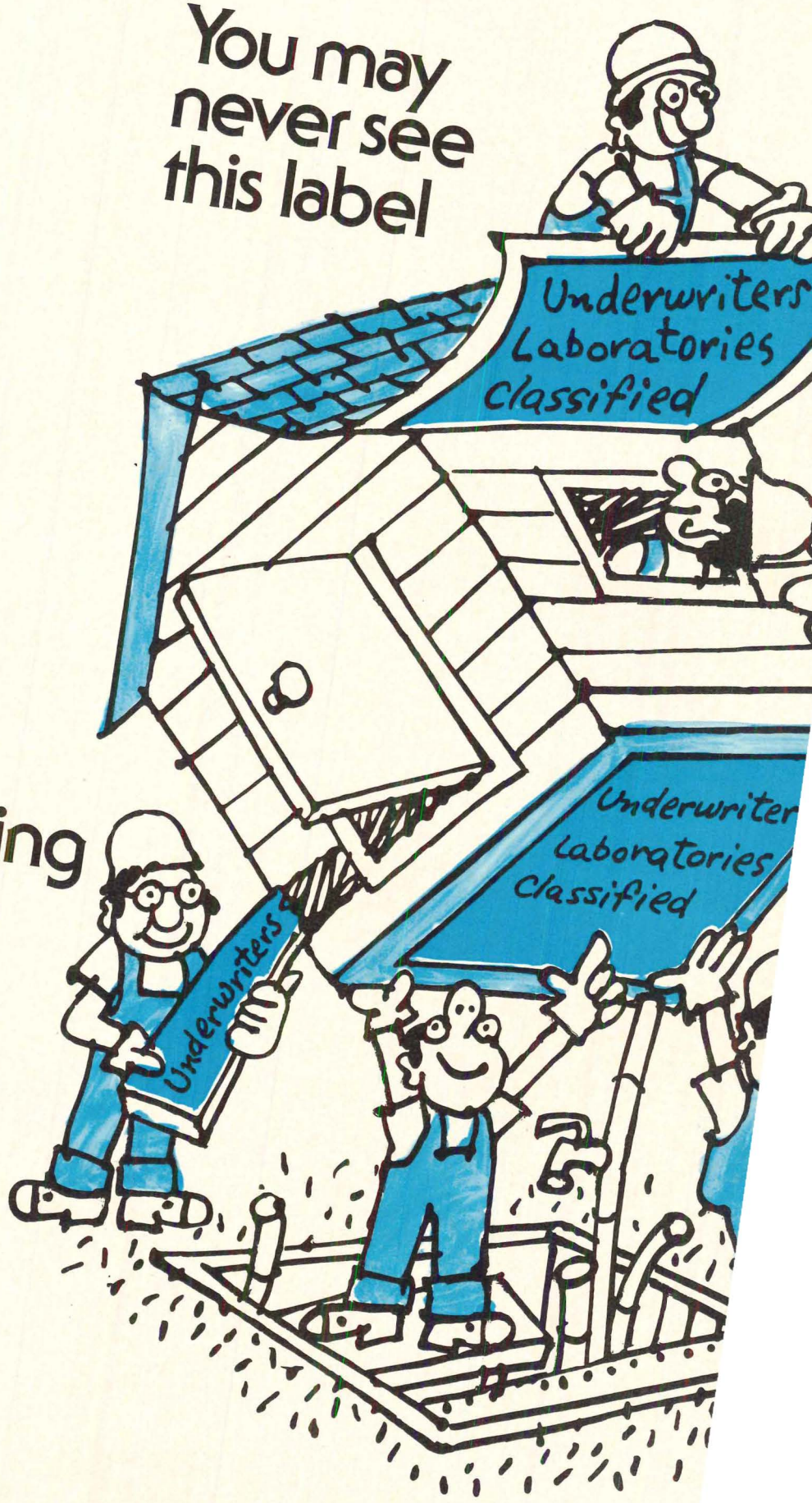
you think.

You may never see this label



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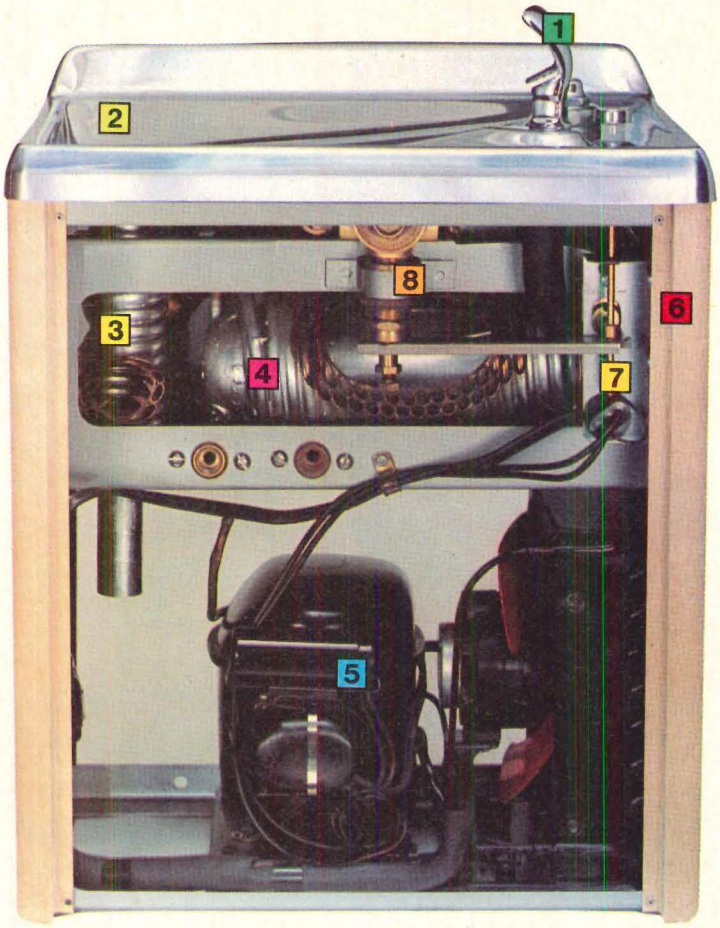

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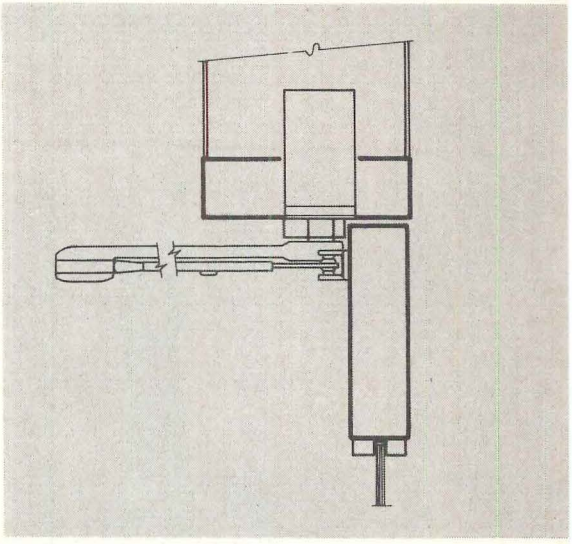

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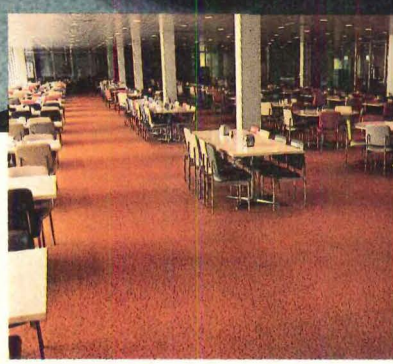

In 1965, Ford Motor Company cemented double Jute-backed carpet to concrete subflooring in their new Ford Motor Credit Company building in Dearborn. No separate padding, no attached cushion. Gained were carpet's acoustic, aesthetic, thermal and easy maintenance advantages. "Bonuses" were lower initial cost, protection for seams, easy mobility for cart wheels and secretarial chair casters without floor pads. Ford office planning personnel report all anticipated benefits realized, with no problems evident. They give much credit to the double Jute backing, which has held fast to the floor and at seams through heavy traffic and rigorous maintenance. Not even chair casters riding 8 years in the same paths daunted the Jute backing!

- Jute's mesh weave and fibrous composition absorb and retain adhesive, for secure bond.
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Top — double Jute-backed car below-grade computer center, 8 later. • **Middle** — carpet in b grade cafeteria, 8 years later. double Jute backing, remained through a flood without mi shrinkage. • **Bottom** — double backing helps resist casters 8

News report

Solution for John Hancock: reglaze

After months of agonizing publicity and behind-the-scenes research, there seems to be a solution to the glazing problems that have plagued the John Hancock Tower in Boston. The answer, recommended by I. M. Pei & Partners and accepted by the owner pending the final outcome of a series of tests, is a simple, if gigantic job: reglaze all 10,300 windows in the tower with ½ in. reflective tempered glass—a high strength monolithic glass different from the original dual-wall insulating glass.

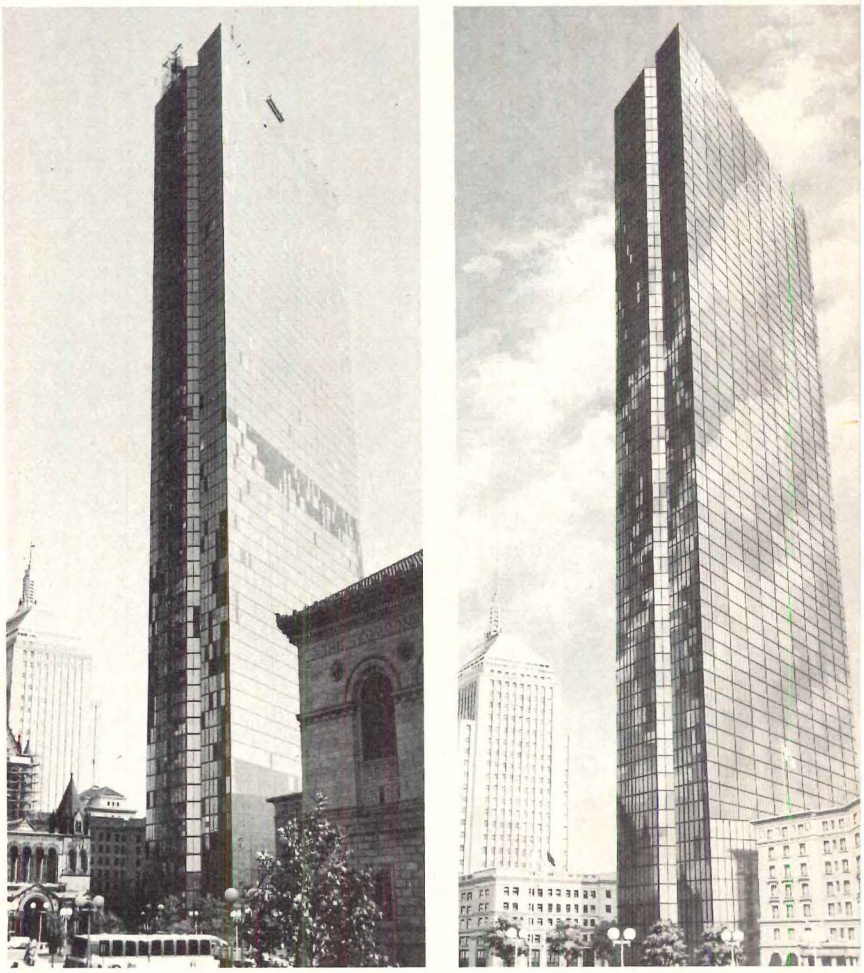
So far, according to a John Hancock spokesman, some 3500 insulating glass units have been removed and replaced with plywood. The reglazing seems to eliminate any possibility of the building becoming the world's first plywood-sheathed high-rise structure; it also fits well with the previously announced tentative occupancy date of next September.

Dallas/Fort Worth airport dedicated

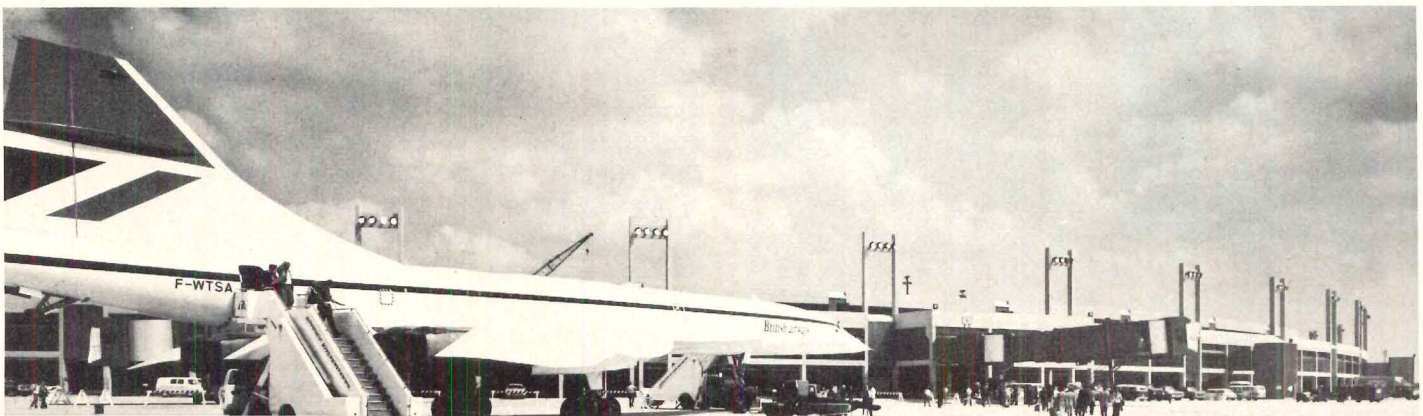
There was one guest at the dedication of the Dallas/Fort Worth Airport Sept. 22 that drew almost as much attention as the 17,500-acre airport itself. A supersonic Concorde SST flew in to symbolize the north Texas region's spectacular leap into the air transportation world of the 21st Century. Only two things marred the dedication ceremonies, which were headed up by former Treasury Secretary John B. Connally: announcement that the airport cannot be opened to passengers and freight before mid-January, and mammoth traffic jams on the highways that forced many human VIP's also to fly in.

The airport, exactly half way between Dallas and Fort Worth, will not really be complete until 2001, when its 14 ter-

[continued on page 22]

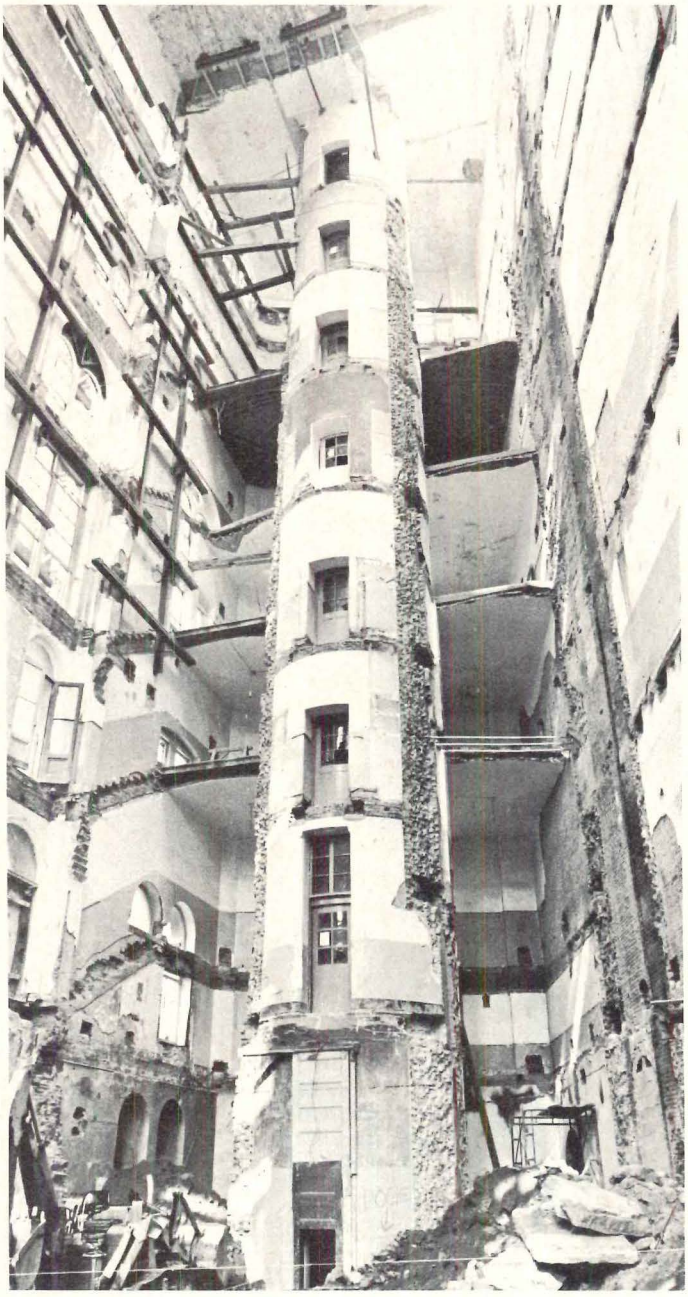


John Hancock now and after proposed reglazing



Concorde SST at DFW dedication

News report continued from page 21



Cooper Union Foundation Building

'Ode to Buckminister Fuller' from 'Dreamhousing'

minal buildings are expected to handle more than two million travelers a month. Tippetts-Abbett-McCarthy-Stratton are prime consultants, planners and engineers; architects for the terminal buildings are Hellmuth, Obata & Kassabaum and Brodsky, Hopf & Adler. Results of their work will appear in full in next month's P/A.

Ready for renovation

It's not a disaster, but progress, that has given the Cooper Union Foundation Building its bombed-out look. The 114-year-old New York City landmark is being completely renovated to provide classrooms, studios and offices for art and architecture students and faculty. And a year after its last appearance in P/A (Nov. 1972, p. 93) all that is left of the interior is the round elevator core, which at last gets a round elevator.

William Wurster dies at 77

William Wilson Wurster, founding dean of the University of California's College of Environmental Design at Berkeley, died in September at the age of 77. He had joined the university in 1950 as chairman of the architecture department, and in 1959 was named the first dean of the college, holding the position until his retirement in 1963.

He started his practice in San Francisco in 1926, and in 1945 was joined by partners Theodore C. Bernardi and Donn Emmons. The partnership accounted for a number of highly regarded projects, the most widely known, perhaps, being Ghirardelli Square. The firm won the AIA's annual Architectural Firm Award for 1965, and Wurster himself won the AIA Gold Medal in 1969.

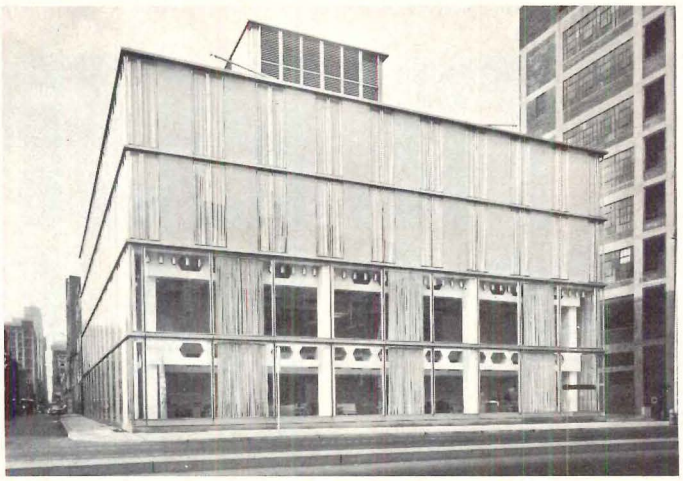
Early houses around the San Francisco area made Wurster's reputation as a leader of the "Bay Style," and according to Phillip J. Hubbard, Sr. former publisher of P/A, he "had more to do with the establishment of contemporary architecture and converting modern architecture to a sensible era than anyone else." Wurster also played a part in the early days of P/A, remembers Hubbard: "Bill had more to do with the changing of Pencil Points to the new Pencil Points and to Progressive Architecture than possibly any other one individual by giving us inspiration and encouragement."

AIA Honor Awards jury named

David A. Pugh of Portland, Oregon has been named chairman of the 1974 AIA Honor Awards jury. Serving with him are Richard M. Bennett, Charles Gwathmey, Ellamae Willis League and John Carl Becker, student representative.

"Dreamhousing" at Whitney Museum

During September, visitors to the Whitney Museum could view an unusual architectural exhibit—a slide show with tape-recorded commentary expressing the highly personal point of view of its creator, Mark Balet, in a series of environmental transformations of cities, houses, gardens, highways. "Dreamhousing," sponsored by the Architectural League, represents "those possibilities of our environment which are promised but remain unrealized," says Balet, a graduate of the Rhode Island School of Design and winner of this year's Prix de Rome. "The experience is environmental. The models aren't meant to be sculptural or tangible. They are meant to be part of a special realm, another place. I have decided what the scale should be. Dreamhouses exist only within the context of the film."



Twisted pipe, tortured concrete mark demolition of AFL Medical Service Plan Building, downtown Philadelphia's only building by Louis Kahn. Photo (left) by Philadelphia Inquirer; others by John Ebstel

Downtown Philadelphia loses its only Kahn building

Louis I. Kahn's four-story American Federation of Labor Medical Service Plan Building, his only structure in midtown Philadelphia, his home city, was hammered into oblivion during late July and early August. Only 17 years old, it was killed by an in-city highway.

Demolition plans were announced seven years ago, almost on the eve of Kahn's Museum of Modern Art solo exhibit, prompting a surprised Arthur Drexler to observe wryly, "This is probably the first time the wreckers will have gotten to an important building before we have even had a chance to exhibit it." Pennsylvania Department of Transportation expects to let construction contracts this fall for a depressed road to be banked with 5-ft-high "hanging plant gardens."

Ironically the encroaching road is one of the last gasps of an expressway system (7 of the 10 planned roads already scrapped) that was devised as part of the Philadelphia area transportation plan in the 1940s. Vine St., then planned for local traffic, is now to be linked with an interstate highway.

The $1.5 million building was unique in two ways. Acclaimed as "a temple of medical service" for union members and their families because the facility was part of organized labor's first full-scale health program, the concrete building also represented a line of development in the work of one of the world's great architects. A.F. of L. showed us the structural evolution of Kahn's now-famous "service spaces," a concept that would find full expression later in his mature works. The widespan structure's ceiling trusses were deliberately made deep with openings through which ran the mechanical distribution system. Those hollow beams were carried on a few regularly spaced columns. This heavy-set frame, clad in glass and gray granite, housed a central service core. (Indoor parking of 17 cars was converted to office space without consulting Kahn.)

While the demolition was in full swing several blocks away,

[continued on page 26]

BERLIN STEEL WAS IN BUSINESS SEVENTY THREE YEARS BEFORE THEY SPECIFIED JOIST GIRDERS FOR THE FIRST TIME. ELEVEN DAYS LATER, THEY DID IT AGAIN.

Girders. The advantages they
ver I-beams were more than
gh for Berlin Steel to specify
for the Sage-Allen Department
they were building in West
ord, Connecticut. So much

st girders have a simple span design. Which why ponding calculations are easier. And ign time is shortened.

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here did Berlin Steel learn about
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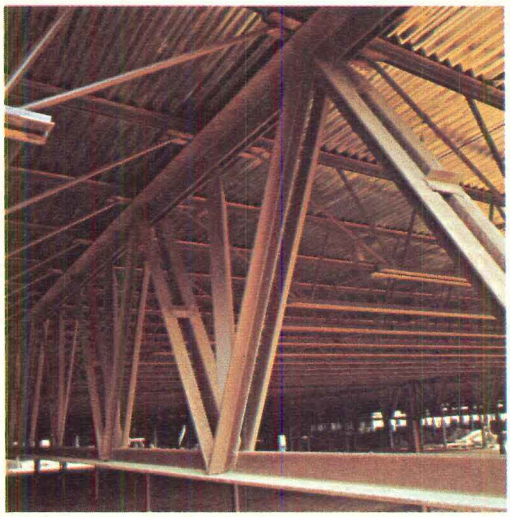
st girders need fewer foundations and s. Which means less work for you and larger s for your clients.

about joist girders as Berlin
bout steel fabricating.
d the first thing the Vulcraft
neers did was show Berlin Steel why joist girders are easier to specify and erect. By explaining that the simple span design of joist girders make ponding calculations easy. And shorten design time.

By telling them about the larger bay areas possible with joist girders. And by talking about the fewer foundations and columns needed with joist girders than with I-beams.

Then came the subject of the advantages joist girders offer after they're erected.

And to explain that topic Vulcraft talked about the modified Warren truss configuration used in joist girders. And that it gave joist girders a high strength to weight ratio.



Joist girders have a modified Warren truss configuration using hot rolled double angle sections for top and bottom chords and single and double angle sections for web members. What that means is a high strength to weight ratio.

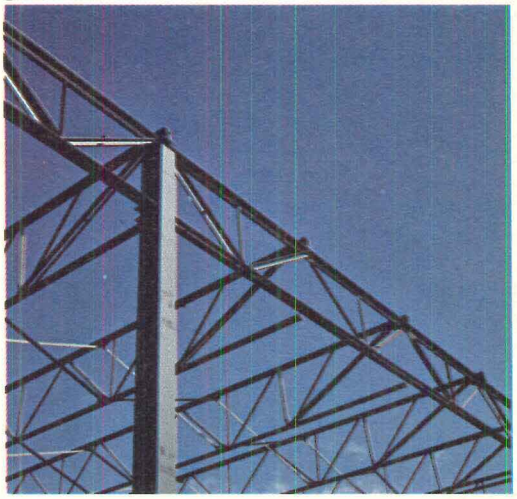
They mentioned further, that bar joist erection was faster. Because top chord panel points show joist location, eliminating a lot of measuring.

Finally, the matter of ducts, pipes and conduits came up. And Vulcraft explained how these things go right through a joist girder. Something no one can say about an I-beam.

What it all added up to for Berlin Steel was a change. A change from I-beams to another roof-framing system. A roof-framing system that was more economical and easier to erect for anything over 10,000 square feet.

It wasn't surprising to Vulcraft, though. Because architects and engineers all over the country are discovering the advantages joist girders have over I-beams.

Joist girders have top chord panel points that show joist location. Which makes a lot of measuring unnecessary.



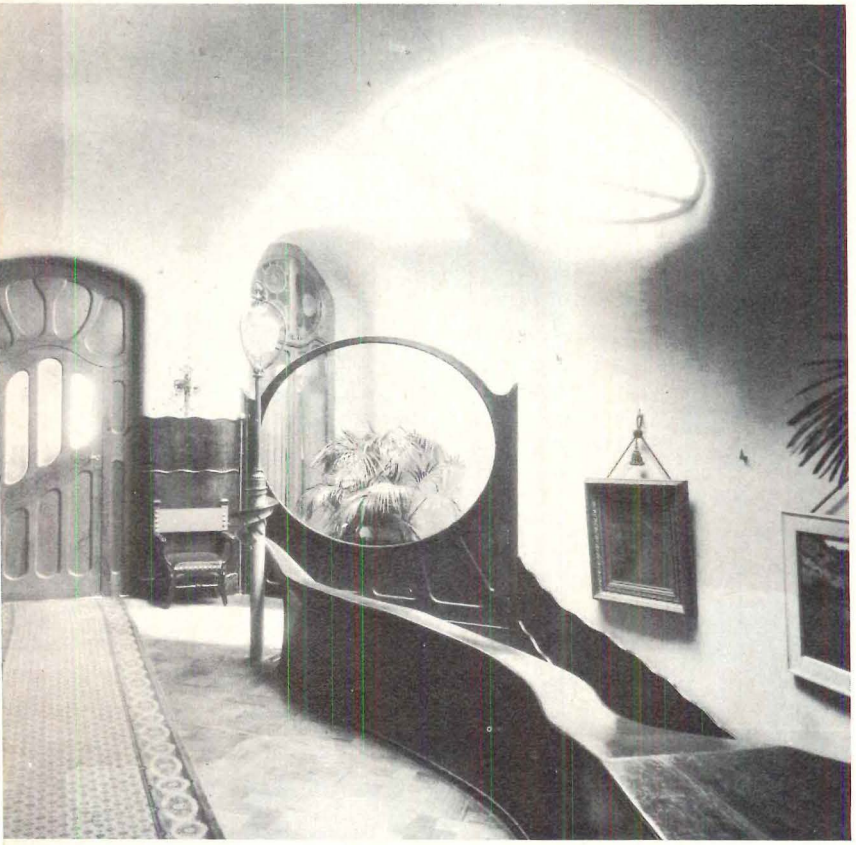
Joist girders already have spaces for pipes, conduits, and ducts to run through. So you don't have to cut them yourself.

If you'd like more information about how joist girders can work for you, send for Vulcraft's Joist Girder Specification Guide. Just contact your local Vulcraft sales office. Or write P.O. Box 17656, Charlotte, N.C. 28211. Or call (704) 366-7000. You'll find a few things even Berlin Steel didn't know. Until they asked.

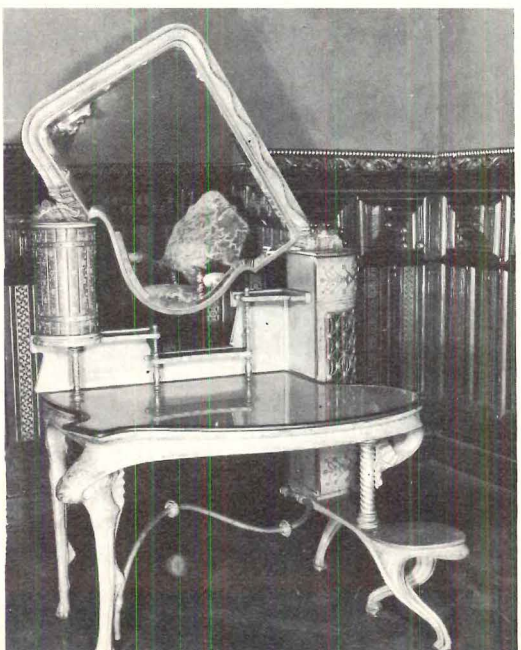
VULCRAFT

llen Department Store, West Hartford, Connecticut; Architect: Associated Architects, Farmington, Connecticut / General Contractor: Bartlett-Brainard & Inc., Bloomfield, Connecticut / Consulting Engineer: Hallisey Engineering Associates, Inc., Hartford / Steel Fabricator: Berlin Steel Construction Com-nc., Berlin, Connecticut. National Plastics and Plating Supply Co., Plymouth, Connecticut: Architect: Andrew C. Rossetti, Bristol, Connecticut / General ctor: S. Carpenter Construction Co., Bristol / Consulting Engineer: Hallisey Engineering Associates, Inc. / Steel Fabricator: Berlin Steel Construction Co., Inc.

News report continued from page 23



Furniture-Muebles-by Antoni Gaudi on display at the Spanish Institute



from his downtown office, Lou Kahn disclosed his "very mixed feelings" about the affair: "I learned a great deal from doing A.F. of L.," he reminisced. "It was one of my first experiences with concrete, the straight reinforced kind."

"I didn't trust concrete then," he explained. "The Vierendeel open structure was a diaphragm used freely without worrying if it's just right. That was also the first time I used metal in its true unpainted form by introducing myself to stainless steel. And I used granite to sheathe the building, not permitting the wall that does the work to also keep out the weather. At Bryn Mawr and the Salk Center I developed this sheathing method further. I like to believe Mies' saying 'God is in the details.' "

One detail that Kahn abhored was the penthouse cooling tower on top of his building. "I hoped it would present itself differently when two more stories were added to the building, but they never materialized." Kahn's favorite feature was the two-story entrance hall, which he felt had to be "very friendly and generous just because the users were working people, poor people." This palatial entry reinforced the fact, that it was *their* place. "It wasn't something given to them," he explained, "but through their own faith in joining the union and the strength they got from it they readily accepted, at least in my mind, a rather noble entrance."

"The building was a kind of street with little alleys where you meet or wait your turn. You never felt the sting of too much closeness to the place where you might feel some pain or where you felt you might get some startling news, which is never very welcome in a place which deals with medicine. A good place to be examined—it had this quality. For most clinics, at that time particularly, they measured the length of every knee as it would touch another knee, and called it sufficient. I think I spread the knees pretty far from each other, and that was good."

"There is a lesson in the building—the most valuable part of a man's work is that it doesn't belong to him. What belongs to him is how he expressed it. How he composed it—he must be satisfied with that alone." [Victoria Donohoe, Art Critic, Philadelphia Enquirer]

Gaudi's *muebles*

Everyone is familiar with Antoni Gaudi's famous architectural masterpieces in Spain, but not many people know that he also designed a substantial body of furniture, or *muebles* (literally, that which is conceivably movable), to complement his architecture. In his furniture as in his buildings, everything is calculated, meticulously thought out and planned to work toward the totality of an architectural concept. In this respect, Gaudi was to create "environments" long before the term came into popular usage. A large photographic exhibition of his *muebles,* including everything from chairs to street lamps and even elevators has been conceived by Nieves Peris; it will run through Nov. 30 at the Spanish Institute, 684 Park Ave., New York City.

Brunner scholarship announced

Professor and planner Jerzy E. Glowczewski has been awarded the 1973 Arnold W. Brunner Scholarship of the New York Chapter AIA for a proposal to study and develop a new technique for urban design. His research will be aimed at producing a manual of urban design techniques dealing with the

[continued on page 32]

Phipps Plaza Shopping Mall, Atlanta

This floor has been stomped, trampled, wheeled over and ice-creamed on for 5 years. But it wears and looks like it's only been tip-toed on.

You know what a shopping mall is like. Thousands of people and kids running, kicking, dropping and dragging things.

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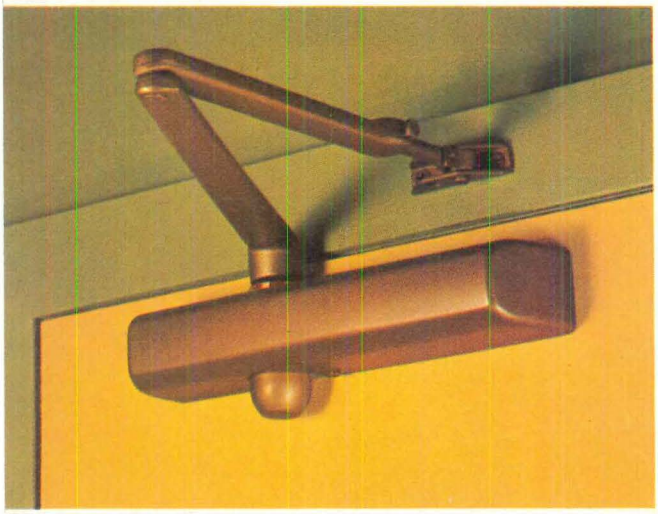

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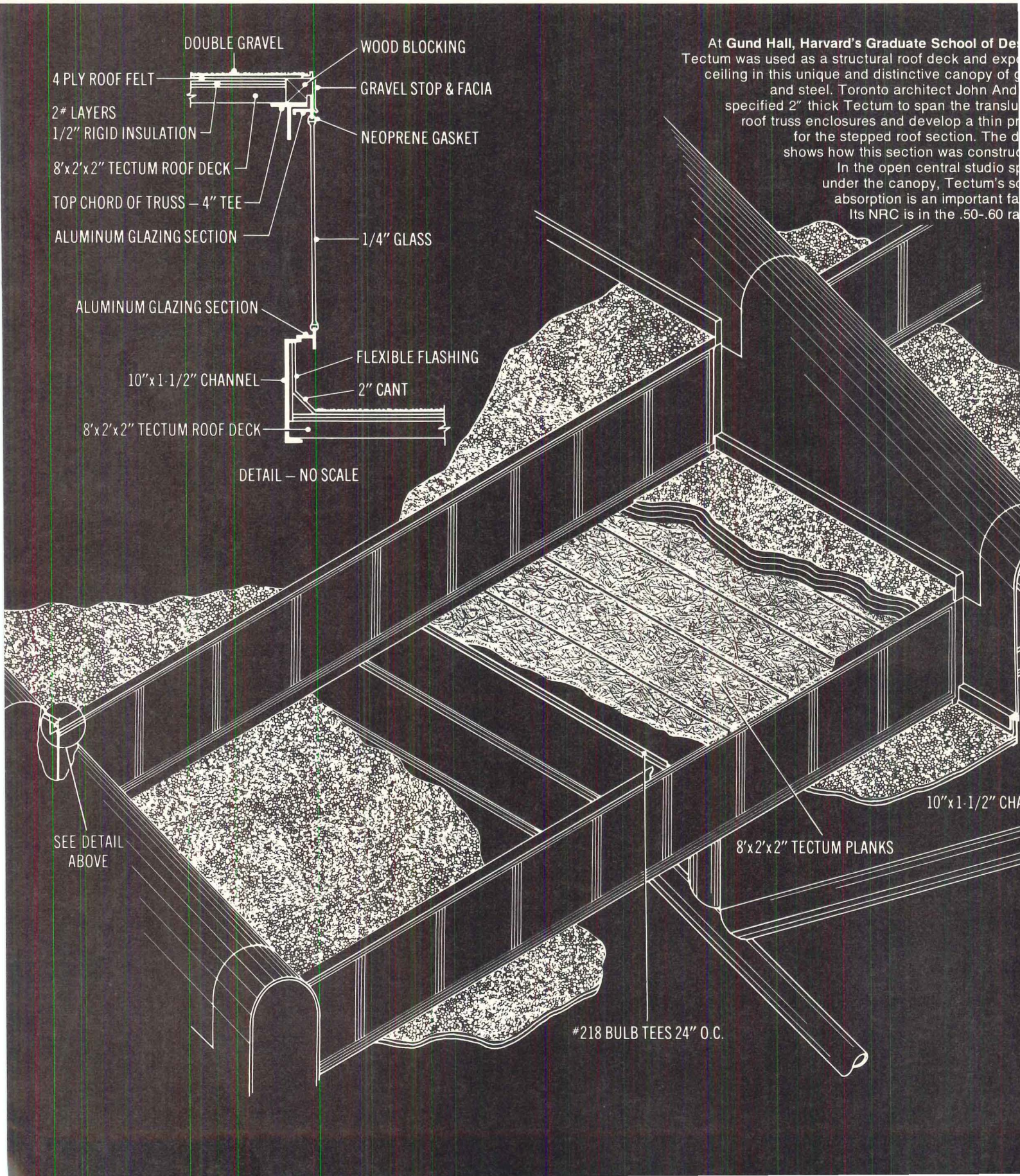
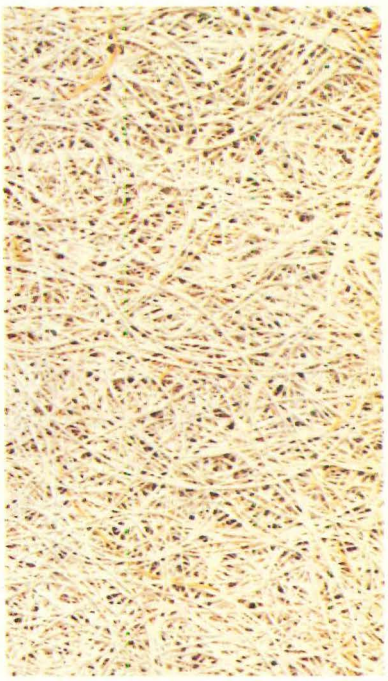


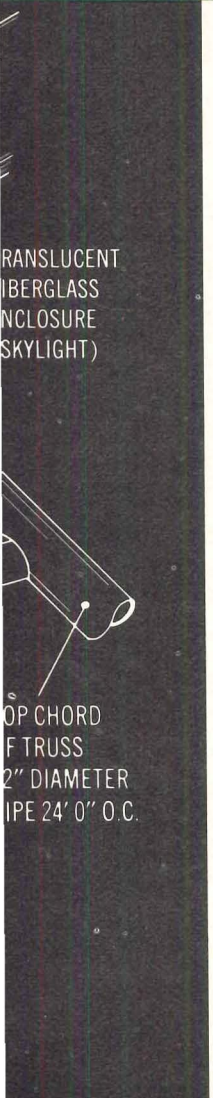
At **Gund Hall, Harvard's Graduate School of De**
Tectum was used as a structural roof deck and exp
ceiling in this unique and distinctive canopy of
and steel. Toronto architect John And
specified 2" thick Tectum to span the translu
roof truss enclosures and develop a thin p
for the stepped roof section. The d
shows how this section was construc
In the open central studio s
under the canopy, Tectum's s
absorption is an important fa
Its NRC is in the .50-.60 ra

tructural, acoustical, on-combustible.

Gund Hall Graduate School of Design, Harvard University, Cambridge, Mass.
Architects: John Andrews, Edward R. Baldwin and John Simpson, Toronto.
Structural Engineers: Le Messurier Associates, Boston.
Tectum Contractor: Bay State Structural Specialties, Boston.



Texture is the thing about Tectum, but not the only thing.



There's no end to the ways you can be constructive with Tectum Roof Deck. Look at the way it was used in Gund Hall, shown at left. As a structural material, Tectum gives the roof a thin, efficient section, and demonstrates impressive insulating values as well. In the two-inch thickness, resistance to heat transmission is 3.50. With its Noise Reduction Coefficient in the .50-.60 range, it soaks up sound. And with its rugged finish, Tectum looks good exposed.

The reason Tectum is so constructive is because of the way it's put together. An exclusive inorganic binder bonds long wood fibers into a compact sheet under heat and pressure. Like wood, it's easy to cut, shape and install. Unlike wood, it's rated noncombustible and Tectum has been given an uplift rating of Class 90.

Long Span Tectum Roof Deck

Tectum is also available in Long Span Tectum. This adaptation allows even greater areas of the exposed Tectum surface to remain unbroken by purlins. Tongue and groove edge of Long Span Tectum is designed for galvanized 16-gauge steel channels. These channels permit spans of up to 6′ for 3″, 5′ for 2½″, and 4′ for 2″ thick Long Span Tectum.

Like other Tectum Roof Deck, Long Span Tectum has factory-applied asphalt felt membrane, and is applicable to flat or pitched roofs with steel, wood or concrete framing.

So, for a good-looking way to cut roofing costs, why not cut down on the number of materials you use? With Tectum, or Long Span Tectum.

For more information, write Gold Bond Building Products, Division of National Gypsum Company, Dept. PA-113T, Buffalo, New York 14225.

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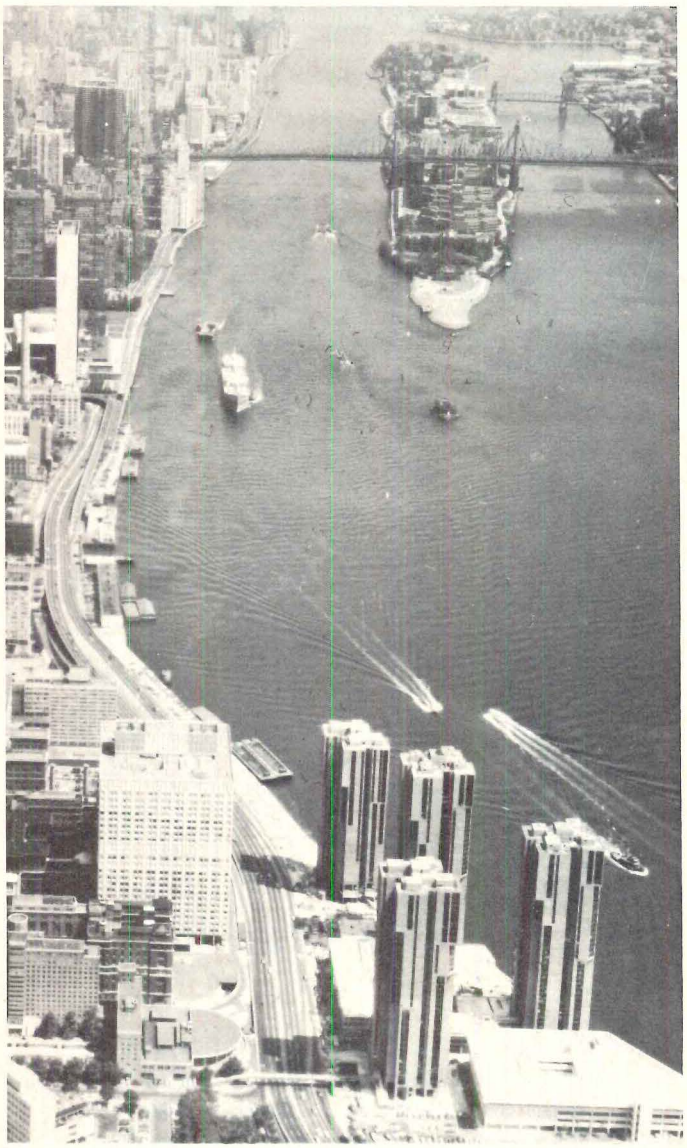
News report continued from page 26



New York City's Waterside

Peace Corps' Ken Lydon (right) in Kabul, Afghanistan

Vista's Mark Hanami (left) and Fred Albert with ARCH in Harlem

natural environment and legislative measures, primarily in medium-sized towns in New York State; the pilot research will be done in Newburgh, N.Y.

Glowczewski is presently a professor of macroplanning, ecology and land development at Pratt Institute's School of Architecture and has his own environmental planning practice in Connecticut. He was a member of the planning and urban design jury for the 1971 P/A Design Awards.

Waterside officially opened

New York is going to miss John Lindsay's sense of style. On one of those rare, clear days when fall was already in the air, the mayor and other dignitaries sailed up the East River in a fireboat to officially open Waterside. Someone in the gathering said it was like Henry VIII arriving at Hampton Court, but the similarity really ends with the fact that one can arrive at either by boat.

Waterside, designed by Davis, Brody & Associates, is a $77.7 million residential and commercial complex built on a six-acre deck extending out into the river on Manhattan's East Side. 1100 of the 1470 apartments are in three 37-story towers, and a fourth 31-story tower includes 370 moderate income units subsidized under Section 236. There are also 20 duplex townhouses. Rents will range from about $30 a room (including utilities) in the lower tower to about $100 a room in the taller towers and duplex units. Building the complex over the river required no relocation of residents or businesses, and it gave the city a good opportunity to get rid of some dangerous, decaying old piers. With over 75 percent of the site given over to open space, New York now has a new two-acre plaza with service and specialty shops, a seafood restaurant overlooking the water, and a five-block-long waterfront promenade.

At the opening ceremonies, Mayor Lindsay also presented the city's 75th Anniversary Golden Jubilee Medal to architect Lewis Davis and to Richard Ravitch, a general partner in Waterside Redevelopment Company, who built and owns the complex, for their contributions to the city.

Progress report: volunteers wanted

"Architects for Peace Corps/Vista-Action: Volunteer overseas and U.S. Low-income housing projects, design of schools, hospitals, community centers, etc. Most openings—singles; some couples."

The ad has appeared in our pages and those of other magazines, but it only hints at what Vista and the Peace Corps are doing in the architectural and planning areas. Volunteers have helped design shopping centers in St. Louis, rehabilitated ancient mosques in Morocco, planned community housing programs in California and taught architecture in Iran. They have used their skills and experience to improve life in scores of low-income communities in this country and many underdeveloped areas abroad.

Consider the impact Benjamin and Lois Brown may have on San Pedro Sula, Honduras. He is designing a central park for the city; she is designing a school and community center, as well as a 1000-unit housing project. Or what H. William Gaisser, Jr. has been doing in Morocco. He has just finished three years service there, during which he designed public markets and squares, low- and moderate-income housing, shopping centers, parks, government buildings and a host of other fa-

[continued on page 40]

and Consulting Engineers:
Raines, Barrett, Hutton,
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Air Conditioning
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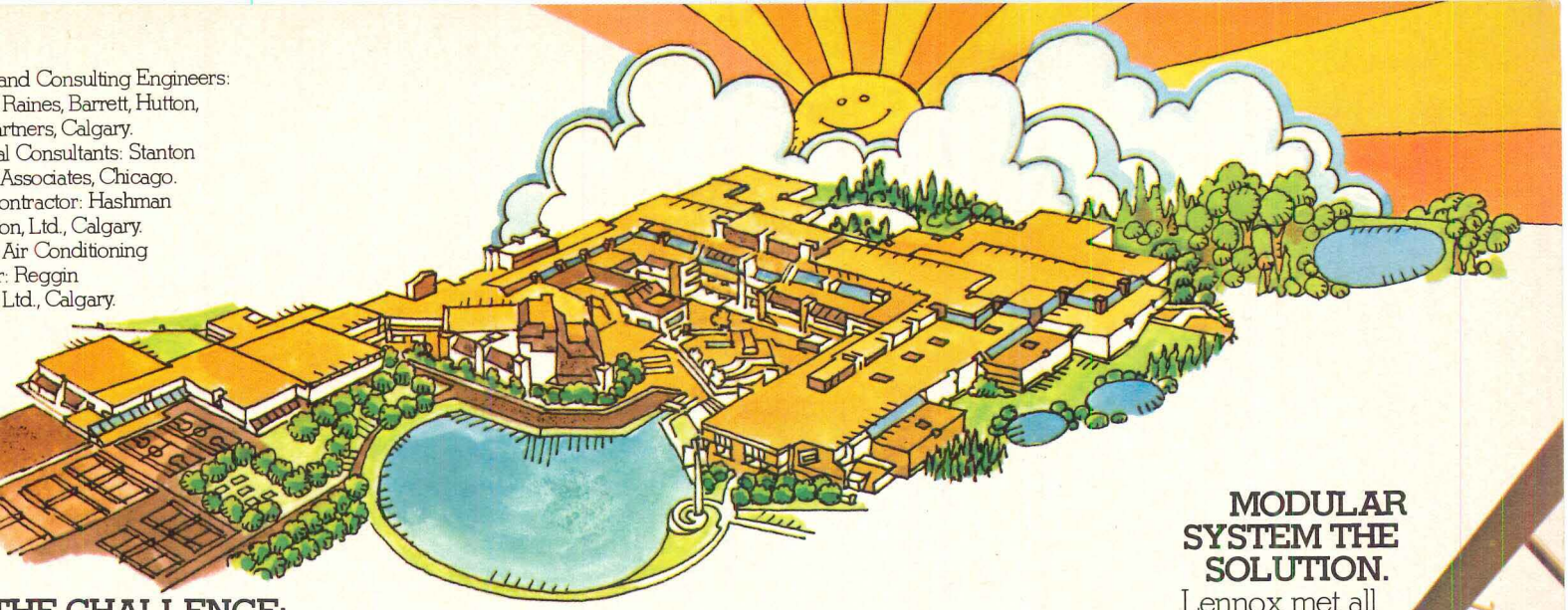
Ltd., Calgary.



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THE CHALLENGE:
gn environmental control
e 14.7 acre building which
ses the entire campus of
t Royal College in Calgary,
a, Canada. In this multi-level
re are 641,000 square feet,
variety of flexible modules,
uge open class rooms,
decentralized service areas.

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FLEXIBLE SYSTEM. To accommodate future expansion as well as internal re-structuring, much of the duct work was left exposed. This also complemented architectural appearance.

SITE LABOR REDUCED. The Lennox
tems are not only an integral part of the
ior architecture, but, because they were
y assembled and wired, on-site labor was
siderably reduced. In fact, the Lennox system
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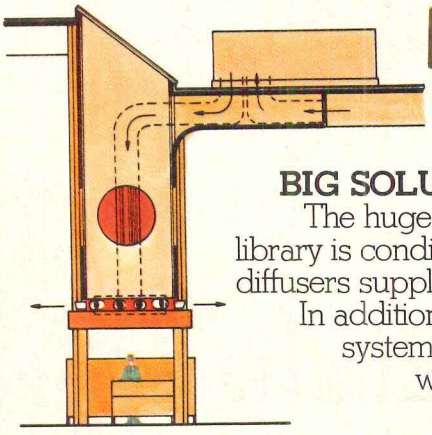

BIG SOLUTION TO BIG PROBLEM. The huge, sprawling, open learning library is conditioned by 12 cannon-type diffusers supplied by vertical duct work. In addition, a flexible perimeter duct system separately handles exterior wall and window loads.

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News report continued from page 32

cilities, some 50 percent of which are under construction or completed. His latest job: setting up and running Marrakesh's first professional school for draftsmen. In Kabul, Afghanistan, Ken Lydon is helping with the restoration of Darulaman Palace, completed in the 1920s and damaged by fire in 1968; when the restoration is finished, the Palace will house the country's Supreme Court.

In this country, Vista volunteers are working in less exotic settings, but making contributions of equal importance. In Pittsburgh, where volunteers are assigned to one of four community design groups, Douglas Sharp and Rod Curtis of the Hazelwood Architects Workshop have come up with an alternate to a proposed highway interchange. Their plan if approved would reroute the highway interchange to save a whole section of a vital business district from destruction and considerably reduce the number of people who must be displaced. Other volunteers in other organizations—social services organizations and community action programs—are developing renovation proposals, planning recreation centers and housing projects, studying self-help housing and designing parks and play areas.

It's important work, and it is no news that it is being done; nor is it news that both programs need more volunteers than they have been able to recruit. "We fill from 50 to 75 percent of our programs when recruiting for them," says George Gatewood in ACTION's recruiting office in Washington. (ACTION is the umbrella organization for Peace Corps, Vista and a variety of other volunteer programs run by the government.) At present, Peace Corps volunteers number about 7000, 150 or so of them architects and planners; Vista volunteers run to about 4200, with about 100 architects and planners.

In general, says Gatewood, volunteers tend to be young, with Vista being "better able to get by with people just out of college." Peace Corps, he says, has more rigid requirements in terms of education and experience. In either case, however, the volunteers are often people just starting or just ending their careers.

What's required, besides a desire to help others? The basic requirement is a skill—in the case of architects and planners, the skills that any architectural or planning graduate should possess, plus an ability to deal directly with a variety of people.

In return, the Peace Corps volunteers receive subsistence allowances that include free transportation, housing, medical care and 48 days paid vacation; they serve for two years and receive a $1800 readjustment allowance. Vista volunteers serve for one year and receive an allowance for food, housing and incidentals, plus a $50 a month stipend paid at the end of their service; medical coverage is also provided.

The chief non-monetary benefit, besides the satisfaction of having helped someone solve their problems, is experience—in most cases experience that might not be available to someone their age at a regular job, and responsibility beyond what they might have early in their careers. Benjamin and Lois Brown are both 24, and Brown says his assignment is a "300 percent jump out of architectural school." He figures that at home, "somebody else would be doing the plans I'm doing here (in Honduras), and I'd be in charge of copying them.

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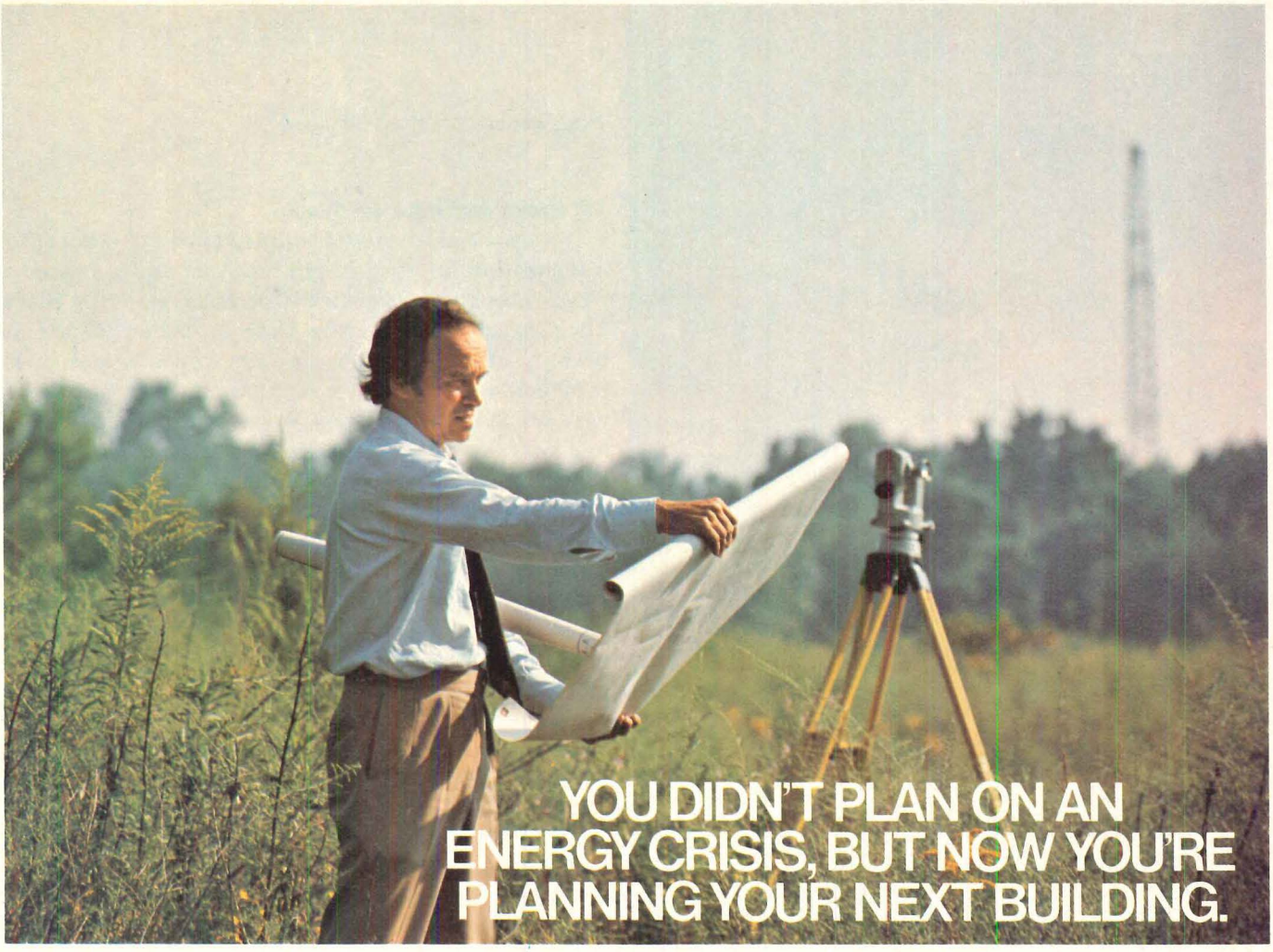


YOU DIDN'T PLAN ON AN ENERGY CRISIS, BUT NOW YOU'RE PLANNING YOUR NEXT BUILDING.

Which building material will you use?

You've got energy shortages to think about. Air-conditioning costs. Heat gain through the long, hot summers. Heat loss in the winter months. Heating equipment costs. The whole set of energy-use factors suddenly has become critically important. The building material you use affects all of them.

Compare the energy conserving capability of masonry, for instance, with double-plate glass walls.

At 4:00 P.M. on a hot August day in Washington, D.C., the heat gain through a square foot of west-facing insulated brick and concrete block wall will be 2.2 Btus an hour.

The heat gain through a double-plate glass wall in the same location will be 173 Btus a square foot in an hour. A big difference.

Project this differential over 10,000 square feet of wall. You come up with a heat gain through masonry of 22,000 Btuh, while the heat gain through double-plate glass is 1,730,000 Btuh.

In the case of the masonry wall, cooling equipment with a two-ton capacity can handle the heat gain. But with the double-plate glass wall, about 143 tons of cooling capacity will be needed.

An analysis of a typical 10-story building shows that over its useful life, the air-conditioning cost for a square foot of our masonry wall will be about 23 cents. For the double-plate glass wall, it will be $7.60.

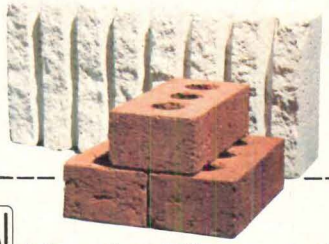
It takes a lot of money to buy, install and create space for all the extra air-conditioning equipment required by the double-plate glass wall. A lot of money and a lot of energy to run that equipment.

Compare the heat loss in winter. It has a dramatic effect on energy consumption and building operation costs.

Our masonry wall, for example, has a "U-value" of .12. The double-plate glass wall has a "U-value" of .55. (U-values are used to determine heat loss through one square foot of wall area in Btuh per degree Farenheit differential across the wall.)

This means that the masonry wall is about 450% more efficient, on the average, than the glass wall in reducing heat loss.

Over the useful life of the building, the heating cost per square foot of wall area for masonry will be about 30 cents. For double-plate glass, about $1.38.



In a time of one energy crisis after another, masonry makes eminently good sense as a good citizen.

The masonry industry believes that the thermal insulating qualities of masonry are an important economic consideration to building designers, owners and investors, and all citizens.

Masonry walls save on air-conditioning and heating costs. And just as important, they are less expensive to build. The masonry wall we've described would have a 38% lower initial cost than the double-plate glass wall.

If you'd like to find out more, write to us and we'll send you a booklet comparing the thermal insulating qualities of masonry walls with double-plate glass walls, metal panel walls and pre-cast concrete walls.

International Masonry Institute P/A

823 15th Street, N.W., Washington, D.C. 20005 / (202) 783-3908

Please send the booklet comparing insulating qualities of masonry with other building materials.

Name

Title

Company

City State Zip

Nature of Business

News report continued from page 40

Yet another new look for Atlanta

The urban growth that has marked Atlanta's recent history is well-known, but the progress seems to have by-passed one sizable downtown area—the 570 acres known as the Atlanta Triangle. Long neglected, the Triangle has deteriorated noticably. Its 1600 permanent residents are almost all poor, their neighborhood blighted; derelicts have staked some blocks as the city's Skid Row. Yet the Triangle is the business-day home of some 42,000 executives, clerks, laborers, professionals, bureaucrats and politicians, and it is no surprise that a group of businessmen formed the Atlanta Triangle Committee to sponsor a plan to bring new life to the area.

Developed by Finch Alexander Barnes Rothschild & Paschal, Inc. (FABRAP) and The Research Group, the plan calls for some immediate solutions to security and transportation problems in the area and long-term physical and social improvements. Based on projections that show the area as an in-town regional shopping center, as well as a business and government center (Atlanta's financial district and the State Capitol are on the edges of the area), the plan proposes a regional shopping and entertainment core (the area already includes the well-known Underground Atlanta) along pedestrian malls. The state government area would be linked with a federal-community services and cultural center, providing another axis for the area; new high density residential areas would be developed in the southern and western parts of the Triangle, while the northwest section would become a world trade center.

The area now serves as a sort of mixing bowl for metropolitan bus passengers, but when MARTA (Metropolitan Atlanta Rapid Transit Authority) gets moving, it will be served by four mass transit stations. A supplementary people mover system of some sort is proposed to link the rapid transit stations, shopping and government areas and a series of proposed peripheral parking areas.

Making it all a reality will demand a lot of effort and organization. The plan recommends that the Atlanta Triangle Task Force (the present name for the committee that sponsored the plan) of Central Atlanta Progress (a downtown business group) take advantage of state laws to set up a private development corporation or a public development authority and special taxing district to do the job. Cecil Alexander, board chairman of FABRAP, sees the plan as "the beginning of a planned program for redevelopment of the Triangle into an 'old-new' historic setting for enjoyable use by people 18 hours a day."

Monumental Art Deco, American Style

The 30s has been called the great decade of American World's Fairs, and justly so. Five were held in the U.S. during that decade, starting with the Chicago fair of 1933, San Diego in '35, Dallas in '36, San Francisco in '39 and culminating in the great New York World's Fair of 1939. Photographic documentation and building models from the monumental fairs can be seen at the New York Cultural Center through Nov. 14.

Called "1930s Expositions," the show was originally assembled by Arnold L. Lehman for the Dallas Museum of Fine Arts. In the catalog for that show, he noted that "The expositions of the 1930s were a strange but often wonderful mixture

f monumental, sometimes ponderous, structures and light nd frivolous sculpture, fountains, gadgets and entertainnents. They were a melange of visual gestures—a last gasp of ne grand space-making schemes of the Beaux-Arts planner nd the adolescent excesses of the industrial designer's art." n New York, the exhibit will also include World's Fair nemorabilia from the collection of Lawrence Zimmerman.

he design activity: a method to the madness

Toward the end of the Design Activity International Conference held in England at the Polytechnic of Central London during August, one of the delegates suggested that the meeting be renamed the Design *In*activity. There's the dilemma of oday's design methods research: much academic squabbling and little real contribution to the business of designing.

Three hundred participants, including architects, engineers, industrial designers, planners, researchers and teachers from 15 countries, attended the conference, which was sponsored by the Design Method Group (DMG) of the United States and the Design Research Society (DRS) of the United Kingdom. Each participant received preprints of more than 100 papers before the conference and during the three days attempted to discuss the issues they raised in sessions on design morphology; design processes, techniques and algorithms; design objectives; case studies; and education, professionalism and management.

There were no formal paper readings, allowing many people to speak but few to make coherent presentations. Discussions wandered and were unwieldy. Horst Rittel's (Berkeley) opening charge that the papers submitted to the conference represented no real progress beyond the first efforts of the early 60s seemed unhappily confirmed three days later when the question, "What can you report that you learned?" got no response.

Standing out from the dissatisfaction was the encouraging award to Hanno Weber, an American architect now at Washington University. He received a $1000 prize sponsored by the Graham Foundation for "the best and most significant" case study submitted to the conference. Weber's paper explained the participatory process by which he, along with a community task force, three architecture students and several consultants, produced a final design for the George Street Urban Renewal Area, New Brunswick, N.J.

Such specific reports, however, were few and far between. Most of the interchange at the conference remained academic and theoretical in spite of DMG Chairman Don Grant's hope that the conference would mark a shift toward "application of methods to real problems."

Christopher Jones (DRS) welcomed the delegates as yesterday's lunatic fringe and today's establishment. What began a decade ago as a self-conscious examination by a few designers of their own work has evolved into the established field of design methods, and the title of this conference—The Design Activity—reflects the expansive and completely open-ended field set out for the conferees. It included everything from design of a cup to design of a city, from technical tasks to theoretical models, from individual techniques to political and social critiques. No wonder the conference was not able to focus on specific questions.

Discussion at this conference centered on abstract conceptualizing of design methods. More productive avenues,

[continued on page 48]

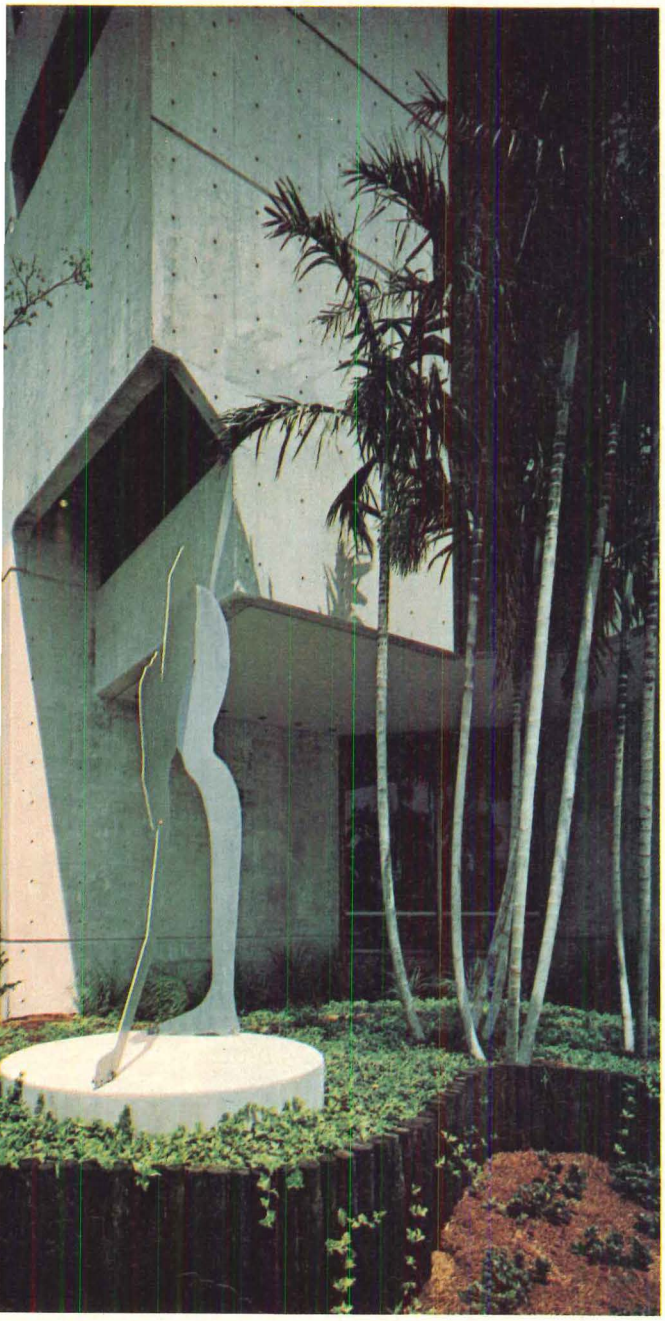
Concrete makes the

There's lots of excitement in Miami, not the least being One Biscayne Tower at 40 stories and 456 feet, the tallest building in southeast Florida.

The soaring reinforced-concrete structure shows architectural concrete at its best. From the massive elements of the 10-story garage to the slender columns in the upper floors, the concrete displays superior appearance.

From a professional point of view, much of the excitement of One Biscayne Tower is behind the scene. Built to withstan wind loads of 185 mph, the unique struc tural system isolates the core from the en walls permitting high-rise construction wit a low-rise system at overall savings o $2.5 million.

The key to quality and performance i the 50,000 cubic yards of concrete was th use of *POZZOLITH* polymer-type admix ture. It made the concrete more work able, placeable, finishable. It improve strength and reduced shrinkage cracking



scene in Miami.

OZZOLITH performed equally as well in e 3500-psi lightweight concrete for floors nd the 5000-psi concrete for mat, col-nns, and core.

POZZOLITH polymer-type admixture elped One Biscayne Tower make the cene in Miami. And it can help make the cene for you. For more information, call our local Master Builders field man. Or rite Master Builders, Cleveland, Ohio 4118.

Owner: One Biscayne Corp,, a wholly owned subsidiary of EHG Enterprises, Inc., San Juan, Puerto Rico. Architect: Fraga Associates, Miami. Structural Engineer: DeSimone & Chaplin, New York. General Contractor: Pavarlni Construction Co., New York; and Edward J. Gerrits, Inc., Miami. Concrete Producer: Maule Industries, Miami.

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Or you might have *two* girls, each operating an obsolescent unit. Keep Women's Lib happy this way: one 875 just might replace both of those old machines, liberating one operator for other duties.

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News report continued from page 43

implicit in the idea of methods research, could be found by moving in either of two directions: on the one hand toward broadening the scope to deal with holistic notions of design in its social, political and economic context; on the other toward narrowing the scope to deal with actual applications of specific new information technologies and techniques. Much of the conference was mired down somewhere in the middle.

What is unfortunate is that the design method perspective, which can be vitally helpful to architecture today, threatens to be lost in a sea of abstractions and endless printed pages. More than ever architects need specific information and ideas on ways to design, and beyond this, to understand, the way their own work affects and is affected by the larger social, economic and political order of which it is part. DMG and DRS are organizations devoted solely to communication but unless they can begin to generate this kind of interchange with practicing designers doing real things, they will remain involved in little more than idle speculation. [Barry J. Korobkin and Michael Ertel]

Plywood award submissions due in January

Outstanding structural and aesthetic uses of softwood plywood will be honored in the 1974 National Plywood Design Awards program of the American Plywood Association. Cash awards of $1000 plus citations will be given in four categories: single-family residential, multi-family residential, commercial/institutional and vacation homes. Projects must have been completed after Jan. 1, 1970 and before the entry deadline of Jan. 31, 1974.

Jury for the program: Pietro Belluschi, Edward D. Dart, and Arch R. Winter. Further information and entry forms are available from 1974 National Plywood Design Awards, American Plywood Association, 1119 A St., Tacoma, Wash. 98401.

Washington report

Saving graces

Money saving and energy saving seems to dominate thinking related to the construction industry, as Washington approaches winter with some apprehension. On the money-saving side, prompted in part by administration efforts to present a frugal aspect to the electorate, and in part by presidential success in knocking down what it considered excessive congressional spending, General Services Administration began an interesting experiment: On a number of its building projects, scattered as to location and type, GSA began a program of full progress payments to contractors, with no retainages.

The idea is simple enough, though against the advice of many construction old-timers. If contractors can see quicker cash flows, and no need to borrow money (and pay added interest) to provide working capital against future retainage payments, they may be inclined to bid more jobs and bid at lower prices.

GSA pointed out that on a $10 million project, at current federal retainage rates (10 percent on the average), total retainage could amount to $500,000. If contractors had to borrow against that figure, the added interest might be as much

[continued on page 54]

"Ticket-Operated Maytags give us better laundry room security and tight money control at Channelwood Village," reports Mr. Reeves.

These washers and dryers minimize coin-box problems. Instead of coins they use an Electronic Ticket that is invalidated on insertion.

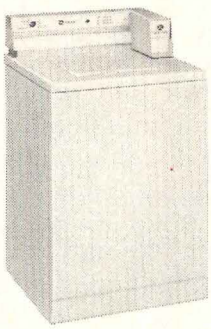
Channelwood Village is a new community in Opportunity Park, Akron's 400-acre urban renewal area. Conceived by the Akron Chapter of Alpha Phi Alpha and federally financed, it was built by Forest City/Dillon, Inc.

Channelwood's 551 units include high-rise apartments, garden apartments and town houses. The complex's laundry rooms have Ticket-Operated Maytags, 32 washers and 32 dryers. These use an exclusive Electronic Ticket instead of coins.

"It was natural for us to pick Ticket-Operated Maytags because we've had years of experience with them," says Mr. Gerald C. Reeves, Forest City/Dillon's Property Management Coordinator. "They give us better security and money control, because tickets are sold in the office. In addition, we have found Maytags work dependably and residents like using them.

"The combination of Maytag and Coin Rentals, Inc., the local Maytag Route Operator, has made our laundry operation run smoothly," concludes Mr. Reeves.

Naturally, we don't say your experience will be exactly like that at Channelwood Village, or that Ticket-Operated Maytags will eliminate all security problems. But if you want a significant improvement over coin-operated equipment, plus famous Maytag dependability, mail the coupon now.



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THE DEPENDABILITY PEOPLE

Mr. Reeves with Mr. James R. Williams,
Chairman of the Board of Alpha Phi Alpha Homes, Inc.

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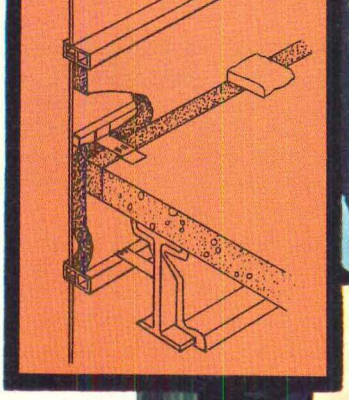

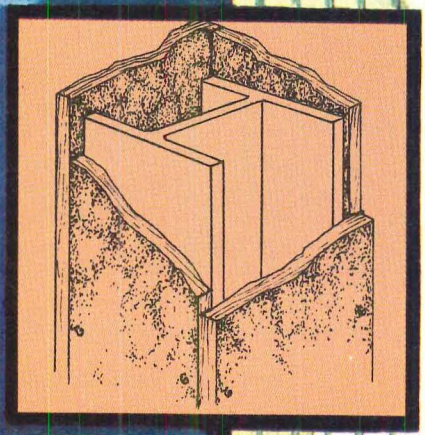

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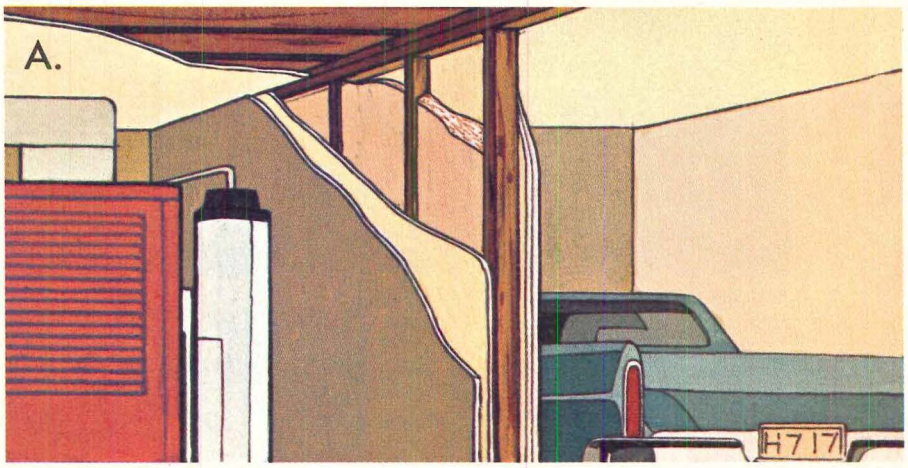

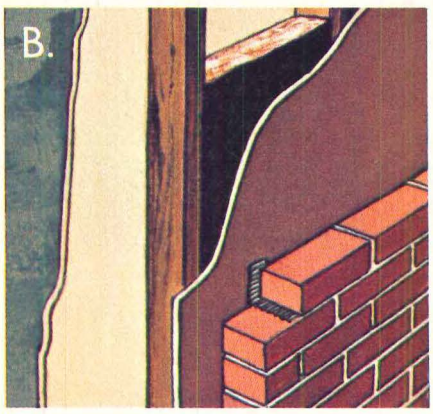

U.S. Pat. Off.

UNITED STATES GYPSUM
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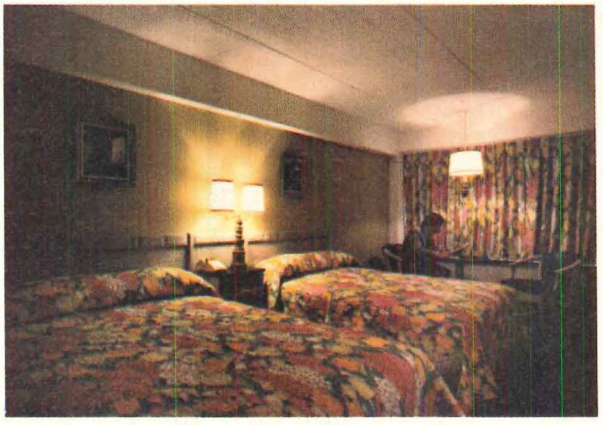
Owner, developer, architect, and general contractor: Crown American Corporation; structural engineer: Norman Alterman Company; fabricator: Claster Steel Company; erector: Kent Steel Company. Sheraton Inn's framework incorporates a total of 226 tons of Bethlehem structural steel. All of the structural steel framing is ASTM A36. The six floors of the $2-million Sheraton Inn encompass 71,086 sq ft.



The five upper floors accommodate 135 guest rooms and suites. Each upper floor contains 13 single rooms and 12 double rooms typically measuring 12 by 24 ft.

eel framing provided economy, rection speed, and early occupancy

Sheraton Inn which recently opened in Johns-, Pennsylvania, is a six-floor, steel-framed motel.

nally the inn's framework was designed for pre-concrete construction. But a switch was made to when a comparative framing analysis indicated teel framing was more economical . . . and would it completion of the framework more than one h before the alternate method.

time from start of design to delivery of the steel ight weeks. A further saving in time was accom-ed because the general contractor was able to plete all the underground site work—curbing, valk, utilities—before the steel was delivered. preliminary effort got the job "out of the mud" enabled the builder to proceed with steel erec-quickly with less lost time due to bad weather. teel framework was erected in only 8 weeks.

eatures enclosed swimming pool

six floors of the Sheraton Inn encompass 71,086 The structure was built at a total cost of $2 million.

ground floor measures approximately 100 by 223 includes a registration desk and spacious lobby, nistrative offices, gift shop, dining room, cocktail ge, banquet and meeting rooms, kitchen area and ndry. An enclosed swimming pool features a slid-vaulted skylight roof.

r clear span area in the first floor is over the 0-sq-ft pool. The enclosure measures 45 by 74 ft. next major span is over the largest of the four ing rooms, which measures 36 by 64 ft. This n can be evenly divided by a movable partition.

The five upper floors accommodate 135 guest rooms and suites. Each contains 13 single rooms and 12 double rooms typically measuring 12 by 24 ft. The guest floors of the inn measure 60 by 178 ft. This area is framed by 15 bents typically 12½ ft apart with three 20-ft bays in each bent. Column spacings were dictated by room layouts and the use of existing footings which were already in place when the framing was changed to steel.

Framed with 226 tons of Bethlehem steel

The inn structure rises 58 ft, 8 in. above ground and is topped by a 20-ft-high elevator penthouse. Floor to floor height for the ground floor is 12 ft; the remaining five floors have a floor to floor height of 8 ft, 8 in.

All of the steel framing is ASTM A36. Typical columns range from W10 x 54 to W8 x 17 sections. Typical girders are W8 x 28's and W8 x 17's. Wind struts are W6 x 15.5 members and pairs of 6-in. channels at the pipe chases. Spandrels are W12 x 19 sections. Floor construction is of 8-in.-deep precast, prestressed concrete planks spanning 20 ft and welded to the girders between each bent. All field connections are bolted with ASTM A325N bolts.

Whether you're thinking about a high-rise or a low-rise structure, steel gives you a lot for your dollar. Its speedy erection often means earlier occupancy. There is a Bethlehem sales engineer near you, or write: Bethlehem Steel Corporation, Bethlehem, PA 18016.

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r clear span area in the first floor is over the pool. This enclosure measures 45 by The next major span is over the largest of the four meeting rooms, which mea-36 by 64 ft. This room can be evenly divided by a movable partition.

News report continued from page 48

as $50,000. Those costs are normally figured into bids.

The president, in his massive housing message, added some ideas both to save money, and increase cash flow into construction. One of these was to grant lending institutions tax deductions up to 3½ percent on interest they would earn on home mortgages. That might 1) result in lower interest rates to homeowners (and perhaps elimination of the "point" system) and 2) increase flow of money to the housing field, which has been lagging steadily behind last year's record construction rate. The president also proposed relaxation of mortgage-amount limits for FHA, use of two federal agencies ("Fannie Mae" and "Ginnie Mae") to strengthen the secondary mortgage market; direct cash payments to make up the difference between what a low-income family could afford, and actual cost of "decent" housing in the area—at the same time phasing out what remains of government-subsidized low-income housing programs.

On the aspect of energy saving, Congress was taking a hand in an effort beyond considerations of rationing and price controls on available fuels: It was considering several laws that would direct federal agencies to incorporate energy-saving designs in all federal buildings.

The key bill, introduced by West Virginia's Jennings Randolph (who heads the Senate's Public Works Committee) would direct that all federal agencies "consider energy conservation in the construction of federal facilities or federally insured facilities to the fullest extent." Specifically, Randolph's proposal (S.2479) would require any federal construction agency to prepare complete life-cycle cost analyses for all buildings in excess of 50,000 sq ft of usable space. This energy consumption analysis would concern the facility's heating, ventilation, air conditioning and lighting systems "in addition to any other energy-consuming systems."

There was of course real concern behind the general worry over energy, even though the expected crisis in gasoline didn't really develop during the summer. But a hard winter in any wide area of the nation could upset the very precariously balanced applecart. Just as an example, Randolph cited the fact that in 1960, total U.S. energy demand was the equivalent of about 21 million barrels of oil per day. But in 1970, the demand topped 34 million barrels per day—and by 1980 is expected to reach 48 million.

Aside from design considerations, the construction industry was already affected by energy shortages: Contractors complained they couldn't get fuel commitments from suppliers to insure continued work on many projects; they also complained that shortages of propane (now to be allocated) could shut down most winter construction work, since the gas is the principal fuel used for space-heaters which (with plastic curtains and other devices) have largely ended the traditional winter construction shutdown.

Pay offs?

Otherwise, as Washington headed into the home stretch of one of the most peculiar political years in recent history, there were many matters still unresolved. For instance, architects and other design professionals were still trying to fight their way out of the box that charges of political payoffs had put them in in nearby Maryland (similar charges are beginning to surface in other states). One answer was a statement signed by the presidents of seven major societies (including AIA), condemning such practices, recommending revocation of licenses of offenders, and promising to discipline members if they are proven to have engaged in unethical or illegal practices. Another was a suggestion from AIA, immediately accepted by Maryland's governor, to appoint a "blue ribbon" panel to come up with alternative measures of awarding A-E and other professional services contracts.

The governor announced that Dr. Abel Wolman, Professor-Emeritus of Engineering at Johns Hopkins University would be chairman of the panel. Other members include architects Jack D. Train of Chicago and John W. McLeod of Chevy Chase. Three other engineers also were named as well as an attorney and the secretaries of three major Maryland departments—General Services, Transportation and Economic and Community Development.

AIA recommendations

Directly tied to the proposal to Maryland was announcement by AIA's Washington headquarters that a nine-month study of political contributions had resulted in a recommendation for "removing the award of government design contracts from the political arena. . ." Specifically, recommendation of an AIA task force was that, at state levels:

1) The Governor choose candidates for a selection board from lists of qualified persons, submitted by professional organizations with an interest in state work. Candidates chosen would be subject to confirmation by state legislatures.

2) Design firms would then submit their qualifications, plus notification of their interest in specific projects, to this board, which would then select and rank firms for consideration for each project.

3) Negotiation (presumably by affected state contracting agencies) would then take place in the order of the board's listed preferences. The task force was headed by Ehrman B. Mitchell Jr., FAIA, director of AIA's Pennsylvania region.

So far, there was no perceptible easing of the public impression that design professionals are generally part of political hanky-panky. And of course, the societies themselves had some difficulties: They didn't have the disciplinary powers (such as disbarment) possessed by legal and medical groups; they don't know how to draw the line (though that is being studied by task force groups) between a member's efforts to get business, and his right as a citizen to support candidates of his choice.

There was a build-up in the somewhat lagging push to convert the U.S. to the metric system—a full-day session on the subject by the International Organization for Standards, a two-day congressional hearing; speeches by top commerce department officials. But Congress itself seemed preoccupied with other things and didn't seem likely to do anything before the year ended.

The usual appropriations bills finally got through Congress—as usual, well after the start of the fiscal year they are intended to fund. In most cases, they ran about as the president had requested, cuts or additions were relatively minor, although there were some internal shifts (such as cutting down military family housing to about 11,000 units). Among the matters effectively buried, for this year at least: plans for extension of the Capitol's West Front. [E.E. Halmos]

[continued on page 57]

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Just look what Orbit can do for those difficult-to-dramatize square places. Orbit is one of three new Genon vinyl wall covering patterns. All anything but delicate when it comes to upkeep. Here, "Lettuce" brings a leafy freshness to windowless inner space.

Also available . . . Escort, our double striated grass effect that authentically recreates the perfections (and imperfections) of Mother Nature.

Then, there's Aura. The look is distinctly calfskin. And 20 hues from which to choose! Dynamite!

Orbit, Escort and Aura . . . three new dazzling effects in Genon vinyl wall covering. For information write: Contract Division, The General Tire & Rubber Co., 979 Third Avenue, New York, N. Y. 10022

genon®
vinyl wall covering

GENERAL TIRE®

News report continued from page 54

Calendar

Through Nov. 11. The Design Necessity Exhibit, Crown Center Redevelopment Corp., Kansas City.

Through Nov. 24. Exhibit of the Italian Art and Landscape Foundation, Inc., Fogg Museum, Cambridge, Mass.

Nov. 6–8. National Interior Design Show, Automotive Building, Exhibition Park, Toronto.

Nov. 6–8. Conference on designing to survive disaster sponsored by IIT Research Institute, Chicago.

Nov. 6–9. First international conference on modern living held in connection with the international fair for equipment and machinery for the furnishings industry (IN–TEK), Bella Centret, Copenhagen, Denmark.

Nov. 14–24. Thirty-fifth International Building and Construction Exhibition (Interbuild), London, England.

Nov. 15–16. Conference on landscape assessment: values, perceptions and resources, University of Massachusetts, Amherst.

Nov. 15–18. National convention of the Society of American Registered Architects, Fairmont Hotel, San Francisco.

Nov. 24–Dec. 16. The Design Necessity Exhibit, Illinois Wesleyan University, Bloomington.

Nov. 27–29. Fourth annual Industrialized Building Exposition and Congress (INBEX), McCormick Place, Chicago.

Nov. 27–29. Fall conferences of the Building Research Institute, Sheraton-Park Hotel, Washington, D.C.

Nov. 28–30. Eighth annual meeting of Automated Procedures for Engineering Consultants, Inc., Denver Hilton Hotel.

Nov. 29–30. Conference on the Managua earthquake, Hyatt Regency Hotel, San Francisco.

Dec. 1. Deadline for final manuscripts of papers for the third international symposium on lower-cost housing problems, Montreal, Canada.

Dec. 10–17. AIA/CEC joint conference on "Systems Today," Florida, Puerto Rico and aboard the ship M/V Freeport of the Bahama Cruise Line.

Dec. 12–14. Seminar on bicycle/pedestrian planning and design, Dutch Inn, Disney World, Fla.

Dec. 15–16. Workshop in applied Gestalt principles for architects and designers, Gestalt Institute of Cleveland.

Dec. 17–24. Third World Congress of Engineers and Architects in Tel Aviv, Israel.

Personalities

Melvin Smith has been appointed to the Department of Landscape Architecture and Regional Planning of the University of Massachusetts at Amherst.

Carl Goldschmidt has been named director of the School of Urban Planning and Landscape Architecture at Michigan State University.

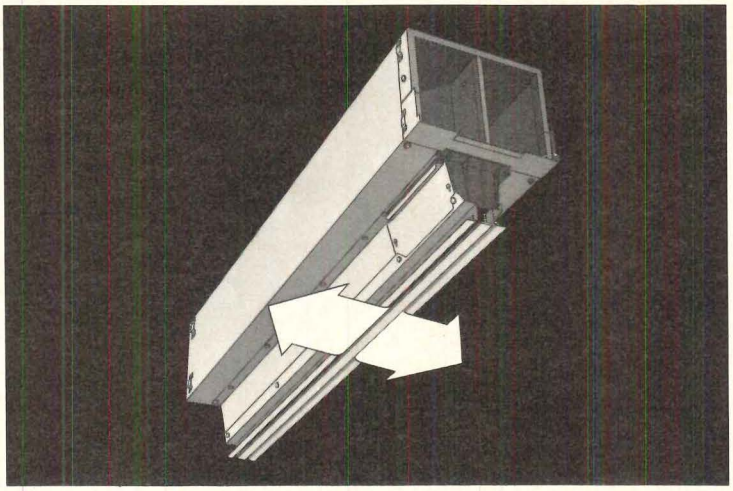
Arthur S. Takeuchi has been promoted to associate professor of architecture at Illinois Institute of Technology's School of Architecture and Planning, Chicago.

Fred S. Dubin, PE, Dubin–Mindell–Bloome Associates, PC, Hartford, Conn., has been appointed chairman of the Consulting Engineers Council Energy Committee.

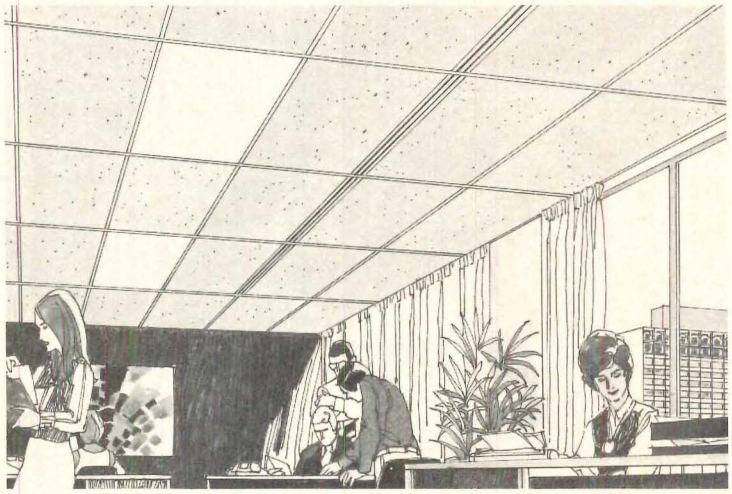
John Andrew Gallery has been named associate dean of the School of Architecture and director of the Graduate Program in Community and Regional Planning at the University of Texas.

[Notices begins on page 64]

Cools, heats,



and hides.



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(It's new Redi-Set Systems 200.)

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With new Redi-Set® Systems 200,
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comfortable underfoot. Needs sealing
long joints at wall and around fixtures.
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City_____
State_____
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ork. Beautifully.

ments the architect's design makes for satisfied occupants.

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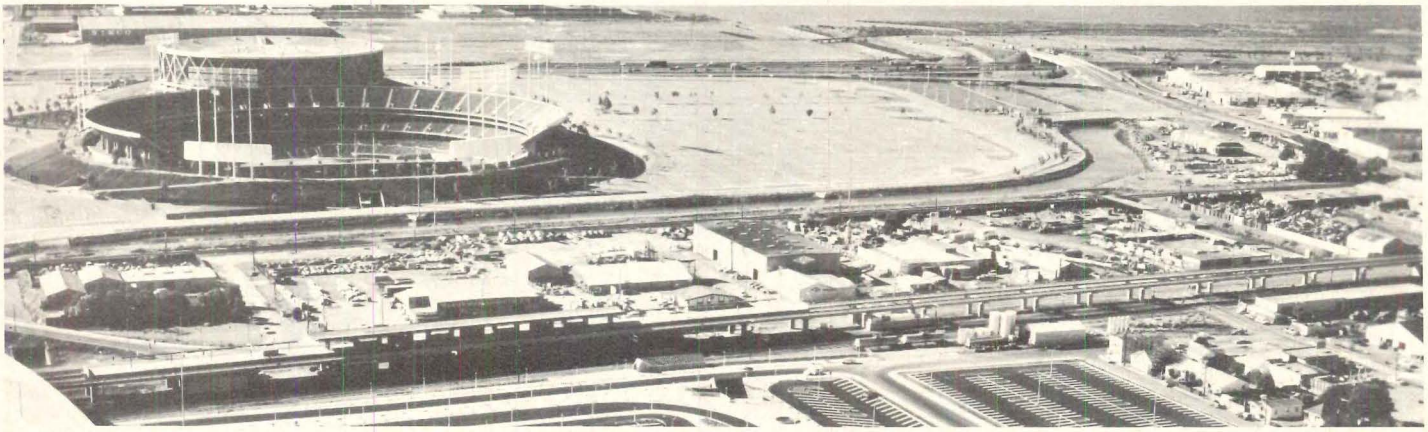
Architecture west



BART's Concord station (top), Coliseum station (bottom). BART photos.

City lovers everywhere, and San Francisco lovers particularly, have waited patiently while Bay Area Rapid Transit—the region's most ambitious work of environmental design since the great bridges of the 30s—limped into action piecemeal over the last year, with its crucial cross-bay link still in the indefinite future. Despite system-wide problems of planning, engineering and control, in design terms the San Francisco Bay Area Rapid Transit District scores high marks.

Precisely the parts that have caused crippling operational problems, the trains themselves and the track, provide its chief environmental design triumphs. The cars by industrial designer Sundberg-Ferar must be among the most comfortable, quiet, inviting and stylish ever to grace a rail transit system. Engineering and quality control problems have dogged them tragically, doors open inexplicably in mid-flight, train controls quit mysteriously; in one infamous case a train under automatic guidance speeded up just as it reached the end of the line and crashed.

The roadbed scores equally well for smoothness, quiet and visual quality, badly for train control problems. Much of it runs above ground on a stout, yet elegant, elevated structure, for which system design consultant and architect Don Emmons was responsible, along with a consortium of engineering firms. It looks so good it calls into question the $20 million decision to go underground in Berkeley.

The 24 stations now open on the East Bay side exhibit work from eight firms and joint ventures. Outstanding among them: The five above ground stations of the Concord line, designed by Gwathmey, Sellier & Crosby together with Joseph Esherick & Associates, and two Gerald McCue & Associates underground stations in downtown Oakland. Predictably, McCue's designs express a tectonic and disciplined touch enriched by attractive glazed brick surfaces; one in reds, one in blues.

The Esherick and Gwathmey stations, which also include two stops midway on the Fremont line, make the system's most significant contribution to the architecture of rapid transit. These seven stations offer permutations on an International Style theme—though the concrete is colorfully painted, not *brut,* the forms complex not schematicized, somehow recalling Sert's work. All of them seem particularly thoughtful in terms of layout and visual organization.

All stations share some peculiarities of system-wide engineering standards. These include minimal public toilets, available only on special plea to the station agent (this presumably prevents rape, homosexual encounters and grafitti) and afterthought elevators for crippled people (at first BART engineers were only going to serve able-bodied stair-climbers until the State Legislature intervened).

The failure of the automated train control systems has necessitated human dispatchers at each station. This caused BART to build awkward little plywood shanties on the platforms. It is safe to predict these hovels are here to stay, as permanent and unwelcome embellishments. And, given the inevitable cost revenue squeeze, what will happen to the individuality of each station? How will Joe Esherick and his public feel when it comes time to repaint all of his elegantly variegated orange, yellow, brown, and vermillion stations in some institutional gray-green?

Still there remains the main fault of BART station architecture: an almost total disinterest in urban setting except where underground in the densest areas. Among the stations now in operation, the context or urban design issue shows up most sharply at Oakland's Coliseum station. Though designated to serve the region's major sport complex, stadium and station are separated by continuous light industry, and a boxed and fenced stream. Belatedly, some kind of a crude bridge is to be built so people can get from one to the other In less striking ways, such disregard of context seems to dominate architectural matters. One of the finest of the Gwathmey/Esherick station interiors, the one in Lafayette, is flawed by an afterthought tunnel that burrows under the freeway to a long narrow zigzag of ramps and stairs leading by way of a back alley to downtown.

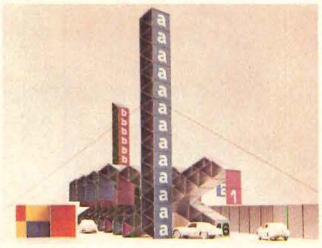
As perspective shifts from architecture to urban design and planning considerations, the real puzzles of BART emerge. Another column will deal with these. In the meantime city-lovers, think twice about supporting ambitious rail transit systems. Behind the often splendid designs lie some really tough problems too easily glossed over in the rhetoric of pro-transit urbanists. [Roger Montgomery]

Weyerhaeuser® Panel 15 makes beautiful "afters" happen.

State Bank of Fall Creek, Wisconsin, **BEFORE** and **AFTER** Weyerhaeuser Prefinished Siding/Panel 15.
Architect: Norman Sessing, A.I.A., of Neujahr, Drake and Sessing, St. Paul, Minnesota.

Section of downtown Atchison, Kansas, **BEFORE** and **AFTER** Weyerhaeuser Prefinished Siding/Panel 15.

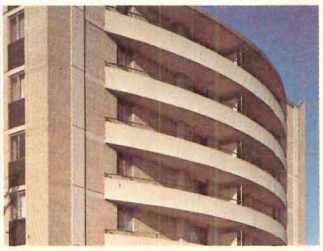
And exciting "originals."



Drive-in restaurant concept, W. C. Muchow Associates, Denver, Colorado.

Swope Park Puppet Theater, Kansas City, Missouri, Morton Rolsky, Architect.

Whistle Stop Restaurant, Phoenix, Arizona, Clarke Modular, Inc., Glendale, Colorado.



LaRonde Apartments, Arthur M. Hemlock, Hemlock Associates, Cleveland, Ohio.

From re-creation of nostalgic significance to innovative design concepts, the uses for Weyerhaeuser Prefinished Siding/Panel 15 are virtually limitless.

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Notices

Appointments

Jaquelin T. Robertson (a P/A Awards juror this year) has been elected vice president-planning of Arlen Realty & Development Corp., New York City, and president of its newly formed planning and design group.

Edward W. Wedge, AIA has been named president of Harry Harman & Associates, Inc., Port Huron, Mich. James H. Tibedeau, AIA has been named vice president.

W. Ennis Parker, Jr. has been named assistant to the president of Heery & Heery, Inc., Atlanta. John A. Wurz was appointed head of the firm's new industrial division.

Jorge E. Ramirez, AIA has been named partner of Ranon McIntosh Bernardo & Ramirez, Tampa, Fla.

William A. Plyer, AIA and **Donald E. Grossmann, AIA** are vice presidents of Shreve Lamb & Harmon Associates, PC, New York City.

George J. Doddy, Gerd H. Ernst and **Robert C. Westerfeld** have been appointed associate vice presidents of Daniel, Mann, Johnson & Mendenhall, Los Angeles.

John V. Sheoris, FAIA has been named director of the Health Facilities Division of Smith, Hinchman & Grylls Associates Inc., Detroit. **Joseph B. Uicker, PE** has been named assistant director of the division.

Ben H. Cunningham, AIA has been appointed senior vice president planning/design for New Community Enterprises, Park Forest South, Ill.

Donald C. Cameron has joined the Irvine Company, Newport Beach, Calif., as director of urban design.

Charles R. Collins has been elected president and chief operating officer of Environmental Systems International, Inc., Los Angeles, Calif.

Herman Blum Consulting Engineers, Inc., Dallas, has elected the following associates: **Ronald R. Chapman, Willie Claude Cheatham, Jorge Fernandez, Frost E. Gardner, Charles Gonzales, John G. Grubbs, Douglas C. Haley, Reggie L. Mayo, Dave Meers III, Emilio Perea, Rex Gerald Raiza** and **Paul Jerome Rutherford.**

Al F. Barabas has joined Maxwell Starkman & Associates, Beverly Hills, Calif., as construction administrator. **Cesar Wytkind** has joined the firm as project director.

[continued on page 72]

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alite® perlite concrete roof decks have been exposed to the s of hurricanes, tornadoes and other high winds for more 20 years with no record of failure. In fact, the bond of the frequently specified perlite concrete (27 lb. density) to nized steel centering is more than 3,500 lbs. per sq. ft. wonder that this deck system enjoys such wide usage in wind areas!

a new system of roofing over perlite concrete offers you onal resistance to wind damage and roofing blow-offs.

system makes use of clinch-type nails to fasten the first ply lt-up roofing to the perlite concrete roof deck. These nails a minimum resistance to uplift forces in excess of 60 lbs. which is sufficient to resist hurricane-force winds of .p.h. and over, when applied at the rate of 1.3 nails q. ft. as recommended.

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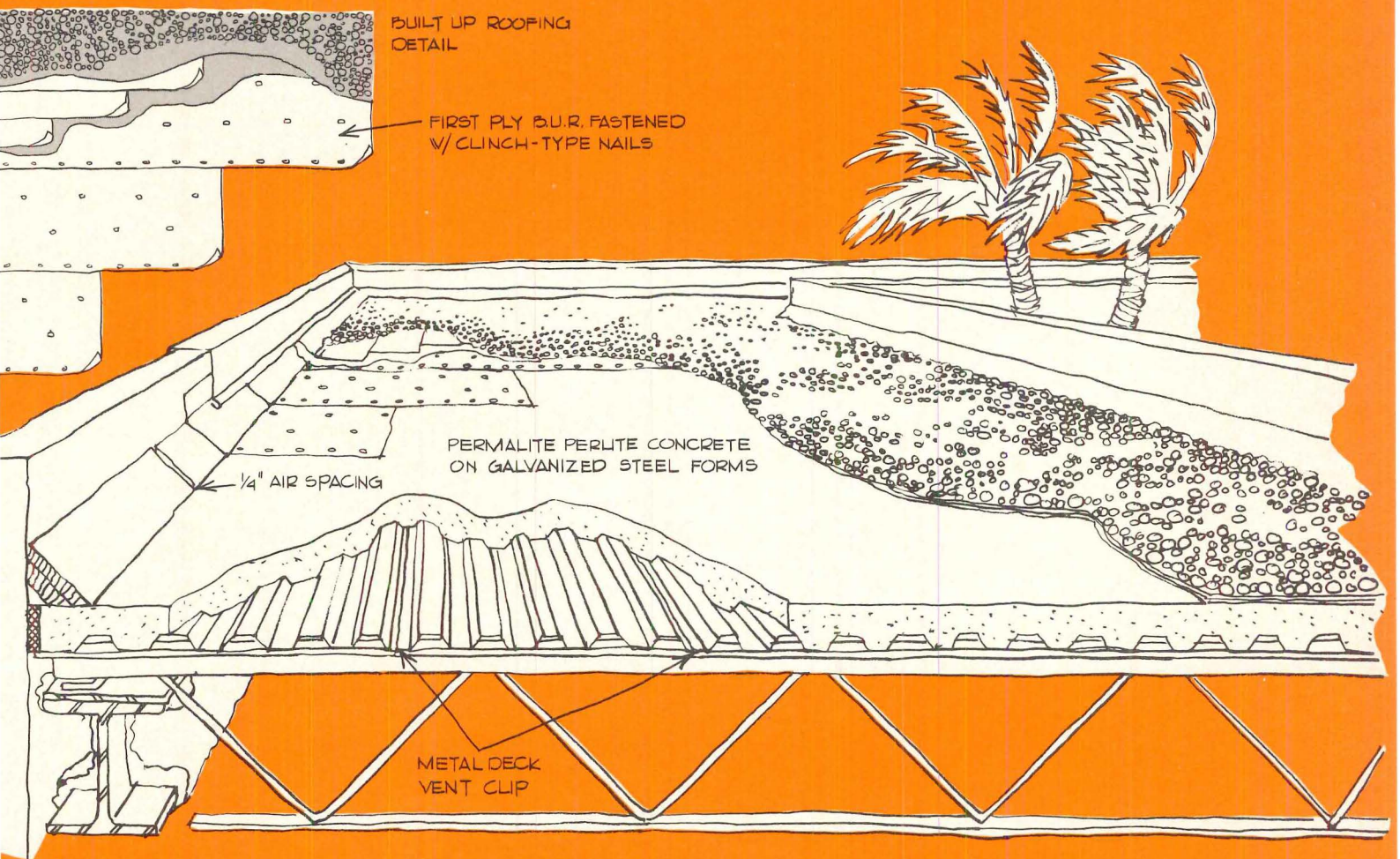
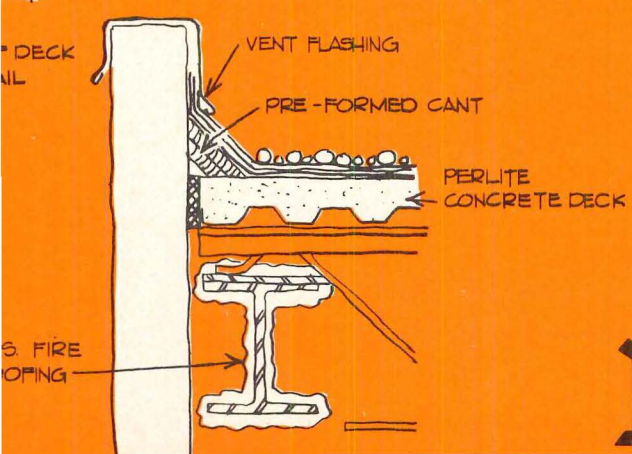
Write for roof deck, nailing test and specification data. Then consider how Permalite perlite concrete can give your next project maximum roofing wind protection.

Permalite lightweight perlite aggregates provide solutions to other weighty problems by providing fire-rated walls and ceilings, insulating fill for fire-rated masonry and weight-saving planting mixes for roof-top gardens.





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"And, together, we worked out a new and special grand master key system. It consists of Yale® bicentric cylinders with highly restricted key blanks.

"Special service? Of course. But that's the way we like to do things—big or small."

That's just like a Yale distributor.

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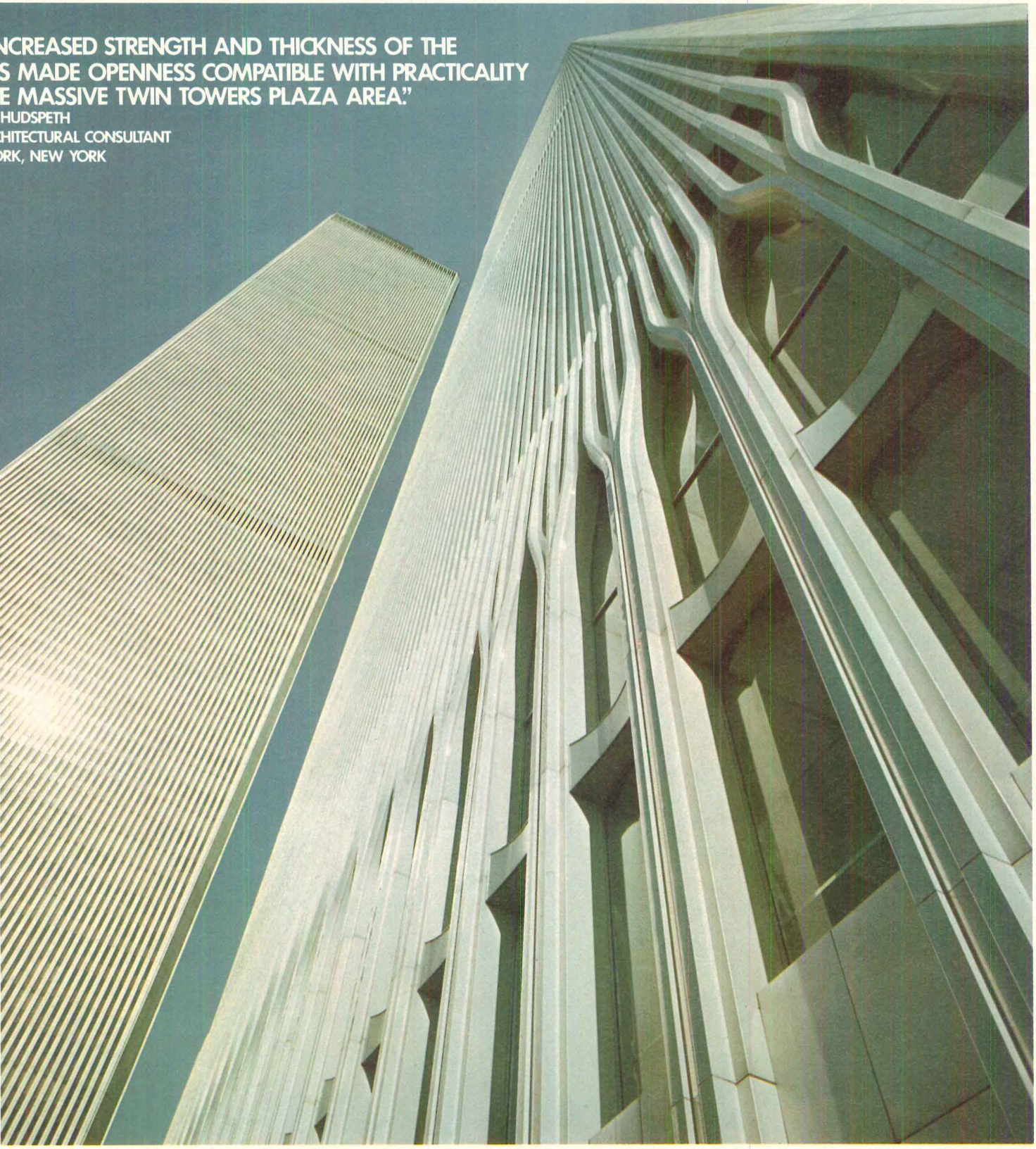
HEAVY-DUTY GLAZING MEETS NEW HALLENGES IN THE WORLD TRADE CENTER.



LOF

FROM HEAVY-DUTY STRENGTH E

The architects of these twin 110-story skyscrapers refused to sacrifice openness for solidity or humanity for monumentality. As a result, the World Trade Center is meaningful in its advancement of architectural technology—in fact, because of its design, whole new technologies had to be developed before construction could begin.

The large cathedral-like modules of the 70-foot-high lobbies necessitated the use of LOF Heavy-Duty glass in 7′ x 18′ lights. The thicknesses here at street level, from ¾″ to ⅝″, not only make such expanses possible, but reduce sound transmission and resist wind loads.

The glass in the upper floors is ¼″ bronze Tuf-flex®, a tempered glare-reducing glass that lowers air-conditioning requirements.

Total amount of glass in the buildings? A half-million square feet or 43,600 windows . . . a view for nearly every person who will work in the center.

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World Trade Center, New York: Built and operated by the Port Authority of New York and New Jersey

Architects: Minoru Yamasaki and Associates, and Emery Roth and Sons

General Contractor Agent: Tishman Realty and Construction Co., Inc.

Curtain Wall System: Alcoa

Glazing Contractor: Collyer-Sparks Company, Inc.

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Heavy-duty glazing gives a feeling of spaciousness to the Michigan Consolidated Gas Company headquarters on Detroit's riverfront. The wide-open spaces of the lobby bring in vistas of the park-like Civic Center and boats on the river.

Our ½" Heavy-Duty glass was utilized with tension mullions in the floor to make this dramatic expanse of glass possible.

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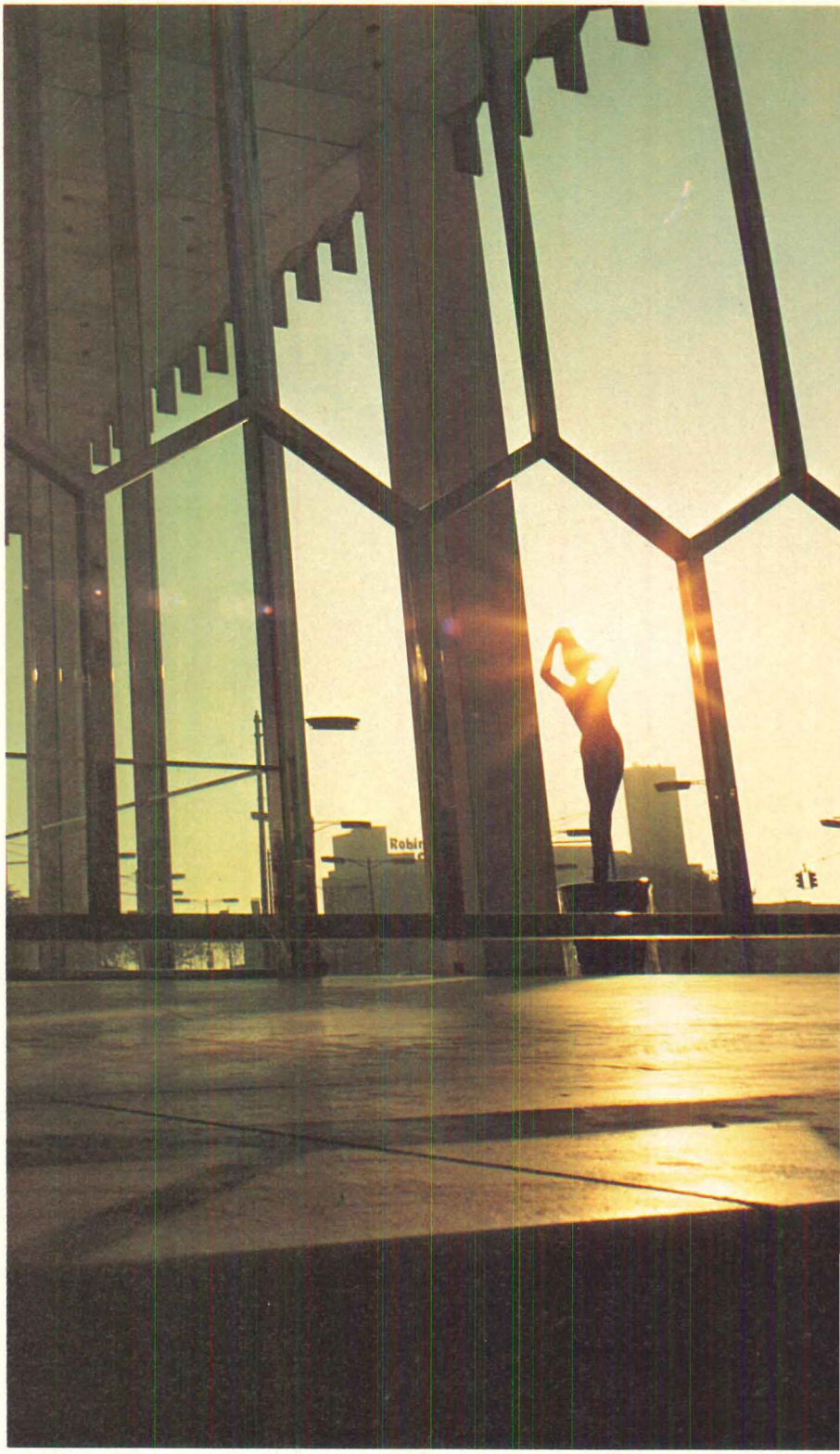
Michigan Consolidated Gas Company, Detroit, Michigan
Architect: Minoru Yamasaki
Associated Architects: Smith, Hinchman, Grylls
Glazing Contractor: Cadillac Glass Company

LOF



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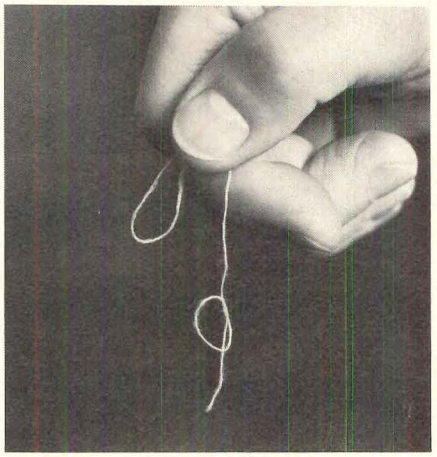
GAF's new Anti-Static Carpet Component is a better way.



GAFSTAT® keeps carpet beauty in and wires out.

For years you have probably been reluctant to recommend anti-static carpet to many clients. Because it hasn't been available in residential designs. You either got a treatment that cleaned out in a short time, or a choice of patterns limited to commercial designs and colors.

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The GAFSTAT component is sealed between the backing layers of the carpet. No wires. And it can't be removed by cleaning. The fibers are not affected, so the carpet can be made in any color or design.

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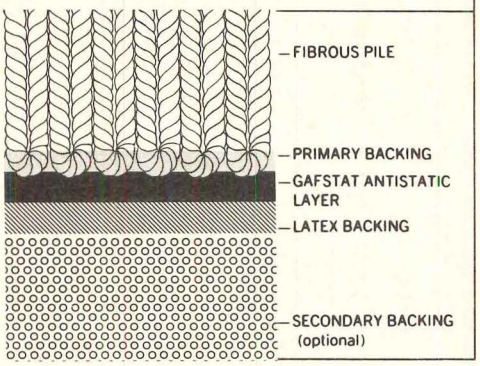
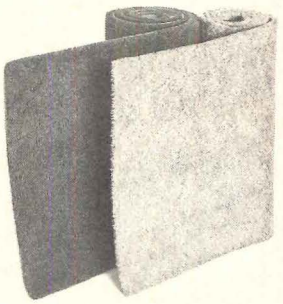


The need for anti-static carpet.

Comfort in the home or in public places is a prime reason for specifying carpet with the GAFSTAT® anti-static component. In other areas, need is serious, since static electricity can affect electronic instruments, can even cause fire or explosion.

So when you specify anti-static carpet, specify GAFSTAT. Because it is a better way.



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Anti-static carpet with GAFSTAT is available from

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Notices continued from page 64

New addresses

Cardoza Dilallo Associates, Inc., 1599-Superior Ave., Costa Mesa, Calif.

Leighton Irwin & Company Pty. Ltd., Pacific Highway., St. Leonards, N.S.W., Australia.

The Landplan Partnership, 354 Pequ Rd., Southport, Conn. 06490.

Ranon McIntosh Bernardo & Ramire 515 Bay St., Tampa, Fla. 33606.

Maurer & Maurer Architects, 166 Mo tague St., Brooklyn, N.Y. 11201.

Barnes Landes Goodman Youngblo AIA, 100 Jefferson Bldg., 1600 W. 38 St. Austin, Tex. 78731.

Caccese Koumjian Associates, Arch tects, 1814 Spruce St., Philadelphia, Pa. 19103.

Crissman & Solomon Architects, 272 Centre St., Newton, Mass. 02158.

New firms

Landgraphics, 501 Almar Ave., Pacific F sades, Calif. 90272.

Stanley G. Gould Associates, Archite & Planners, 1150 S. Bascom Ave., San J Calif. 95128.

David Yager, principal of D.B. Yager & sociates has joined with John Torello to tablish **Yager-Torello, Architects and P ners**, 402 Highland Ave., Cheshire, Con 06410.

Hassinger Schwam & White, Inc. has been established to continue the practic Herman A. Hassinger, AIA, Gerald F. Schwam, AIA and Arthur B. White, FAIA. new firm is located at 39 E. Schoolhouse Lane, Philadelphia.

Melvin A. Solomon and Robert J. Claybaugh have formed **M.A. Solomon Claybaugh, Architects, Inc., AIA**, 220 W Terrace, Kansas City, Mo. 64113.

John Gard Associates, 221 N. Portag Path, Akron, Ohio 44303.

Richard E. Craig, AID has formed a p tice in interior design and architectural d sign at 13 E. 37 St., New York City 1001

James G. Neu, N. 29 W. 22885 Marje La., Waukesha, Wis. 53186.

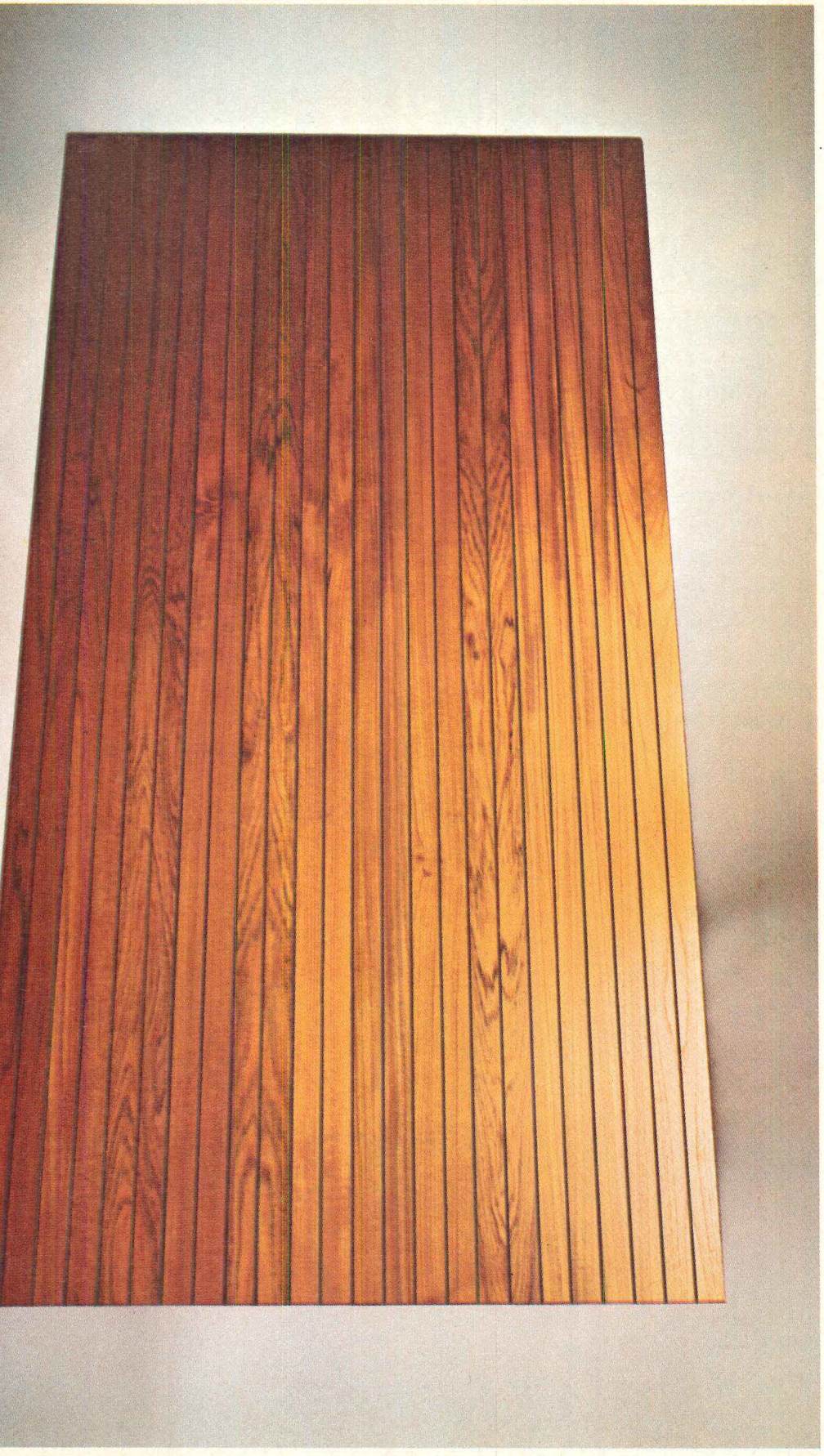
Daniel Adache has formed **Lauderdal Design Group**, One Financial Plaza, Fo Lauderdale, Fla.

Werner Rosenthal, urban planner, 19 Ventura Blvd., Tarzana, Calif. 91356.

Jack Sevilla Architect AIA & Associa 9885 Charleville Blvd., Beverly Hills, Cal 90212.

Richard S. Di Salvo, PE, 57 White Bi Rd., Ridgefield, Conn. 06877.

The new Weldwood Collection.
ıddenly, anything else seems out of date.



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The Weldwood Collection features veneers of hickory, teak and walnut. Just these are given a formal planked effect, with slender eighth-inch-wide grooves spaced two or four inches on center. Some are medium and dark shaded. Others light-toned for a contemporary feeling.

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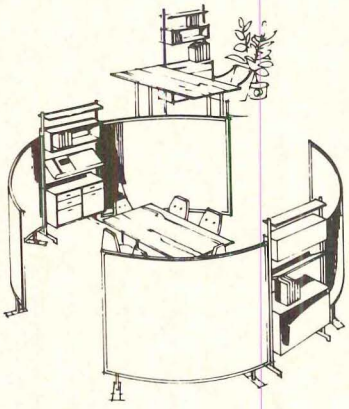

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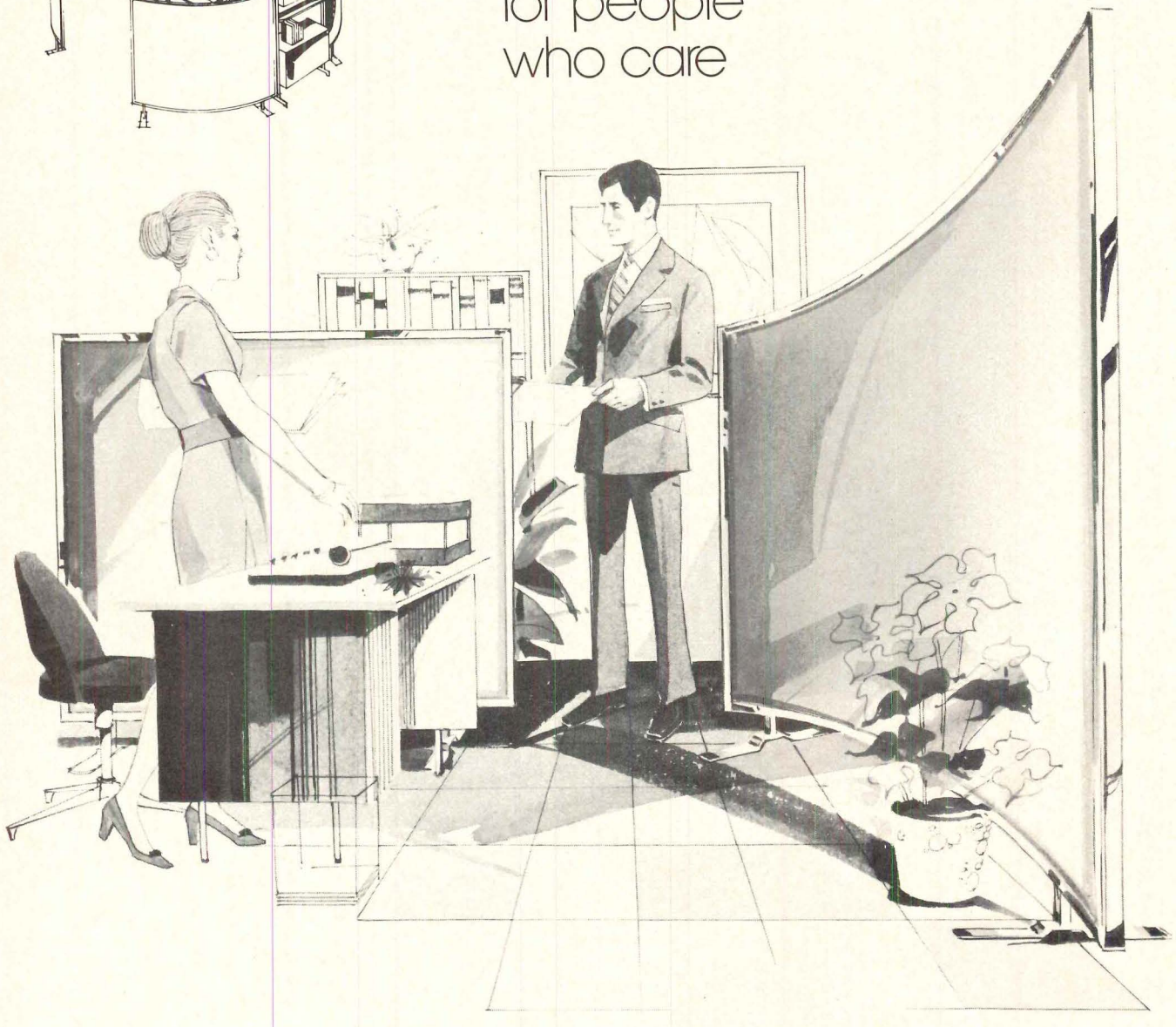

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Inside Architecture

November 1973

TWA Terminal, New York International Airport, Eero Saarinen & Assocs.
Photo: Ezra Stoller ©ESTO

What Saarinen wanted to create was "a total environment where each part was the consequence of another and all belonged to the same form world."—P/A, Oct. 1962.

Progressive Architecture has been into interiors for over two decades. A regular interior design department appeared on P/A's contents page back in 1952—before SOM had an interiors department of its own and a decade before the American Institute of Interior Decorators changed its last name to Designers. Covering interiors monthly, as we have, has the virtue of continuity, but it tends to project a fragmentary view. Now and then we feel the need to set aside an entire issue for a position statement on interiors.

The last time P/A devoted an entire issue to interiors as such (as against office planning, theaters, etc.) was back in October 1962. That issue was called "The Architecture of Interiors," and its purpose was to establish, through examples and statements by leading professionals, that interior design was indeed architecture. Signs of both "antagonism" and "rapport" between architects and interior designers reported then can still be observed today. As in the arena of international affairs, 1962's uneasy coexistence has become 1973's state of normalcy.

The title of this month's issue, "*An* Architecture of Interiors," points up the fact that we are talking not about interiors generally, but about *one* position that we are advocating—that architecture and interior design can only be completely adequate when they are re-united, that the best of interior design is inseparable from the structure containing it. Even more essential for architects is the converse implication—that no mere container of unrelated interior spaces can be a complete work of architecture.

This is not to say, by any means, that P/A is judging interiors strictly on the criterion of integration into buildings. Isolated interior spaces, within existing structures, can pose valid design problems and yield instructive solutions (as do the house and apartment interiors by Robert Stern and John Hagmann to be featured in next month's P/A). In judging the success of interior design, we consider above all its response to the purposes and the people it must serve.

Among the interiors P/A's editors chose back in 1962, some—like the offices in Columbus, Ind. by Alexander Girard and the Cooper Jewelry Shop in Philadelphia by Geddes, Brecher, Qualls & Cunningham—were inserts into existing structures. One example in particular, the TWA Terminal at New York International Airport by Eero Saarinen & Associates, represented the kind of total inside-outside coordination we are taking up this month. TWA also remains, despite unimaginable changes in airline procedures and passenger volumes over the past decade, an interior superbly attuned to the state of mind of the user; it remains the only air terminal I know of where the threat of a delay is offset by the prospect of watching the movement of aircraft, passengers and ground traffic from a variety of comfortable vantage points.

It is encouraging that TWA, and the other interiors mentioned above, survive today intact—encouraging because interiors are so vulnerable to unanticipated changes. Often these are reckless alterations—attempts to squeeze more revenue out of a space or to update an image for promotional purposes. At the very least, there is likely to be a slow *erosion* of character, brought on by the intrusion of countless little elements—accessories, signs, etc. for which the users feel a real need.

Last month, on this editorial page, I wrote about the peculiarly perishable nature of parks—of public open spaces. There, of course, the forces of natural growth and weathering are critical, but in terms of human forces—user alterations and maintenance—there are surprising parallels between outdoors and indoors. Of all the elements the architect attempts to control, only the shell of the building comes close to his all-too-common assumption of immutability; everything inside and outside that shell is subject to change without notice.

The message for those who design interiors, then, is essentially the same as for planners of parks. Make every effort to anticipate patterns of use—all of the probable ones; then check out the design for *adaptability.* Will the interior allow for moderate changes in policies, capacities and personal preferences without radical (and wasteful) alteration? Will it survive an accumulation of paraphernalia without losing its integrity? The interior can be fully successful only if it is seen, through every stage of the design process, as an environment for people to operate *in* and to operate *on.*

John Morris Dixon

An architecture of interiors

In October 1962 P/A, editor Thomas Creighton asked a group of professionals if there was a distinct activity called interior design "quite apart from other aspects of architecture." George Nelson replied that obviously there must be, "otherwise there is no explanation for the existence of such a large and special professional group." But perhaps that large body of professionals reflects only our increasing interest in specialization, not the need for such a distinction. And the existence of such a separate professional domain allows interior design to approach dangerously close to decoration, but with what might be termed "good taste."

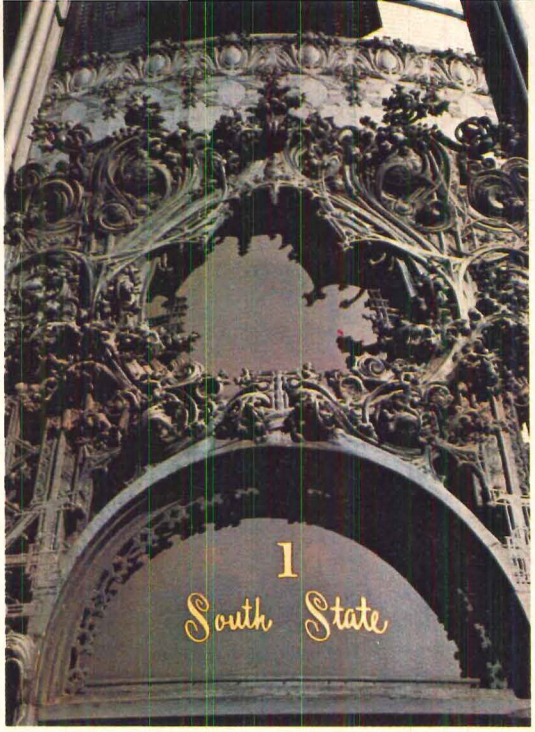
An Architecture of Interiors might well be considered a rather presumptuous title for an issue on an area of design that has come to be regarded as a mere stepchild. But inasmuch as building is the organization, lay-out and design of spaces, the distinction should not exist at all. Rather, a building should be a single conception of spaces that outwardly respond to the context of the site, and inwardly respond not just to pragmatic levels of program, but to the possibilities of space as volume, light, texture, color and detail. By contrast, the spaces we live and work in are the result of a post-industrial technology—of a change from an agrarian society with its roots in the land, self-sufficient, to one with a high degree of specialization and consequent interdependence, whose premise is efficiency of production and consumption.

With few exceptions, our architecture is not a social art but an economic rip-off with a 40-year, built-in, self-destruct mechanism. History, in this country, is getting shorter. With such little regard for the permanence of what we do, it is not surprising that our society lacks concern about the quality of what we build. With few exceptions we are not as in touch with ourselves as we are with our possessions. We represent ourselves not by who we are but rather by what we have.

Modern office building represents the direction of institutionalized architecture; a technology applied to the standardization of building part and package. But our technology and processes of mass production unfortunately tend toward uniformity rather than diversification; our choices are fewer as we become locked into a system whose pieces go together only in one way. And in this simplification there is no discovery of place, no detail for the eye to dwell on or the hand to touch, no variety or richness to the experience of looking at, walking through or being in a space. Office interior systems mimic the traits of the buildings they are housed in, yet are supposed to be based on the accommodation of individual work needs. They succeed in doing nothing more than making it easier to deal with the masses *en masse.* In building there is little acknowledgment of the street and consequently little sense of entry; there is no transition except for a door; there is no sense of expectation of what we might find—we know it all too well, even what we have not seen. The ritualistic and anticipatory act of descending or ascending a set of stairs has been replaced by the convenience of the elevator.

Architecture, historically, has always shown a richness and clarity of expression, as diversely as in the Robie House and the Villa Savoye, Charlemagne's Chapel at Aachen or the temple at Karnak. The Romanesque church at Tournus, the Cathedral at Chartres, or Borromini's San Carlo were all built as places of Christian worship, yet each is quite distinct in terms of form. Each was a product of a building technology and a sociocultural context at a point in time when church and state were coordinate. The essential conception of each building was one of space, a single idea brought out in many diverse ways, at many different scales using many different media. From their decorative frescos, the intricate carving of their stone capitals, molding and sculpture to the rhythms of their main piers, relationships of solid to void and structuring of light, each exists as a rich, complex and subtle experience of a space whose essential purpose was quite simple.

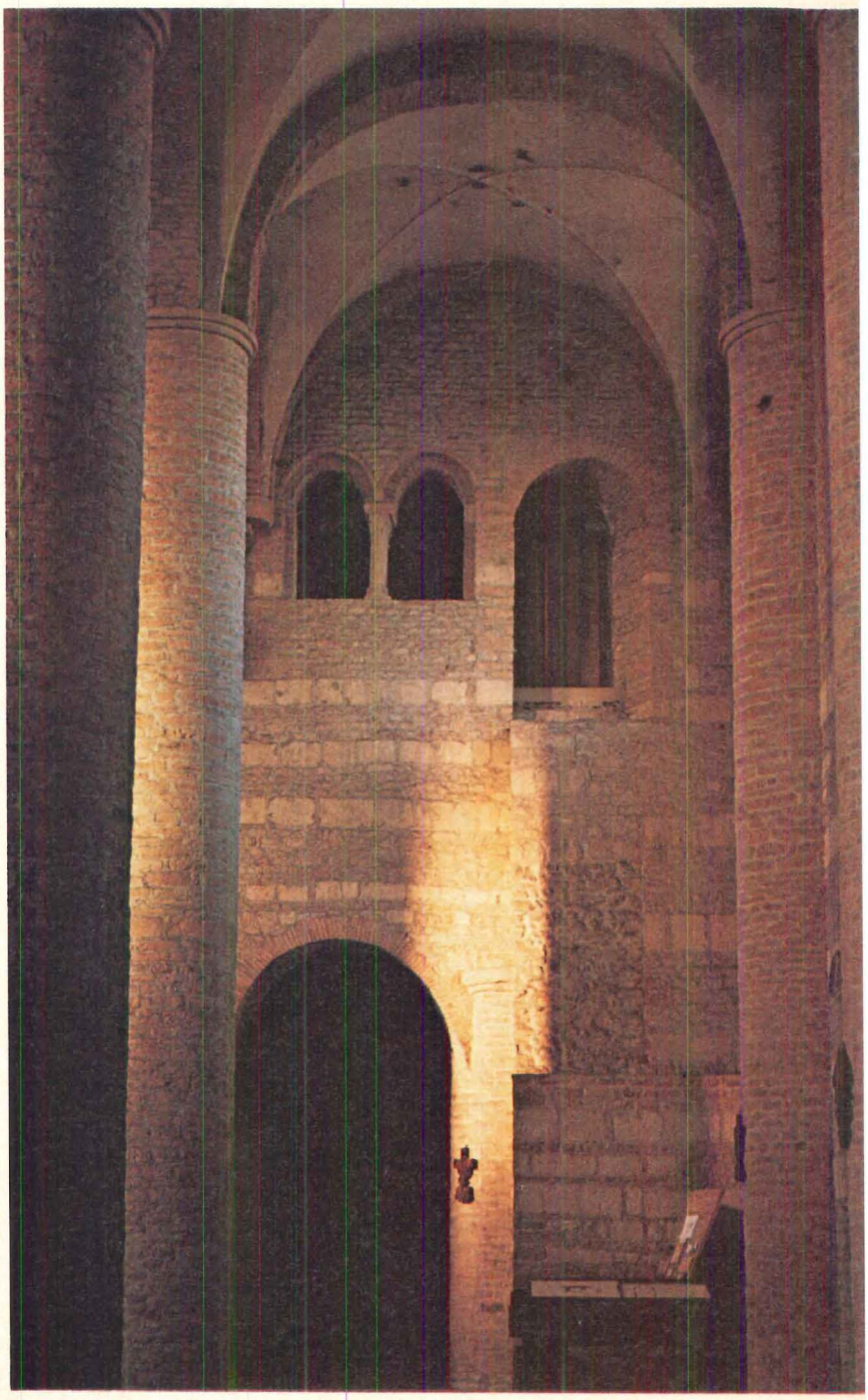
But whatever the device, form or style, if you will, the conception of building as space allows for the consideration of the many sensuous, illusionistic, purely ritualistic or symbolic gestures that provide a frame of reference and a set of experiences for people to respond to. It allows the building to be part of its urban setting. It allows something to be made of transition from outside street to inside space and, if by necessity or choice, a contradiction of the two. It allows for a transition from one space to another, a signal of change that in itself can become a separate experience. It allows for a complexity in the reading of a space that may be generated by the intricacy of its overlaid geometries or by the layering of space in space. The ability to experience these qualities is innate in human nature. The Gothic cathedral was as much a product of social-religious expression as it was a product of an advancing building technology. But our buildings, based more on a mechanical technology than on human use, too



Louis Sullivan: Carson, Pirie, Scott, Chicago, Ill.

Borromini: San Carlo, Rome. Photo: James Addiss

Benjamin Thompson: Design Research, Cambridge, Mass.



St. Philibert, Tournus, France. Photo: James Addiss.

often are the result of arbitrary form-making. We deal with people as statistics, as so many desks, chairs and trash receptacles. We no longer deal with the prime user.

Our building technology has produced building types whose interiors rely on highly specialized objects to give meaning. Does all the open plan school furniture reinforce the learning experience or is it just a light modification of existing preconceptions of desks and chairs? We have no methods for measuring when something works or not—even on a purely pragmatic basis. The assumption is that if it works through some measure of accommodation, it's good. Cyberneticists have learned to incorporate responsiveness into their technology and working process, but architects don't yet really know what feedback is.

Architecture may no longer be an art, but our attempt to replace it with science—in the form of behaviorial principles or systems technology—is merely leading us further from a response to human experience. Design is limited by its own dream of technological perfection and its uselessness to society. This issue of P/A will point out some alternatives to the seeming conflict between art and science, technology and culture, architecture and interiors. [SLR]

Accounting for image

In Buenos Aires, a young group of 'radical' architects has brilliantly used the materials of industrial building to redefine the meaning of bank architecture

What is most surprising about the new main office and branch offices of the Municipal Bank of Buenos Aires is not that they would be unqualified architectural tours de force in any country, but that they are in fact banks. Somehow you don't expect an old, established banking firm to hire a young group of "radical" architects to design its buildings. But that is exactly what the Argentine bank did, and for some very good reasons. They wanted to be certain that the new design would reverse the traditional image of the stuffy, conservative institution; they wanted a new look that would say "this is your bank, we're your friends, come on in." But just as important, they wanted a design that could serve as a prototype for future construction, and they wanted to be assured that this design could be produced almost overnight.

The bank considered several firms before finally settling on the newly formed studio of Flora Manteola, Ignacio Petchersky, Javier Sanchez Gomez, Justo Solsona, Josefa Santos and Rafael Vinoly, all of whom either had taught or had been students at the University of Buenos Aires, before they left for political reasons in 1967. The bank was familiar with their work, and was especially attracted to their strong, social-minded motivation. They also knew the group could get the job done on time, and this was important because the first commission was for the new main offices in downtown Buenos Aires, which had to be completed—from initial design to moving-in day—in only six months to be in time for the bank's 90th anniversary celebrations. The design took just one month; after that 1000 workers worked 24 hours a day to complete the building—on time. Since then the group has gone on to design all of the new branch offices, completing six so far.

While the offices are quite distinct from each other, a shared aesthetic can be seen in all of them. Part of this is accounted for by the extensive use of industrial-building materials, but it is more attributable to the way these materials have been brought together into an extraordinary series of illuminated spaces.

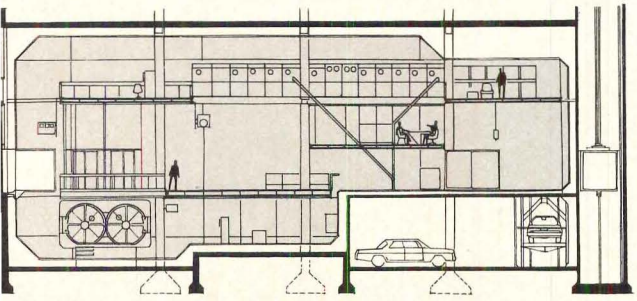
In each office, large, open multilevel spaces are enclosed primarily by glass and glass brick. In some configurations these materials are used not only for walls, but also for floors and ceilings that are not always at right angles to each other. In other cases, glass cages have been recessed into the building shell to bring the outside literally into the interior of the building. As a result of this extensive use of glass, an unusual kind of enclosure has been created where the traditional distinction between interior and exterior, and open and closed, has become somewhat diffuse. This is a little unsettling at first, but the complex relationships it fosters quickly become compelling.

During the daylight hours the interiors become vast vessels of light where the inner volumes and their boundaries, the solid and void, are constantly redefined by changing light passing through transluscent or transparent surfaces before it is reflected off interior surfaces of similar materials. This sets up an ambiguity not only between the inner spaces and their surfaces, but between the interior and exterior of the building as a whole. But while the density of the volumes and the definition of their boundaries may constantly change in relation to each other, the totality of the space at any given moment is perceived as a clearly defined objective where only the relationships between elements, and the relationship between the building and its context, change.

While this could be true of all buildings in varying degrees (except a windowless one), the difference in the Buenos Aires banks is that here the architects have purposely manipulated light to enhance its potential as a space-defining element. And they have done this for a specific reason, which involves a particular philosophical attitude the group shares concerning architecture. One of their main concerns is to debunk not only what they consider to be the myth of architecture—its constitution, the rules and regulations, codes and precepts as we know them—but also to debunk the myth of architectural subjects, in this case The Bank. They do this partly by making a completely open and transparent or translucent object out of a structure that traditionally has been considered as a closed, secure, vaultlike space. They demythologize the bank by constructing it with materials that are not associated with that type of building, and by doing this they make explicit the frailty of the rules that govern traditional architecture.

Even though most of the materials used are those usually associated with industrial architecture, here the exposed structure, the free-standing metal stairways and suspended metal bridges, the glass brick and the exposed forms of the boldly colored mechanical elements have all been orchestrated into a brilliant kaleidoscope of light and color quite unlike anything one would expect to find in an industrial building, and certainly not in a bank. And within this complex landscape, the architects have consciously used highly refined, carefully designed (mostly by themselves) furniture that contrasts to the surroundings, and thus emphasizes the ambiguous and contradictory nature of the space itself. [DM]

When it moved from one old structure to another one, the Municipal Bank of Buenos Aires could give the architects only six months—from design to moving in—to complete the new main office. Industrial materials are used to create a glass and steel enclosure within the old building, where glass cages now bring the outside literally into the interior.



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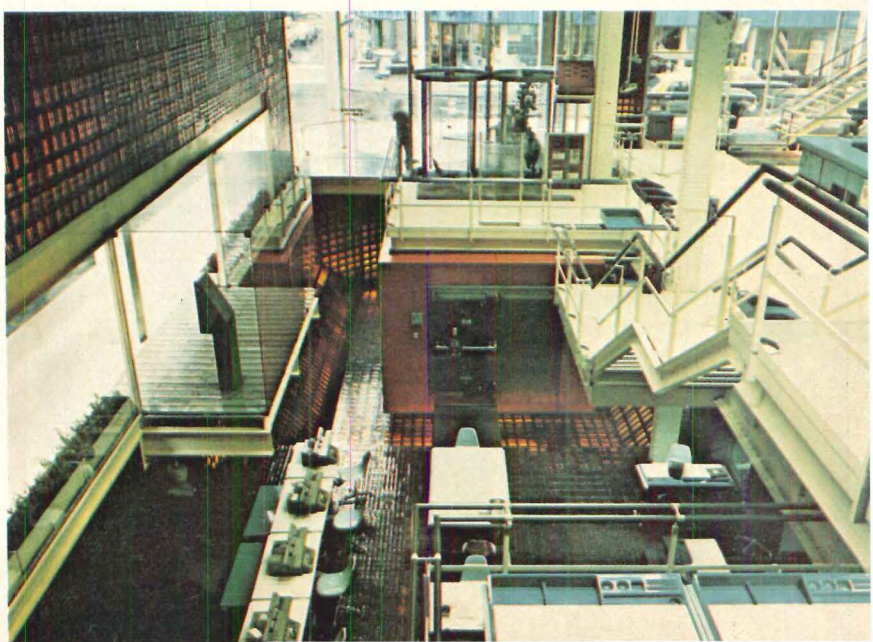

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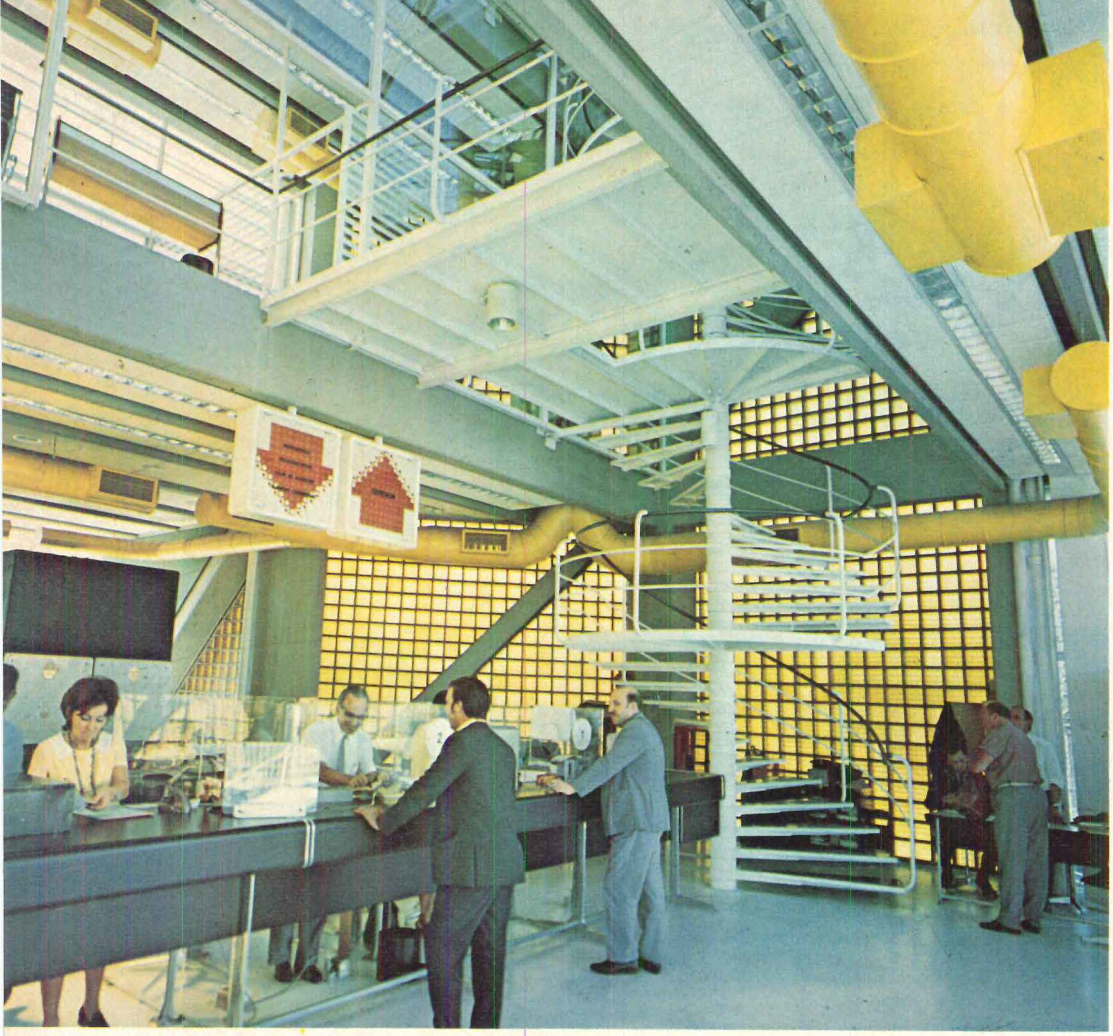
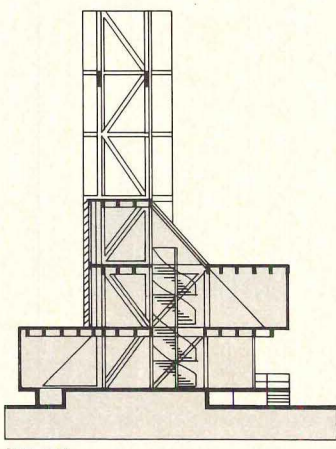
In a Buenos Aires suburb, glass screens of the two-story Condor branch tower above the neighborhood to signal the bank's presence. The Edificios Ventas, or "selling building," (facing page) also fulfills a bank function; in its large auction and exhibition spaces in Buenos Aires, repossessed and second-han merchandise is traded almost every day.





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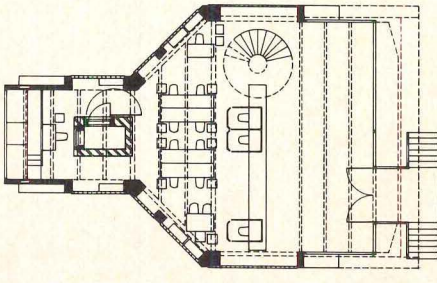

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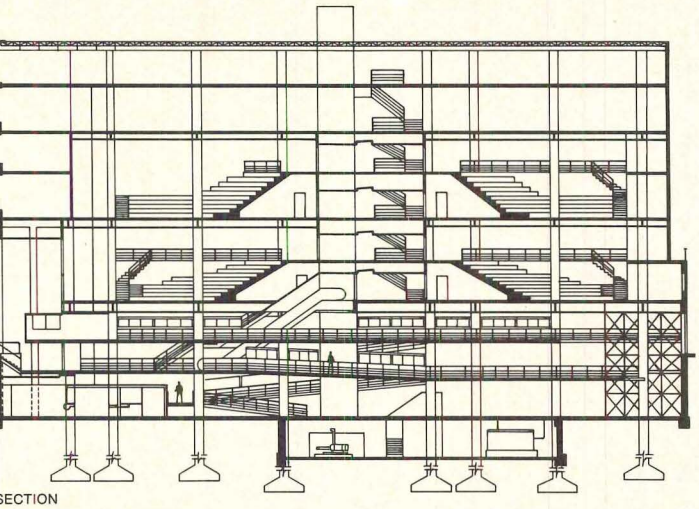

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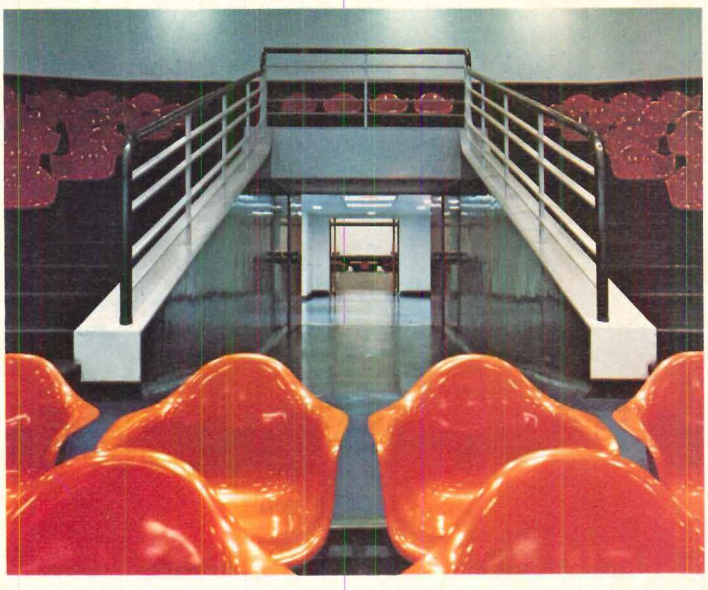

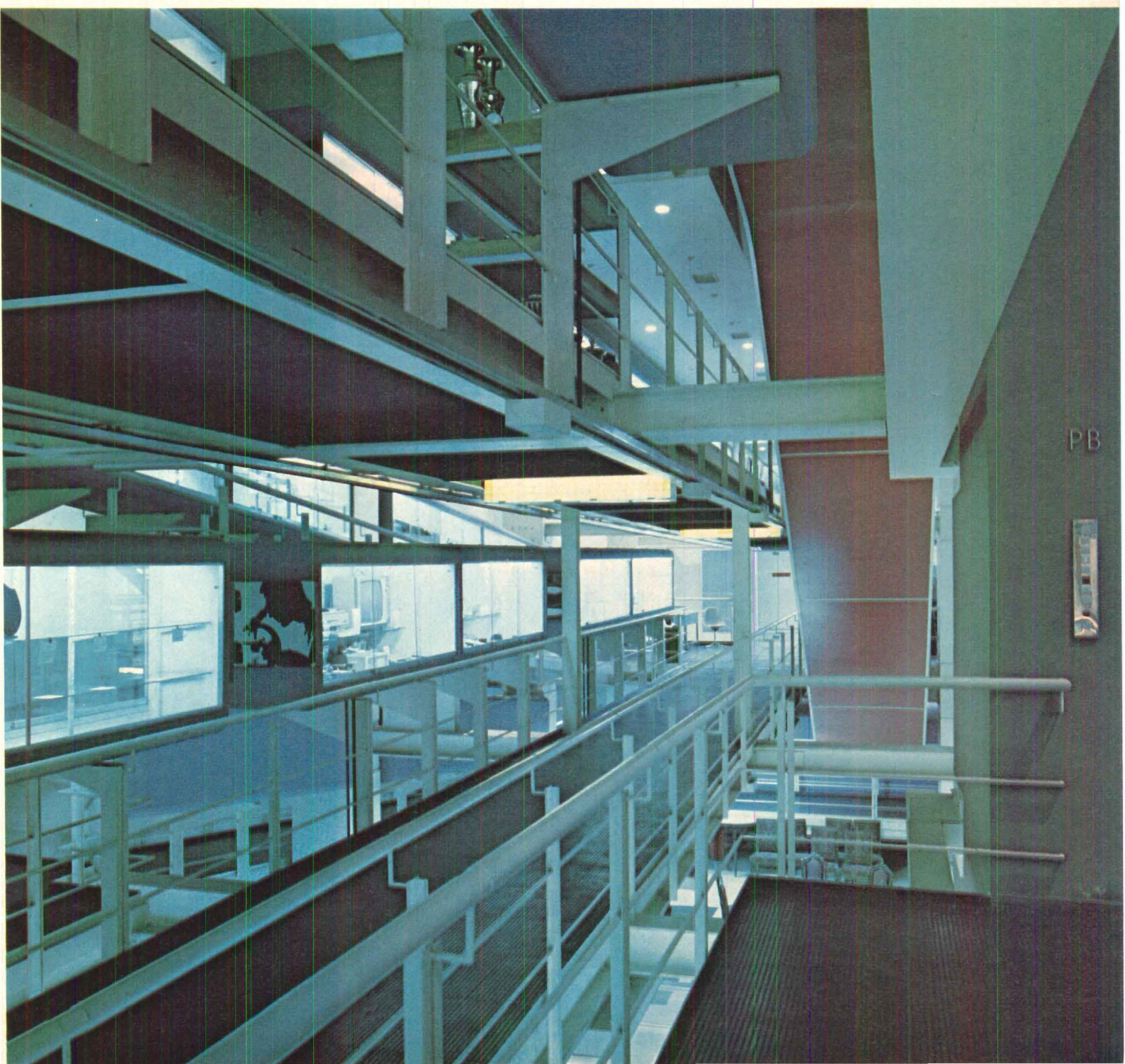

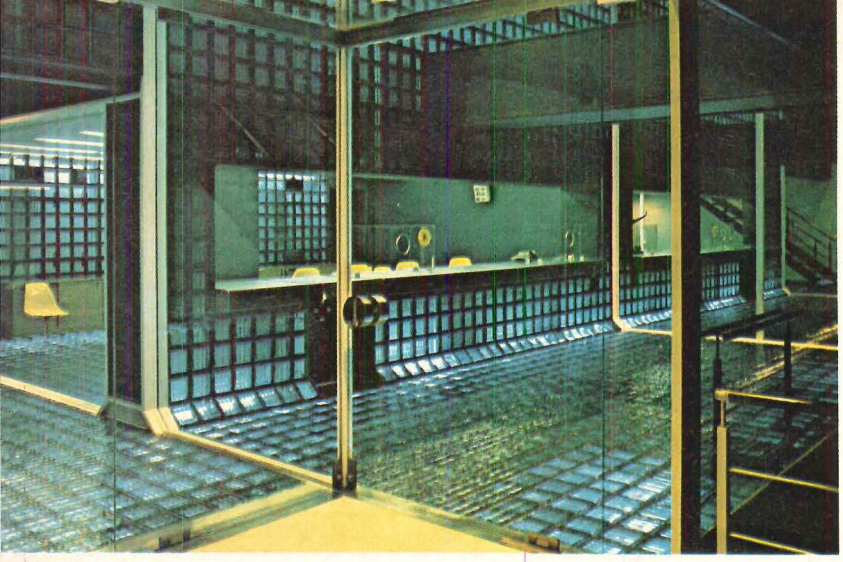

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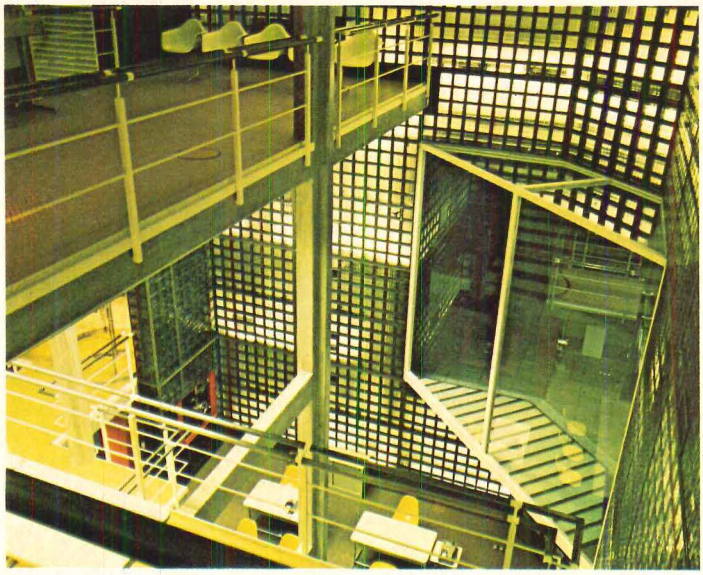
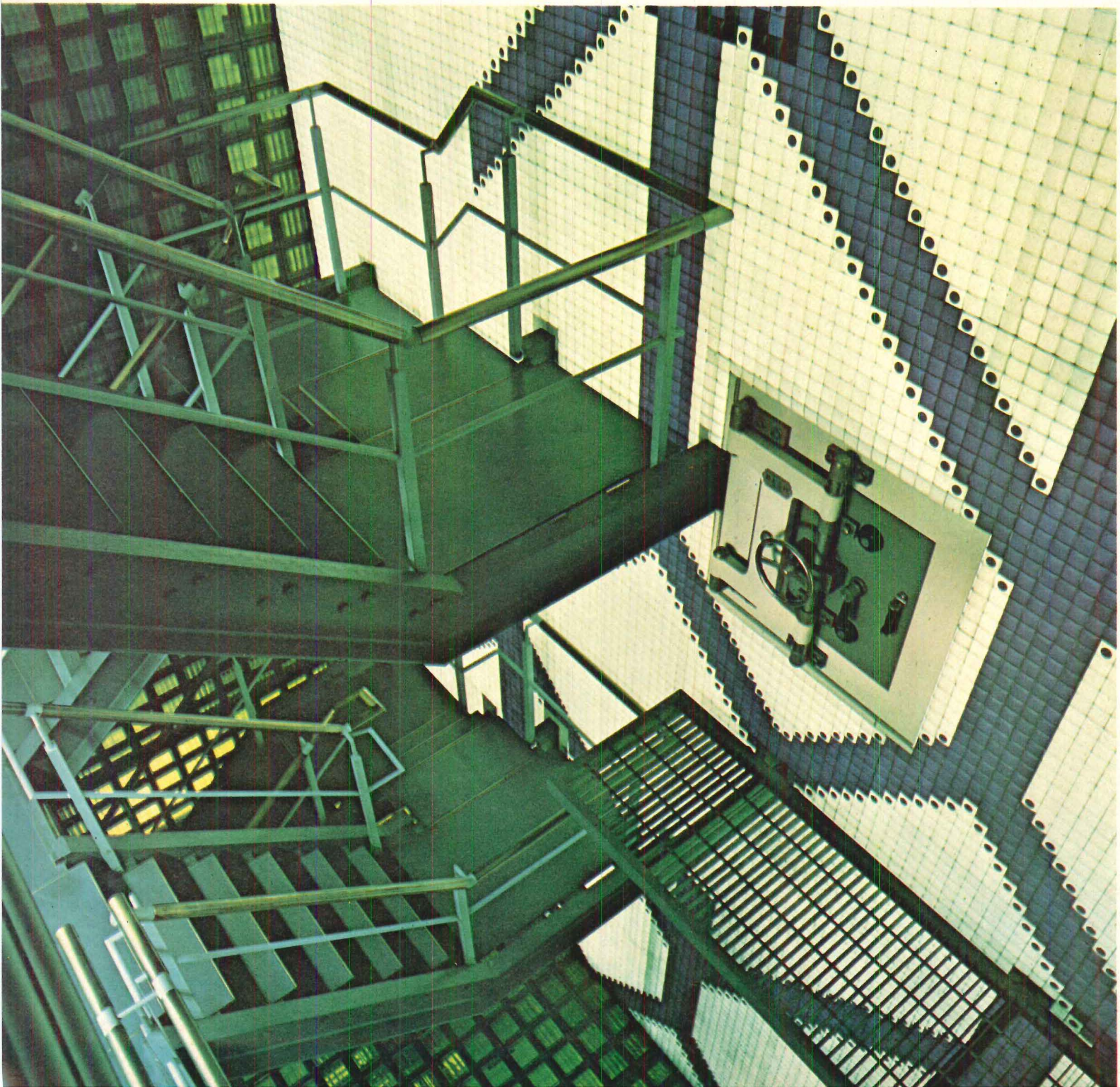
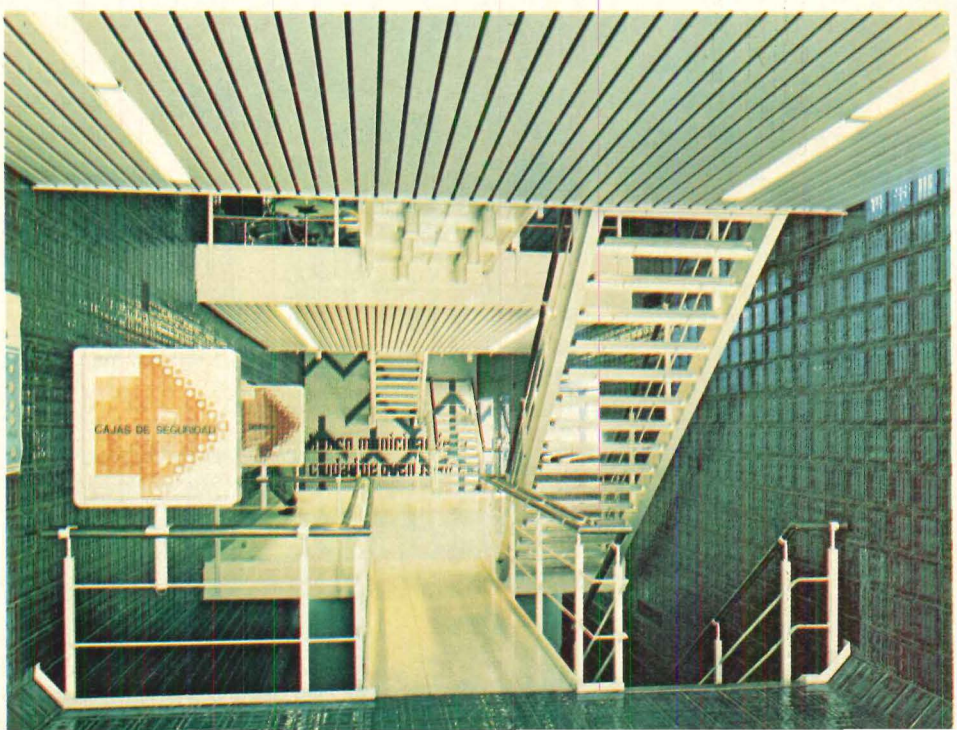
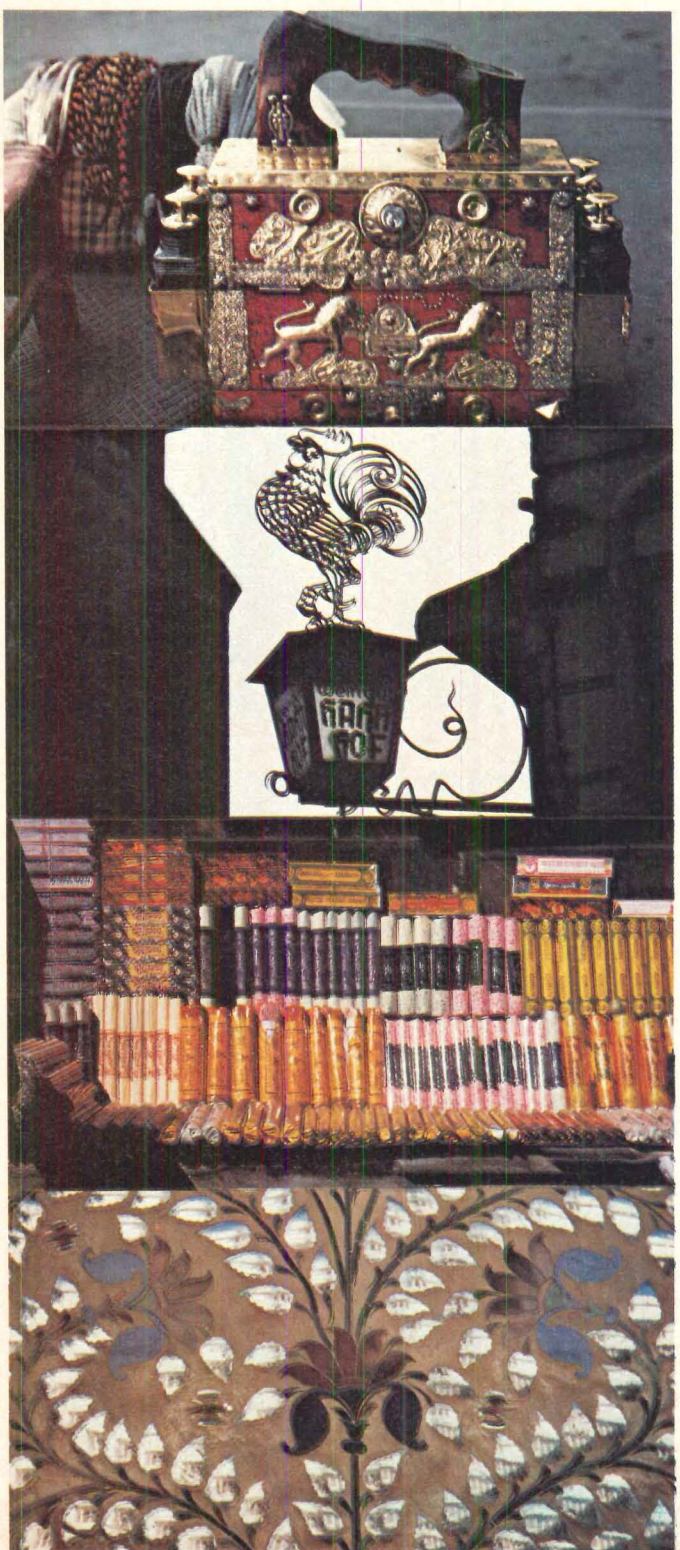




In the Barracas, Patricios and Liniers branches (facing page top left, right and bottom) color changes create a distinctive palette for each branch. At the Santa Fe branch (this page) floor areas are suspended within a dark blue glass-brick tube that forms continuous floor, walls and ceiling.



Deborah Sussman: profile of a designer



Working with the limitation of a professional label and without the constraints of one medium, Deborah Sussman is able to deal with a broad range of design problems

The work of Deborah Sussman and Co., which began only six years ago, has included nearly everything short of designing a building. Working with a small and variable "company" of designers, Ms. Sussman considers herself a problem-solver and feels that design is a very intuitive process: a collection of images, experiences and responses that become focused on a given problem.

Her attitude and approach to design come from two not unrelated sources; her work at the Eames office and her travels through Europe, India, North Africa and Mexico. Observation has been her education and her work clearly shows a response to the wealth of visual phenomena encountered in European villages and marketplaces, in India while working with the Eames office on the Nehru Exhibit, or in Mexico while photographing for the Eames film *Day of the Dead.* The colorful textural delights of an Indian or Italian marketplace, where everything is artfully stacked to be seen, touched, smelled and bargained for, shows up in the design of a series of stores for Standard Shoes, where 60,000 pairs can be seen and handled, where the eye is assaulted by colorful silk-screened or laminated plastic inlaid panels, and where the hand can touch the shoe hanging delicately from a chromed mannequin foot.

At whatever scale, she is intrigued with the parts and the detail—a characteristic of the Eames office where each line of information is important in the construction of a broader idea, where, as she explains, "There was an amassing of the parts with each part articulated by itself, almost standing as a whole." This caring for each piece that makes up the whole gives Deborah Sussman's work an extraordinary richness that always leaves something more to be discovered. It embodies a sense of craft, of hands fashioning a form from images in the mind, of involvement with the shape and the materials, of tradition in skills passed from one generation to the next. While mass production processes have taken away the involvement of hand and eye, the same spirit can still exist in the object. The process of producing a book or catalog will

A collection of images photographed by Ms. Sussman during her work and travels throughout Europe, North Africa, India and Mexico.

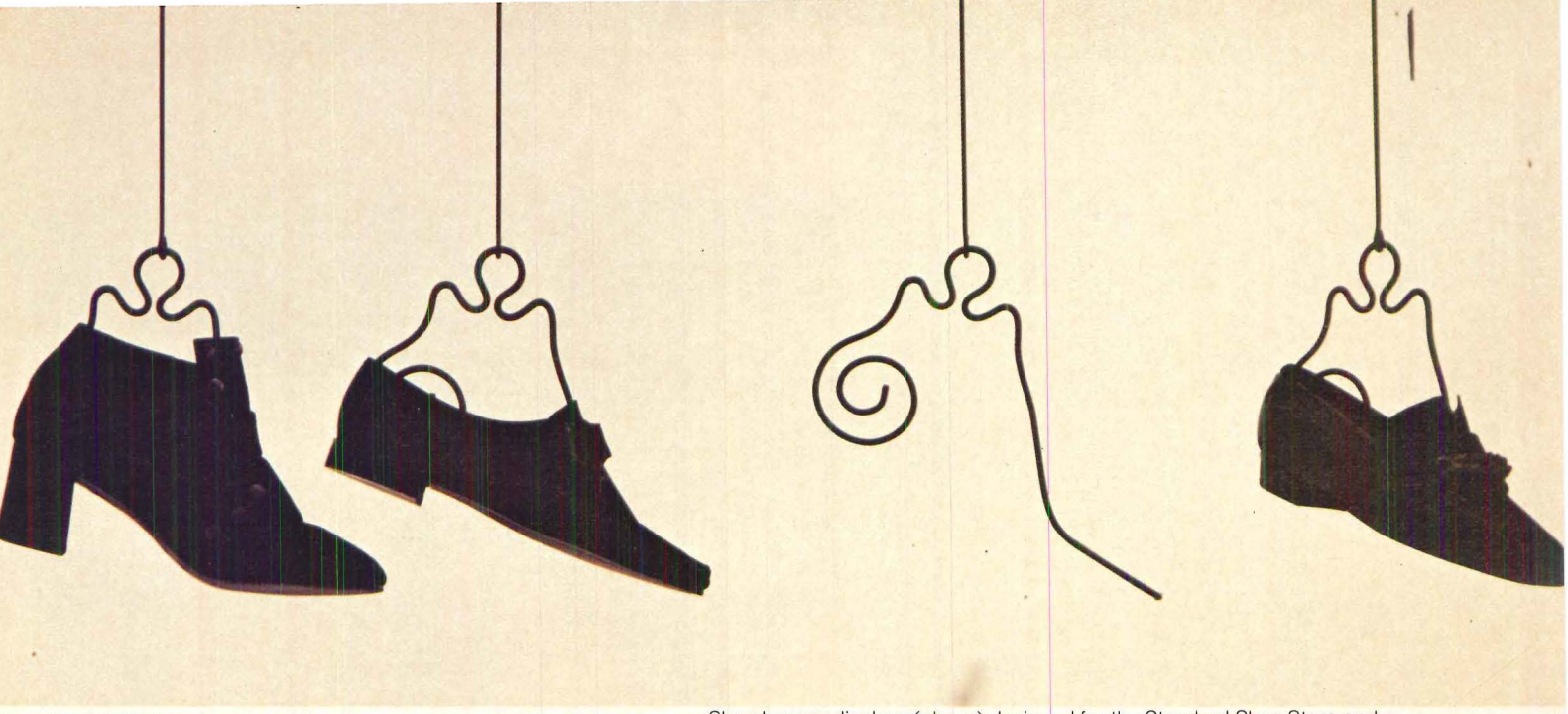


Photo: Annette del Zoppo

Shoe hanger displays (above) designed for the Standard Shoe Store and packaging (below) designed for the Los Angeles County Museum.

nvolve instead, an exploration of printing processes and echnology and a reliance on the expertise of a printer, the 20th Century technicians of craft.

In her own words, Ms. Sussman wants "to give a place of character; to determine what is appropriate and then to shape he whole environment, not in the structural sense but in a use sense . . . and beyond that to bring an awareness of some fundamental experience outside of one's immediate existence."

For this, she draws on diverse resources. The design of an nterior is based on giving identity to the parts as well as the whole and giving information about where you are or want to go. Such information can be as abstract as the Standard Shoe store panels that depict the transformation of alligators nto shoes, tulips into Dutch shoes, top hats into spats, umbrellas into boots; or as literal as a mural for Zody's clothing store showing an old-fashioned beach dress as a foil to the new clothing. Information is historical material incorporated nto the design, as part of the basis for understanding the context of where we are now and maintaining a sense of continuity with the past. It is also a 12-ft-high antique shoe sculpture, a representation of the one the old lady lived in, for the children's department of the Standard Shoe store. Information may also be literally words and signs, and in that area Ms. Sussman explores the purely pop American idea of the roadway sign. Signs designed for California City made a cartoon of the visual roadside dilemma by changing the scale, making a forest of signs and altering the pictorial style. Her sign for Zody's is a theater marquee; others are wall-long billboards. But the final parody, however, is a tribute to Reyner Banham n a billboard 40 ft long on Santa Monica Blvd. that reads 'Reyner Banham Loves L.A."

With the diversity of her work comes a diversity of style. There is nothing consistent but the underlying attitudes. Each problem is taken and solved on its own terms for the appropriateness of its own solution. Some work she describes as conservative, sober and quiet, like the catalog for the David Bright collection designed for the Los Angeles County Museum. Other work is colorful, light-hearted and warm. "You can't escape your own personality," she concludes, "but it should not be imposed on the problem." With that, the only esource left to create solutions are one's own experience, magination and creativity. [SLR]

Photo: Mark Swartz

Deborah Sussman: profile of a designer

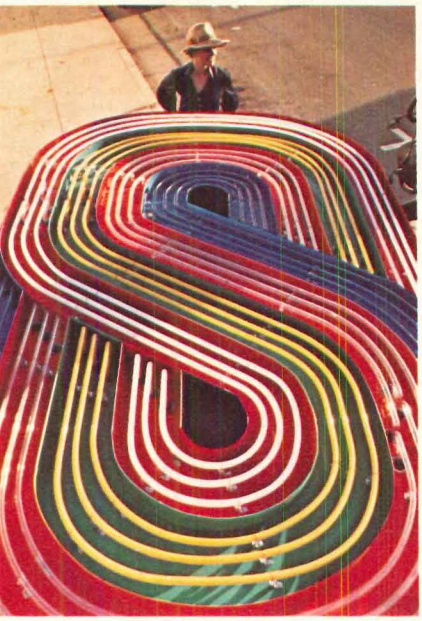


Photo: Mark Swartz

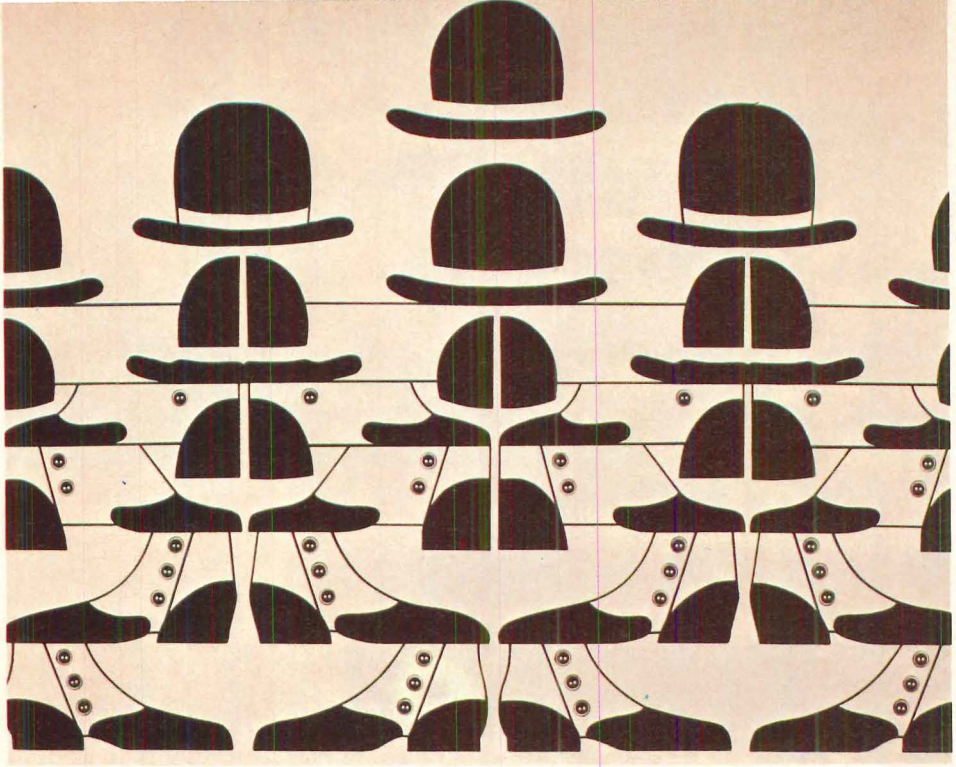


Photo: Deborah Sussman office

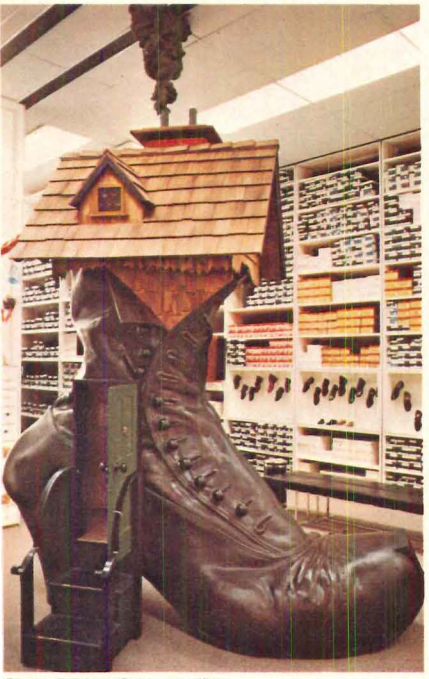


Photo: Deborah Sussman office

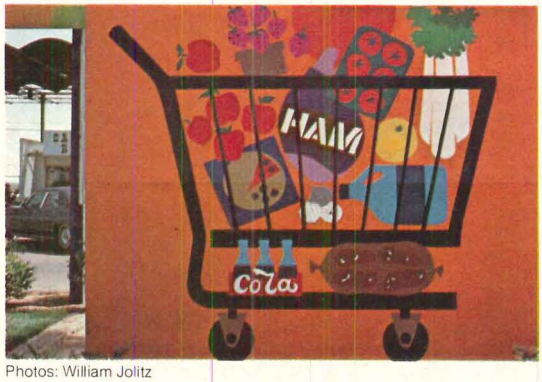
Photo: Virgil Mirano

Photo: Annette del Zoppo

A comprehensive program for the design of a series of stores for Standard Shoes included the general organization and layout (facing page), the neon sign (top left), graphic panels depicting the transformation of top hats into spats (top right), a 12-ft-high model of the shoe that the old lady lived in, located in the children's department (left), seasonal decorations made by school children, the shoe hanger (above) and, finally, a sign on the building that makes it clear what goes on inside.

Photo: Marvin Rand

Photo: Tom Bosterman

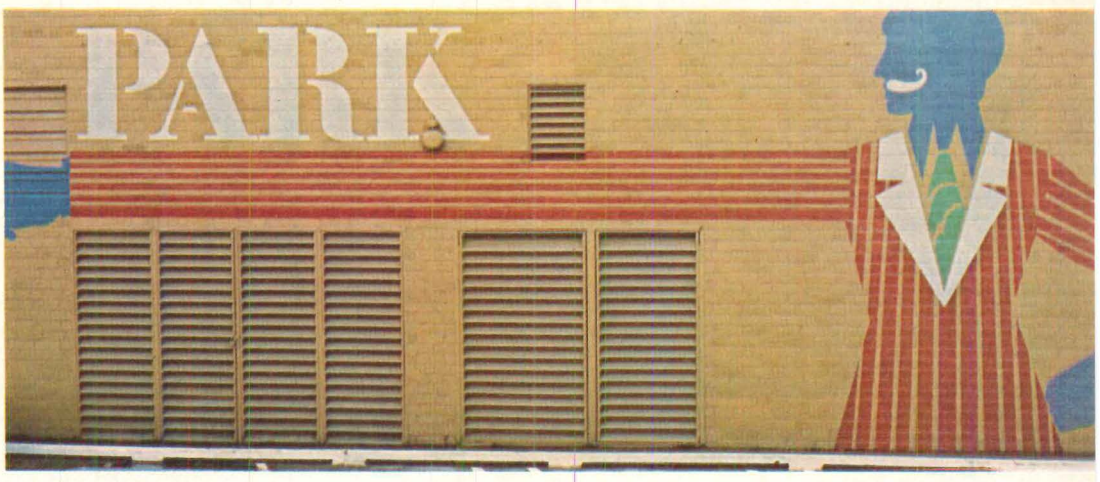


Photos: William Jolitz

The Zodys' façade (above) is a large billboard, the actual sign is a theater marquee. Signs (below) for California City are cartoonlike in their imagery.

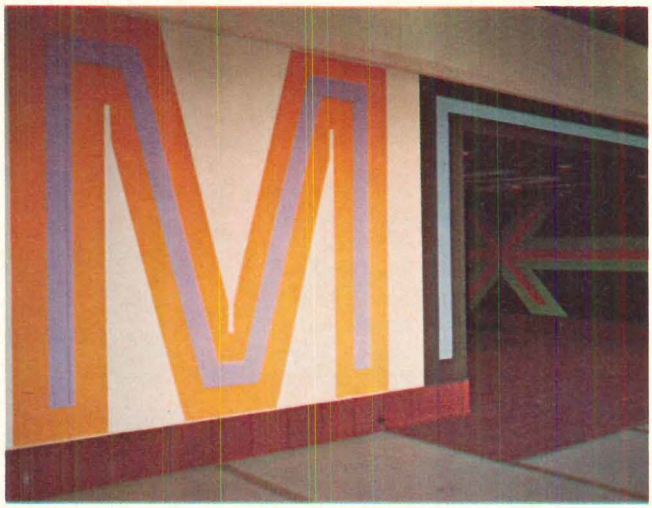
Parking signage for the La Cienega store of Dorman Winthrop flattens the well-dressed executive in pin-stripe suit against the texture of the bricks and grille work (right and middle). Walls as signs, façades as billboards and billboards as cartoons succeed in juxtaposing the unexpected image with the ordinary place. The billboard below, on Santa Monica Blvd., was to announce the title for Banham's recent film on L.A.

Photos this page: Mark Swartz

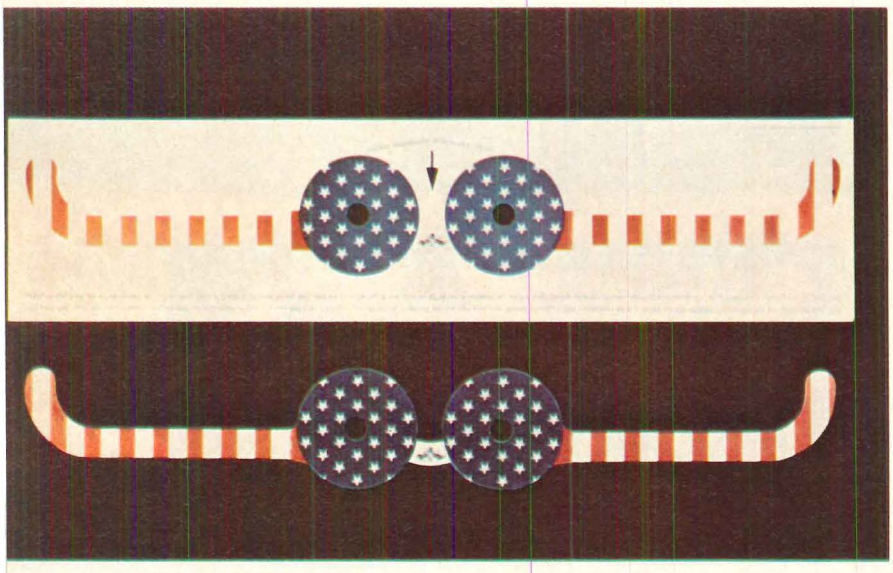


Photos: Deborah Sussman office

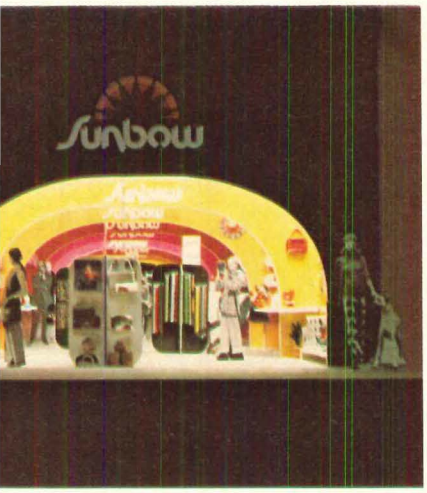
Photo: John Knoop



Hollywood Bowl program cover (left)
Joseph Magnin entrance graphics (above)
Announcement for Los Angeles County Museum (below; left)
Guard patch for the Hollywood Bowl (below)



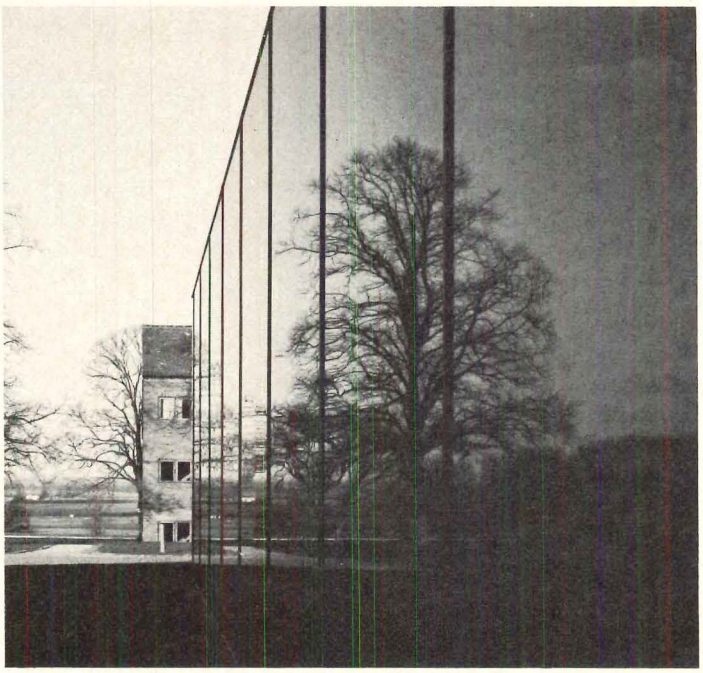
All photos this page: Mark Swartz



Sunbow, a name chosen by Ms. Sussman for a prototype store selling women's accessories, has an interior that reflects the image of its name. The bands of color and the arch forms break up an otherwise ordinary space and provided a scale and framework within which to organize all the various accessories.

A celebration of systems

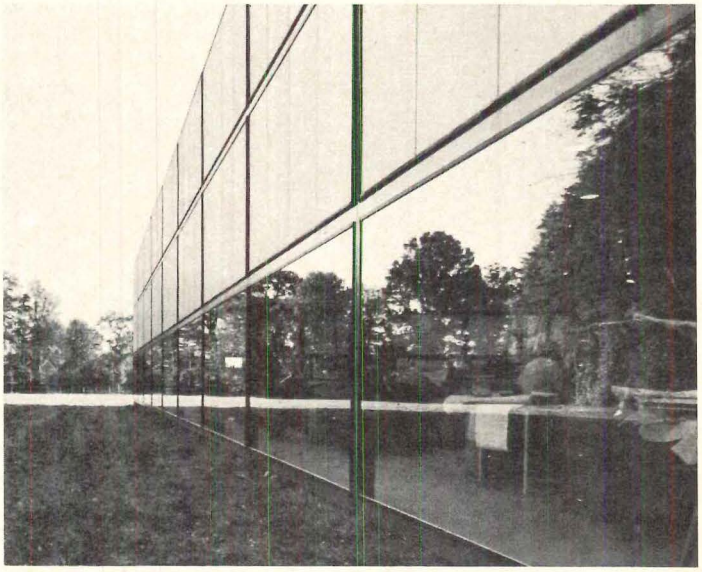
Sometimes born of Miesian concern for detail and clarity and sometimes of the expression itself, a design ethic is being developed around emphasis on a building's systems



Among the more obvious efforts to let the interiors derive expression from the building, or vice versa, one of the most visible is the practice of playing up mechanical/structural elements. Call it "the mechanical aesthetic" or whatever seems appropriate, the phenomenon has gained wide acceptance with designers in recent years. It's certainly not that the "let-it-all-hang-out" approach is necessarily easier; it often requires more care, both in design and installation, sometimes demanding a degree of craftsmanship and involvement beyond the grasp of many tradesmen.

The methods by which designers articulate elements, and their reasons, cover a broad range. The three examples shown encompass part of that spectrum and illustrate how similar principles, applied to varied problems by different designers, produce striking responses. All are results of the program, but the inputs were very different.

Parts for Milton Keynes



In order for systems technology to be appreciated by designers in more than its most cold-blooded form, it must first be recognized as *a tool*—an expanded form of masonry unit, or can of paint, or glazing detail. When planners called for a new town outside of London and Buckinghamshire in England, they also set out to create the very best form of development organization, within reasonable limits, that could be assembled. Milton Keynes is more than a new town; it represents a strong British attempt to set up a town structure that could respond to future needs as they arose. To carry out the planning objectives, while maintaining appropriate flexibility, a talented group of architects and planners was needed. Once established, the Department of Architecture and Planning of the Milton Keynes Development Corporation was charged

Milton Keynes Development Corporation's conference pavilion (above and top, opposite) elegantly displays the systems potential.

Prototypical SBI building (below and bottom, opposite) houses the Milton Keynes design implementation teams at Wavendon.

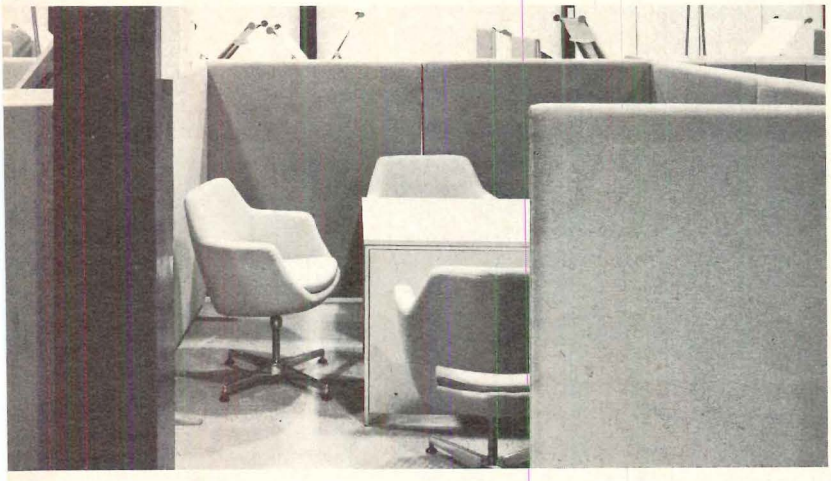
with planning (in detail) how diversity and quality could be achieved together.

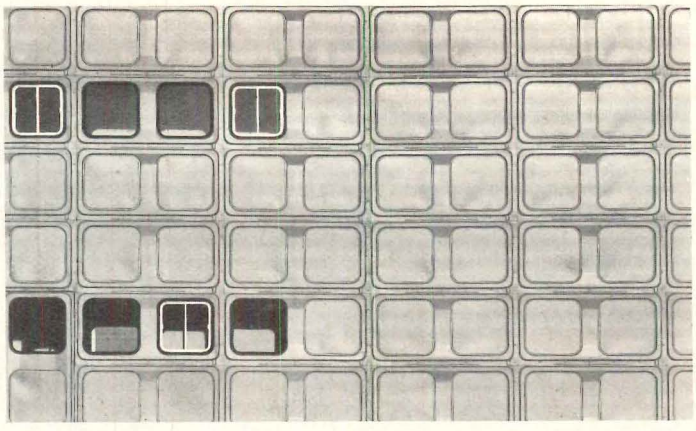
SBI and AFU

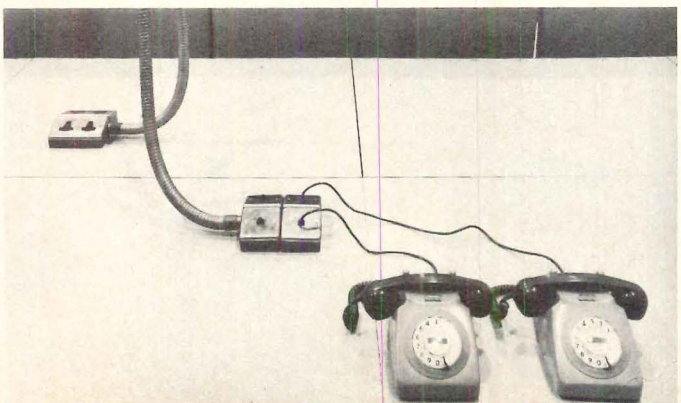
System Building for Industry (SBI) is a program and a set of subsystems designed by the MK team. In practice, their system has been used with one type of cladding to produce needed space for MK design implementation teams at their Wavendon headquarters. As part of an overall concern for inducing a healthy industrial/commercial mix in the new town, Advanced Factory Units (AFU's) have also been built, with a different cladding. Basic structural bay sizes are 39.4 ft (12m) square or 52.5 ft (16m) square, truss depths are standard at 3.9 ft (1.2m) and clear height options available are 11.5 ft, 18 ft or 24.6 ft (3.5m, 5.5m or 7.5m).

Clean detailing prevails throughout, because the systems that make the buildings *are* both the interiors and the exteriors. The care that the MK architects have given all structural and cladding connections, as well as the electrical/mechanical planning, is evident. The elements assembled, only finish elements such as paint, carpet and furnishings are needed to elevate the buildings from industrial to office quality levels.

For their own conference pavilion at Wavendon, the MK group felt that the heavier SBI system was not required. Instead, the channel member trusses of SBI were replaced by open web steel joists for the 42 ft square pavilion. The same concern for detail is carried even further here, since the building will serve for corporation conferences and presentations. Gray heat-absorbing glass seems to form the entire envelope; even the perimeter columns disappear from the exterior. One delightful detail allows rainwater to be led down the center of the tubular columns in plastic pipe and out through the glass. Drain chains guide the water down to drywells encased in orange painted concrete tubs.

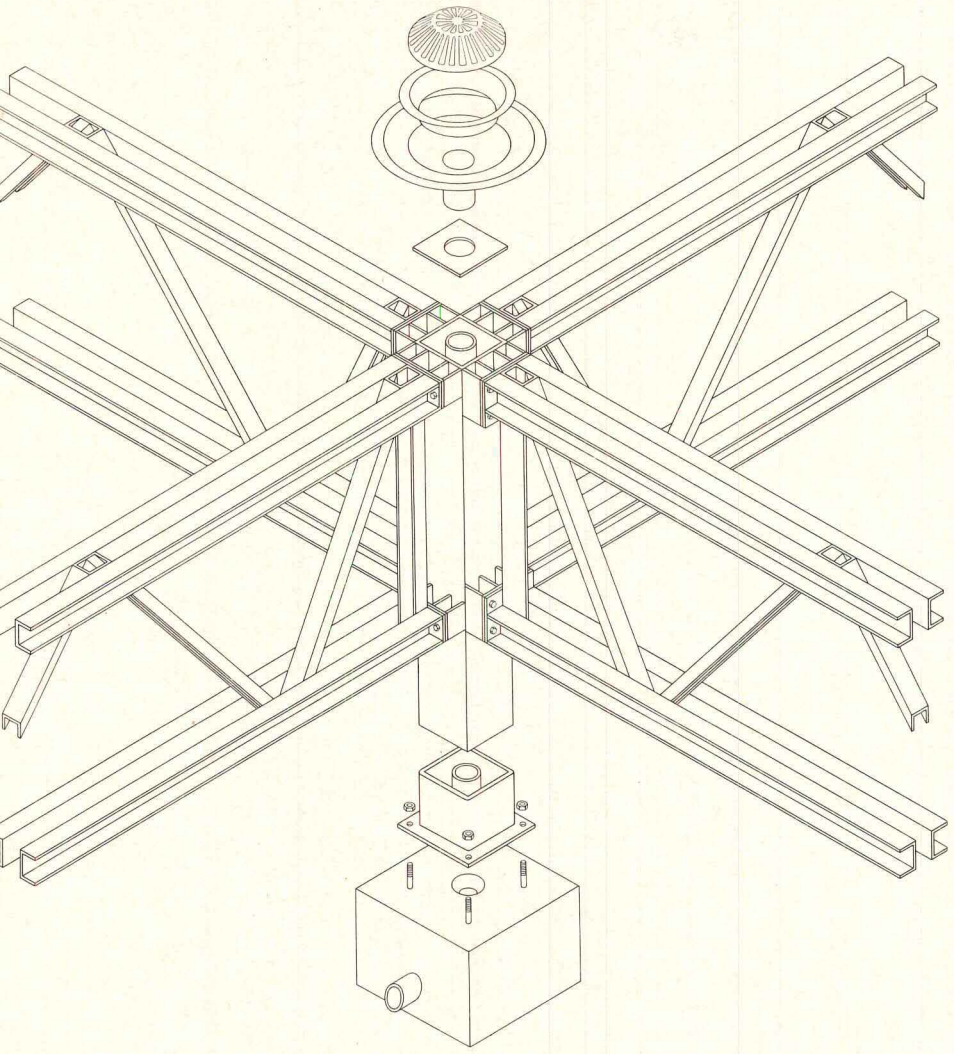


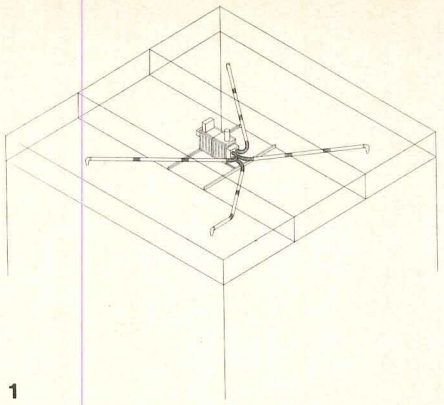




Credits

Pavilion design: Derek Walker, Pierre Botschi, John Wright; David Stabler, Supervising Architect. AFU design: Derek Walker, Derek Codling, Barry Clayton, John Doggart. SBI concept: Milton Keynes Development Corporation, Department of Architecture and Planning—Industry Group. Photographs: John Donat.





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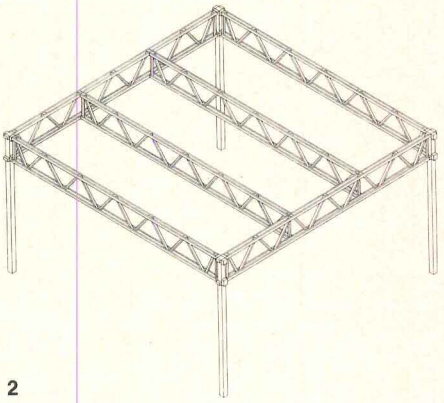

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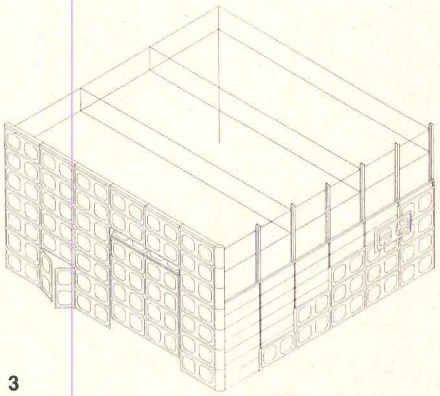

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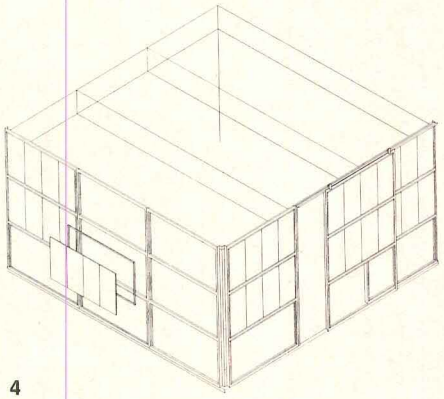

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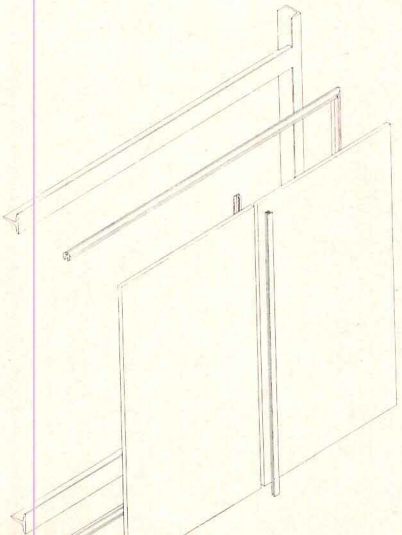
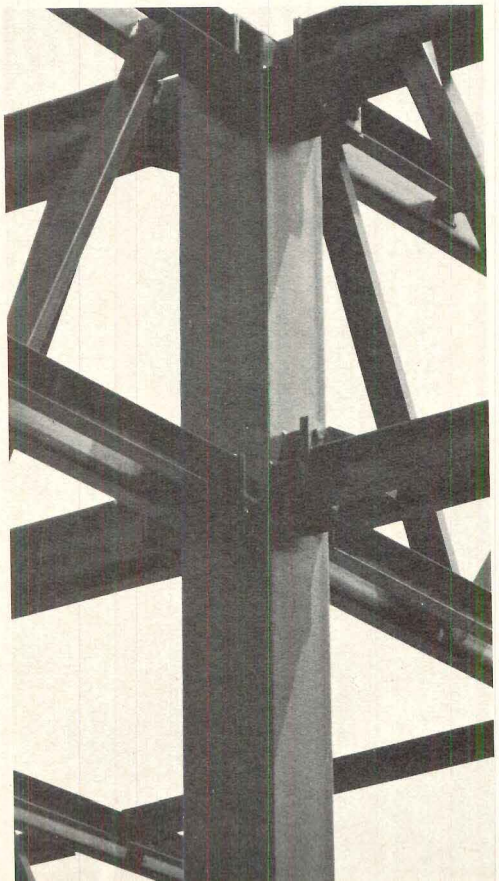


Beginning with the basic structural assembly, the Kiln Farm Advanced Factory Units were clad in adaptable formed metal panels that allow windows (opposite page, lower right) at almost any location. The two optional cladding types (3 and 4, far right) produce quite a variety of options for openings and glazing. Mechanical units (1, far right) mounted within standard truss depth, also allows flexibility in ducting. Interior spaces of the prototype occupied by MK design teams are planned for change, employing movable screen walls, phones and electric boxes (far left, opposite page.)



A celebration of systems

Street level 747

Until recently, the mechanical and electrical innards of office buildings have been closeted away in the least visible spaces. Especially in elevator lobbies, those marble and brass environments that encourage passers-by to pass by quickly. New York City developer Mel Kaufman, however, has a war on with office building ground floor standards (P/A Mar. 1971; p. 66; Apr. 1972, p. 78). At his request, designer Pamela Waters launched this latest battle in that war, using the very elements that have been tucked away and boxed in for so long.

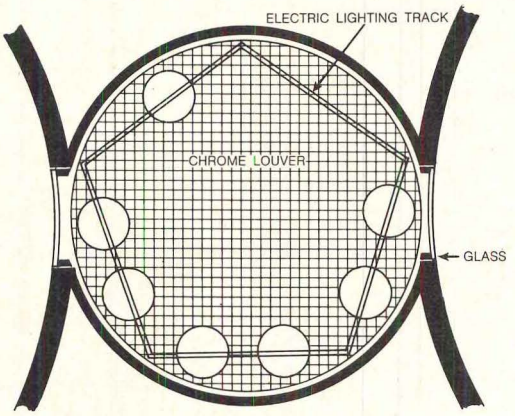
The lobby of 747 3rd Avenue in New York is a funny space to begin with, so in Kaufman tradition, Pamela set out to make it even funnier. It's a quieter humor this time, as opposed to some other Kaufman-owned buildings. As one approaches the building, improbable, irregular mounds meander around the plaza, enclosing trees and benches. On the exposed walls of adjacent buildings are tile murals of animals, a surrealistic window (with real curtains) and a "truck" at the loading dock.

Upon entering the revolving doors to the lobby, if you look quickly, there is a revolving nude sculpture in a cylinder between the doors. The narrow viewing slots face into the door enclosures only, so the statue is visible only briefly during entry or exit.

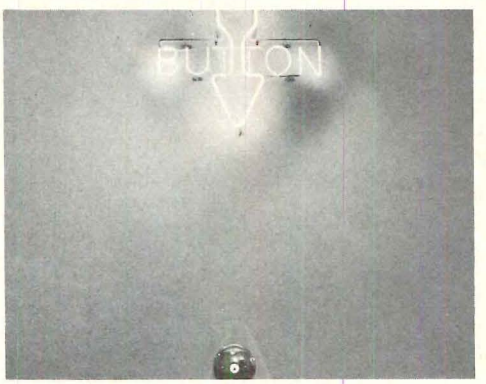
Once inside, a visitor passes two round shiny ports coming up from the floor—heat supply ducts to cut the chill near the doors in winter. S/he then sees an almost all white lobby with a neutral carpet and what appears to be Claes Oldenburg-orchestrated pipes sweeping in an arch across the ceiling. While the pipes do not sag, as Oldenburg might have wished, they *are* white vinyl (covered) and soft. Then there are the four chrome vertical pipes rising from the floor, somewhat reminiscent of either exaggerated chrome carburetor stacks on a dragster or exhaust pipes on a street racer. They are for return air. On one wall is a transparent version of the normal elevator control panel, inviting inspection by the curious. That theme carries to all other elevator button mechanisms, including the cab panels. A full length design to be painted inside the elevator shaft has not been started as yet. The final touch is a light-hearted neon sign, an arrow and the word "button" over each call location.

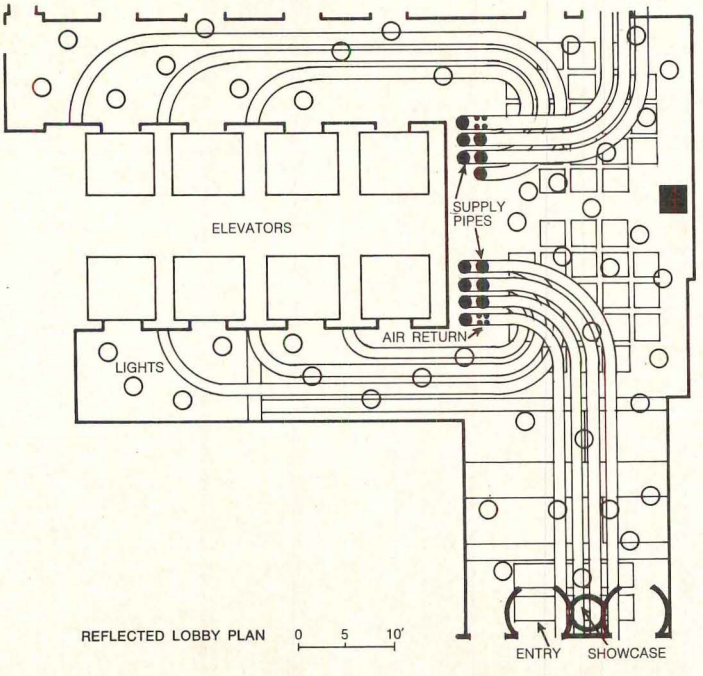
Credits

Design, Pamela Waters; lighting, Howard Branston; photographs, Norman McGrath

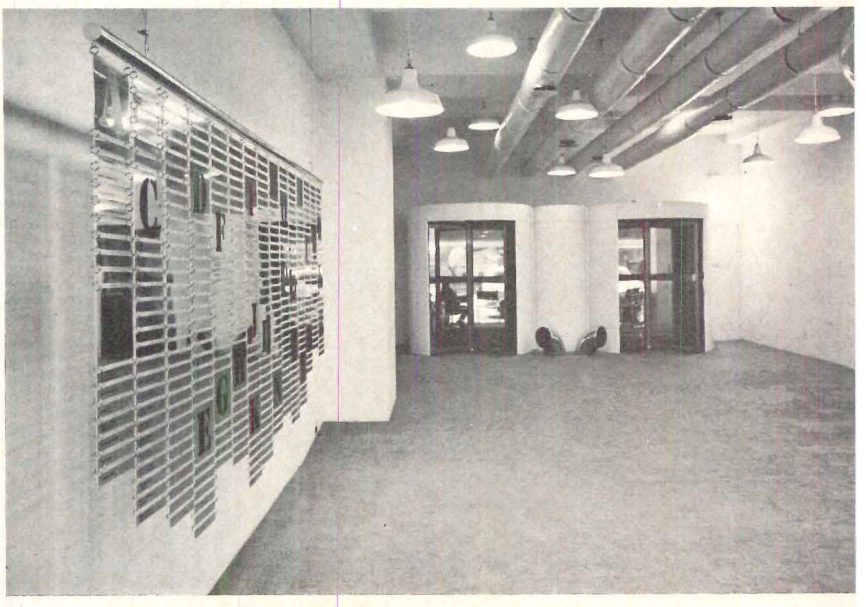


REFLECTED CEILING
SHOWCASE BETWEEN DOORS

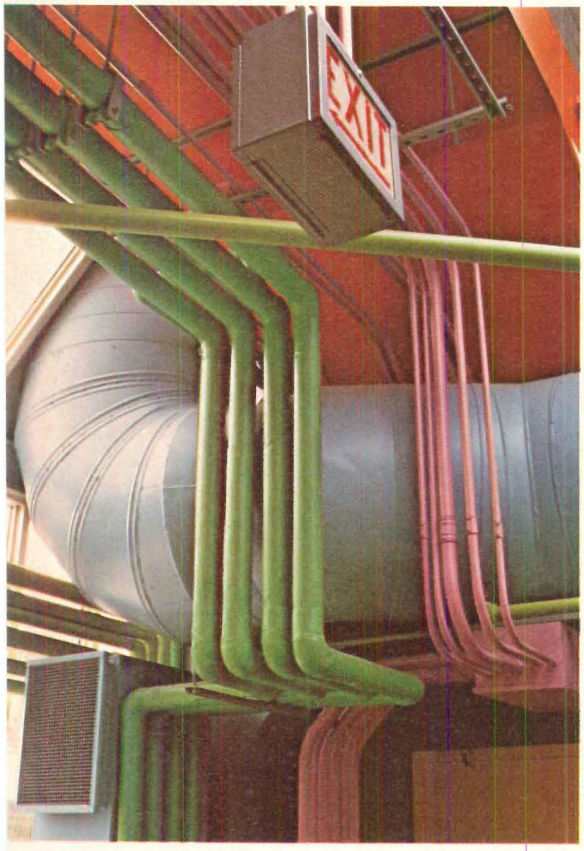




REFLECTED LOBBY PLAN 0 5 10'



A commitment



When it received a citation in the 1972 P/A Awards program, The Childrens' Learning Center in East New York, N.Y. was praised by the jury for being a thoroughly workable kind of advocacy design. Earl Flansburgh, in concurring, said, "Yes, when we talk about advocacy, this is something that is really the toughest kind of design." The design, by Works (East) is physically shaped by its interior functions—it is an interior building, essentially. The spaces and their ordering spring from a very direct attempt to make a responsive shell for varied activities. The exposure of ducts, piping, wiring and structure have a definite place in this effort, but should be seen in context.

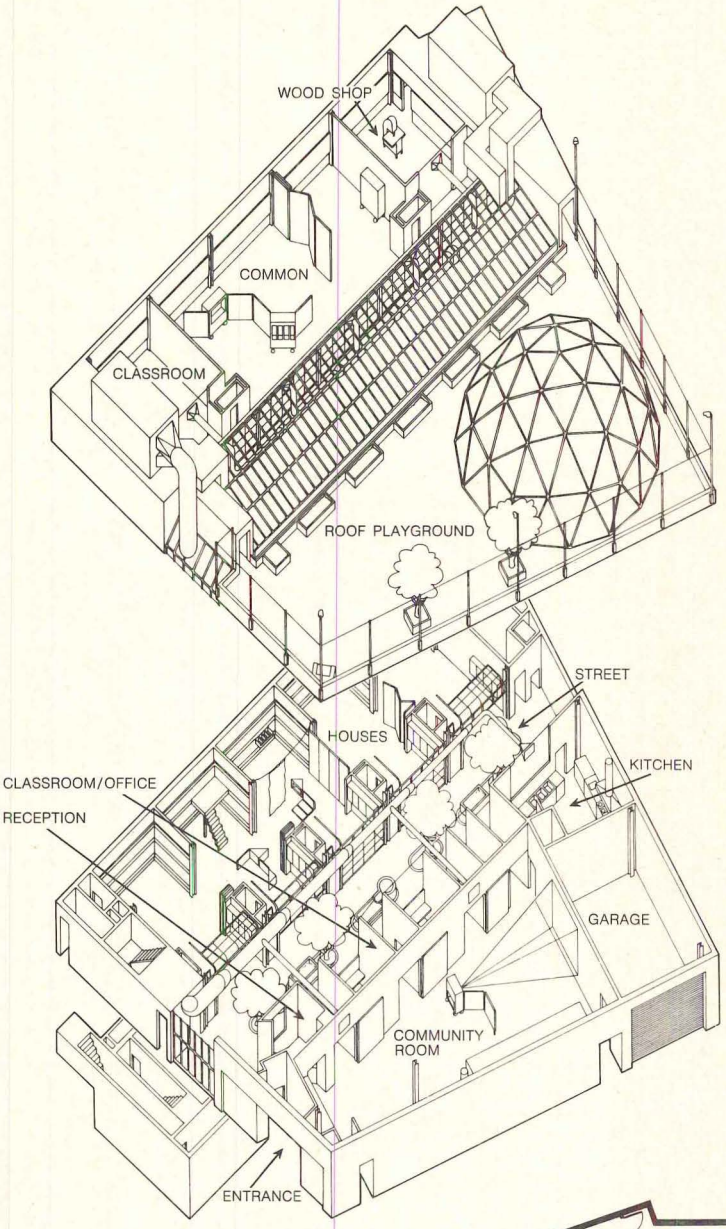
Works was first involved by the United Community Day Care Development Fund Co., Inc., a social work organization. It was their desire to build a facility to serve 180 children in a severely deteriorated neighborhood. More than that, it was to become a community use center after school hours, and it had to be flexible, not imposing itself on its users.

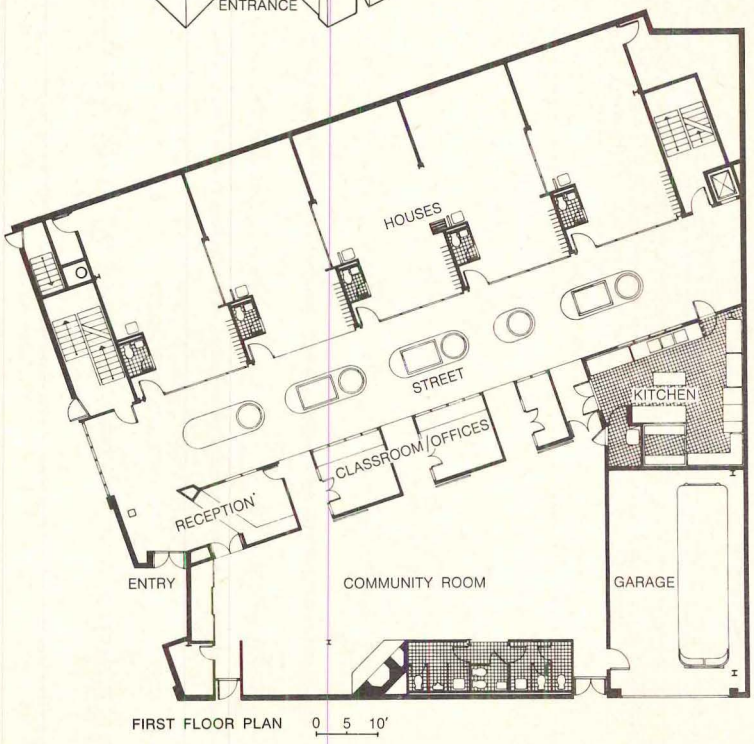
The site was surrounded by buildings which were scheduled to be torn down in preparation for a Model Cities park. An existing one-story corner building was retained as part of the Center, though extensively renovated. Funding conditions, both for learning centers and for parks have not been that good recently, and the architects began work with more involvement and commitment than money. As for the park, the community leaders have begun a search for alternative funds for it, but it is not yet in sight. The Center, however, is a gratifying reality in the bleak streetscape.

Works' Robert Mangurian stresses the fact that the building was designed to be acted upon by the community, and to promote interaction between school and home experiences. Every aspect of the interior, from the surfaces to the functional plan organization, was guided by this intent. The building is actually two masses, the existing one and a new two-story structure, linked by a skylighted "street" or activity spine. This central space is seen as the hub of the building, in both visual and functional terms. It explodes into a very special kind of urban atrium, with green rubberized floor surfaces, small trees and a fountain. Overhead, under the full length skylight, all of the building's main HVAC ducts are exposed and painted in bright colors. It is a vital space, a mixture of light, humor and warmth—a real oasis in the gray existence of East New York.

The building is zoned for less and less noisy activities in a progression of spaces off the "street." Each of a series of "houses" on the street level of the new building can be opened or closed to the spine by means of glazed overhead garage doors. Each house was also designed with successively quieter areas away from the doors. On the opposite side of the "street," in the existing building, are a band of administrative spaces, kitchen facilities and a combined use classroom/office. Beyond that is a large common room for both community and Center use. The second floor of the new building is for after school community use. New functions will probably be found as the community grows into the Center.

That, in fact, is the architects' whole rationale for the facility. The users should not be intimidated by the design, Mangurian feels. The exposed mechanical/structural elements, although brightly painted, are meant to give a feeling of casual familiarity with the building to those who occupy it. Works hopes that the informality of the Center and its capacity to be manipulated is reinforced by the materials used; the Center's





program stressing social development through growth and change will put that to the test. Given the built-in options for opening and closing spaces and the building's clear adaptability, success seems assured.

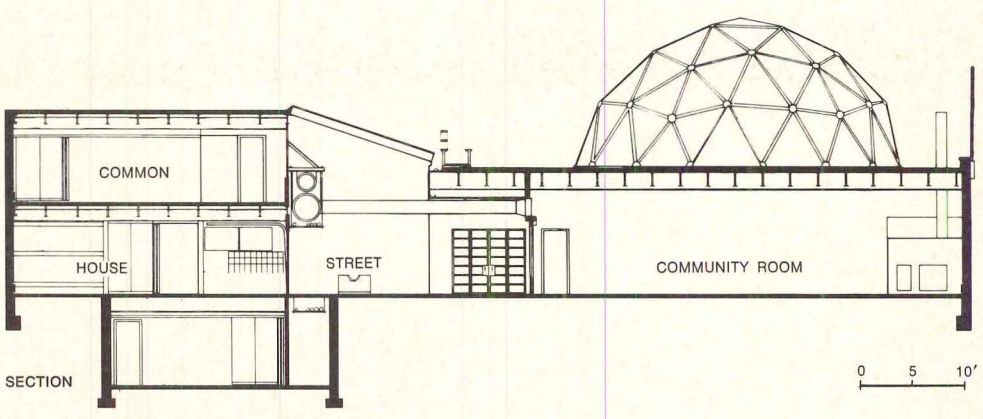
Tenacity and optimism, from both Works and the Center's staff leaders, paid off. Despite the inevitable hassles at every stage (funding, building department, contractor, etc.), only a few aspects of the project changed from the original design. Child-height areas for playing market or house along the "street" had to be abandoned, as did traffic lights inside, for budget reasons. Exterior display panels at the corner of the existing building also will not happen. They were to have held child-designed messages about Center activities, events and work. Kit-of-parts furniture, to be assembled by community members, is not yet a reality, but remains a possibility.

For all of that, the facility supports two points very well. First, the notion that planning with and for the community can, with sensitivity, produce an open-ended program and a structure that is sympathetic to those goals. Second, if a piece of architecture is to mean anything to the people it serves, its parti will grow from the inside out. The Childrens' Learning Center hasn't been around long enough to allow evaluation of its concept and/or solution from the users' standpoint. The architects are monitoring that. If it does nothing else (and that is highly improbable), it has already proved that there *are* dedicated people out there, working to lessen the relentless nosedive of underpriviledged areas. What's more, they've done it very well, against heavy odds. [JM]

Credits:

Architect: Works/Robert Mangurian; design team, Robert Mangurian, Lester Walker with Jeffery Hannigan and Jeffery Milstein. Consultants: structural, David Geiger-Horst Berger, P.C.; mechanical, Dalton & Dunne. Contractor: Castel Construction, Inc. Photographs: John Dominis.

Familiarity is built into The Children's Learning Center because it is expected to serve, and to respond to, the people who use it. All the way from the individual child (opposite) to community groups (above, right) the center will be asked to accommodate. The community room (above, right) and the "street" (above) are different kinds of areas for vigorous activities, separated by a block of office/classroom spaces in the newly remodeled existing building. Areas to the left of the "street" in the section (right) become increasingly quieter as a function of distance.



SECTION

Transformations of the interior

Kenneth Frampton

Styles of both architecture and interior design have been conveniently assigned to historical categories, but all have been products of cultural and social situations which are clearly expressed in building forms and interior furnishings

"The castle of the high noble stood practically empty when its lord was not in residence. He would leave behind only miscellaneous fittings and whatever could not be taken away, such as the stone window seats, the decorations of walls and ceilings, or the carefully sculpted chimney pieces. . . . This profound insecurity, both social and economic, constrained merchants and the feudal lords to take their possessions with them whenever they could, for no one knew what havoc might be loosed once the gates were closed behind him. Thus deeply rooted in the word for furniture, *meuble,* is the idea of the movable, the transportable."
—Siegfried Giedion, 1948.

Like clothing, medieval furnishing seems to have been a direct extension of the personality. Essentially nomadic, it was carried with one wherever one went, a practice which continued almost up to the end of the *ancien regime.* As Giedion has remarked, the universal pieces of the medieval period were the folding stool and the chest. The fixed chair at that time was reserved largely for honorific purposes, while the collapsible stool established one of the first postures that was not predicated on squatting. The chest, on the other hand, doubled as everything from bench seat to wardrobe, serving as the general container for all household effects including the flag. This last was the essential nomadic ensignia that announced the residence of the feudal lord.

The prime distinction to be made in the medieval interior was between furniture as movables and built form as *immeubles* or fixtures. Thus the medieval great hall could be instantly transformed from a refectory to a public arena and vice versa simply by mounting or dismounting the traditional "board" and "frame." Given the primitive idea of comfort obtaining at the time, the interior could be occupied, transformed or abandoned with equal ease. What remained after the furniture was removed was an implacable, austere, semi-public space that was handed down intact from one generation to the next (1).

"The *appartement* is something quite unbearable. We all tramp to the billiard room and lean on our bellies without uttering a word until the king has finished his game. Then we all straighten up and go into the concert hall where they perform an act from some old opera that we have all heard a hundred times. Next we are off to the ball which lasts from eight until ten o'clock and those of us, like myself, who do not dance, sit without budging for two hours; we see and hear nothing but an interminable minuet. At a quarter to ten all do the contradance, one after the other, and then the ball is over."
—Marie-Victoire of Bavaria, Dauphine of France, 1682.

For Louis XIV, the interior, like every other artifact of civilization from clothing to cooking, was a matter of style and control. His creation of an anti-feudal culture anticipated the identity crisis of the self-made man; a trauma to be repeated *ad infinitum* throughout the subsequent centuries. Constrained by a rebellious nobility and by the aspirations of the emerging bourgeoisie, Louis laid claim to his centralized authority on the grounds of national sovereignty. His famous slogan *l'état c'est moi* anticipated the nationalism of the 19th Century. Unlike the traditional kings of Christendom, he likened his power to that of the sun, adopting the curiously pagan title of *le roi soleil.* His court emblem of the radiating sun may be regarded as a metaphor for the first rays of the Enlightenment. On the various artifacts of the period, these rays are seen to emanate from the head of Louis XIV, in the form of a benign Apollo. They also find their reflection in the *allées* of Versailles, which radiate out from the fountainhead of the state, Mansart's *galerie des glaces* (2). This last was seen to dispense its power on the face of the world, through the channel of the infinite vista. Behind the crystalline illusion of this hall of mirrors, however, there lay the unhygenic labyrinth of the palace itself. Versailles effectively transformed the traditional all-purpose plan of the Renaissance Palace into a

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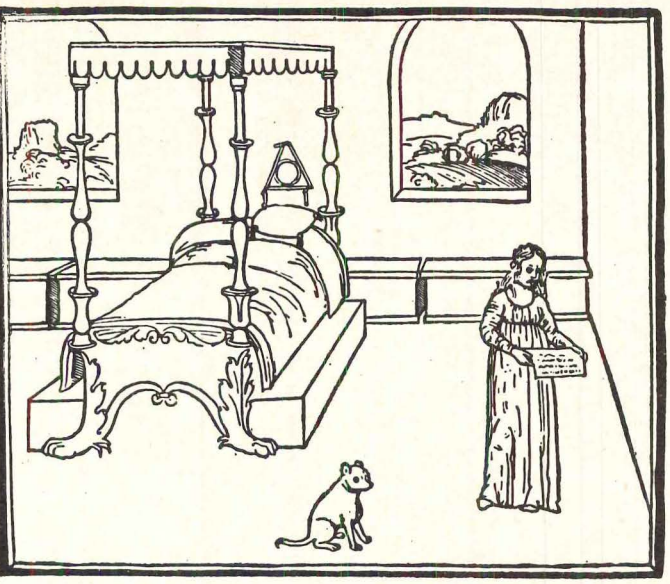
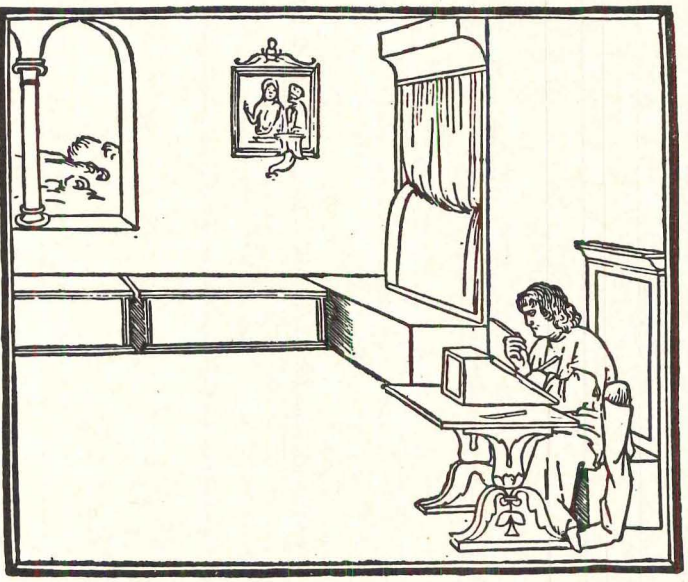
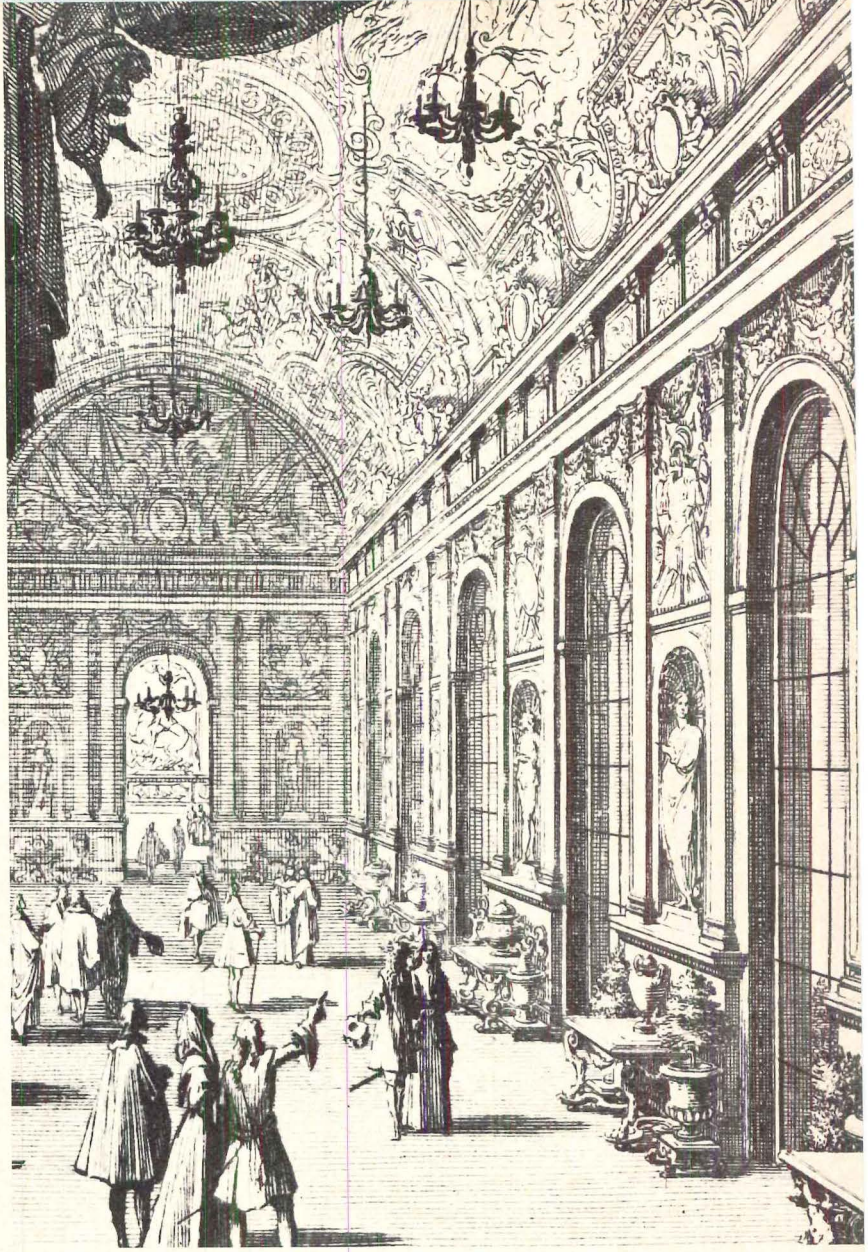


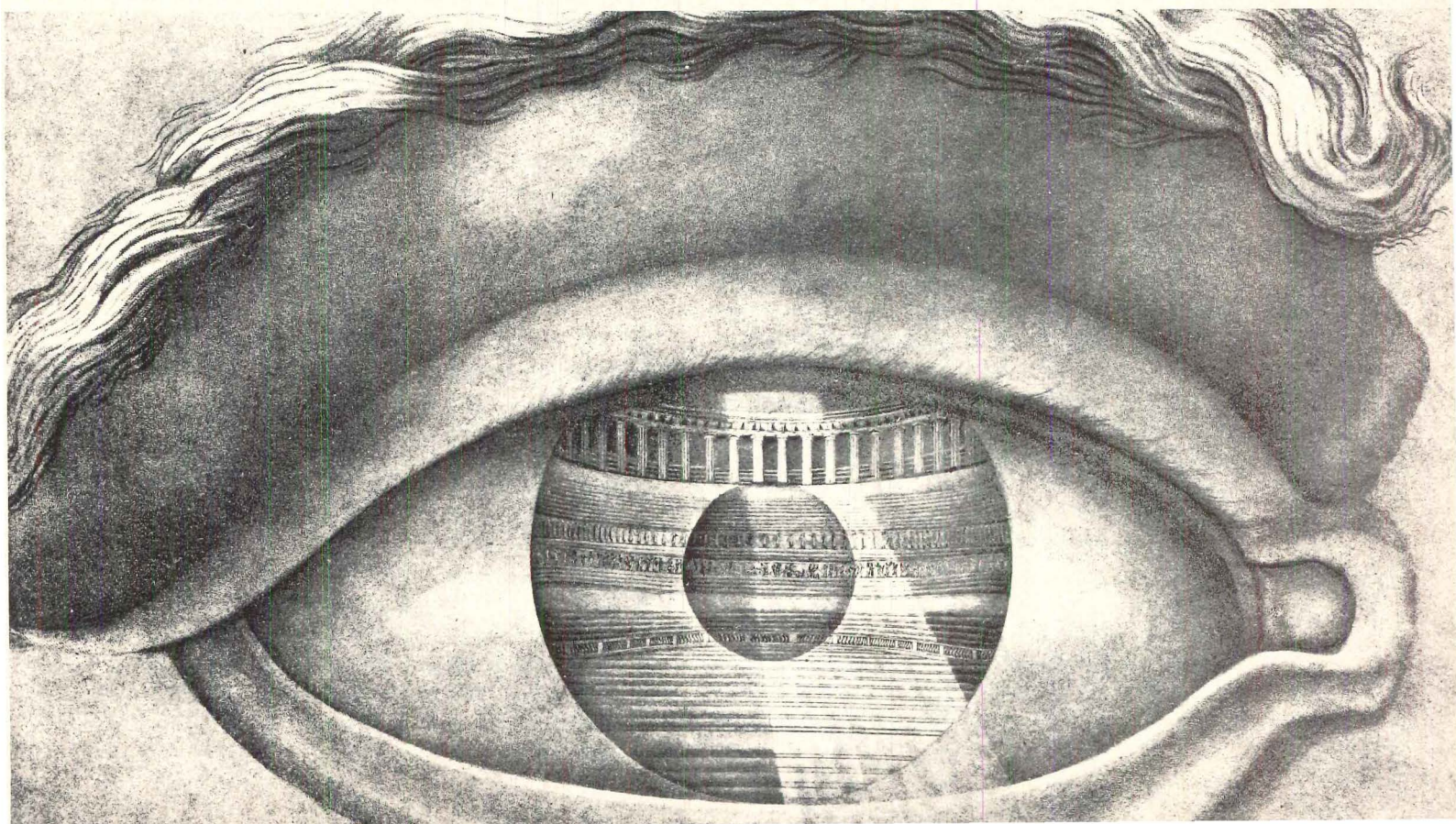
1 Two woodcuts from Francesco Colonna, 1499.





2 Galerie des Glaces from *The Sun King,* Harper and Row, New York, 1966.

3 Théâtre de Besançon, LeDoux from *Le Cabinet Fantastique,* Editions du Minotaure, Paris, 1961.

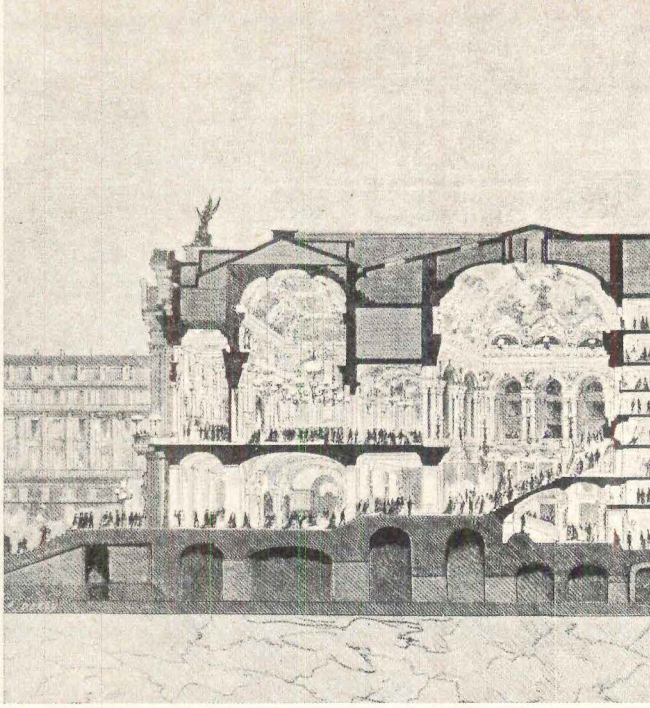


complex spatial etiquette; the articulation of a pleasure dome into a caravansery of the State. From now on the *enfilade* begins to comprise a sequence of rooms each housing objects which denote specific sets of behavior; the library, the picture gallery, the gaming room, the billiard room, the orangery, the conservatory, etc. The exaggerated infinite perspective of the apartments at Versailles presents a sequence of proscenium arches, each of which, in turn, receives the fourth wall of an ever-advancing audience, as the latter proceeds on its foreshortened passage through a chain of alternative realities. Ledoux's eye (3), rendered five years before the Revolution, looks back from the proscenium of his actual theater at Besançon and challenges the reality of the empty court auditorium for which it is both the reflected image and the sole source of illumination.

After the Revolution of 1789, the conquering bourgeoisie were to adapt the general model of Versailles to the accommodation of their public institutions. The pressing need to invent unprecedented building types, for the public display of aristocratic collections and for the accommodation of new means of locomotion and new modes of government, resulted in the proliferation of schematic "palatial" structures. To this end, Napoleon's technocrat extraordinary, J.N.L. Durand, became the codifier of Versailles. Thereafter the library, the museum, the stock exchange, the congress hall, the casino, the opera house, the grand hotel and the railway terminal were just so many public foyers distributed throughout the city. In Vienna, where they were strung out along the length of the Ringstrasse, they became an intrinsic part of the *Kaiser-Koniglichen* setting of Robert Musil's *Man Without Quality.* The grand foyer, (derived from Mansart's gallery at Versailles) emerges around 1850, as the paradigmatic public space of the second half of the century, so much so that the bulk of the Paris Opera of 1878 is almost entirely consumed by its foyer (4). With this came the "courtly" promenade of high society, where it was more important to be seen and heard than it was to see and hear. As with the opera house, so with the grand hotel, where to assemble publicly in the foyer, in formal attire before dinner, was an essential part of the daily ritual. Finally in the 20th Century, with the advent of the cinema when the concept "palace" finds itself popularly reinterpreted as "picture palace," the auditorium is still to be flanked on either side, by a considerable amount of foyer; an anomaly inasmuch as cinematic projection afforded little, if any, occasion on which to promenade. The still extant Tuschinski cinema in Amsterdam is an innocent survivor from this magic age.

"Napoleon's tragedy was that he failed to cast a new, a vital social form from the favourable opportunities the Revolution had opened; this was not merely Napoleon's fate, but the fate of the whole 19th Century . . . His immense appetite for power and craving for conquest found no social channel that it might constructively fill. At all events, his imperium, patterned on obsolete models, neither feudal nor democratic, proved wholly inadequate."
—Siegfried Giedion, 1948.

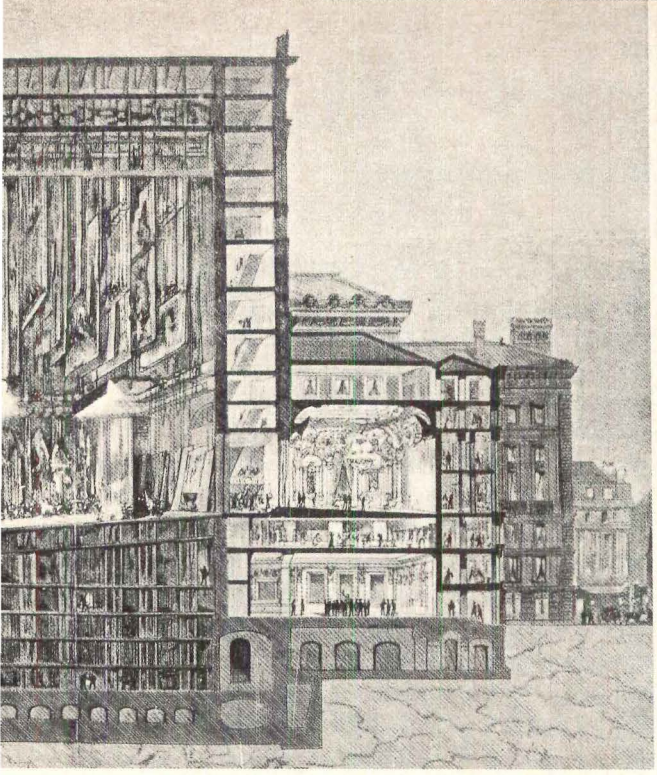
The Empire style of Napoleon Bonaparte was to spring fully armed, as it were, from the heads of the imperial architects Percier and Fontaine, yet the style they created was decidedly



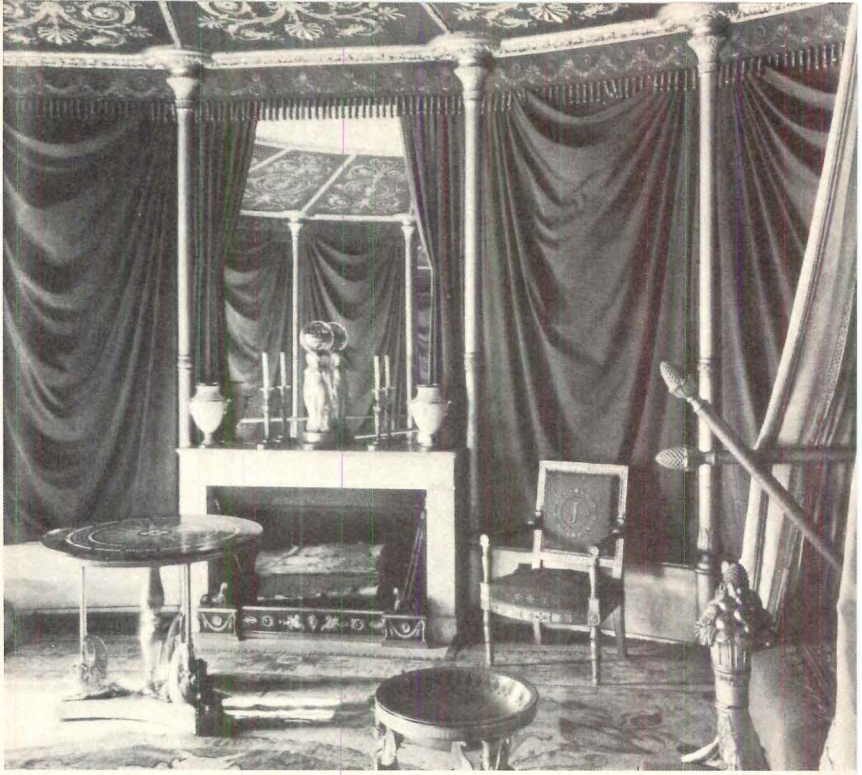
shaped by the value system of the Imperium. The stylized theatricality of Louis XIV found its muted fulfillment in the draped Napoleonic interior, hung or sometimes papered to stimulate the interior of a campaign tent—the temporary abode of the Napoleonic triumph. To this end, the interior of Malmaison is rendered as a sequence of tents encamped across the face of the world: the council room with its striped interior, braced by lances; Josephine's bedroom tented in red draperies and furnished with a portable *miroir de voyage* (5). In between these fantasy encampments the rooms of Malmaison reinterpret the halls of the Ancient World, with Pompeian friezes and Roman andirons, with nymphs discovering time and the shield of Minerva serving as a clock. Finally, after the Napoleonic expedition to Egypt in the late 1890s, we are treated to consoles borne on sphinxes and bookcases fashioned after the fronts of Egyptian temples (6). By the end of Napoleon's reign, furniture has become architectural and freestanding. The French *jardinière* (7) and the *borne* are destined to become the archetypal pieces of the 19th Century foyer. The Empire devaluation of traditional symbols is ultimately epitomized by the letters "N" and "J", encircled by laurel leaves, which hint at a future Hollywood of "his and hers". The elaborate crossed draperies and lambrequins of the late Empire anticipate the *kitsch* comfort of the 1860s. One can already sense the incipient high bourgeois style of Napoleon III, that feeling for clandestine love, for the off-stage allure of the *odalisque.*

"Unremittingly, science enriches itself and life with newly discovered useful materials and natural powers that work miracles with new methods and techniques, with new tools and machines. It is already evident that inventions no longer are, as they had been in earlier times, means for warding off want and for helping consumption; instead want and consumption are means to market the inventions. The order of things has been reversed."
—Gottfried Semper, 1852.

The word *kitsch,* from the German verb *verkitschen* meaning roughly to fake, enters the language around 1860 with the rise of the department store and the deliberate stimulation of consumption. Through the popularization of a *petit-bourgeois* etiquette, it becomes both the means and the substance for

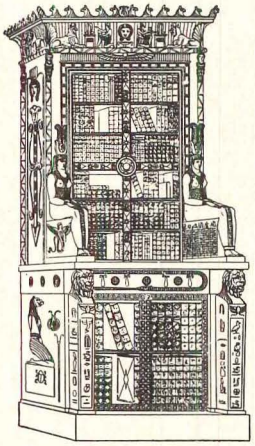


through the Paris Opera from *Storia del'architettura Moderna,* Editori Laterza, Italy, 1966.



5 Josephine's bedroom from *Great Interiors,* Hamlyn Publishing, New York, 1971.

hair from *Recueil de Décorations Intérieures,* 1801.

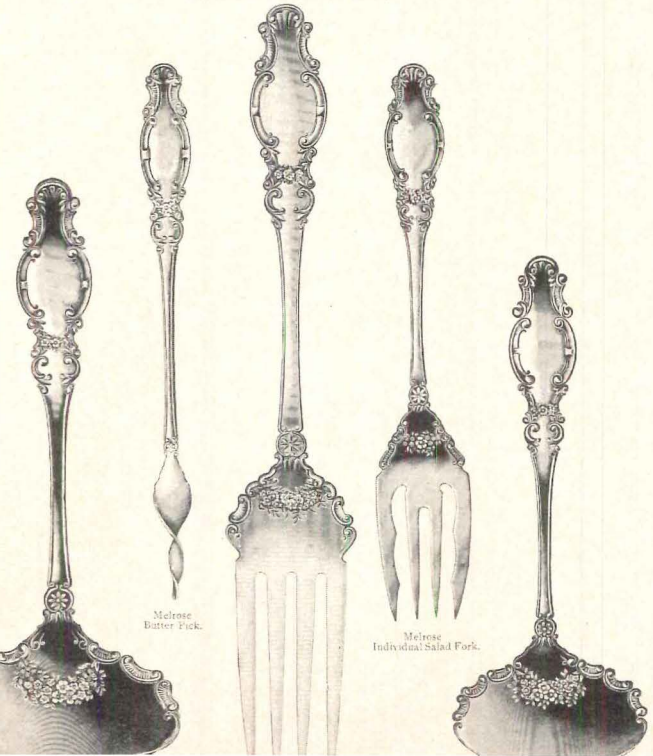


7 Secretary from *Recueil de Décorations Intérieures,* 1801.

9 Sarah Bernhardt's boudoir from *Paris Fin de Siècle,* Robert Delpire, Paris, 1958.

om Marshall Field and Co. Catalog reprint. Follet Publishing Co., Chicago, Ill.

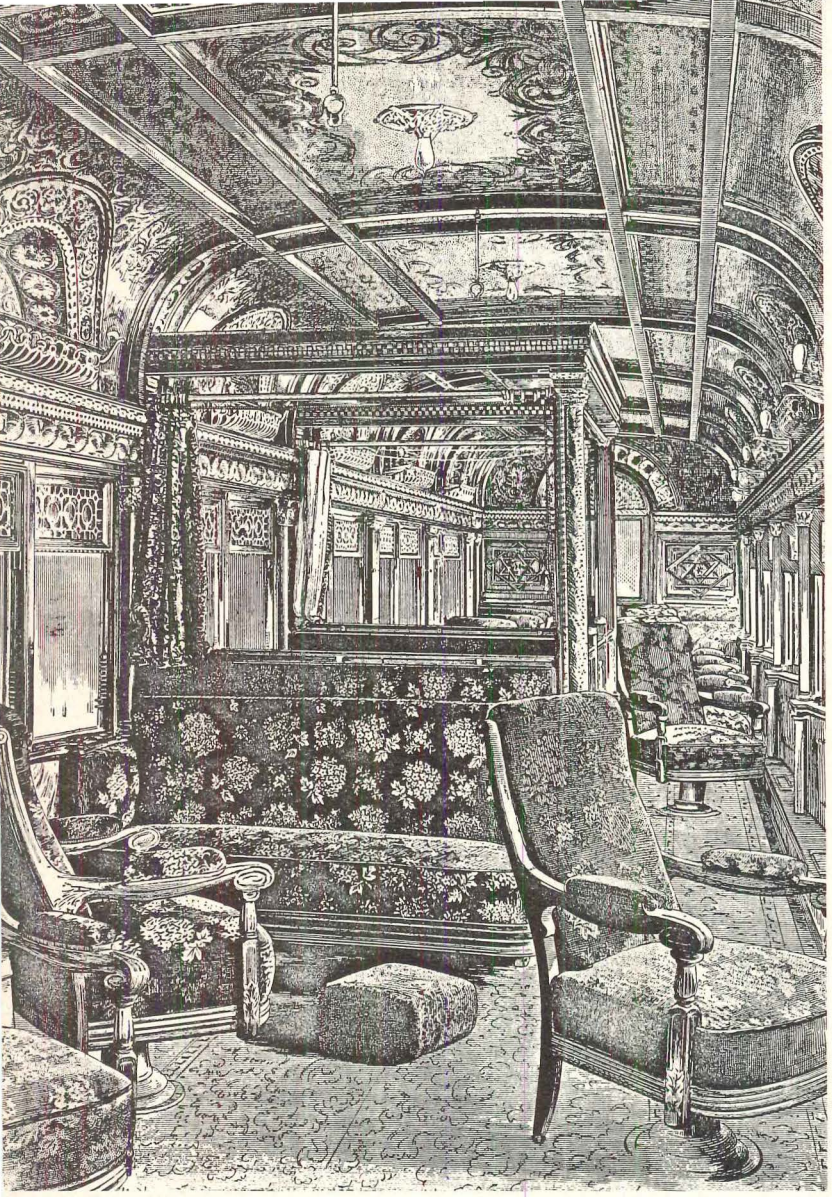
Melrose Butter Knife (Reversed Handle).



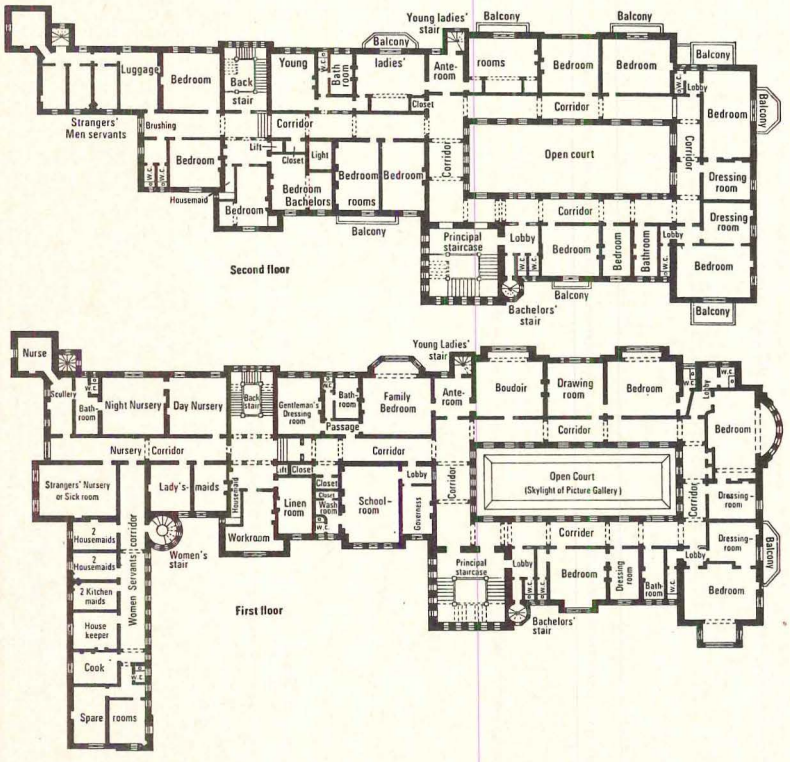
Melrose Butter Pick.

Melrose Individual Salad Fork.

marketing instant class. While Semper's words more than adequately characterize the cultural dilemma of the Great Exposition of 1851, Marshall Field's catalogue of 1896 offers sufficient proof of his diagnosis, with every flatware company represented therein, marketing a separate piece for each comestible. Evidently no self-respecting household of the 1890s could get by without a food pusher, a sugar sifter, sugar tongs, a cucumber server, a gravy ladle, a cheese scoop and a nut pick, let alone sundry spoons and forks, for every item on the menu. Starting from the obligatory wedding gift of fish cutlery in a fitted velvet box, the interior gradually ripened, along with its occupants, into an overburdened maturity (8). At the turn of the century, Sarah Bernhardt's boudoir was exemplary of the fashionable overstuffed interior (9).



10 Rolling stock interior from *Wheels Across America*, A.S. Barnes and Co., New York, 1959.



11 Bear Wood from *The Victorian Country House*, Clarendon Press, Oxford, 1971.

Transformations of the interior

This *horror vacui* was ministered to by the ever-present upholsterer whose buttoned down, highly sprung interiors transformed every available surface into a padded seat of oriental comfort. Such interiors, as Denys Hinton has remarked, celebrated the belly as "the bourgeois anatomical region par excellence."

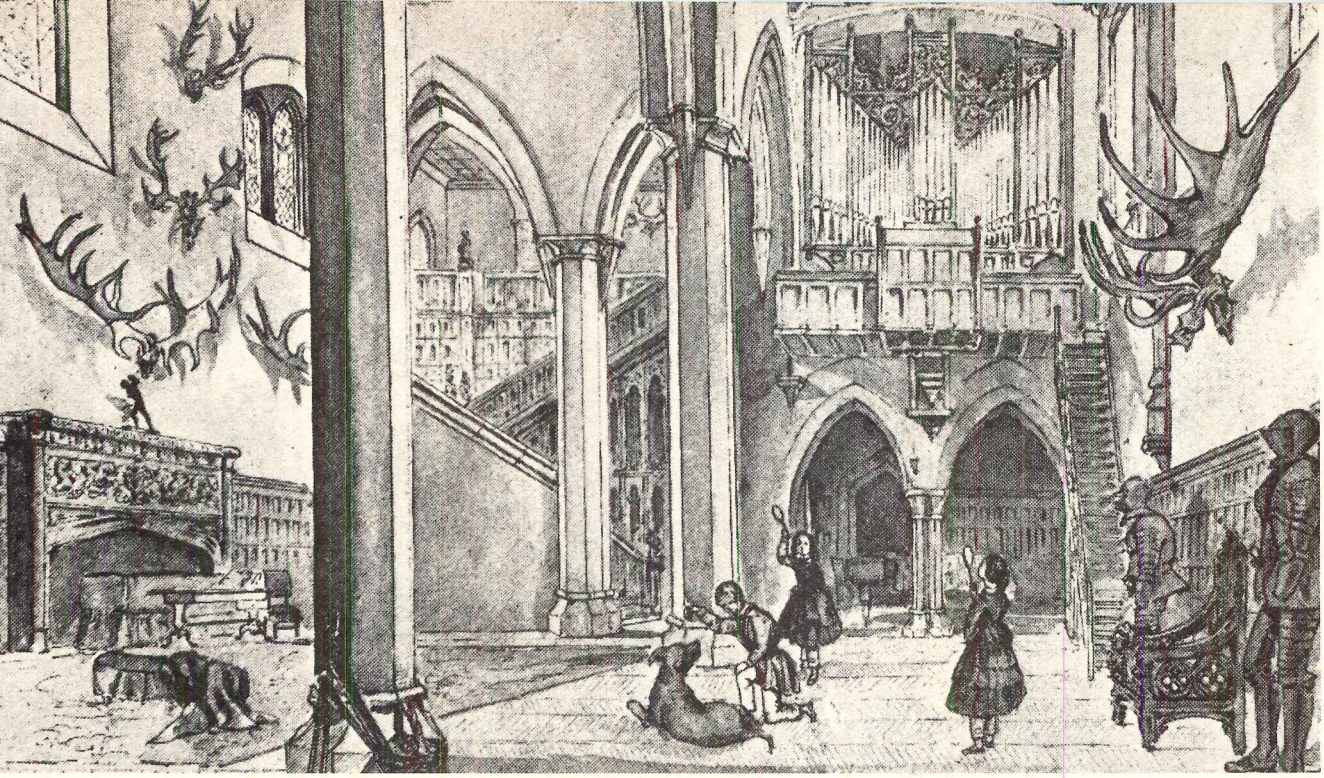
Even when the Sarah Bernhardts of this world traveled, they preferred to maintain the illusion of not having left the plush comfort of home. To this end, the upper class rolling stock and marine interiors of the second half of the 19th Century were decorated so as to create the phantasmagoria of an interior whose exterior did not exist: a suspended revolving stage whose trundling wings were the steep embankment and the open sea (10). Conversely, Des Esseintes, the decadent aristocratic, anti-hero of Huysman's *A Rebours* of 1884, was to isolate himself, within the interior of his country house, in a fake ship's cabin, in order to experience "all the sensations of a long sea voyage without ever leaving home." For such a mind the Crystal Palace was an anathema; an overblown translucent conservatory whose infinite space could only be tolerated if it were furnished out of existence.

"Once a Victorian merchant, manufacturer or professional man had made a sufficient fortune, he was faced with the dilemma of whether or not to set out to establish his family in the landed gentry. A country estate would be bought if possible with a country house on it already, to supply a mature landscape and differential surrounding population. Even if the property came with the house, it often seemed too modest or old-fashioned for its new proprietors; and a grand new mansion, with generous entertainments for the neighbors held within it, was a useful means for accelerating acceptance by the county."

—Mark Girouard, 1971.

These words succinctly characterize the genesis of the 19th Century English country house, which reached its apotheosis as the object of a *nouveau-riche* building mania in that brief period between 1850 and 1875. The Victorian country house, and the country house interior, were a codification in stone of the myth of Victorian chivalry and the constrictions of its class structure. The meticulous designation of domestic space to specific social ends reaches its limit in this development with its elaborate differentiation of the interior into entrance hall, drawing room, morning room, gun room, billiard room, smoking room, library, gallery, bedroom, dressing room, ballroom, schoolroom, chapel and so on (11). Along with all of this went an elaborate socio-sexual code that accorded, amongst other rights, the drawing and morning rooms to the women and the smoking and billiard rooms to the men. Suspended poignantly between these poles was the conservatory, reserved exclusively for the cultivation of exotic plants and the courtship of young couples.

This spatial specialization which, at its most elaborate, paralleled the equally absurd petit-bourgeois differentiation of flatware, was extended progressively to the servants' wing, which was even more rigorously segregated along sexual lines, into the respective domains of the butler (male) and the housekeeper (female). As Girouard points out, a large country house, in its heyday, with its full complement of guests and



12 Pseudo-Elizabethan Hall from *The Victorian Country House,* Clarendon Press, Oxford, 1971.

servants, might easily house 150 people; a dense community of social obligation isolated in the midst of an agrarian sea.

The most singular feature of the Victorian country house, essential no doubt to one's instant recognition as truly belonging to the landed gentry, was the conscious revival of the Elizabethan great hall, always present in spirit if frequently absent in fact (12). According to A.W.N. Pugin, the founding father of the Gothic Revival, this space must comprise a bay window, a high open roof, two good fireplaces, a great sideboard, a screen and a minstrel's gallery. Some vestige of this prescription surely remains in the freely planned modern interior, with its double height volume overlooked by a mezzanine. At any event, from the time of Herman Muthesius' *Das Englische Haus* of 1904, a certain "medievalising" impulse is decidedly there, incorporated into the polemic of the modern movement, along with the Gothic Revival principle of arranging the plan irregularly in accordance with convenience, rather than symmetry.

". . . The shattering of the interior took place around the turn of the century in the *art nouveau.* And yet the latter appeared, according to its ideology, to bring with it the perfecting of the interior. The transfiguration of the lone soul was its apparent aim. Individualism was its theory. With Van de Velde, there appeared the house as an expression of the personality. Ornament was to such a house what the signature is to painting. The real significance of the *art nouveau* was not expressed in this *ideology.* It represented the last sortie on the part of Art imprisoned by technical advance within her ivory tower. . . . The new elements of construction in iron . . . girder forms . . . obsessed *art nouveau.* Through ornament it strove to win back these forms for Art. Concrete offered it new possibilities for the creation of plastic forms in architecture. Around this time the real center of gravity of the sphere of existence was displaced to the office. The de-realized center of gravity created its abode in the private home. Ibsen's *Master Builder* summed up *art nouveau:* the attempt of the individual on the basis of his interiority, to vie with technical progress leads to his downfall."

—Walter Benjamin, 1928.

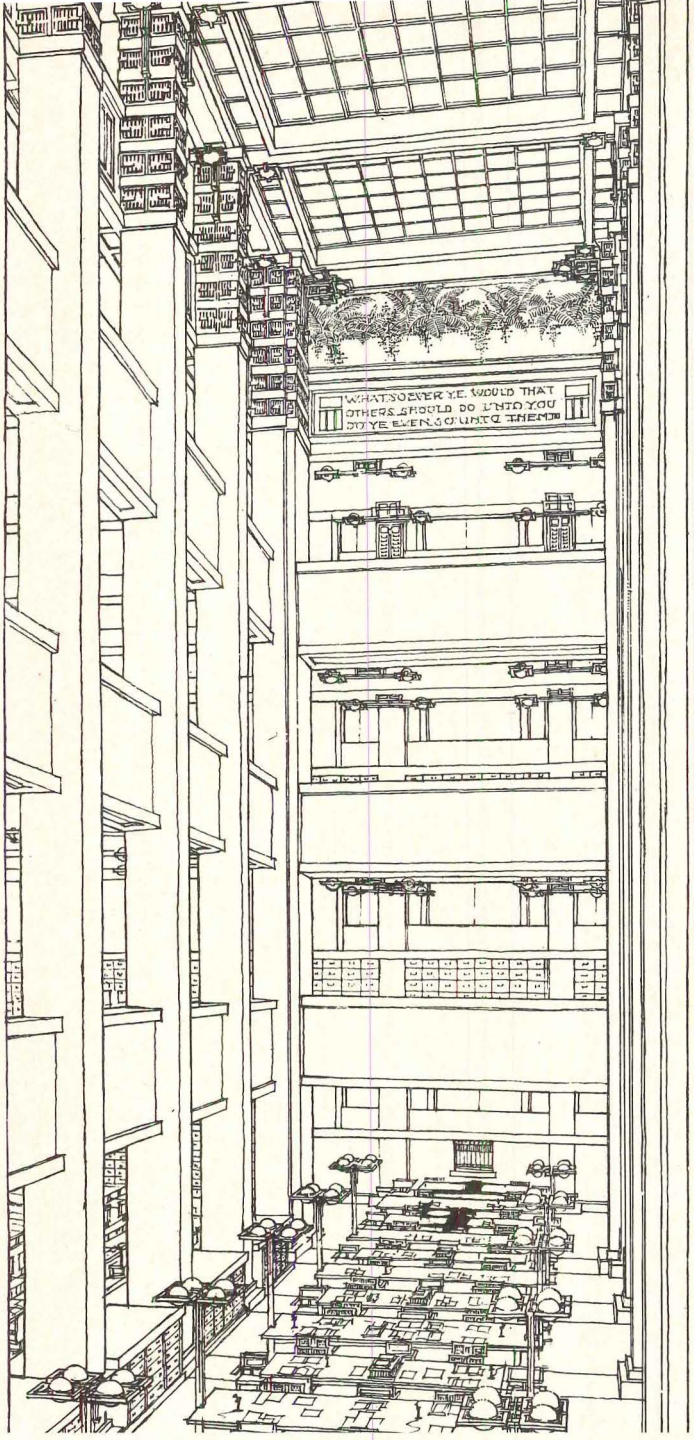
As Benjamin points out, the interior became a place of refuge for Art, the one stronghold from which to challenge the reductive utilitarianism of the industrialized world. By mid-century, Richard Wagner had already proffered his model for the aesthetic redemption of the world through the creation of a total work of art, his famous *Gesamtkunstwerk;* first in his operatic work, *The Flying Dutchman* of 1843 and then in this theoretical text, *The Artwork of the Future* of 1859. The influence of this model, largely substantiated by the critical work of Ruskin and Morris, pervaded the rest of the century, from Ludwig II of Bavaria, building out in desperate fantasy the specific myths of Wagner's operas, to Frank Lloyd Wright's much later attempt to create a more subtle and general form for the fulfillment of Wagner's endeavor.

Until his Imperial Hotel, Tokyo, of 1922, Wright was able to realize his vision of a new and all-embracing "prairie culture," which, based finally on Japanese models, was able to fuse the interior with the exterior and to project art out into nature. Wright's masterpieces of 1906, a house, a church and an office building, all display essentially the same architectural system. In all these total works of art, a piece of applied or fine art that is not from the hand of the master is an unthinkable proposition. While Wright's Martin House and Unity Temple could sustain the illusion of a unified culture—a new Usonia, as it were—the Larkin offices could barely project such an illusion even at their completion. From the outset Wright was thwarted by not being allowed to re-style the office telephones and subsequently it was a constant irritation to him that, "They never hesitated to make senseless changes . . . it was just one of their factory buildings." Wright had expressly dedicated his Larkin building, within its organ loft and nave (13), to what he thought of as the sacrament of work. In this respect nothing could have been more pathetically aestheticizing than the Larkin entrance relief which bore the inscription, "Honest labor needs no master, simple justice needs no slaves."

"I will tell you that the time will come when the furnishing of a prison cell by Professor Van de Velde will be considered an aggravation of sentence."

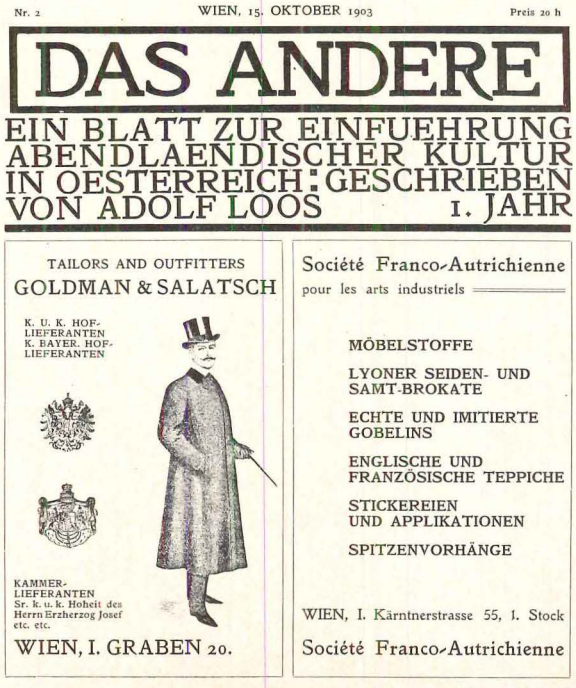
—Adolf Loos, 1908.

The work of Adolf Loos is the paradoxical counter thesis of



13 Larkin interior by Frank Lloyd Wright from *An American Architecture*, Clarkson N. Potter, Inc., New York, 1960.

14 Cover, *Das Andere*


Nr. 2 WIEN, 15. OKTOBER 1903 Preis 20 h

DAS ANDERE

EIN BLATT ZUR EINFUEHRUNG ABENDLAENDISCHER KULTUR IN OESTERREICH: GESCHRIEBEN VON ADOLF LOOS 1. JAHR

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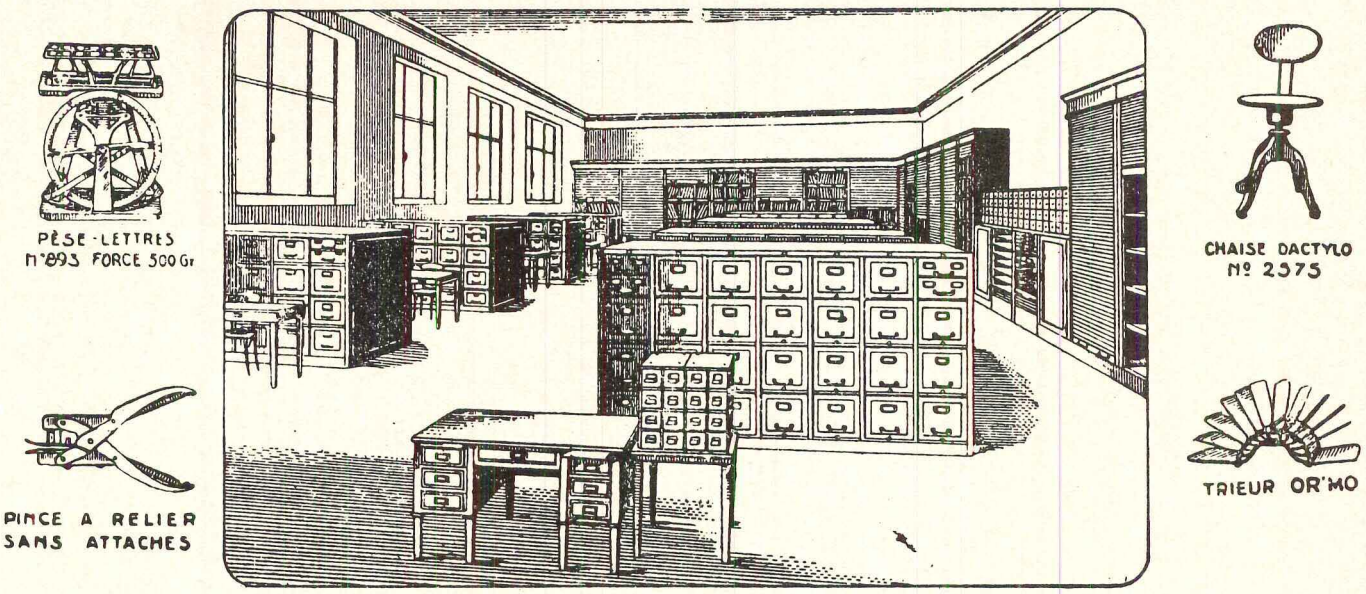
the *art nouveau;* paradoxical in the sense that while Loos was just as preoccupied with the interior as Van de Velde he insisted vehemently on strictly limiting the province of the architect and on maintaining the categorical separation of the exterior and the interior. Unlike Wright, Loos distinguished meticulously between *meubles* and *immeubles.* He was to write, "The walls of a building belong to the architect. There he rules at will. And as with the walls so with any furniture that is not movable . . . The wrought iron bedstead, table and chairs, hassocks and occasional chairs, desks and smoking stands—all items which are made by our craftsmen in the modern idiom (never by architects)—everyone may put these for himself according to his own taste and inclination."

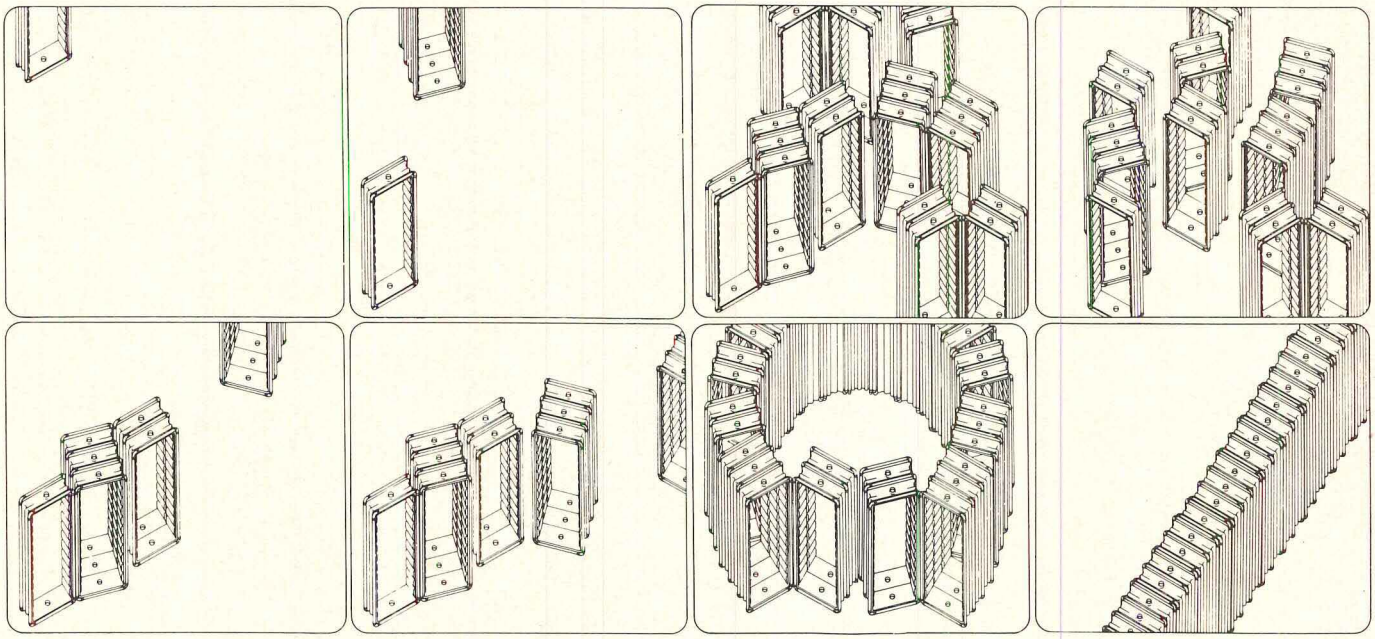
Loos believed in the world as found, not in Wagner's pathological romantic attempt to make it whole through the creation of a total work of art. For Loos, self-conscious art was an abomination. Truth resided in culture, in tradition and in craft or not at all. To the peasant, the creation of ornament as a birthright; to the craftsman, the patents of the craft as handed down; to the bourgeois nothing less than his aristocratic inheritance of 1789, namely the asperities of a schematic classicism. Between these irreconcilable poles came the mediation of the Loosian interior as determined by personal inclination and taste. This was the interior of *Das Andere* (14) (The Other), Loos' magazine, dedicated to the introduction of Western civilization into Austria. This was the interior, as a loose bricollage of the Anglo-Saxon way of life; The Saville Row interior of Abercrombie and Fitch, compiled according to taste; an interior of Persian rugs and parquet floors, of Chesterfield sofas and Heppelwhite chairs, of homburgs and bentwood hat stands, of belted tweed coats and brick inglenooks, of yachting blazers and Havana cigars. The home of the gentlemen's gentleman; the interior of discreet eclectic assembly in which each object exhibits clearly its independent origin. This interior was but a prelude to the painterly still life interior of the Purist dream; the self-conscious readymade type objects of the 19th Century cafe—the glassware, crockery and lightweight furniture of the Parisian sidewalk. Loos' insistence on the singular validity of the culture as found and his distinction between built-in storage and free-standing pieces established the cultural frame for the Corbusian model of the house as a "machine for living"; the Purist house of 1923 as the product of precise selection.

With this fundamental cultural shift as to the nature of the interior, the position of influence began to pass imperceptibly from the interior decorator of 1890 to the industrial designer of 1930. Pierre Chareau's handcrafted, yet highly mechanistic, *Maison de Verre* (extremely Loosian in all its references) appears in retrospect as an elaborate metaphor for this transition (15). At the same time, the office, Benjamin's real center of gravity, begins to assert its pre-eminence even over the domestic realm. In the pages of Le Corbusier's highly polemical *L'Art Decoratif d'Aujourd 'hui,* 1925, the pressed steel office interior—the interior as naked prism plus storage wall—finds itself projected as the normative interior of the epoch (15).

"The idea is to succeed in making furniture from which we feel detached, so disinterested, so uninvolved that it is of absolutely no importance to us. That is, the form is—at least in in-



15 Office furniture from **L'Art Dècoratif d'Aujourd 'hui,** Editions Vincent, Freal & Co., Paris, 1958.



16 Movable interior by Ettore Sottsass from *The New Domestic Landscape,* The Museum of Modern Art, New York, 1972.

tention—designed so that after a time, it fades away and disappears."
—Ettore Sottsass, 1972.

With the disappearance of the peasant and the decline of the craftsman, with the rise of consumerism and the dispersion of the middle class, with the emergence of industrial design and the regression of the interior, with the generation of well-serviced stereometric anonymity as the universal space of the epoch, irrespective of content, with the distension of neo-kitsch to cover over the semantic impoverishment of this abstraction, with the temporal and spatial isolation of built form by systems of perpetual movement, with the erosive triumph of the automobile and the elimination of the pedestrian, Western Civilization has now penetrated to Austria and elsewhere; a *machine à habiter par excellence.*

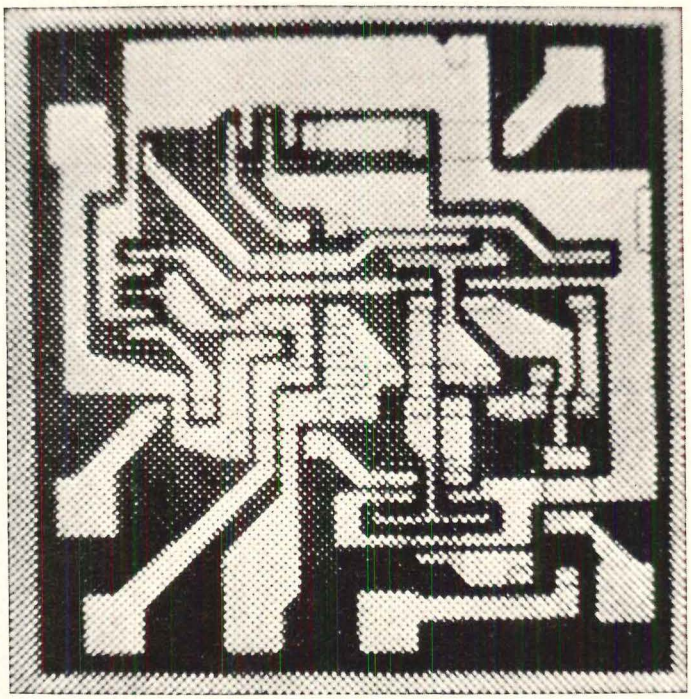
In the face of this, these words of Sottsass tentatively suggest a realm in which the physical barely exists; a world of diminished consumption, of an attrition of objects, of a culture that channels its energy into light. The idea of continuous space, secure as shelter, but otherwise undivided and free, the notion of an internal landscape (*burolandschaft*) (16) composed of elements that "can be moved closer or farther away from oneself, one's friends or one's relatives, however and whenever the fancy strikes. So everybody, either as an individual or as the representative of a group, can indicate through his furniture the different situations through which he passes during his private or communal adventure. . . . For such an idea to work, however, we must be able to envisage a society or group of people not inclined to barricade themselves within great walled fortresses; people who don't wish to hide, people who don't feel the need or perhaps the unavoidable necessity to demonstrate continually their imagined status, not to live in houses that are nothing other than cemeteries containing the tombs of their memories."

Object lesson: four short-end views

Craig Hodgetts

Architecture as built form is shown to be a myth in the omni-present environment of the transistor and T.V. that connect us more readily into another reality

The M.O.S.F.E.T.* and the Bible



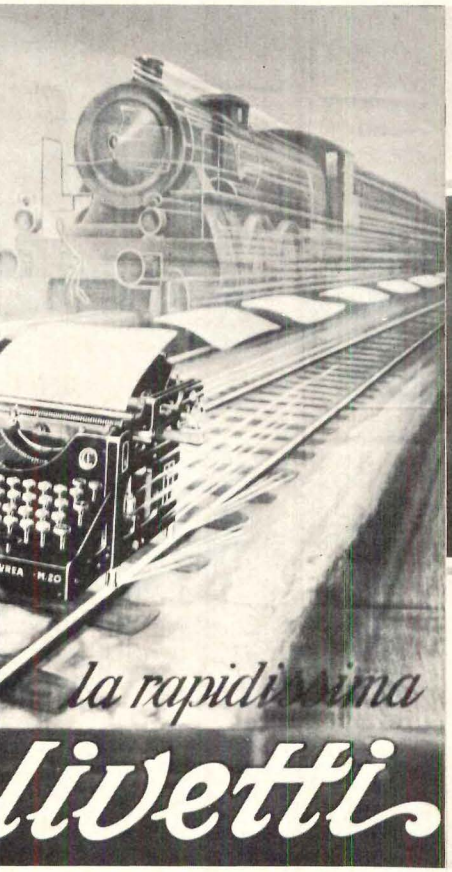
Nowadays we must recognize that physical organization is the least powerful means of structuring relationships. The machine-object, the fundamental icon of orderly process for more than 200 years, is today the weakest link in the cultural economic system. Since the Industrial Revolution, the purpose and character of the machine aesthetic have dominated our planning to such an extent that one must consider whether the modern city is more than an eclectic antique founded on a superseded system of logic.

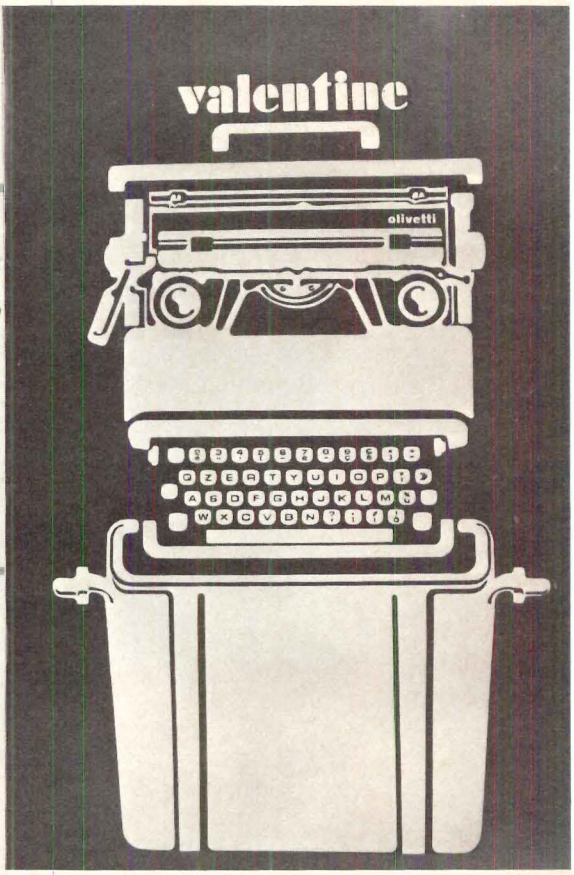
According to the technologic myth of industrialization, the linear organization of physical process made possible the production and distribution of goods for the popular market. This specialization of workers and tools in the factory served as a model for the separation of roles in society itself, shaping our conception of the layout of city and house. Special districts in the metropolis correspond to the structure of production and management of the assembly line. In the service of a now superseded technologic efficiency, boundaries are provided between districts assigned to various uses without reference to the activities of those traveling between them.

Buildings and environments once seen as elements required to structure relationships must now be seen as elements for the neutral support of unspecified activities. Phenomena like Woodstock I and II illustrate the power of even a casual turn of attention by the media-public, placing a demand on resources which even the most careful planning could not accommodate. Our use of tools can now coincide with our needs. No longer must we plan production and transportation with a fixed trajectory. Data processing and the electronic conditioning of the environment render one-shot planning obsolete by selective feedback and programming of individual operative requirements.

Thus the separation of production and individuals—of industry and housing—forced by cumbersome processes becomes a matter of choice. A new kind of community, bounded by communication, may develop without regard for geography or geometry. In a wired nation, production and distribution are diffuse and polyfocal. Without the need for heavy traffic from point to point, it becomes possible to support the activities of individuals in our society without recourse to the 19th Century separation of home and work, husband and wife, child and factory.

*metal oxide silicone field effect transistor





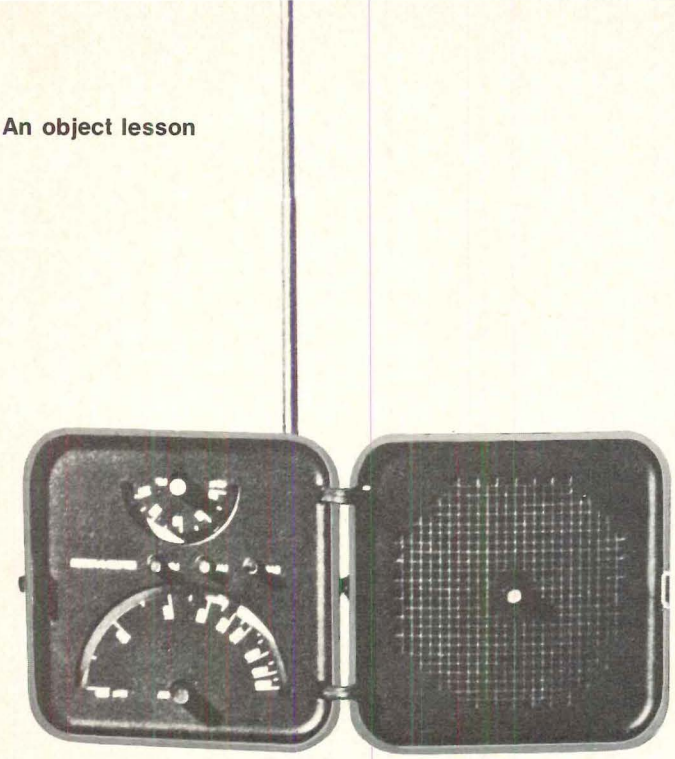
Dragging the Brion-Vega

When the directors hauled the Cisitalia and a bunch of other cars into the Museum of Modern Art in the early 50s, kids had just begun to chop and channel their Detroit iron into a mean Mafioso kind of look, and the Studellac went to the drags with a swapped Caddy engine under the well-tailored skin of the Loewy coupe. It was already too late for the craft and breeding of the Italian line (or the International Style, for that matter), because Americans had discovered performance. The kids called anything that was pretentious, overweight and underpowered a *shot rod*. In short, all show and no go.

Their parents may have been suckers for Detroit's slogans, but since four barrel carbs and streamlined headers were the way to get the most out of your mill, everyone knew you couldn't cruise the drive-ins and shopping centers looking for a little competition if all you had going for you was "torsion-bar luxury." They had discovered performance. Not the balanced, almost architectural response of Ferraris and Alfas, but a violent, head-wrenching explosion of power more like the mega-wattage of super groups like the Jefferson Airplane. The svelte, disciplined fuselages on the Italian machinery didn't look *right*—they didn't somehow express the American fascination with machinery as an instrument of change. But in no time, the kids found just the thing to hop up all that classy Italian machinery. They removed the engine, a marvelous construction of polished manifolds and monogrammed bolts, and replaced it with a domestic V-8. The resulting machine, with a super light chassis and tuned-up powerplant, was the prototype for most of the avant-garde architecture of the 60s—and a lot easier to maintain than the 24 overhead valves that came with a Ferrari.

The American scene, after all, was based on improvisation. The time frame is right now. It is no coincidence that American automobiles, are somehow always photographed moving in the great outdoors, surrounded by trees and mountains; while their European counterparts are shown parked on moist streets, in front of flower shops. Getting there is at the very heart of the American machine. Being there—being born there—is the *raison d'etre* of its European counterpart.

Twenty years later, the Museum of Modern Art offered a second look. The principles are the same: discreet, beautifully crafted envelopes for ingenious mechanisms—like little buildings—with all that connotes of premium art and stability. Folding tables. Folding houses. Folding radio. Everything accomplishes something, somehow. Seemingly infected by the American way these elegant objects promise performance European style, without the gee-gaws and prehensile devices offered up by our domestic stuff. A little radio designed by Sapper and Zanuso seemed to have all the qualities of portability, utility and graphic clarity lacking in our domestic models. Its neat rectangle and soft corners are pure architecture compared to our automobiles and clock radios. All of that has to do with what you see, not what you hear. But the Brion-Vega makes polite coughing sounds as though to excuse its older role as transducer. The voice of a radio, whether it comes from a plastic fantastic or an imitation RCA Victor dog, is always up to date. We don't care what a set looks like when its on. We want to be overwhelmed with cassette decks, instant replay, and 120 watts RMS per channel of undistorted sound. We want a no-holds-barred opportunity to change our lifestyle. We want the medium to disappear in a vivid connection to another reality.



Brion-Vega radio

All news all the time

Long after midnight, on a stretch of highway hundreds of miles from architecture, you turn a small knob on the dashboard of the automobile and flick casually from rhythm and blues, to all night talk, to classic oldies but goodies. The "no there" that Gertrude Stein used to refer to is now a place quite capable of originating a program linking like places around the world. This "place" needs nothing more, architecturally, than an appropriate black box to be the operative nucleus of a metropolis. No wonder the city center dies of inattention. The distribution of information, once motivation for cathedrals, halls of government and great libraries, is no longer dependent on proximity. A pervasive nostalgia for the form of these things makes contemporary architecture falsely hierarchical in an autonomous landscape.

The urban environment is seen as perhaps it always had been—as information intensive rather than location intensive. The old landmarks have been replaced by movable distributors of economic-cultural information which are as portable as the objects which repeat, store and relay it. The new geography has as many centers as points. Everything originates everywhere.

Archigram's walking city, telescoping extended legs to touch perhaps lively spots in the old skyline nearby is not half so responsive as Ma Bell, and nowhere near as cheap. Visions of the city to come begin with unlikely collections of generators, coders and peripherals, linking in unseeable, unmeasurable ways with satellites and neighbors. The exquisitely graphic organizations of gravity and flow which characterize modern architecture from freeways to shopping centers has become no more relevant than Le Corbusier's dictum that architecture is the full and magnificent play of light and shadow. Architects who continue to play at the aesthetics of ebb and flow, light and shadow, have their hearts set on a history which has just ceased to be.

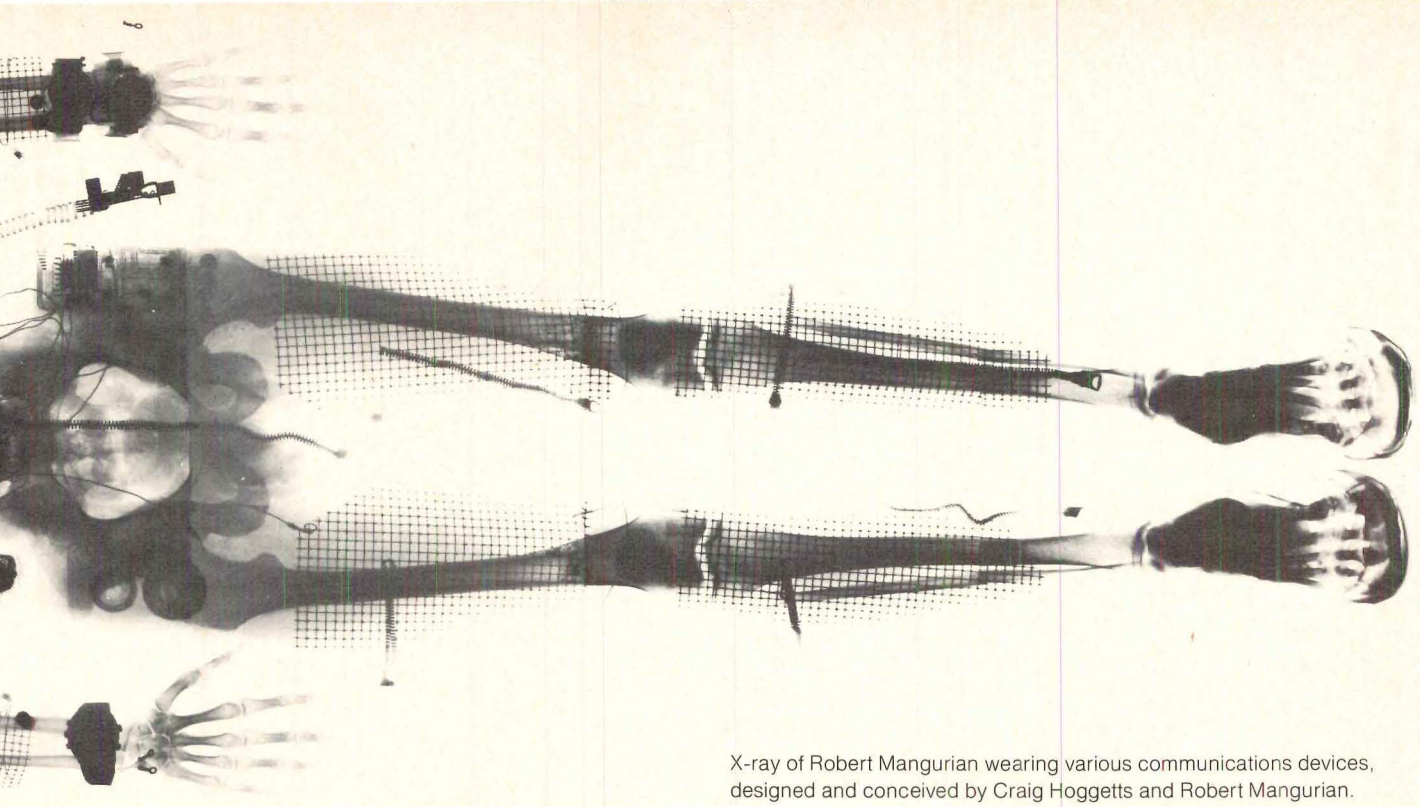
The autonomy produced by instant access fields of information and 24-hours-to-any-point-on-the-globe goods distribution is independent of form and style. Functional accommodation is assigned to equipment, not configuration, reversing the roles of architect and engineer. For it is the engineer who devises controls for a comfortable environment, the engineer who produces televisions, lighting systems and smokeless Bar B-Q's. In deploying these articles in a fixed relationship, the architect often subverts the user control implicit in the increasing portability of the object. The architecture of efficiency, as proposed by the Bauhaus, is a cumbersome reminder that brick and mortar cannot produce more, with less, than a printed circuit.

The building as a highly configured machine-object, as rigidized form, must be seen as the historic records of a singular activity traced in form. Bolting down a fireplace or a bathtub makes no more sense than bolting down a vacuum cleaner. We don't because, before vacuum cleaners, the brooms were always kept in the closet.

Yet Le Corbusier, though able to propose the generosity of the Dom-ino house, was unable to resist artfully wrapping static walls around otherwise portable furniture. In love with form, and the dialectic which determines the final, tailored shape, architects have been unable to put down the needle and thread and take up the loom. They understand the design process to be the painstaking cut and fit of a well-tailored skin to the well-tempered environment when the environment is quite able to take care of itself.

If the Pope wore neon

Technologic imagery hardly guarantees a sophisticated object. Mickey Mouse watches and injection molded, imitation carved T.V. cabinets opt for a populist imagery, but are themselves sophisticated products of industrialization and distribution. The imagery of pop rainbows and sentimental re-cre-



X-ray of Robert Mangurian wearing various communications devices, designed and conceived by Craig Hoggetts and Robert Mangurian.

ations are strategies for a marketplace increasingly worried about imagery yet peculiarly confident of performance. The formal references that were once difficult to separate from functions, references that forced Gropius to reassert that form followed function, have become straitjackets for political and ideological conformity. In an environment defined by "state-of-the-art" performance, the canons of formal appreciation—proportion, consistency, balance—are seen to be semantic devices for communicating the responsible *intentions* of the designer rather than necessary aspects of function. The President—or the Pope for that matter—can make formal appearances from the bedroom, if he wishes, since the frame of reference is not the long, glorifying perspective of St. Peters, but the Vario-Switar lens of the image orthicon T.V. tube. Formal constraints, and the corollary mandate to select the single best form for a given function, are absurd at best when the context is fragmented in hundreds of home T.V. screens. The point is not to set out a new hierarchy of cans and can nots, but simply to try to point out the existing context in an effort to define our expectations for serviceable environments.

The presence of "architectural" qualities of composition does not offset poor performance. Venturi's dissertations on beautiful ugliness are the scholar's rationalization of the historically "ugly" forms of billboards and moonlanders which outperform objects with a more conventional organization. The performance features once integral to building form—acoustics, iconography, temperature control, have been coopted by high performance objects which accomplish their work without necessary inflection of the built form.

The high spaces and careful window placement of classical architecture once functional entities, have become mere symbols of humanist concern. Biomorphic, technomorphic and socially symbolic forms must be replaced by an environment whose content is described by performance. There are no models for such forms, they are by necessity composite, pragmatic and ambiguous.

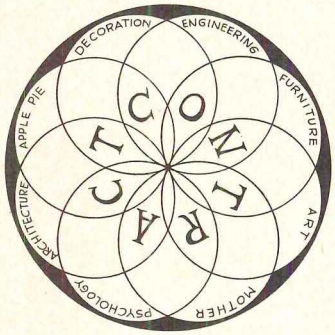
The pragmatist employs one set of objects to ventilate the space, another to light it, and a third to fill it with atmospheric sound with the proper reverberation time. His buildings have the erasable qualities of magnetic tape. Always adjusting image to content, configuration to information flow, his buildings are conceived as a field of environmental controls, supporting a range of activities in a loose-fitting matrix, rather than fitting a single activity into a customized mold. The luxury of exclusively formal constraints, like the luxury of couturier clothing, is only for those who can afford it.

Unlike past cultures, ours does not have to print aspirations on buildings. Film and magnetic tape are far more efficient. Buildings in the shape of ducks and elephants, as well as recent adventures like the Pepsi-Cola, Lever House and Seagram buildings in New York, have an uncomfortable habit of turning up, finally, as residual graphics on a package somewhere in the supermarket. Post modern architecture should recognize that the media and technology available today can be responsive to individual patterns of life *without aesthetic intervention at any level.* The plazas and courtyards which served to locate and provide definition for an opera house or a bank have their counterpart not in the setback of an office tower from Sixth Avenue but in half an hour of the *I Love Lucy Show.* The limited utility of architecture as an instrument of corporate or state enterprise reflects nothing more than the values of a post-industrial culture which measures only results, not intentions. Specific forms, in this view, serve only to limit change and close options. Generalized forms, enriched with temporary user identity and fleshed out with functional objects, increase long-range utility by increasing the range of response. The value of television, after all, is that it allows the sponsors to be bullish on violence one day, nostalgic on sex the next—something that can't be said for the Parthenon.

Author: Craig Hodgetts graduated from Yale School of Architecture in 1967, won three P/A Design Awards as a partner in Works (West), and is currently on the P/A's Editorial Panel.

The education of an interior designer

Forrest Wilson



Interior design education is as varied as the people who are practicing it, and the curricula taught today are questionable in terms of usefulness in professional practice

Interior design education is not clearly defined because interior designers do not yet have a clear picture of themselves. The educational offering ranges from home economics electives to "interior architecture" majors. It is potentially the best or worst education available in design. There are unlimited possibilities for innovation on the one hand and inanity on the other. Often vulgar but never lacking vitality, it reflects a wide spectrum of activities loosely lumped together under the pseudonym "contract" design, presumably to distinguish serious designers from lady decorators wearing funny hats.

"Contract" design emerged as a serious activity only after World War II when construction started again, and business, commercial and institutional interiors replaced farm, mill and factory as the common environment for most American workers. Employers competing for employees were forced to improve primitive prewar office conditions. "Muzak" and the psychological implications of color, light and amenities were the solutions supplied by contract designers as they became the office efficiency experts.

The reason contract design did not originate in architectural offices is that it is as closely associated with industrial design, decorating, furniture and drapery merchandising, the fine arts, behavioral sciences and engineering as it is with architecture. The first interior designers emerged from the most unlikely places. A typical example is a former actress, turned secretary, who became an interior designer by arranging her bosses' furniture. She became successful enough to head a major firm and compete with the most prestigious architectural designers in the 50s. The design principal of the largest interior design firm in the country today was trained as an industrial designer, not as interior designer or architect.

When the need arose, the "experts" were there without any professional education at all. Carpet and furniture distributors, paint and department store sales people became interior designers overnight as product sales blossomed into interior design services. The phenomenon is somewhat akin to the recent rush of architects, building product manufacturers, entrepreneurs, engineers and management consultants to the field of industrialized housing, with much the same results. The free-for-all eliminated all but the most adept.

Firms that survived the competition perfected techniques which, although parallel and sometimes overlapping those of architectural services, did not duplicate them. The vitality of "contract" design has come from an accumulated mixture of disciplines and skills, lack of traditions and formal education.

Interior design education derives its strength from a lack of restrictions; the only attribute it shares with architectural design education is that when graduates enter the job market, their training inevitably is claimed to be inadequate.

Although building forms and building interiors may be manipulated for purely formal ends, their content is social process and human beings, each with inevitable nonaesthetic requirements. Of paramount importance to design education is the fact that the direct relationship between user and designer has almost disappeared. Designers deal with corporate entities, big business, institutions, government and the military. The secretary in the skyscraper, the factory workers, the child in the anonymous school are the users for whom interiors must be sensitively designed. The designer has little contact with his real client.

Instead of first-hand observation of real people, their needs and aspirations, the designer tends to work from statistical data. These data are essential for establishing broad lines of policy but are no substitute for actual knowledge of the users of the building. When the design student graduates from school, he should have been sensitized to the needs of individual building users. If this awareness of his real clients, those that use his buildings, is not developed in school, it will apparently not be developed at all; thus we find interior design education more concerned than other disciplines with the behavioral sciences.

The interior designer's role may well become one of adjusting man to the painful task of making himself comfortable in a perceptually alien world of optimized engineering forms. In many ways they are better equipped for these eventualities than the architect. In cities where office space changes many times during the lifetime of the building and never involves an architect after the shell has been completed, interior design offices may have little association with architects at all. The amount of research and study required to analyze and design corporate and institutional interiors is something few architects are equipped to cope with unaided. They have no false

Author: Forrest Wilson, formerly an Assistant Professor of Interior Design at Pratt Institute, was the editor of P/A from 1969 until 1971. Author of many books on architecture and interior design, he is currently Dean of the School of Architecture, Planning and Design, Ohio University, Athens, Ohio.

sense of their engineering expertise: It is almost nonexistent. Technology is usually the weakest area of interior design education. They do not have a proprietary interest in built form and are quite accustomed to working amicably with the variety of disciplines that do.

The university

Professional schools were originally placed in educational institutions so that the student would be exposed to the cultural activities that the society said comprised its culture. But the university proliferates contradictions, among them the belief that learning is only the result of teaching and that it is best to shut students away from the world to teach them about it. They tend to extend childhood and a protective environment against the real world of work and experience encouraging a theoretical rather than a practical orientation.

The faculty of a design school has goals different from the academics whose objectives are tied to the reward system of the university and, as a result, design schools are seldom important elements of the educational institution. But the most serious drawback of institutional education is that interdisciplinary studies are difficult to augment due to the proprietary nature of the university and its divisions into departments, schools and colleges. As a result it becomes difficult to coordinate courses within the same school or department, much less the university as a whole.

The student emerges from his training with the knowledge that other disciplines exist and perhaps with some comprehension of their scope, but the working experience so vital to today's changing practice of design is totally lacking.

Interior design education is usually lumped into three categories: home economics, architectural concentrations in architectural schools and schools of interior design. Home economics courses usually concentrate on residential work and homemaking—cooking, weaving, art, history of styles, and residential space planning. Graduates are suited to work in furniture stores, kitchen and bathroom supply houses, department stores and the host of commercial product firms that market design as an inducement to product sales.

Schools of architecture teach interior design as an architectural discipline. Training is more stringent in science and technology but is deficient in the particular expertise the designer needs to function in an interior design office. These schools tend to follow the strengths and weaknesses of their architectural curricula. Graduates are competent to work in architectural offices.

The schools of interior design, if located near a major city where instructors who work in the field are available, do the best job of preparing the student for practice. All the schools excepting those in architecture seem uniformly incompetent in the technical areas.

However no design curriculum is fixed. As the design professions during the 60s became aware of the tremendous, almost hopelessly complex problems of the environment, their reaction was to adjust the schools to meet this new complexity with all-embracing courses of environmental design and a concentration on sophisticated problem-solving techniques. Traditional architectural and design education lost its main strength, the studio sequences. In throwing out the baby with the bath, much that was nonsense passed for education. Interior design schools suffered with the others.

A change has occurred during the past two or three years. There now seems a turning away from social activism to a demand for practical knowledge—more toward the acquisition of skills and less toward theoretical, social and economic problems. It is debatable that this represents a retreat from the brave new world of "architecture is everything" of the 60s, as has been claimed; students are probably no more disillusioned than the rest of society and are just as concerned over their futures.

We find interior design education at a turning point. It faces the proliferation of technology, engineering analysis and the deadening influence of the university, which is probably more serious to a new and free-wheeling activity than it is to the older design disciplines which have learned to adapt to such contradictions.

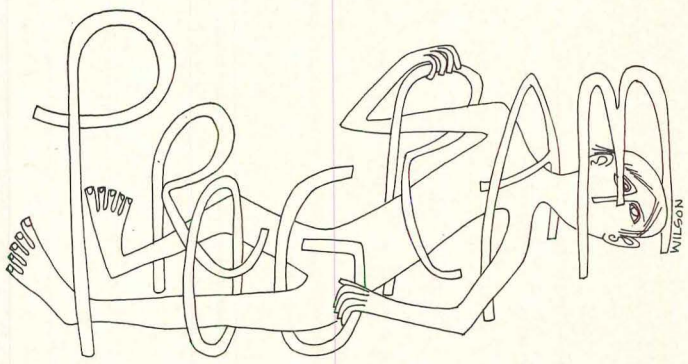
Lacking educational traditions, education in "contract" design can only be compared with the basic objectives of education itself. The major fallacy upon which school is based is that learning is only the result of teaching. Teaching may contribute to a certain kind of learning under certain circumstances, but most people in the world acquire their knowledge outside of school as contract designers once did.

The division between school learning and learning outside the school is essentially false. What we really do is spend four or five hours each day in school when we are young and two or three hours a day in learning for the rest of our lives; if we accept this fact, school can be assigned its proper relevance.

Designers cannot be trained in four or even six years. They can be exposed to a given set of attitudes, a way of viewing the world, which is the beginning of design education. In the real world outside there is fantastic research going on in laboratories and fine museums; people are constructing buildings and making objects. Learning by watching how others work and by doing is no less a productive learning experience than is listening in the classroom.

Interior design education is in the peculiar position of turning its back on this rich source of learning which served the profession so well in its formative years when it lacked an educational structure. It does not yet recognize the school for what it is, a provider of partial education, and seems ready to trade off the possibility of continued innovative learning for the respectability of accredited schools, registration of interior designers and the institutionalization of a free-wheeling activity into a discipline.

There is nothing so dull as a reformed drunk or a woman of easy virtue turned church matron. If anything is needed today, when the entire idea of higher education is under attack, it is innovation and an integration of university learning with unplanned learning. An openness to see the things we agree not to see because of professional blinders is imperative. Formal education is essential but otherwise unimportant.



Madonna Inn, San Luis Obispo, Calif.

Roadside mecca

Written and photographed by Telethon

Designed and completed a room at a time by nonprofessionals the Madonna Inn at San Luis Obispo, Calif. has become a magnet for architects and designers, who marvel at the diversity and fantasy of its many interior environments

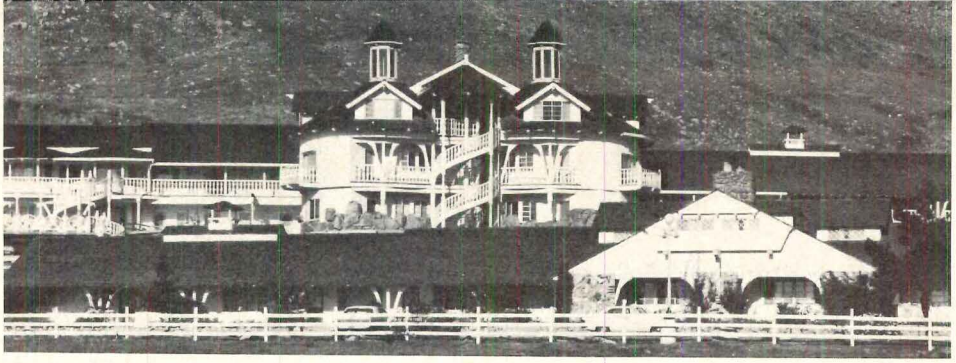
The Madonna Inn is an extraordinary architectural monument, full of feeling and overflowing with layer upon layer of lavish detail. Designed and built as a labor of love by a family of highway contractors, the Inn is on Highway 101 in San Luis Obispo, Calif. about halfway between Los Angeles and San Francisco. It has 109 guest rooms—each a sumptuous, distinctive fantasy environment, and most of them are booked up at least two months in advance.

In the 14 years of its spontaneous design and evolution, The Madonna Inn has created its own tradition and style. Architect Charles Moore was so taken by the Inn that he lauded it (in Perspecta 11, 1967) as "one of the most surprising and surprisingly full experiences to be found along an American highway." George Hasslein, Dean of the School of Architecture and Environmental Design at California Polytechnic University in San Luis Obispo describes himself as a longtime "Madonna watcher." He is particularly impressed with the use of gigantic boulders in the construction. (Some boulders on the exterior weigh up to 209 tons, while some interior fireplace stones weigh up to 15 tons.) "Only a roadbuilder familiar with heavy equipment which punches through mountains would have the skill and fearlessness to use such huge rocks in his buildings," Hasslein points out. "A conventional architect wouldn't consider such possibilities."

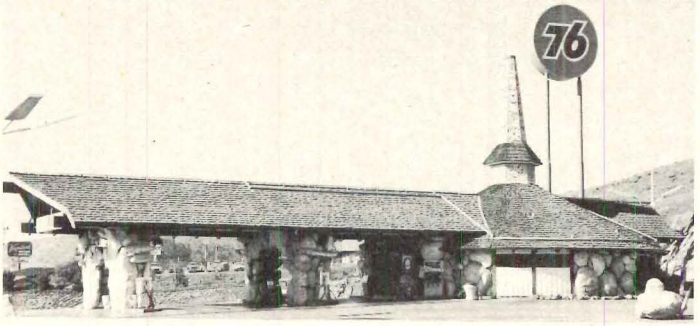
Alex Madonna considers his work on the Inn as a sparetime hobby, apart from his profession as a highway builder and contractor. Working in collaboration with his wife, Phyllis, he was not impeded by such mundane considerations as a

Author:
Telethon is a Los Angeles-based company concerned with analysis and documentation of environmental phenomena. Principal members are Billy Adler and John Margolies, who collaborated on the exhibition "Morris Lapidus: the architecture of joy" at the Architectural League of New York in 1970 and on an article on Lapidus. (P/A, Sept. 1970, p. 118).

in entrance spells welcome in carved doors.



Guest rooms in exuberant Hilltop unit (1969) overlook modest 1962 unit.



Boulders support gas station (above); fanciful woodwork adorns Hilltop unit (below).

budget and pleasing a client. Furthermore, neither Alex nor Phyllis Madonna has any formal design training.

Before starting on the Inn in 1959, the Madonnas consulted various architects and interior designers, but they were disappointed and thwarted by these encounters. Alex Madonna feels that architect-designed buildings have a sameness about them and that they are usually not imaginative. And so the Madonnas decided to do it themselves, drawing upon their own construction crews and craftsmen for the road-building operation. "We were never plagued by plans or architects or anyone saying you can't do this and you can't do that," recalls Madonna. "We were very fortunate with the city. They allowed us to build pretty much at random because they knew we knew how to build and had built substantial buildings before."

Building on experience

Alex Madonna himself manned a piece of construction equipment as work began on the main complex in 1963. The design and construction process was random and spontaneous, using no plans and changing building configurations according to on-site conditions. The hilltop unit, originally intended to have 16 rooms, ended up with 84. The shape of the main complex was bent to conform to an existing rock configuration. Madonna likes to quote the late Richard Neutra, who commented to him while visiting the Inn, "Alex, you didn't have an architect here, did you? It's just as well you didn't because you couldn't have captured all the details if you had had to draw them out. I don't know how you would draw these things and then accomplish them."

Madonna explains, "Everything we have done we have done with a lot of feeling. It has been done from pure love. I feel many people have so much and give so little. How can you be happy without giving? If you give people a fair chance, they all give you a fair chance back." Phyllis Madonna puts it more simply: "It makes people happy and that in turn makes us happy."

The Madonna Inn consists of five buildings on a 1500-acre site, starting with a remarkable, ornate gas station. Past the gas station one encounters the main complex, a one- to three-story horizontal building punctuated by a drive-through underpass leading up to the three guest-room units cut into the hill above. The first two residential buildings are one-story motel units containing a total of 28 rooms. These first units, completed in 1961 and 1962, are plain and subdued when compared to the spectacular and flamboyant hilltop unit, completed in 1969. This horizontal building with two-, three-, and four-story sections stretches some 400 feet along the hillside, its façade enlivened by a variety of dramatically curved wooden stairways leading directly to rooms or terraces.

The main complex features a spectacular, plush pink and goldleaf dining room seating up to 500 and serving an expensive, delicious meal—indeed a rarity along California highways. The 200-seat coffeeshop has etched copper-covered counters and tabletops throughout, murals by a local artist in some of the booths, custom-made, hand-etched and frosted-glass windows, and carved-wood booths. Other public facilities in the main complex include the lobby, two cocktail lounges, a 300- and a 500-seat banquet room, gift shops and registration area.

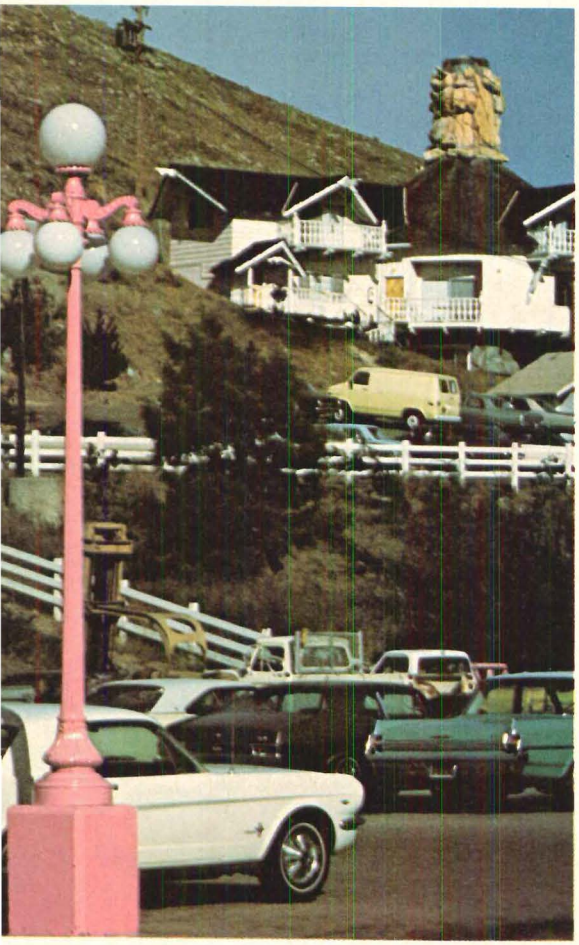
Everywhere the main complex is a profusion of details and refinements too numerous and intricate to be comprehended in a single visit—typical of the inclusive, materialistic Madonna design expression. Every detail is super-real, fabricated from lavish, natural materials—a stage set with real props. The Madonna Inn is a place where things that don't go together go together. Like a Jan Van Eyck painting of the 15th Century, there is no focusing in the design of The Madonna Inn. From the smallest to the most major elements, everything is given an architectural expression of equal emphasis. This consistency of meticulous detailing somehow helps to create a unified, if not coordinated, whole. Visitors wander about the public spaces wide-eyed and transfixed as they discover one surprise after another: a spectacular monolithic boulder fireplace, custom-made floral carpeting, murals, solid carved wood columns and doors, waterfall bathrooms, leaded stained glass windows depicting scenes from Alex Madonna's career in road construction, hand-carved marble balustrades, antique light fixtures and on and on.

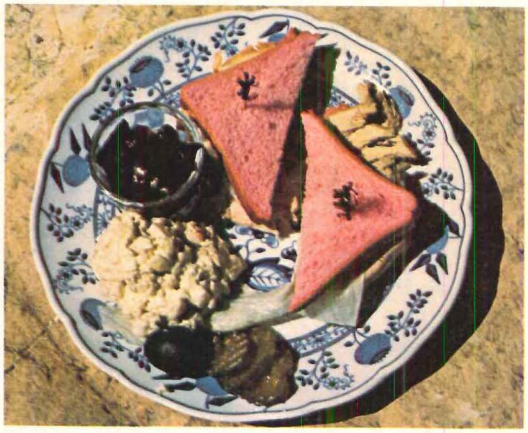
The major unifying element is a special shade of pink, found on lamp posts, graphics, garbage cans, everywhere. "If you go into one decorator's outlet in Los Angeles, you will find that they are calling it Madonna Pink," he says with some pride. Madonna Pink is a good example of a compulsively thorough design process. Madonna points out that this pink "is creamy, yet it has a lot of impact. We were probably six months getting the right color." Pink is so pervasive at the Madonna Inn that even the sandwiches are served on Madonna Pink bread.

Guest rooms in 109 flavors

The splendid and exuberant interiors in the public areas are rivaled and in some cases surpassed by the elaborate guest rooms, each a thematic fantasy environment and each completely different—the antithesis of the sterile, franchised reality of a Holiday Inn or a Hilton. Entering the registration area in the main complex, the visitor may select the theme and decor of his room from a collection of hundreds of post cards (which, along with three roadside signs and word of mouth, are the Inn's only advertising). Room themes, proudly proclaimed on hand-painted doors, are literal expressions developed with great imagination and originality. There are series of thematically related rooms such as cave grotto rooms, Swiss rooms, honeymoon rooms, American rooms, period rooms and rooms devoted to various nationalities. Accommodations range from singles to three-bedroom, two-story suites and range in price from $11 to $50 per night.

Mr. and Mrs. Madonna chose to make each room different because they wanted to please the tastes of the greatest number of people, and they knew that no two people like the same thing. The differences also provide a reason for the visitor to return again and again. The decision to make 109 different environments was not only an expensive one, but also creates problems of cleaning and maintenance. "We know we could





Gold Rush dining room (above) has custom-designed floral carpet and 28-ft-wide gold-leafed lighting fixture. Banquettes restate Madonna Pink, first announced in light standards outside (far left). Sandwich in coffee shop (right) is on pink bread. Lobby window (below) depicts scene from Alex Madonna's career as a highway contractor.

get more money and still have people staying here," admits Alex Madonna, "but then we would be making this a commercial thing. We are not trying to cut corners. We are trying to provide good value."

The Madonnas work as a team. "Alex will sit down and sketch something on a napkin and then we go from there," explains Phyllis. Madonna adds, "When you are feeling just right, you can think up 15, 20 or X number of names." Once the theme is established, Mrs. Madonna puts together appropriate furnishings, decorations and ideas, and after more give and take between them, the environment is completed. "Maybe no one else knows how we've related things in each room, but with us there's a reason," she continues. "Each room tells a story and has a little history behind it."

Try sugar and spice (151) or everything nice (152)

The 109 guest rooms abound with one theatrical device after another, one material after another, one refinement after another: leather bedspread and drapes in the Indian room (177); elaborate fireplaces in some; patent leather wallpaper here and embroidered wallpaper there; a sofa hand-hewn from tree trunks in Cabin Still (133); exact antique replicas in Victorian Gardens (214); a 4-ft crawl space tunnel which converts Daisy Mae (138) and Caveman (137) into a suite; Fred and Irma Flintstone in leaded stained glass in the Flintstone Room (139); round rooms as in Ren (167), De (168) and Vous (169); etc., etc., etc. What's Left (158) is decorated with leftovers from other rooms. Tall and Short (182) is a tribute to its spontaneous design, with a bed 5½ ft long on one side and 6½ ft on the other to fit into a leftover space. Mini Maxi (146) has no fixed rental fee—the guest may pay whatever he wants.

The Madonnas have a special flair for bathrooms. The justly renowned urinals in the public men's room feature gushing waterfalls activated by electric eyes as they are used. Not only are these public facilities spectacular, but the guest-room baths as well received special attention. Alex Madonna feels that they "are something you are living in when you travel and are just as important as your home." Some of the bathrooms feature brightly painted Italian floor tiles, others have hand-painted French toilets and sinks. One bathroom contains a 7-ft bathtub imported from Africa. The Daisy Mae bathroom features Daisy Mae herself in leaded stained glass. Laminated plastic shower doors designed and made by Phyllis Madonna adorn the different bathrooms and incorporate such articles as old Belgian wedding veils and fragments of French love letters, all pertaining to the overall theme of each room.

Several of the most spectacular bathrooms are rock grottos, with walls, floors, ceilings and fixtures all of rock. In the grotto bathroom of the Old World Suite (192) a river of water guided by a trough comes splashing into the sink diagonally from 6 ft above when one unsuspectingly turns the faucet. The Old World grotto shower has two sets of shower controls—one for the shower head and one that releases a meandering series of trickles throughout the shower area (serving as a natural waterfall shower, Madonna explains).

The exterior architecture of the Madonna Inn does not rival the interiors, but the buildings are an energetic expression of the process that created them. The eccentric Madonna style is developed in all of its complexity in the main complex and hilltop unit. These low-slung, horizontal façades defy any precise stylistic description, and they are not gracefully proportioned. They are busy expressions of white-painted and carved wood, pitched roofs and gables, monolithic stonework, and sculptural chimneys—all exuding "old world" vibrations and suggesting over-sized Swiss chalets. Alex Madonna is of Swiss descent, which is coincidental to the architectural style, because he visited Europe for the first time two years ago, long after the Inn had taken shape. "There is nothing in the Inn that has been copied from anywhere else," he asserts.

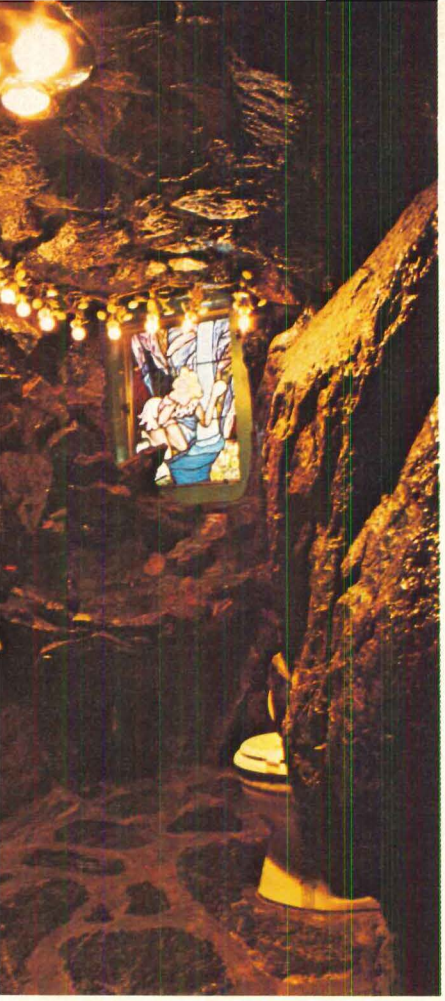
Madonna refuses to discuss the cost of building and furnishing the Inn, but he estimates that his per room cost is three or four times that of a conventional, commercial motel. His perfectionist temperament overrules a budget. "Everything is just a little bit better than it has to be. If you can't do something well, you shouldn't do it. I am very meticulous and particular about the way something is done. If we have made a mistake, we just tear it out regardless of cost. Many people who hesitate to make a change live with a mistake for a long time."

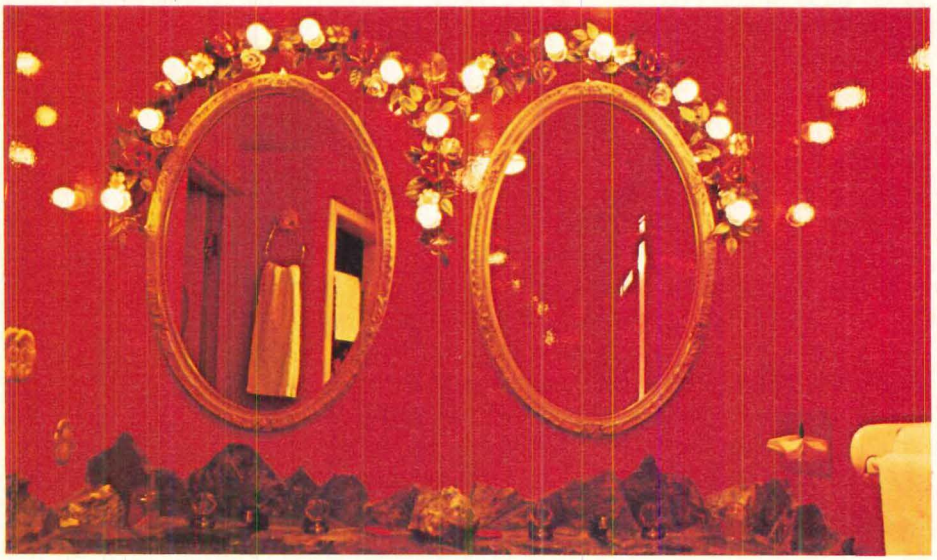
But, he continues, with a gleam in his eye, "I built the Inn withholding many ideas I had because I want to build a new place eventually." Some features of this unrealized project: "a 300-ft-long bar with a three-story fireplace with some big doors to take a tree into it. Close the door and the tree will burn for a week. The bar would float in a vast lake created by a waterfall going through the building, and you would be in little canoes—say two, three, or four of you—and you could float over to the bar and get a drink."

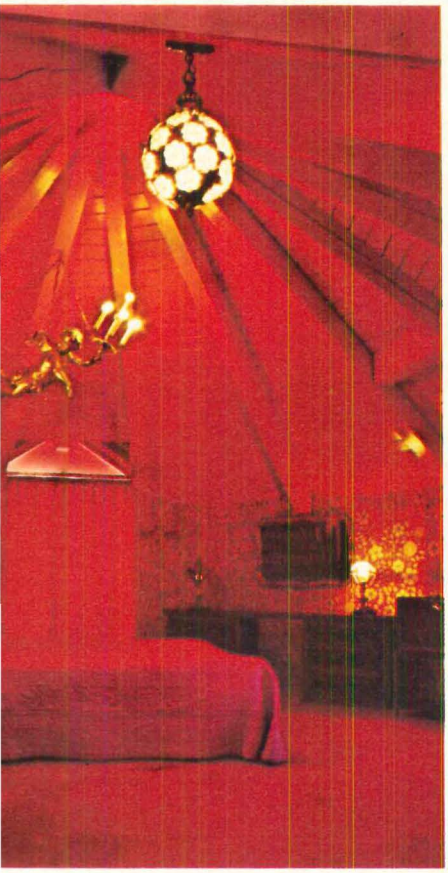
A landmark to personal taste

Alex and Phyllis Madonna realize that the conglomerate, additive taste expressed in their architecture is disturbing to some trained design professionals. One interior decorator got so exasperated during the design process that he told the Madonnas that a typical juxtaposition of materials and scale was going to be a monstrosity. "That's only one person's opinion," says Madonna. "And whether it's supposed to be right or wrong we don't know. We just think it's important to put things together that we enjoy living with." One measure of the Inn's success was the proclamation of Alex Madonna Day in San Luis Obispo on April 3, 1971. One of the citations from this special day reads in part, "the uniqueness and beauty of the Madonna Inn with its sumptuous accommodations and widely acclaimed cuisine have drawn between 1½ and 2 million visitors annually."

The Madonna Inn is a living, unfinished monument. Alex and Phyllis Madonna continue to develop the Inn in their own distinctive, untrained way, unscathed by the aesthetic criticism of those who know or think they know. What the Madonnas know is what they like, and they know how to get what they like.







Grotto bathroom of Daisy Mae (top) includes the siren herself in stained glass. Cloud Nine (above), originally just attic space, has golden cherubs under its conical roof. Among other rooms (right, top to bottom): Carin is named for Swiss term of endearment; Hearts and Flowers has bathroom walls of red patent leather; Austrian suite, 76 ft long, recognizes Union 76's cooperation on inn's gas station; Old Mill has bucolic murals, water-driven headboard cuckoo clock.

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INSTALLMENT
LOAN

Rigid board fireproofing

Harold J. Rosen, PE, FSCI

Properties requisite to the successful application of rigid board fireproofing as well as some of its advantages over the spray-on type are discussed

From its inception, spray-on fireproofing enjoyed a boom period as a substitute for concrete and masonry fireproofing. Its light weight, economy and ease of application made every other type of fireproofing virtually noncompetitive. However, several factors contributed to its present low esteem.

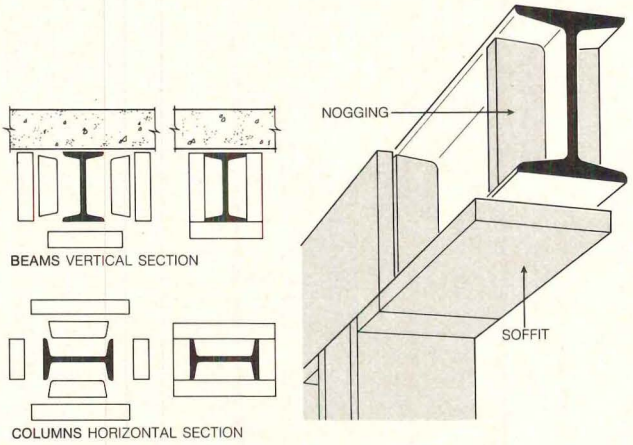
The first setback occurred when it was established on the basis of medical statistics that asbestos fiber spray-on fireproofing was responsible for asbestiosis and cancer (P/A Specifications clinic Feb. 1970, p 102). Further disenchantment ensued as environmental protection agencies forbade the use of asbestos fiber and placed severe limitations on the application of spray-on materials in general. These limitations, which include protective measures and clean-up, added to installation costs. During this period, sloppy application caused some insurance rating bureaus to institute an inspection procedure. If specifications were not complied with, insurance rates were penalized, which added to the cost of the installation.

It was clear that the final day of spray-on fireproofing was fast approaching. Recognizing this, farsighted manufacturers responded with research and development of rigid board-type materials which were ultimately developed and are now available for use after successfully passing required fire tests.

In some European countries fire protection of the structural steel frame is required by code in order to safeguard the building's occupants, but no specific legislation protects property. However the insurance companies have a forceful sanction by increasing the premiums of any construction they regard as hazardous. Steelwork of a building in a severe fire reaches its critical temperature at 550 C, beyond which the steel progressively loses its strength. If properly protected, a beam that might ordinarily fail in 15 minutes would remain sound for two, three or four hours depending on the thickness of the protection material. A good substitute for spray-on fire protection would therefore require a material with the following properties:

1 Noncombustible, in order to not increase fire load.
2 Good thermal insulation.
3 A material that will not crack or spall at high temperatures.
4 An attachment system that is not affected by the fire.

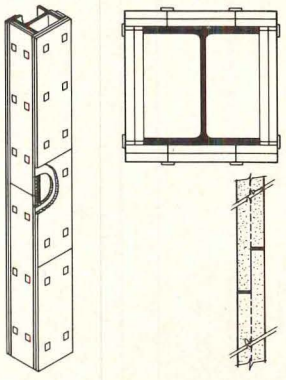
In 1970 a rigid board was produced in England consisting of exfoliated vermiculite and inorganic binders. The product was tested by the British Fire Research Station. Based on the tests, boards of varying thicknesses have been developed for varying weights of steel columns and beams for various fire ratings. Its application is dependent upon specific noncombustible adhesives which are employed for its attachment to steel members as shown.



In essence, the assembly method assures adherence of the boards to each other rather than to the steel. The configuration and assembly also lends itself to plastering or painting.

In this country, a similar development was introduced recently which is essentially a felt mineral fiberboard treated so that it provides the essential qualities listed above. The board has been subject to fire tests at the Underwriters' Laboratories Inc. in accordance with the time/temperature tests of ASTM E 119. Several column and beam configurations for varying rated constructions have been established for one- two- three- and four-hour ratings.

This application however is made by the use of a simple welding rig using a stud weld and a speed clip washer as shown here.



The advantages of a rigid board type of fireproofing over spray-on are quite obvious: the need to protect workers and the public is eliminated; the cleaning up of spray-on that overshoots the mark is eliminated; thickness and density of protection are assured; application can proceed in cold weather.

Author: Harold J. Rosen is an independent construction specifications consultant in Merrick, New York.

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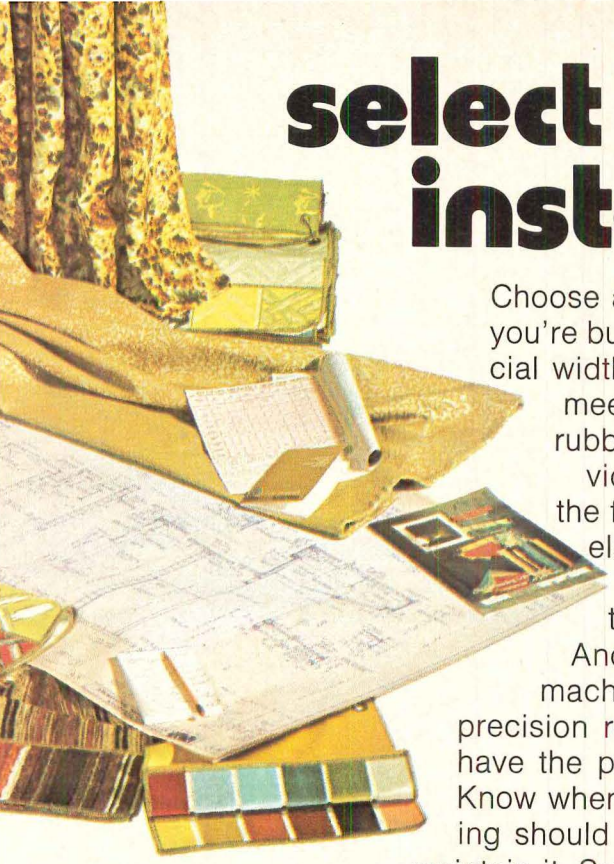

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Zoning variances for churches and schools

Bernard Tomson and Norman Coplan

Because churches and schools have a special place in the fabric of cities and towns, they cannot be excluded from residential areas by zoning regulations

The validity of zoning ordinances as applied to church or school structures is not generally measured by the same standards which would determine the validity of those same ordinances as applied to commercial uses. The difference in approach is reflected in the opinion of the Texas Supreme Court in *City of Sherman v Simms,* 183 S.W. 417, which states that "to exclude churches from residential districts does not promote the health, the safety, the morals or the general welfare of the community." In more picturesque language, an Illinois Court (*O'Brien v City of Chicago,* 347 Ill. App. 45) stated "Wherever the souls of men are found, there the House of God belongs."

Although the exclusion of churches or schools in residential areas may be unconstitutional, municipalities may, nevertheless, regulate church or school use in a residential zone provided that such regulation is not of such a nature as to constitute an indirect effort at exclusion. Illustrating the conflict between the exercise of "police power" by the municipality and the constitutional protection of church and school use is a recent case in New York (*Jewish Reconstructionist Synagogue of North Shore, Inc. v The Incorporated Village of Roslyn Harbor*).

Involved in this suit was the interpretation of a village zoning ordinance as applied to the request of a religious corporation to convert a residence located in a residential district to a synagogue and Hebrew school. The ordinance authorized a special permit in any zoning district for churches and schools provided that "no such building shall be erected or used for such purpose within 150 feet of any street line nor within 100 feet of any property line." No variance from this requirement is permissible under the statute. In addition, the ordinance provided that the Board of Appeals is not to authorize the issuance of any such permit unless it finds that a) the proposed structure will not tend to depreciate the value of the property in the village; b) it will not be detrimental to the neighborhood or to the residents thereof; and c) it will not alter the essential character of the neighborhood. One further requirement was that the Board must conclude that the proposed use would not be "feasible or practicable in a less restricted area."

The residence in question was located on a 2½ acre plot and conformed to the setback provisions of the ordinance for its use as a residence, but a change to church use would result in a violation of the ordinance in that, on one side, the residence was located only 30 feet from the property line. Consequently, the plaintiff had sought a variance from the Village Board of Appeals, which application was denied on the ground that the Board did not have the power to vary the requirements of the ordinance. On appeal, the plaintiff asserted that the Board could not be deprived of its authority to grant a variance, and the ordinance, as applied to it, was exclusionary and thus unconstitutional.

The evidence at the trial established that the Village had a population of 1125 persons in a total area of 630 acres with 94 percent of the area zoned for one-acre residential use. The value of the residential homes ranged from $80,000 to $200,000. The evidence further showed that of the membership of the congregation of the synagogue (which consisted of 150 families), less than 4 percent lived in the Village, the remainder residing in larger and more heavily populated neighboring communities. The plaintiff submitted proof that a side-line setback of 30 feet, rather than 100 feet, would have no ill effect upon the adjacent and neighboring properties.

The Court concluded that the zoning ordinance was unconstitutional as applied to this plaintiff, stating:

"Religious structures enjoy a constitutionally protected status which severely curtails the permissible extent of governmental regulation in the name of police powers, but the power of regulation has not been altogether obliterated. Defendants assert . . . the ordinance does not exclude churches from any district but merely regulates them. The prerequisite findings to be made by the Board of Appeals are characterized by the defendants as normal zoning requirements appropriate to the use sought. Defendants further maintain that the setback requirement of 100 feet is a reasonable one for its legislators to mandate in the light of its long-established low-density character. . . .

"The presumption of legality applying to the legislative enactment of defendant trustees as well as the factors urged by them as motivating the nonvariable restriction imposed in the ordinance are out-weighed by the constitutional protection afforded a religious organization such as the plaintiff. . . . The fact that the plaintiff's members are in the main nonresidents of the Village does not justify the application of more restrictive standards than those affecting residents. It is the character of the plaintiff as a religious body that controls . . . It is the opinion of this Court that the existing ordinance of the defendants, as it applies to the plaintiff, is an unconstitutional enactment. Those provisions which mandate positive findings by the Board of Appeals before a permit may be granted have been tested and rejected in a number of cases . . . Further, a Board of Appeals may not be deprived by a local ordinance of the (power of variance) granted to it by (state) law. Here the ordinance does so deprive its Board of Appeals since it cannot vary the height, area and yard requirements and hence must be stricken as invalid."

Authors: Bernard Tomson is a County Court Judge, Nassau County, N.Y. Hon. AIA. Norman Coplan, Attorney, is Counsel to the New York State Association of Architects, Inc. AIA.

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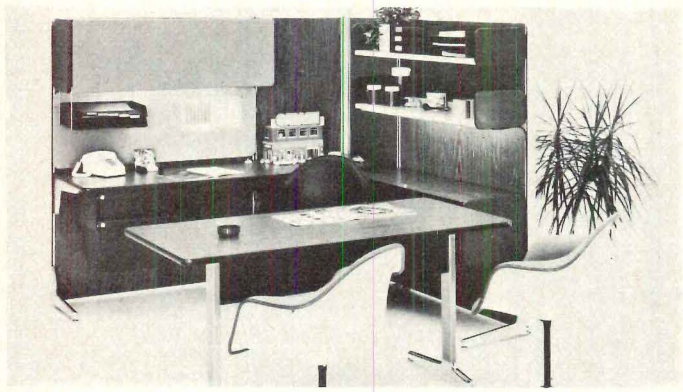

Work stations

Series 1000 seating group features American black walnut end frame with oil finish, seat and back of sculptured contours and comes in wide range of textiles and vinyl. The square and rectangular occasional tables have either flat cut walnut or textured laminate insert tops. Stow/Davis.
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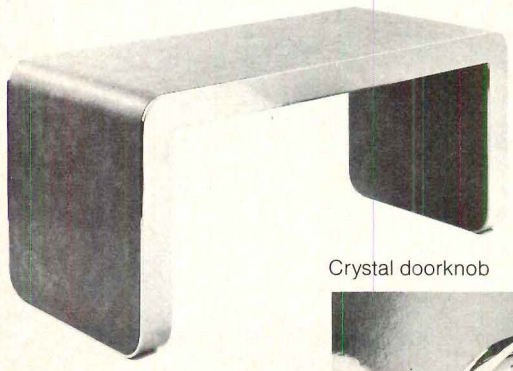

Desk

Desk. Measuring 60″x28″x29″ high, the frame is in a mirror polished stainless steel 4″x⅜″, surface is covered in either vinyl or leather, color to specifications, including white. Axius.
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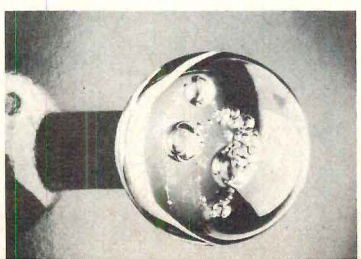

Crystal doorknob

Crystal doorknob. The heart of the knob contains air bubbles which seem to float through clear crystal. The knob is available as a working doorknob or as a push-pull knob in 3-¼ and 5-⅜ in. dia. J. C. DeJong & Co., Inc.
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[continued on page 148]

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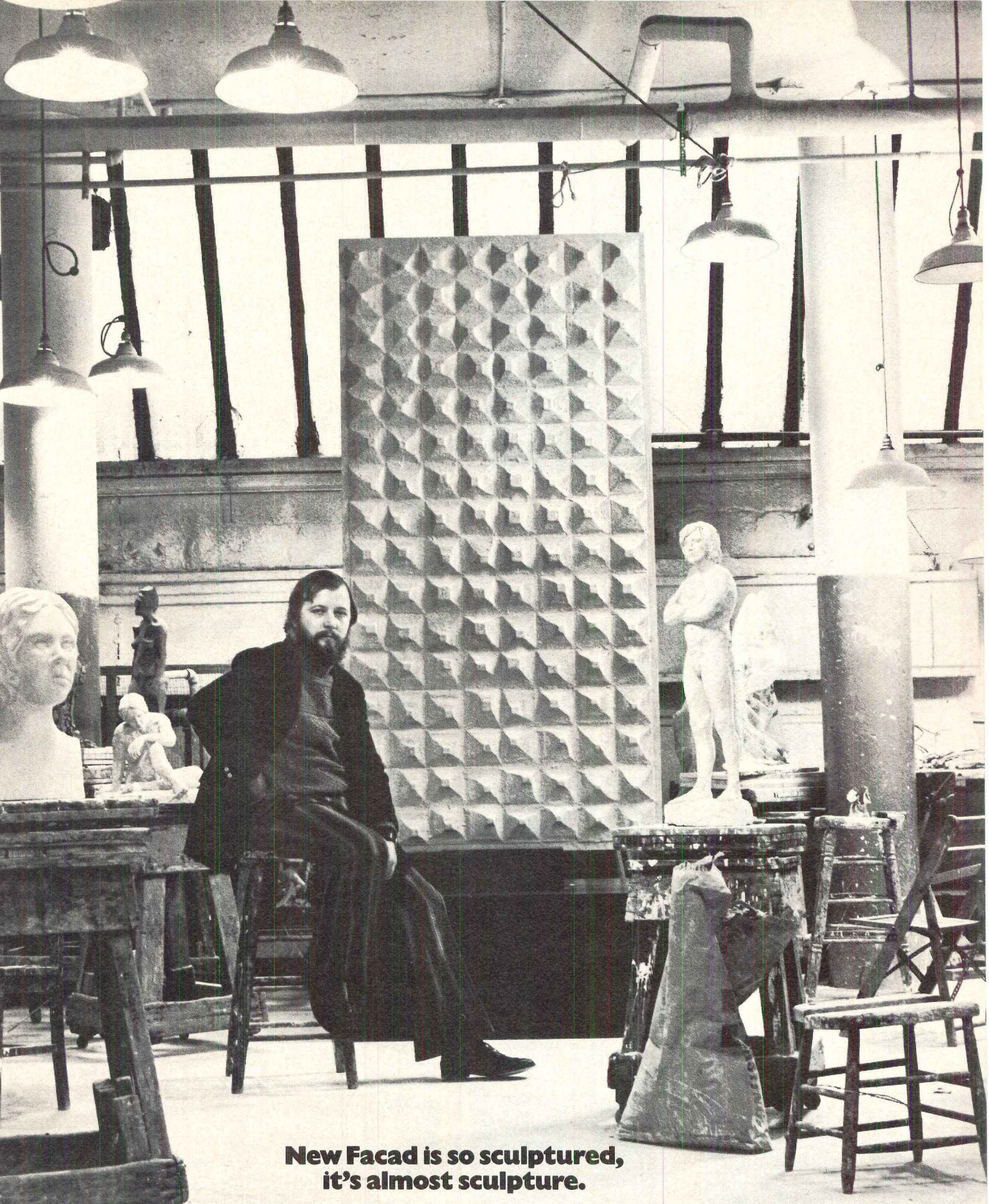

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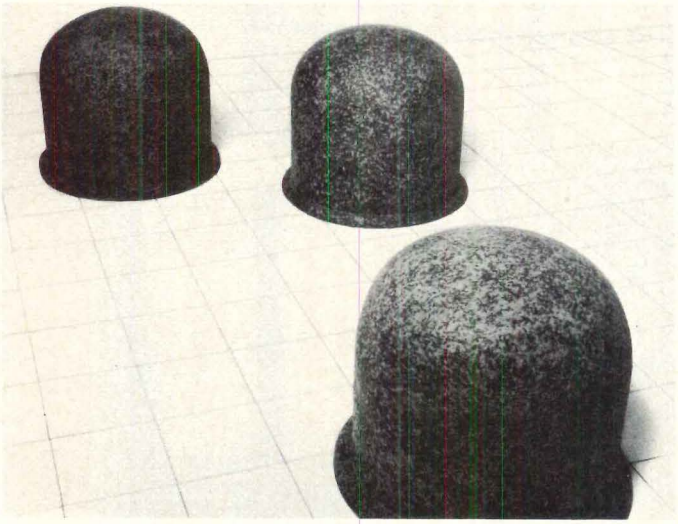
Facad is also very durable. And because it is all mineral, it is completely incombustible.

Facad comes in a series of standard panel surfaces, one of which is shown above. It can also be custom-molded to afford architectural designers a broad choice of texture, color and pattern.

For complete information, call the Architects Service Representative at your nearest U.S. Plywood office or write:

U.S. Plywood
A Division of Champion International
777 Third Avenue, New York, N.Y. 10017

Products continued from page 140



Charlie

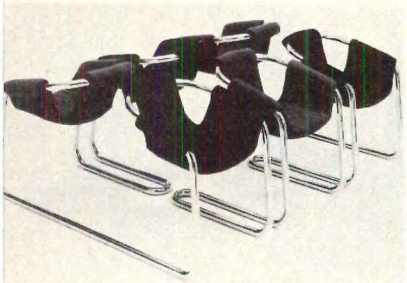
Charlie. A polyurethane stool shaped like Charlie's famous chapeau, upholstered in stretch nylon in a selection of colors. Stendig.
Circle 109 on reader service card

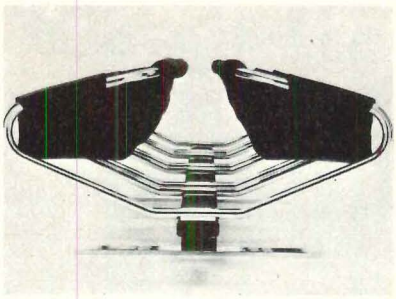
Seating. Lounge chair and ottoman mounted on chrome disc bases feature full swivel action. Upholstered over premium grade polyurethane, both come in company's full line of upholstery fabrics, vinyls and leathers. Disc bases are available in chrome, antique brass or Tenite-coated finishes. Chrome-strap sofa is accented by polished chrome and exposed frame. Available in wide choice of fabrics and in 86 in. length, two-seater and matching chair, part of the Spectrum 75 line. Also in antique brass. Carolina Seating Company.
Circle 110 on reader service card

Mass seating. Zermatt Continuous System transforms individual lounge or dining chairs into mass seating which can be changed at will without the use of tools. Seating may be single row or back-to-back. Slings are said to offer firm and secure support, and to be easy to remove or replace without tools. Zermatt Cantilever System provides seats slung in mirror chrome tubing supported from a single structural beam, either in back-to-back or single row configurations. Base feet are heavy chrome plated steel. Small individual ash tray tables may be inserted between seats without changing seat positions. Vecta Contract Company.
Circle 111 on reader service card

Seating

Weld-Crete bonds cement toppings and patchings to spalled, badly worn concrete surfaces, levels surfaces to prepare them for nonslip coatings, is completely safe to use—nontoxic, noncombustible, according to maker. Larsen Products Corp.
Circle 112 on reader service card

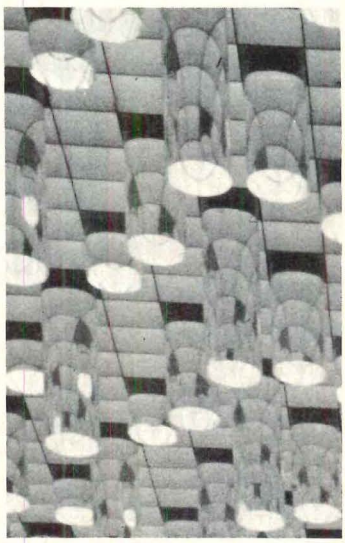




Mass seating

Three-way landscape system for businesses, schools and other institutions for creating versatile work environments includes panels, cabinets, shelves, work surfaces, desks and tables and carpets. Panels are woodgrain or solid vinyl finishes. Cabinets are offered in four basic styles, in two widths, two heights and two depths. Reflector Hardware Corporation.
Circle 113 on reader service card

Le Bambole, a collection of upholstered furniture designed by Mario Bellini, is constructed with reinforced foam polyurethane corners, foam polyurethane body and encased in pillows of foam and dacron fiberfill. Shaped from the outside "like a doll" with special high tensile strength textiles and special water buffalo suedes and leathers. Atelier International Ltd.
Circle 114 on reader service card

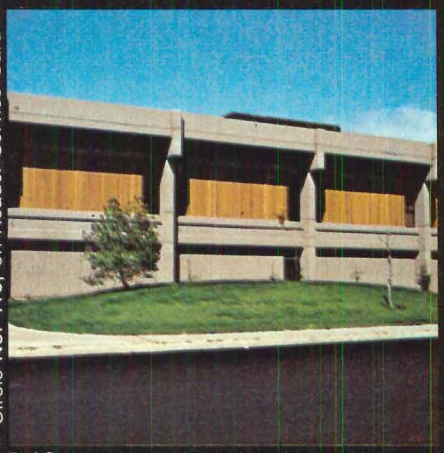


Le Bambole

Illuminated ceiling

Illuminated ceiling. Acrylic crystals of uniform or irregular length, random or regular spacing, clear or in color, create reflections in constantly changing tones and provide many architectural possibilities—modulations, geometrics, abstractions, emblems, designs, special effects. Proper choice of finish blends supporting gridwork with surrounding walls. Neo-Ray Lighting Systems, Inc.
Circle 115 on reader service card
[continued on page 152]

Circle No. 410, on Reader Service Card

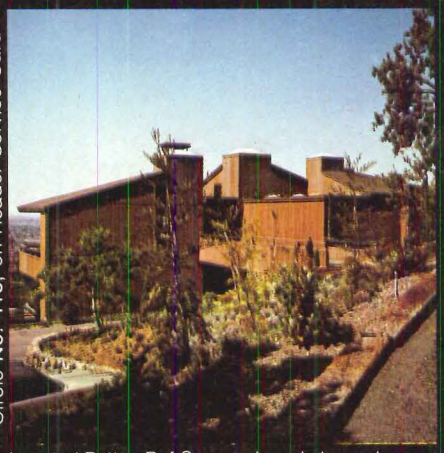


Ruf-Sawn redwood plywood combined with architectural concrete

Circle No. 413, on Reader Service Card

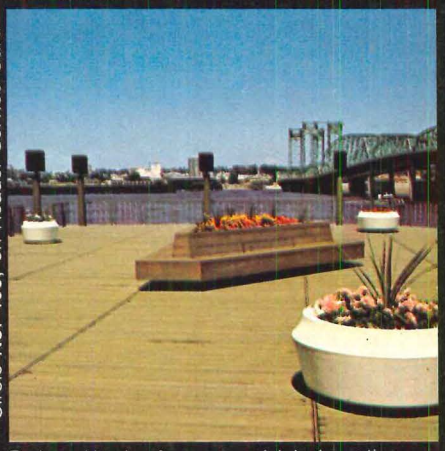
Traverta ceiling tile provides fire safety and noise control

Circle No. 416, on Reader Service Card



Inverted Batten Ruf-Sawn redwood plywood on custom residence

Circle No. 409, on Reader Service Card



Redwood lumber for commercial decks, patios and stairways

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Recessed edge, non-directional fissured Pyrotect ceiling

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Redwood lumber siding lends lasting warmth to office buildings

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Castillo pattern entrance door from the International series

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Ruf-Sawn 316 was the answer for low-income housing project

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Innsbruck pattern entrance door from the International series

We make products for people . . . who design for people.

Good design, expressed in the right materials, provides the sort of environmental warmth that attracts people and helps keep them happy. Simpson panelings, ceilings, sidings and exterior trim are made to last a long time, and to look attractive as long as they last.

Whether your project is residential or commercial, there are Simpson products that will help add that extra warmth people want. For complete product information see your Simpson supplier, or write: Simpson Timber Company, 2000 Washington Building, Seattle, Washington 98101.

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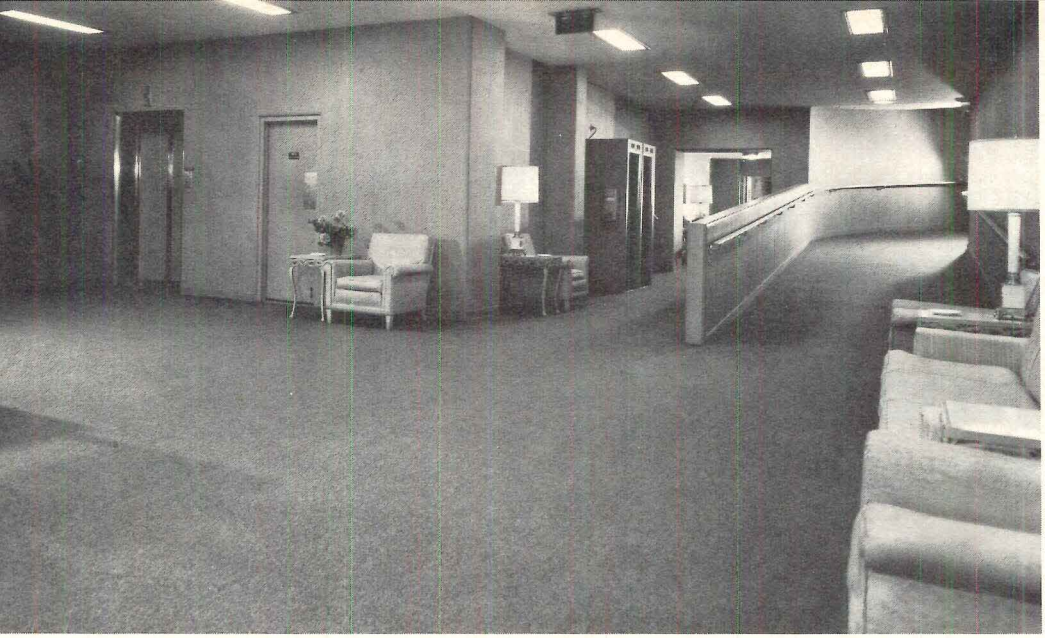


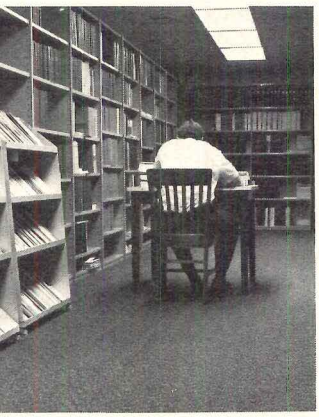
Hospital after hospital after hospital prescribed proven carpet by Bigelow.

If you're doing a hospital job, you can create your own specifications for the carpet you want. And we can make it for you.

However, Bigelow has another practical suggestion: specify carpeting that has already proven it can take the hard use (not to mention abuse) patients, visitors and staff deal out. Carpet that has repeatedly demonstrated it can take a beating year after year after year.

Bigelow has that kind of proven in actual hospital use carpeting ready for you in a wide selection of carpet styles and patterns. Carpet that is the result of research and development combined with the realistic experience gained in hundreds of hospital installations.

And Bigelow will do more than just sell you proven carpet. We'll give you expert counselling in installation and through our Karpet Kare® Division, we'll give you the best advice available on maintenance. It's a total package designed to assure you that you can specify Bigelow with total confidence.



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Products continued from page 148

Mini-table system. Winner of 1973 Grand Prix de Excellence top overall design award available to Quebec furniture manufacturers, the mini-tables can be clipped together quickly and without tools to form freestanding work surfaces. Basic units come in a polyurethane plastic-coated finish, white or doeskin. Steel drawers can be finished in several choices of acrylic enamel. Designed to serve either as a separate system or to complement maker's panel system. Sunar Limited.
Circle 116 on reader service card

Hospital chair that reclines to 180 degrees, is mobile and turns a full 360 degrees, is designed for coronary recuperation, pediatrics, geriatrics, podiatry and hemo-dialysis. Comes with optional additional leg rest for extra elevation of feet where necessary. With or without mobile base, it is available in many styles upholstered in flame-resistant vinyl, wide color range. When leg rest is disengaged the chair becomes locked in place and is stationary. La-Z-Boy Contract.
Circle 117 on reader service card

The Cube. Desk and credenza units with self-edged plastic high pressure laminated tops and bright chrome-plated hardware. Letter drawers operate on quiet full-cradle progressive suspension; locking devices in center drawers lock all drawers; adjustable floor glides to level all units; a movable divider in each box drawer. Available in a wide range of colors. Cole Div. of Litton Industries.
Circle 118 on reader service card

Jet Tandem. For reception areas, waiting rooms, lounges or wherever a semi-permanent lounge is necessary. Steel-framed, in a wide variety of upholstery fabrics and colors, it is available in two- and three-seat models with or without built-in tabletops. Said to be heavy enough to stay in place without creeping, yet is not difficult to move if necessary. Designed for easy cleaning beneath the tandem unit, it has an optional bracket for permanently mounting to the floor. Fixtures Manufacturing Corp.
Circle 119 on reader service card

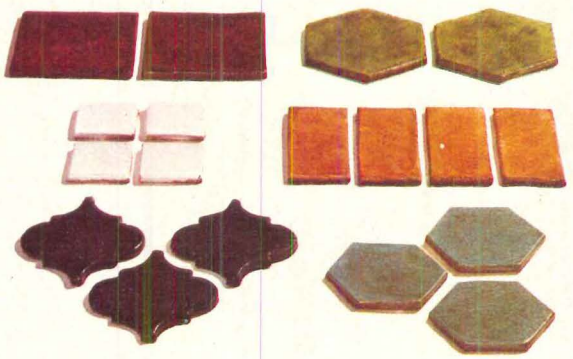
Berber wool. A collection of coordinated wallcoverings, drapery fabrics and carpets woven in Holland of natural unbleached, undyed wool yarns from Africa. Wallcoverings are especially suitable for areas that require a high degree of sound absorption and durability. S.M. Hexter Company.
Circle 120 on reader service card

Suprchair. The winner of Best Engineering for Furniture & Furnishings in the Design in Steel Award competition (1972–1973) sponsored by The American Iron and Steel Institute, it has adjusting mechanisms that are instantly responsive, accessible from a seated position and require only fingertip force to perform. Pneumatic cylinders combined with the pentapod base provides maximum stability and support, according to maker. Backrest panel rotates 30 degrees, accommodating user's posture changes and back angle. Designcraft.
Circle 121 on reader service card
[continued on page 157]

The road to the *Magic Kingdom* is paved with Earthstone.

Not far from the massive gates to Walt Disney World, travelers who arrive at a new Regency Red Carpet Inn are greeted in a spacious lobby that's paved with Florida Tile's Earthstone. This natural, hand-molded, half-inch thick tile has a rich look of quality, combined with a rustic, old-world warmth that offers a genuine "welcome" to tired travelers. Yet, it is durable enough to receive throngs of overnight visitors. And, Earthstone still needs no waxing, no buffing or stripping. Whether or not you have a mouse living down the road from you, Earthstone will enhance any interior floors you may be planning. There are six shapes and six colors immediately available.

Regency Red Carpet Inn, Kissimmee, Florida



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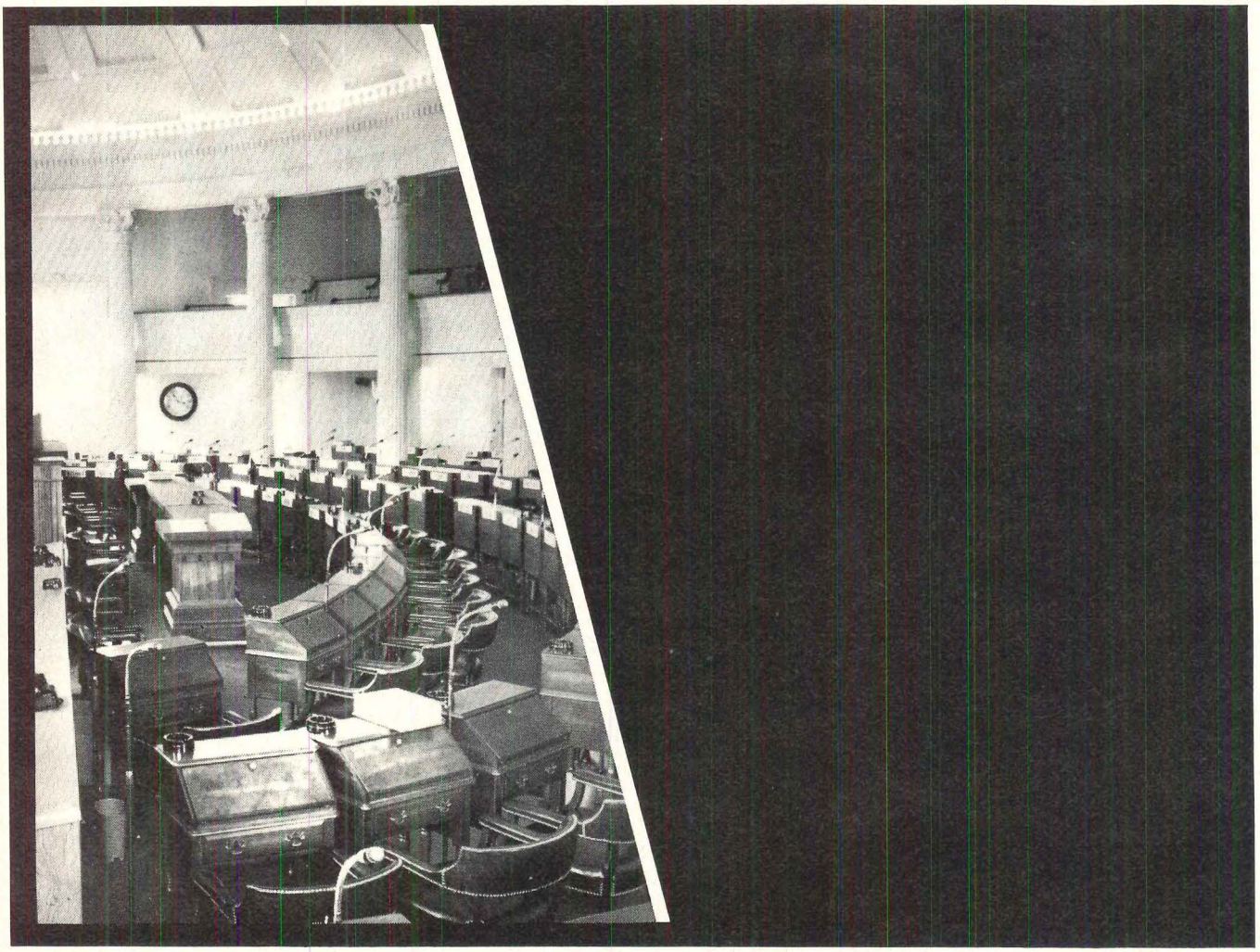
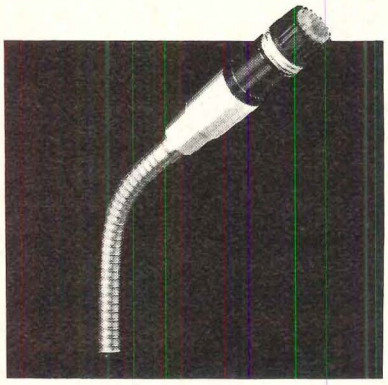


Con-Con to Congress



Nowadays, history isn't written, it's spoken . . . and verbal clarity is essential wherever people meet to discuss the issues of the day. From coast to coast, from town halls to the halls of Congress, you'll find Shure microphones in the really critical, prestigious sound reinforcement installations. Case in point: when the Illinois Constitutional Convention ("Con-Con"—see photo above) met to create the first new state constitution since 1870, a total of 65 Shure Unidyne III microphones were at hand to assure a clear, intelligible voice for each delegate. The Unidyne III was right for Con-Con, and there's a Shure problem-solving microphone right for every installation.

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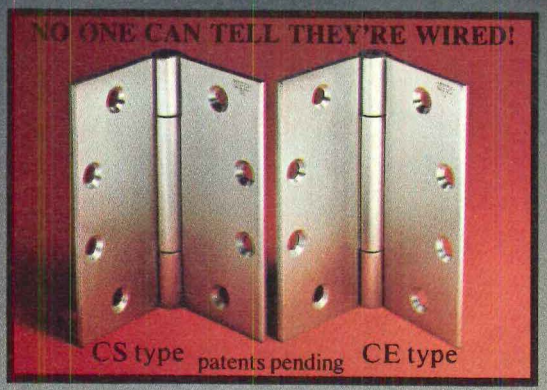

Stanley electric hinges uniquely conceal the switches or wires needed for any door security system you encounter.

Our new CS type hinge, on the left, hides a switch that passes on information about door entry. It can activate alarms, monitoring devices or other sophisticated security equipment. Our CE type hinge, right, has 4 or 8 wires to power any number of devices relating to a door — electric locks, panic bolts, hold-open devices.

This hinge can also transm signals from a code reader o the door to a remote compute for access control.

Sure, they're just good looking hinges, once installed But they can't be tampere with, won't fail you. For full, secret information write Stanley Hardware, Division of The Stanle Works, New Britain, Conn. 06050. In Canada The Stanley Works of Canada, Ltd.

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Circle No. 380, on Reader Service Car

Products continued from page 152

Mohair plush for contract interiors, woven in Holland, has a 100 percent mohair pile in 27 contemporary colors having a high colorfast rating. Adaptable for modern or traditional upholstery, wallcovering, it may be treated with stain repeller and is available with acoustic backing. Design Tex West.
Circle 122 on reader service card

Loveseat. Butcherblock framework in maple, oak and other hardwoods and upholstery colors to match any floor or wall coverings, unit is designed for use in study or recreation areas as well as in office reception areas and lounges. Thompson Manufacturing.
Circle 123 on reader service card

Wallcloth is composed of four successive layers: a woven cotton backing for dimensional stability, a layer of vinyl reinforced with natural and synthetic fibers for strength and bulk, a layer of pigmented acrylic vinyl for decoration and long wear, and a layer of clear vinyl chloride for resistance to staining and for scrubability. Suitable for commercial interiors subjected to heavy transient traffic. Textured effects of cork, bark, burlap, macrame, batik plaids and moire, as well as wet looks, foils and geometrics, florals and novelties come in 150 colorways with flat, flocked, embossed and engraved finishes. Imperial Wallcoverings.
Circle 124 on reader service card

Powr-Closer. Designed for solid-core wood or medium weight metal interior doors up to 3'x7', 85 lbs maximum weight, which are not subject to excessive drafts or winds. Closer is made of precision-formed steel, has sealed unit with built-in preset performance, requires no adjustment. In plated dull brass, chromium, aluminum and beige enamel, it is UL listed and meets requirements for a corridor door self-closing device. Leigh Products, Inc.
Circle 125 on reader service card

Anti-graffiti. Ceramicoat is said to offer a tough abrasive-proof film with the appearance and hardness of glazed tiles, be resistant to spray paint and marking-pen graffiti, which wipes off easily. It can be brushed or sprayed onto all forms of masonry, metal, wood. Will last 15 years. Flair Products, Inc.
Circle 126 on reader service card

Smok-Chek. Combination door release/door closer can be used for independent door control or fire alarm systems. Eliminates need for separate closer and door release, permits doors to remain open until activated by remote smoke or ionization detector, fire alarm, sprinkler system or manual switch. Surface or concealed wiring for existing or new installations. Rixson-Firemark.
Circle 127 on reader service card
[continued on page 160]

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What every commercial interior designer should know: Gulistan® Carpet offers seven different carpet patterns especially engineered to take heavy duty wear. Design your own color combination from a group of 42 yarn colors. All in anti-static, Zefran® Blend CR-4 from Dow Badische. For an appointment to choose your specific needs, contact Ed Cassinelli, Contract Manager, at (212) 575-2298.

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GULISTAN® CARPETS
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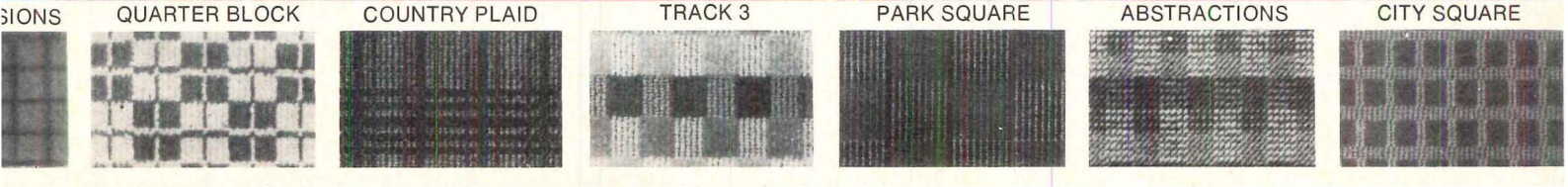

Products continued from page 157

Contemporary chairs. One in a Parsons design has heavy square-tube steel frame finished in chrome; seat and back are foam-padded and available in wide range of cloth and vinyl fabrics. Chair height, 31½ in.; seat height, 17½ in.; overall seat 20″x18″; floor area, 20″x22¼″. Tubular chrome chair with a sling-back look has a one-piece curved plywood seat and back panel topped by a criss-cross sling arrangement of foam-padded seat-back and arm cushions fastened with chrome buttons. Choice of fabrics. Dimensions are 21 in. in height; 17½ in. seat height; 18″x17¾″ seat overall; 25″x25″ floor area. B. Brody Seating Company.
Circle 128 on reader service card

Literature

Contract carpets. A series of sample folders containing complete specifications and samples of the entire color line for each quality plus instruction for installation and carpet maintenance. Material is contained in standard size washable plastic loose-leaf binders. Nine carpets, nylons, acrylic blends and olefin fibers, are offered in the initial set. They include carpets with foam backing and built-in static controls. Sample folders for other fabrics will be added to the collection, which is available to architects, designers and specifiers. C.H. Masland & Sons.
Circle 129 on reader service card

'Lamp Selection Tips' is an eight-page brochure containing suggestions for new and existing incandescent lighting installations for hotels, motels, restaurants, shops, parking areas, interior and exterior building surfaces and more. General Electric Company.
Circle 130 on reader service card

Environmental ceiling system. Catalog includes information on system's four component installation; a plenum view of a module installed; illumination, acoustical and mechanical data; a specification guide on the system in general. Guth Lighting.
Circle 131 on reader service card

Fine art. A sampling of gallery's paintings, graphics and sculptures are shown in brochure. It also describes services available: restoration, framing, rentals/purchase plan, portrait painting, lighting accessories. Newman Galleries.
Circle 132 on reader service card

Acoustical ceiling system. Brochure includes installation details, product description, technical data, and full-color photographs of the Pyrotex 100 system in use. Design flexibility of semi-concealed suspension system makes it adaptable for use in schools and other institutional type buildings needing unusual configurations. Panels are available in fissured and non-directional fissured patterns, 12 ft wide, lengths up to 96 in. Meets interior finish flame spread requirements and is Class 25. Simpson Timber Company.
Circle 133 on reader service card
[continued on page 166]

Satisfying Supercritical Surgeons

Surgeons are trained to be supercritical of their work. And, their desire for perfection makes them supercritical of everything else, including the plumbingware they use and depend on.

So Eljer designed a new full line of hospital-styled plumbing fixtures and fittings to meet their most demanding needs. Besides the plumbingware shown above, you'll find more than 290 other hospital and commercial line products fully detailed and illustrated in Eljer's new "Hospital/Institutional Plumbing Fixtures and Fittings" catalog.

Hospital-styled plumbingware . . . one example of Eljer's ability to meet any commercial building need with a complete line of well-designed, quality commercial plumbing products.

If you're planning on satisfying supercritical commercial clients, you should have Eljer's new 62-page catalog on file. Send for the "Hospital/Institutional" catalog: Eljer, Dept. PA, 3 Gateway Center, Pittsburgh, Pa. 15222.

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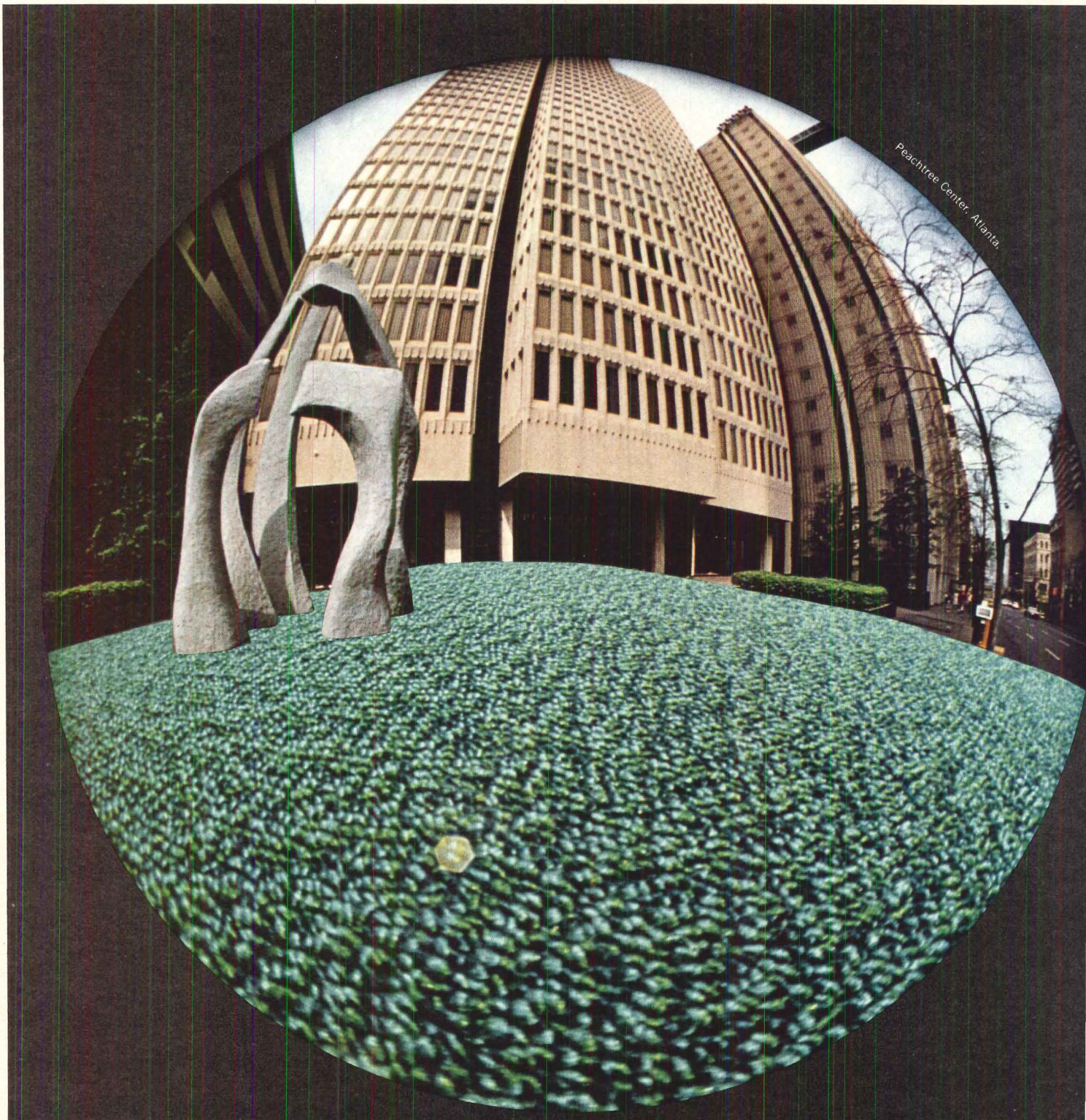

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. . . an attractive, sturdy carpet of 100% Antron® DuPont Nylon Filament in a unique, alternate twist pile that results in a most decorative random texture. Improved soil-hiding qualities . . . anti-static control by Brunslon. Available on foam or jute back. For conventional installations or direct glue-down. Exceeds FHA standards. 12′ width. 11 dynamic colors and color combos. Write for sample and specs. PATCRAFT MILLS, INC., Dalton, Georgia.

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Western States:
D. R. Stevenson, Atlas Asbestos Company,
833 Cundy Ave., New Westminster, B.C.

See our Catalog in Sweet's Canadian Construction File and Sweet's Architectural File

Products continued from page 160

Clocks for executive office building suites and corridors are featured in catalog. Contemporary as well as avante-garde styles are shown. Types range from round wall models to cubes, pedestals and grandfather clocks. All are hand crafted. Washington Clock Works.
Circle 134 on reader service card

Interior panels. A 22-page color brochure describes and illustrates the various architectural and interior design applications of Tectum panels as an acoustical textured interior surface in offices, churches, schools, apartments, homes and retail/commercial structures. Design data chart and sound performance tables are included as well as cross-section drawings detailing methods of installation. National Gypsum Company.
Circle 135 on reader service card

Architectural glass. Described in eight-page brochure are laminated safety, sound control, security and bullet-resistant glass as well as general glazing instructions for the products. Safelite Industries.
Circle 136 on reader service card

Reflective glasses. Performance data booklet includes product descriptions, spandrel and structural recommendations and maintenance, cutting and glazing procedures for single glazed reflective glasses. Also contains charts and tables related to availability, performance, heat transfer values, shading coefficients and wind load requirements. PPG Industries, Inc.
Circle 137 on reader service card

Rubber flooring. Suited for hospitals and nursing homes, booklet contains latest research report on flooring's resistance to chemicals and spillage as well as a bound-in sample of flooring. The R.C.A. Rubber Company.
Circle 138 on reader service card

Bath and shower units. Brochure describes and illustrates in color complete line of fiberglass units, provides dimensional drawings and information on tests units are subjected to. Eljer.
Circle 139 on reader service card

Fire protection building manual containing information on wood and plywood systems to meet code and insurance requirements. Illustrates floor, roof and wall construction techniques, case histories, sample specifications and background information on building codes and insurance provisions. American Plywood Association.
Circle 140 on reader service card

Identification system. 24-page catalog describes approach used, illustrates typical examples and gives complete specifications for various types of building signage, including lettering, materials, mountings, colors and finishes; also outlines architectural specifications. Jas. H. Matthews & Co.
Circle 141 on reader service card
[continued on page 172]

the new washroom:

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lavatories. Large capacity stainless steel waste receptacles reduce maintenance time. Bobrick "flush-front" laminated plastic toilet compartments and matching counter tops complete this up-to-date washroom.

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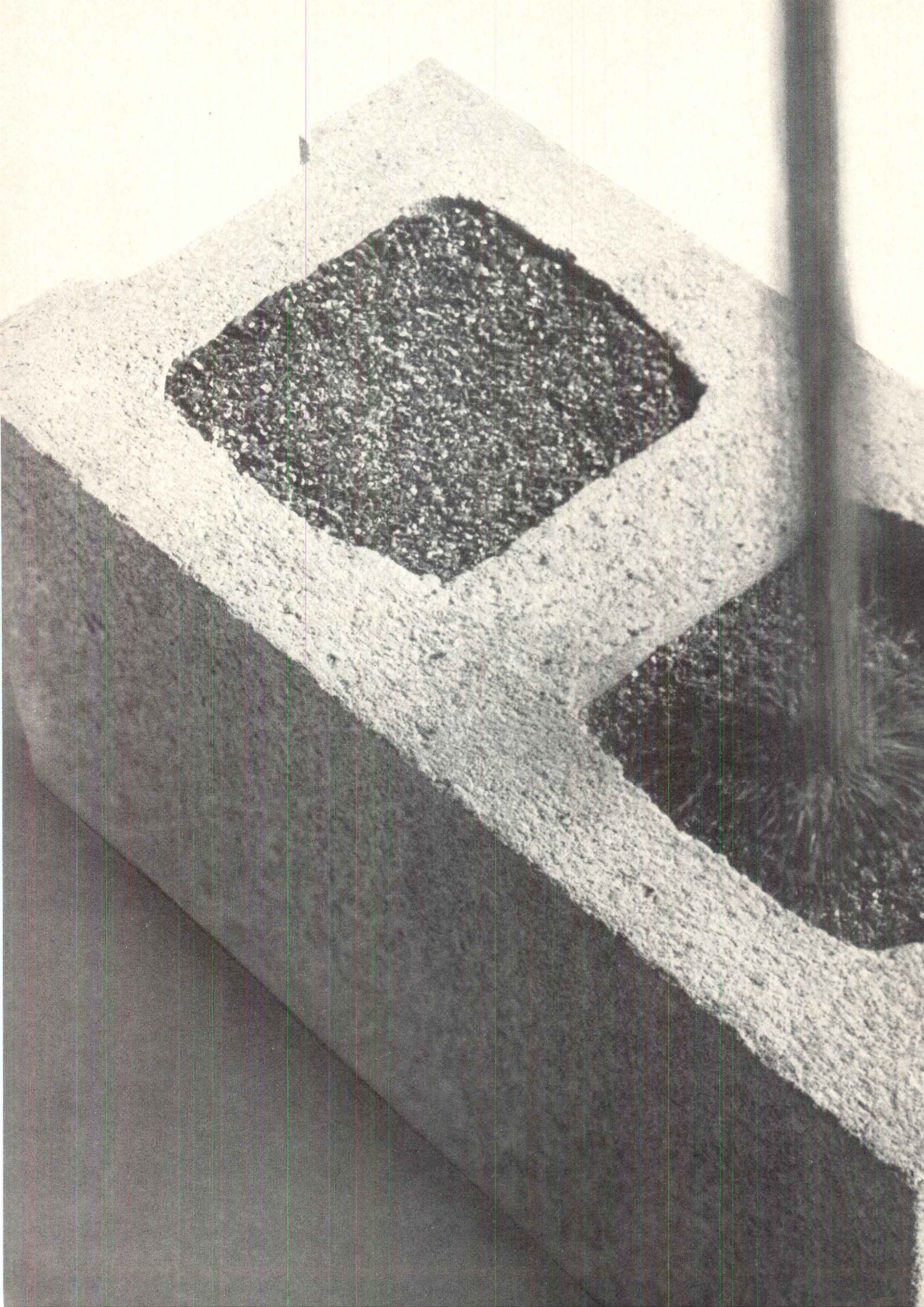
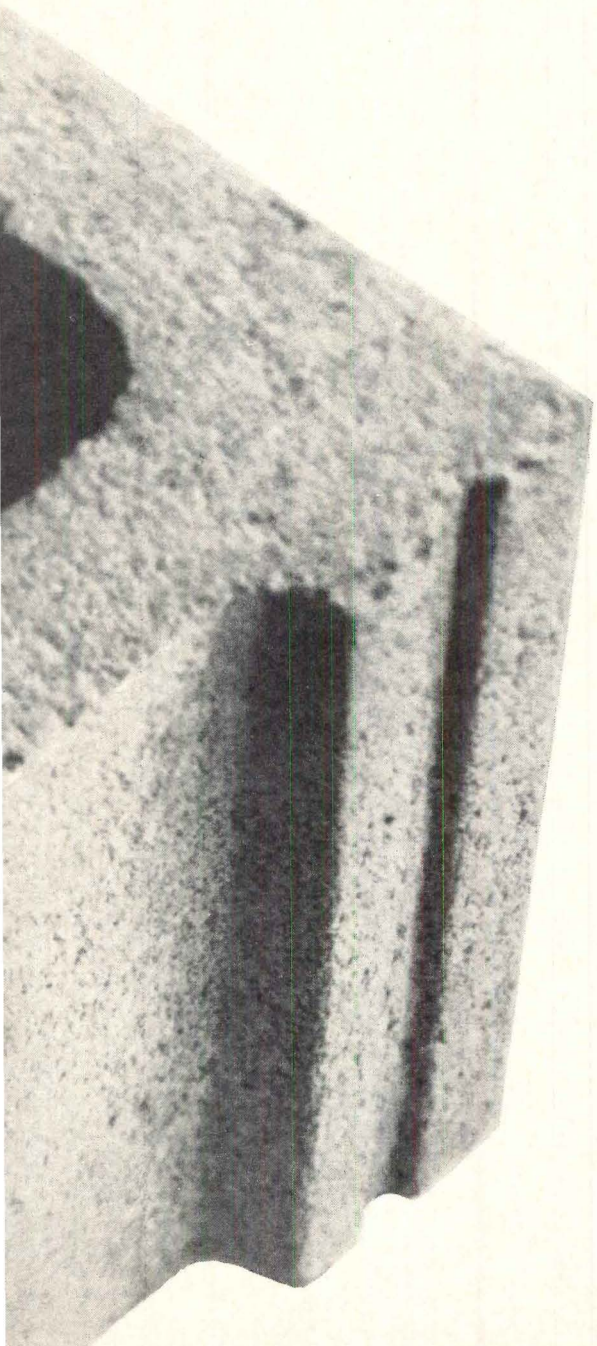
e No. 334 on Reader Service Card



For every dollar invested ZONOLITE Masonry Fill Insulation returns up to 48% every year.



ZONOLITE® Masonry Fill Insulation, poured into cores or cavities of masonry walls, usually reduces heat loss by 50%—and more in some cases.

To the owner, this means his insulation cost is paid back to him in two or three years. Then savings continue year after year. A fact that should be of importance to every specifier or builder.

Heating and cooling savings are impressive in every area. Example:

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Combined Heating/ Cooling Savings*	$6400	$3500	$8150	$6450	$5400
Installed Cost of Insulation	1700	1700	1700	1700	1700
Average Annual Return on Insulation Investment	38%	21%	48%	38%	32%

*10-year savings from insulating walls; 8″ lightweight block; 2-story office building, net exterior wall area 10,000 sq. ft.

The new FHA standards for multi-family housing require masonry walls to have a heat loss factor ("U" value) no higher than .17. ZONOLITE Masonry Fill is the most economical way to bring block walls into conformance—as low as 17 cents per square foot installed, for 8″ block.

In addition to cost savings, consider these important features:

Improves comfort—Inside wall temperatures are increased up to 13°F. in winter. Body-to-wall radiant heat loss is reduced. Greater comfort results. Summer conditions are improved, too.

Increases fire resistance—Adding ZONOLITE Masonry Fill to a 2-hour fire-rated lightweight block gives more than four hours extra protection—earns 4-hour UL rating.

Cuts sound transmission—Users report that Masonry Fill in exterior or party walls improves the sound resistance.

For full information, contact your ZONOLITE sales office. Or send for booklet MF-164A, to Construction Products Division, W. R. Grace & Co., 62 Whittemore Avenue, Cambridge, Mass. 02140.

GRACE

CONSTRUCTION PRODUCTS

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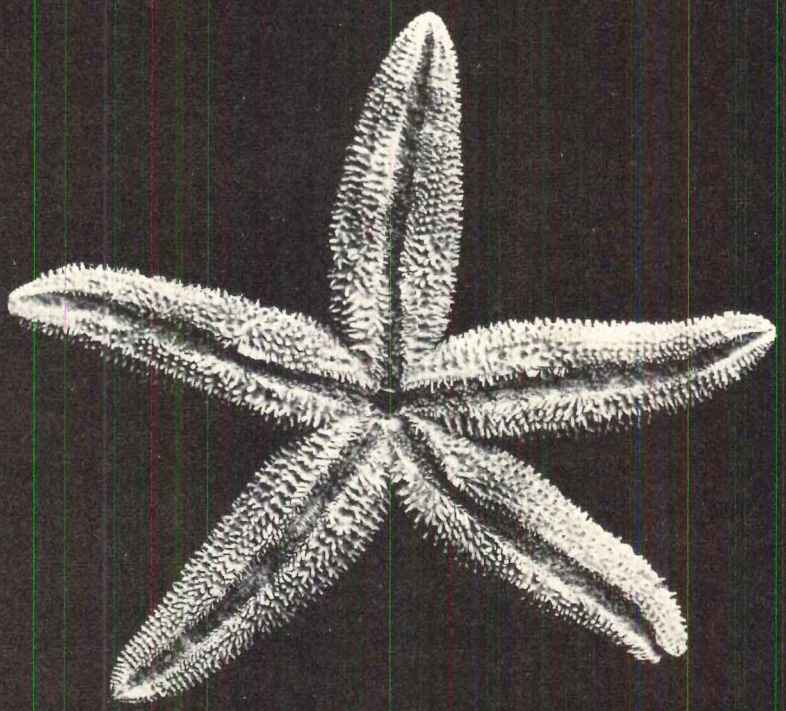

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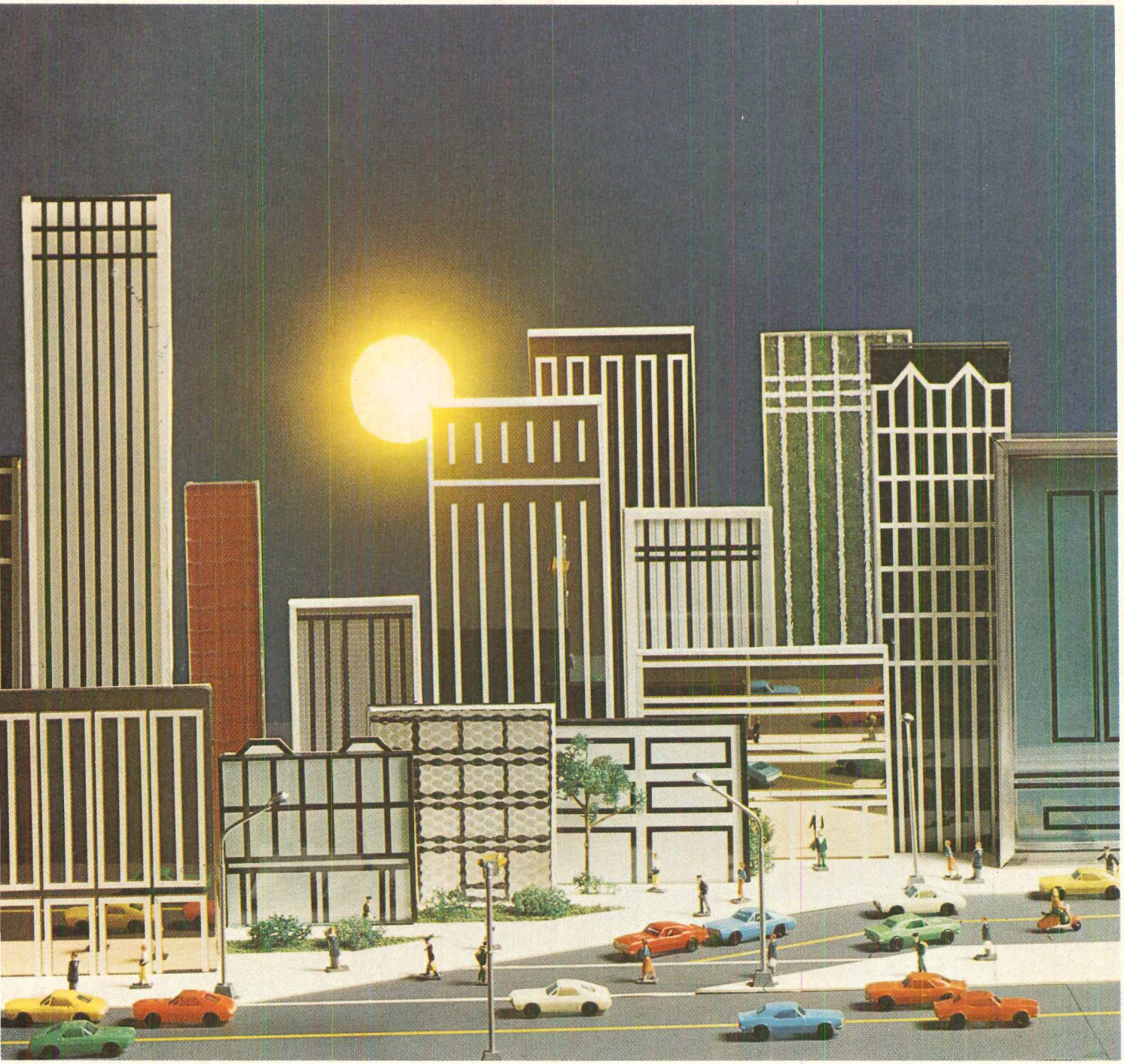

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The Glass Company P.O. Box 929, Kingsport, Tennessee 37662
CREATIVE IDEAS IN GLASS

Products continued from page 166

Laboratory apparatus. 96-page color catalog features designs in laboratory fume handling equipment, fiberglass safety enclosures, laboratory carts, glassware washers, Kjeldahl apparatus and more. Detailed charts and data for selecting proper components are included. Labconco Corporation.
Circle 142 on reader service card

Library furniture. Bookstacks, study carrels, exhibit cases and coordinated furniture to completely equip libraries or in-service educational facilities. Landscape system for librarians offices, counselor stations, individual study stations are also shown in brochure. Reflector Hardware Corporation.
Circle 143 on reader service card

Supergraphic murals collection. Each of the 14 designs and 63 colorway in the Kaleidoscope supergraphic mural collection is illustrated in a full-color brochure. Included is a six-page multi-lingual fact sheet which contains specifications and illustrates uses. James Seeman Studios, Inc.
Circle 144 on reader service card

Partitions Plus. A structural system that is said to permit a work station to be moved for as little as 30¢ per sq ft. Two basic elements are used: an anodized aluminum framework plus any panels desired, glass or hardwood in any thickness. Configurations of 45, 60, 90 or 120 degrees are possible and system permits incorporating existing furniture into work stations. No height limitations for partitions, and ceiling panels are optional. Literature. Syma Structures, Inc.
Circle 145 on reader service card

Cobblestone paving. Fishscale cobblestone is one of the many paving patterns available in company's colored and patterned concrete; others simulate the appearance and character of brick or tile in a wide variety of patterns, colors, and textures. Bulletins contain complete information. Bomanite Corporation.
Circle 146 on reader service card

Classroom furniture is shown in 32-page color catalog along with wide array of supplementary furnishing such as mobile cabinet wall and media center components. All are suitable for either open plan or traditional schools. American Seating Company.
Circle 147 on reader service card

Roof deck systems. Booklet documents ways roof decks lower heating and cooling bills and conserve energy with properly insulated buildings, help reduce unwanted noise and comply with OSHA standards. School, shopping center, industrial plant and other institutional commercial building application. United States Gypsum Company.
Circle 148 on reader service card

Acoustics. Design guidelines, technical data, estimating information and application data and specification for Geocoustic acoustical units for sound control are described in brochure. Pittsburgh Corning Corp.
Circle 149 on reader service card

Wall panels shown in brochure are carried on discs in overhead track to any point in open plan one at a time, by anyone, at any time; they can be placed anywhere along the overhead track in either flat or 45 or 90 degree angular arrangements to create complete walls or landscape screens for large or small study/meeting groups. Available in full-height chalk and tackable surfaces. Panelfold Doors, Inc.
Circle 150 on reader service card

Commercial lighting systems. A 12-page catalog combines into one reference book a complete line of commercial lighting systems using High Intensity Discharge (HID) lamps. Publication includes typical data, coefficients of utilization and lighting system NC (sound) ratings to assist lighting users. General Electric Co.
Circle 151 on reader service card

Gravity conveyors. Catalog contains data on wheel and roller conveyors and accessories, which include portable and permanent stands, wheel and roller gates, guard rails and spur curve switches. Rapistan.
Circle 152 on reader service card

Rolling metal doors. Catalog presents comprehensive architectural details on these and fire doors, rolling grilles, rolling pass window shutters in standard and packaged units, fire shutters and sliding grilles. All products are available in a wide range of sizes. Cornell Iron Works, Inc.
Circle 153 on reader service card

Fluorescent dimming system. Described in four-page brochure is no-flicker, no-swirl 120- or 277-volt dimming system for commercial and industrial users. Includes voltage ratings, descriptions and specifications of the three components of system (intensity selector, dimming auxiliary, dimming ballast) and installation procedures as well as description of available options. General Electric Company.
Circle 154 on reader service card

Fiberglass draperies. "The Feneshield System" of drapery selection for large, multi-windowed buildings, and how to use them to control solar light, brightness and radiant heat through windows of high-rise buildings is described in 20-page color booklet. Shown are how openness of fabric and its degree of color—light, medium, or dark—perform under various environmental conditions. Technical information and cost comparison are included. PPG Industries, Inc.
Circle 155 on reader service card

Compactor. An eight-page brochure on the Pollution Packer on-site solid waste and refuse control systems and accessories for commercial and industrial applications is available from The Tony Team, Inc.
Circle 156 on reader service card

Modular panels, curtain wall. Working to designs, colors, insulations and fastening systems created by the architect or designer, this maker produces panels with clad interiors and/or exterior surfaces in paint, enamel, plastics, aggregate, wood grains, weathering and galvanized steels. Panels can also be used as nonload-bearing movable walls within a building. Brochure. Lusterlite Corporation.
Circle 157 on reader service card

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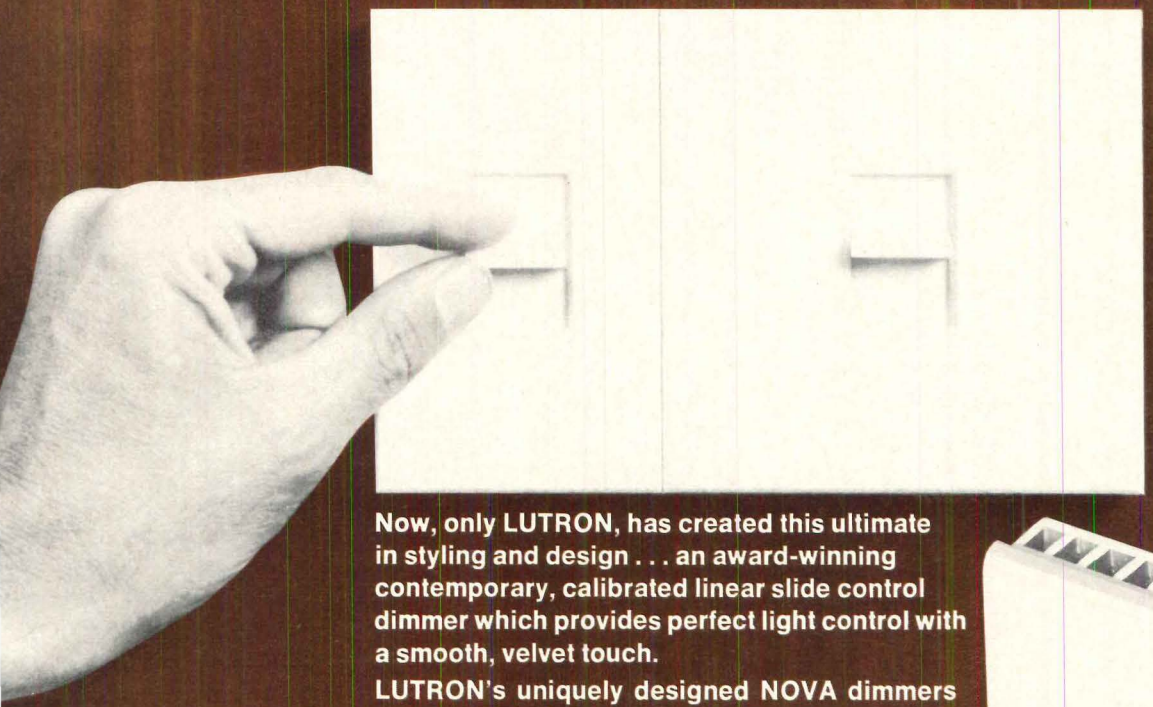
. . . time has long passed when lighting was only meant to illuminate . . . Todays sophisticated architects can now design lighting for anticipated activity. The LUTRON NOVA DIMMER makes possible an environment which literally speaks . . . quietly, boldly, joyfully, subdued . . . precise lighting for every occasion . . . to enhance any setting . . . professionally . . . as dramatic as theater*. . . perfect for institutional, commercial or residential design.

LUTRON DIMMERS™ SAVE ENERGY



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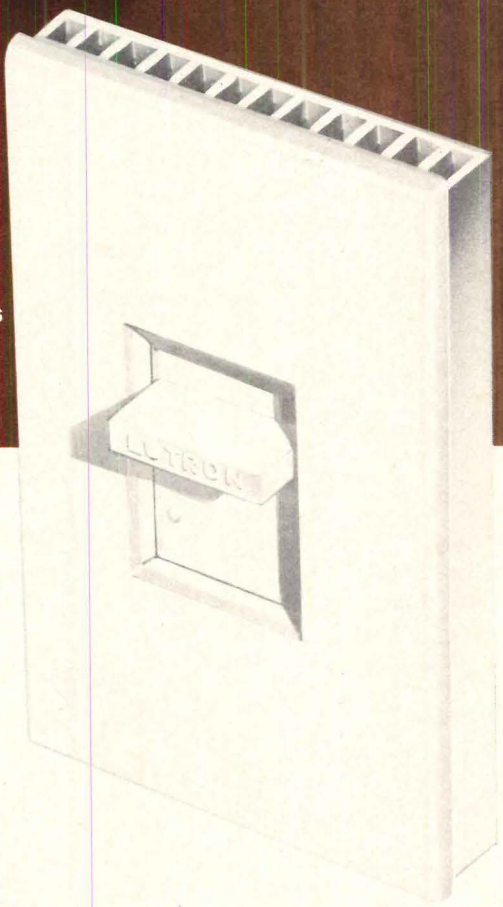
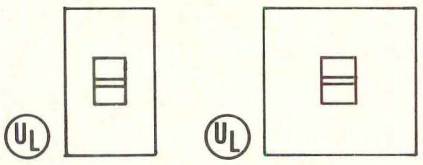
LUTRON's uniquely designed NOVA dimmers are available for both FLUORESCENT and INCANDESCENT lighting . . . NOVA's precise engineering allows for any combination to be ganged without breaking off hidden fin sections and meets tough UL standards in all models.

*features SQUARE LAW DIMMING previously available only in expensive theatrical equipment.





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FLUORESCENT
10 Lamps

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1500/2000 Watts
FLUORESCENT
20/30 Lamps

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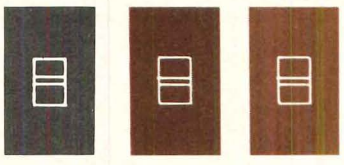
SWITCHES
NOVA switches provide decorative coordination with NOVA dimmers. Single pole, 3-way, 4-way.



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Circle reader service card No. 404 for more information on LUTRON'S Custom Dimming Systems and over 350 other dimmer models.

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a color-spangled new
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dtones. Splashing
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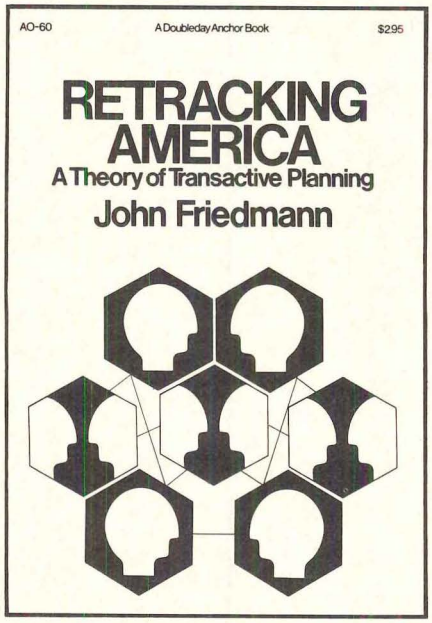


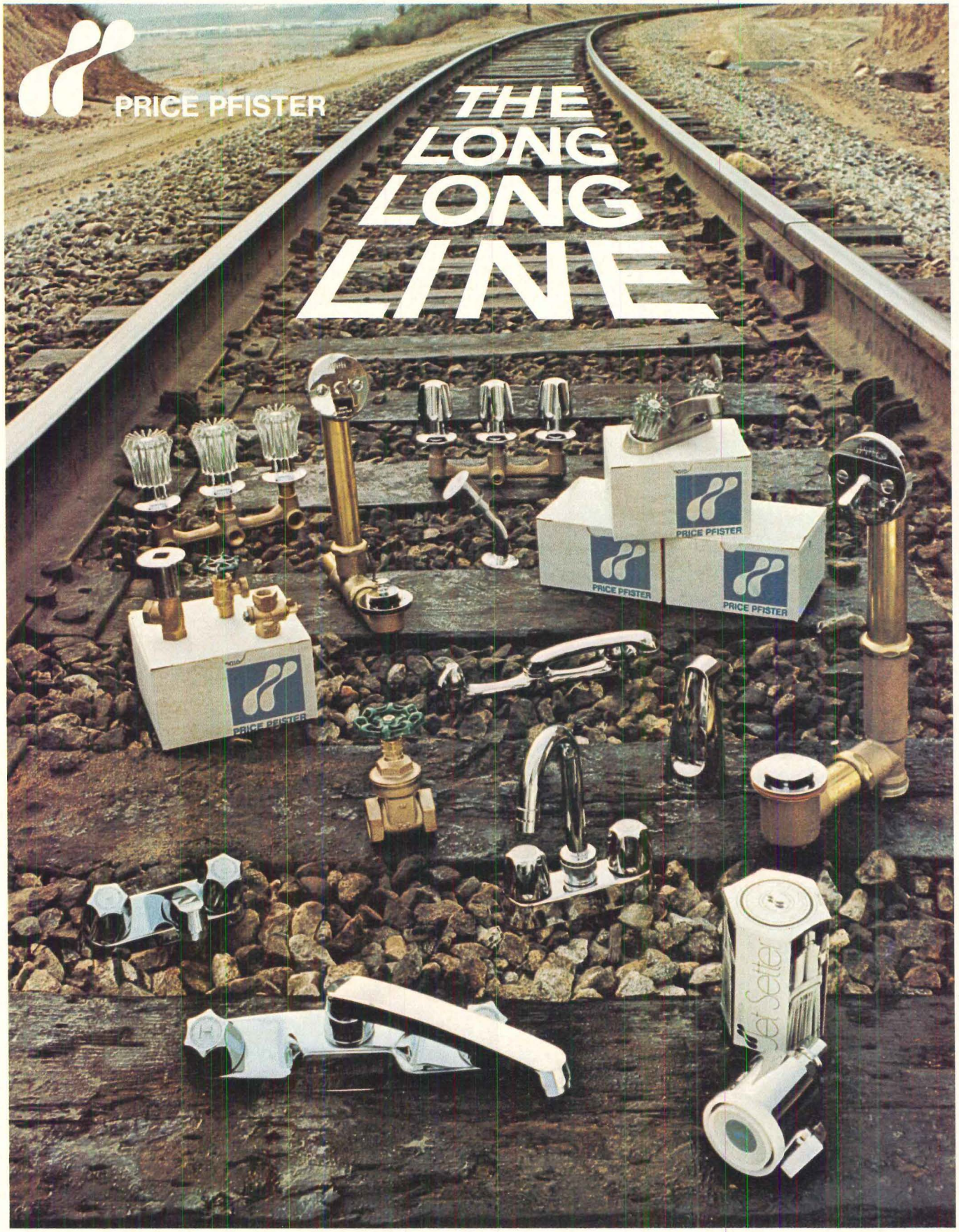
Retracking America: A theory of transa tive planning *by John Friedman. Garde City; Anchor Press/Doubleday, 1973, 2 pp., $7.95, $2.95 paperbound.*

Reviewed by Michael and Susan Sou worth, partners in a Boston city and re gional design firm.

John Friedman wants to retrack Ame with transactive planning, an approach that gives central importance to inter- personal relations in planning. It has ha certain vogue in the U.S., reaching a hi point of religious fervor in 1970 beyond watershed of group therapy, sensitivity training and Eric Berne. In reacting aga current planning practices, which the a thor considers to be too static, cerebra and uninvolved, he attempts to lay the foundations for a new "societal guidan system" that would theoretically allow citizens to spend most of their lives par pating in planning.

The new structure is based on task-o ented working groups—small cells of twelve people at most—that organize s taneously across the nation around an sue. Assemblies of groups organized a corporate and supra-corporate levels g legitimacy and formal authority to indiv ual working groups. The lowest level a sembly is composed of all members of eight working groups. Ten of these me bers are elected to a higher assembly, ten of those to a higher one, and so on "until the entire corporate structure is hausted." Exhausted, indeed! Delegat

[continued on p 182]



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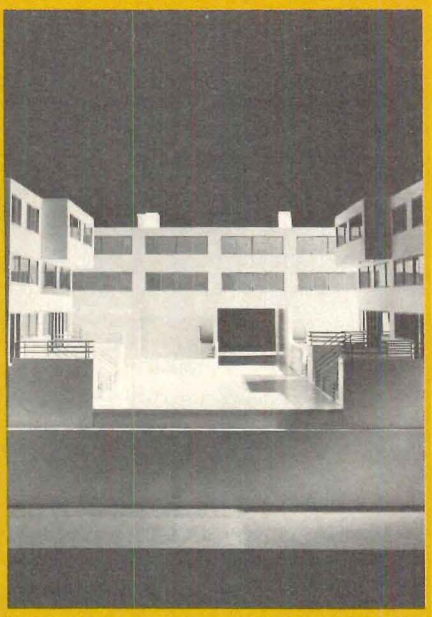
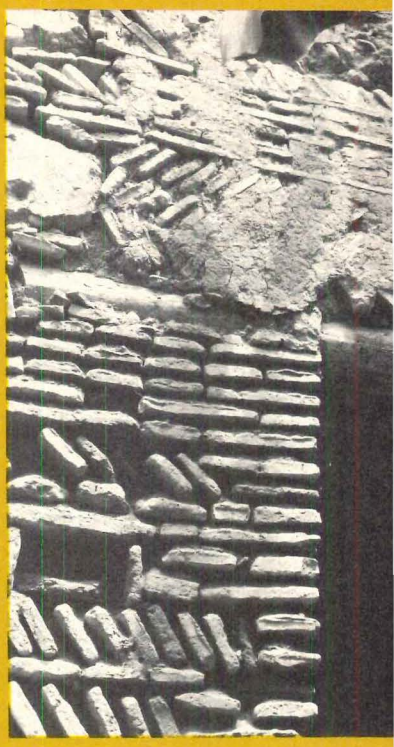
Coming in the December P/A

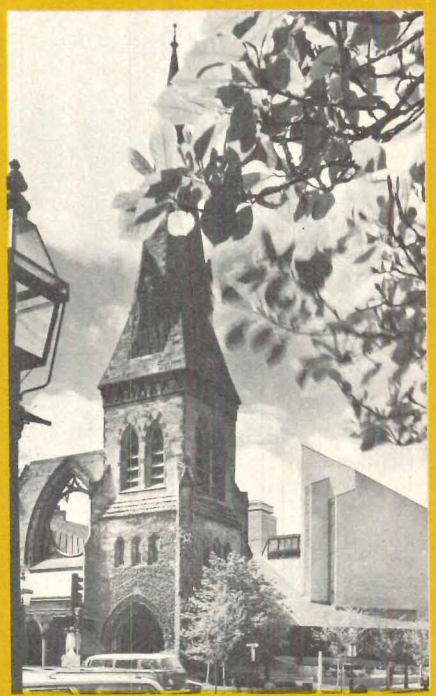
Following three special issues on the subjects of Lighting, Parkitecture, and Interiors, the editors of P/A will wind up 1973 with a diversified issue covering points all the way from Morocco to Texas.



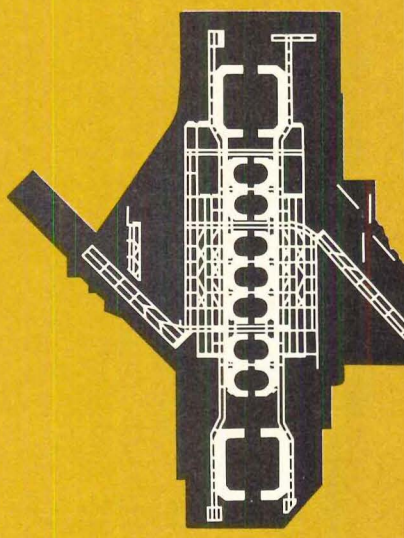
Low-rise high-density housing: New York State's Urban Development Corporation, in search of an alternative to high-rise family housing in densely populated areas, commissioned the Institute for Architecture and Urban Studies to develop a low-rise prototype, which is now under construction in Brooklyn and in Staten Island.



Dust-to-dust architecture: Through perceptive photographs and commentary, architect Richa Bender shows the natural recycli system of traditional Moroccan construction.



Rudolph rebuilds a church: The stone tower and charred front wall of a burned-out church in Boston's Back Bay are integrated into one of Paul Rudolph's most intriguing spatial compositions – reflecting a new kind of church-community relationship.

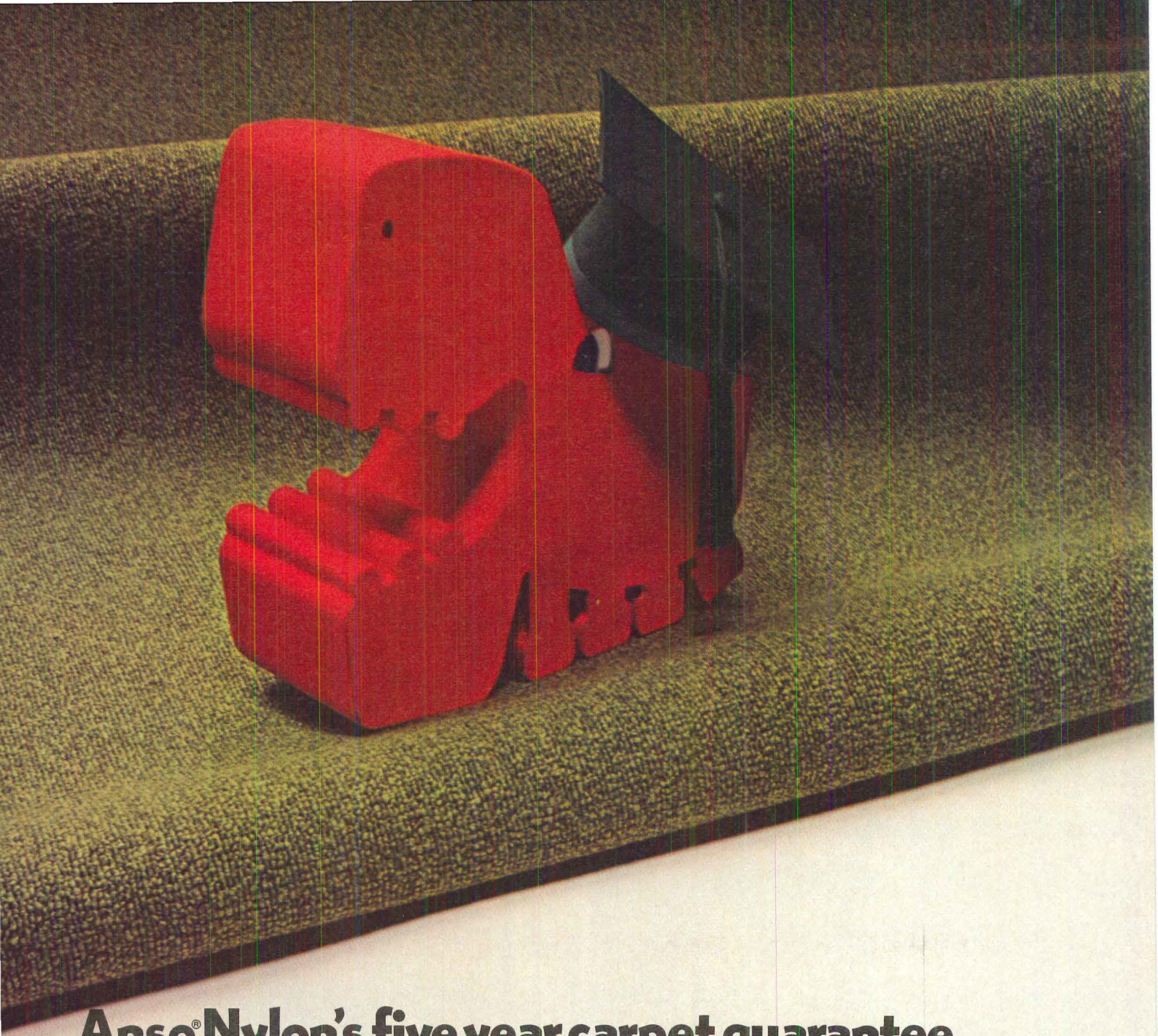


Texas goes international: The newly dedicated Dallas-Fort Wo Airport, aside from being merely colossal, is described locally as planned for the year 2001.

P/A annual business survey: T highly respected forecast is bas on reports from architects them- selves about their own anticipat projects.

Coming in January 1974: the publishing event of the year, for 21 years, the annual P/A Awards Issue.

Progressive Architecture
600 Summer Street, Stamford, Conn. 06904



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Books continued from page 176

from corporate assemblies would then participate in the activities of supra-corporate assemblies that would tie into policy-making bodies at central government levels.

Professor Friedmann's proposal is somewhat similar to that of citizens electing city council members who elect state representatives, who elect national representatives, who elect the president and vice president. If one fourth of the U.S. participated in this system there would be about 60 million different groups organized into a pyramid of 11 hierarchial levels.

On top of these multitudinous layers there would be a technical secretariat with incredible powers. "In addition to the specific services they perform for working-group assemblies . . . they also engage in policy analysis, program monitoring, the measurement of system states, program evaluation, short-term forecasting, experimental system design and testing and technical assistance, system-wide integration and the balancing of working group efforts." Pure research agencies would also exist and be independent of any external control. As proposed by this book, planners would have far more power than they do in America today, and there would be little external control over them.

We recognize that the proposed tran tive guidance concept is embryonic, bu we cannot ignore the inherent problem How will a system which depends upon spontaneous organization come about society as seemingly satisfied and com cent as ours? Moreover, experience ha shown that groups needing representa the most are often those least likely to ganize and to participate. How could o assure the representation of minority c cerns through this complex hierarchy, ery step of which offers the opportunity majority control? How are conflicts with and between groups resolved? How is tinuity achieved? How are resources al cated? Once the elaborate communica tions network is established, it could become an instrument for coercing a s ety to conform to tyrannical goals.

How does the author reach such a p tion? He assumes modern planning to an outgrowth of human engineering—t assignment of human bodies to work items—which is applied to such things production quotas. But this model doe not fit environmental planning, and he tends to apply it to all branches of plan ning. However, while Professor Friedm cautions that this style of planning is d rived from a scarcity situation, he is co vinced that the U.S. does not experien scarcity as a nation. But how many Am cans have an abundance of energy fue urbanity, clean air or meat?

Many will view this book as old-fash- ioned in that it assumes a traditional ex pertness which has been entirely dis- carded by radical members of architec and planning. Nevertheless, there are eral worthwhile elements of the book. does attempt to find an alternative to t current railroading of our nation into p tions which offer our citizens no choic transportation, housing or life style. W should take seriously the author's criti analysis of our nation-wide journey tow "a monitoring system of social indicat . . . whose repository of quantitative m els spews out appropriate answers." T section of the book is highly recomme to those in awe of the computer mode social planners or housing experts.

Professor Friedmann concludes tha quality of a society ultimately depends upon the character of its individuals, a that social change should therefore be rooted in the individual. This is an ana truth repellent to many, but then no pr cess for human engagement guarante liveable results, at least thus far.

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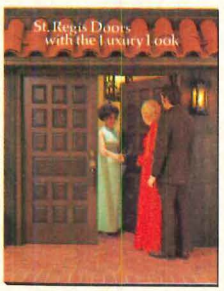
Open invitation to gracious living.

The richly carved wood panels and hand-cast grilles of these *Valencia* style doors express her taste—her lifestyle. They add the character and individuality she looks for in a home. And *she's* the decision maker.

The elegance and quality of these carved wood panel doors are great persuaders to house-hunters. *Valencia* is only one of the many styles in our line of solid quality doors of exotic Malaysian Meranti, old-growth, vertical grain Douglas Fir and West Coast Hemlock—machined and assembled by skilled artisans. Many styles are available to fulfill your special design requirements and your clients' taste. These impressive doors open the way to years of client satisfaction.



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Architect/instructor: Community college with rapidly expanding architectural program offering diverse courses is seeking an individual to teach in the areas of architectural graphics and design. Professional degree required; teaching and practical experience preferred. Please send resume stating education and experience to: Professor John Santosuosso, Chairman, Department of Engineering and Architecture, Mercer County Community College, 1200 Old Trenton Rd., Trenton, N.J. 08609. An Equal Opportunity/Affirmative Action Employer.

Architect/land planner: Major national development corporation headquartered in Dallas has an opening for an architect-land planner. This senior position offers an unusual grow opportunity for the executive with the right attitude. Applicants must be university graduates, have N.C.A.R.B. regis tration, must have proven experience in la planning, and be a member of the America Institute of Planners. Only qualified professionals need apply. Staff advised about this ad. Centex Homes Corporation, a sub sidiary of Centex Corporation. Please send samples of freehand sketches of work together with resume. Reply to Box #1361-5 *Progressive Architecture.*

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[continued on page 186]

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Job mart continued from page 184

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Wanted: Apprentice architect. Country stuc of leading residential firm. Good graphic skills. Field work and drafting. Salary plus room and board. Write: P.O. Box 171, Bridgehampton, New York 11932.

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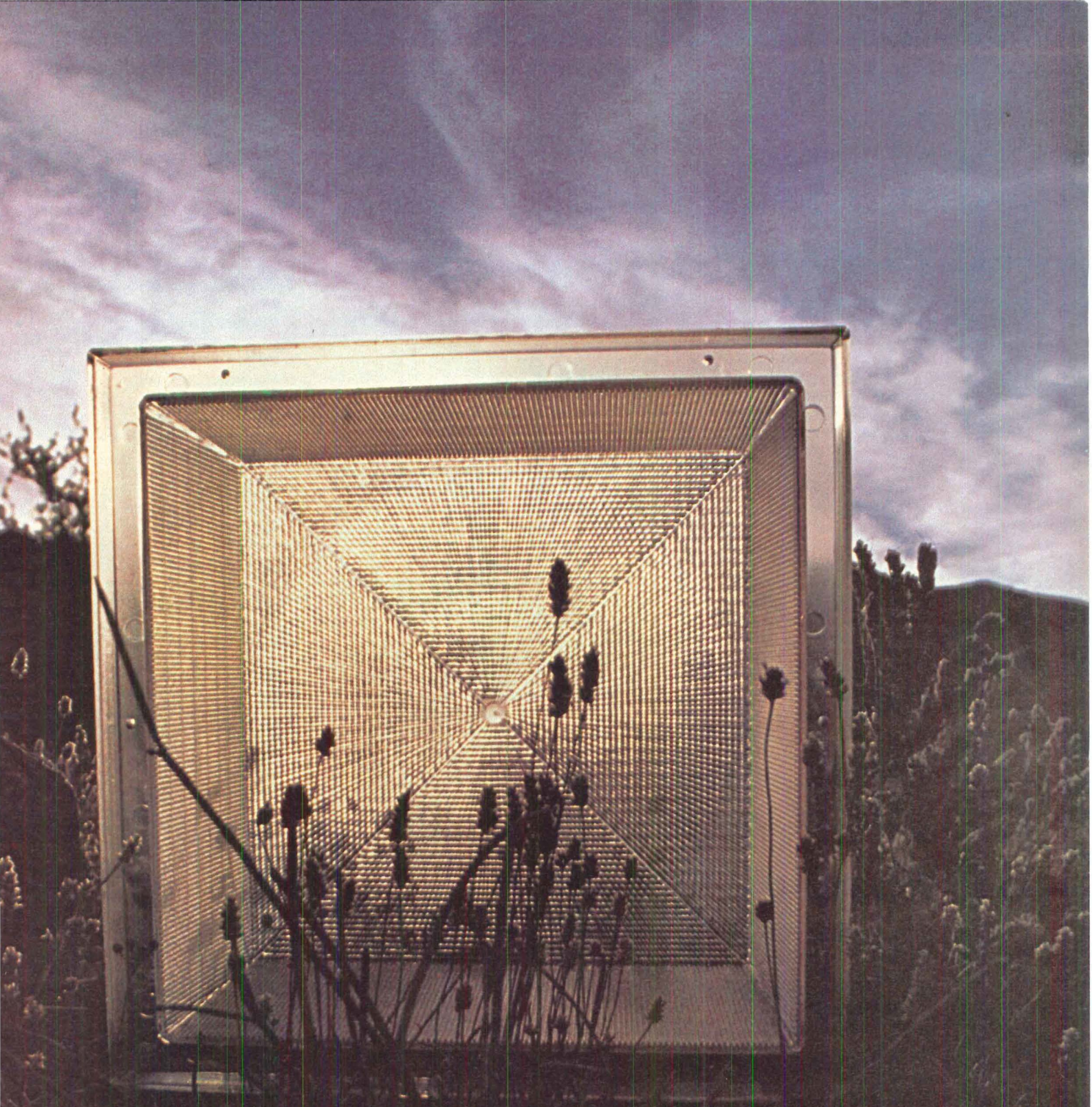
Architect: Seeking special opportunity to earn or purchase partnership in a small es lished firm or larger firm with additional potential. Presently office manager and ch architect for medium size A-E office. Anxio to demonstrate design ability. Experience, financial and management responsibility. Enjoy client rapport. 38, 3 children. Reply Box #1361-597, *Progressive Architecture.*

Architect: NCARB, AIA. Currently officer, p ect architect and administrator in 100 mar [continued on page 188]

Advertising Rates

Standard charge for each unit is Fifteen Dollars, with a maximum of 50 words. In counting words your complete address (any address) counts as five words, a box number as three words. Two units may be purchased for thirty dollars, with a maximum of 100 words. Check or money order should accompany advertisement and be mailed to Job Mart c/o Progressive Architecture, 600 Summer Street, Stamford, Conn. 06904. Insertions will be accepted not later than the 1st of the month preceding month of publication. Box number replies should be addressed as noted above with the box number placed in lower left hand corner of envelope.



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Architectural engineer: 43, twenty years international experience in N. & M. East, Europe and USA in design and building supervision: schools, cinema's, condominium housing, & industrial buildings and teaching architectural design seeks position with progressive firm. For resume contact: B. E. Labib c/o A. Wirth, 658 Craig, Chapel Hill, N.C. 27514.

Architectural graduate: 29, single — M. Arch. 2½ years office experience, desire permanent challenging position in design firm. Reply to Box #1361-601, *Progressive Architecture.*

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International consultant architect-planner: Experience in 45 countries, most U.S. and international agencies. Assist you in problem identification from culture to currency, as coordinator of total project development. Will work in country, my office or yours. NCARB. Who's Who in America. Michael M. Kane AIA, 43B King St., Christiansted, St. Croix, U.S. Virgin Islands, 00820, phone (809) 773-0371.

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Affiliation: Small New York City progressiv architectural firm seeks joint venture with out-of-town architectural or engineering fir [continued on page 190]

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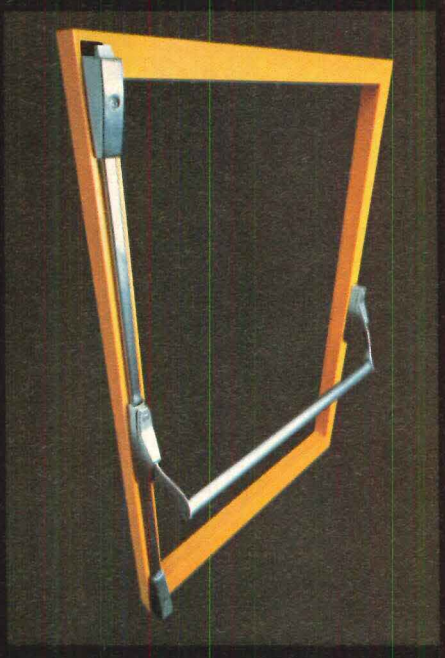

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