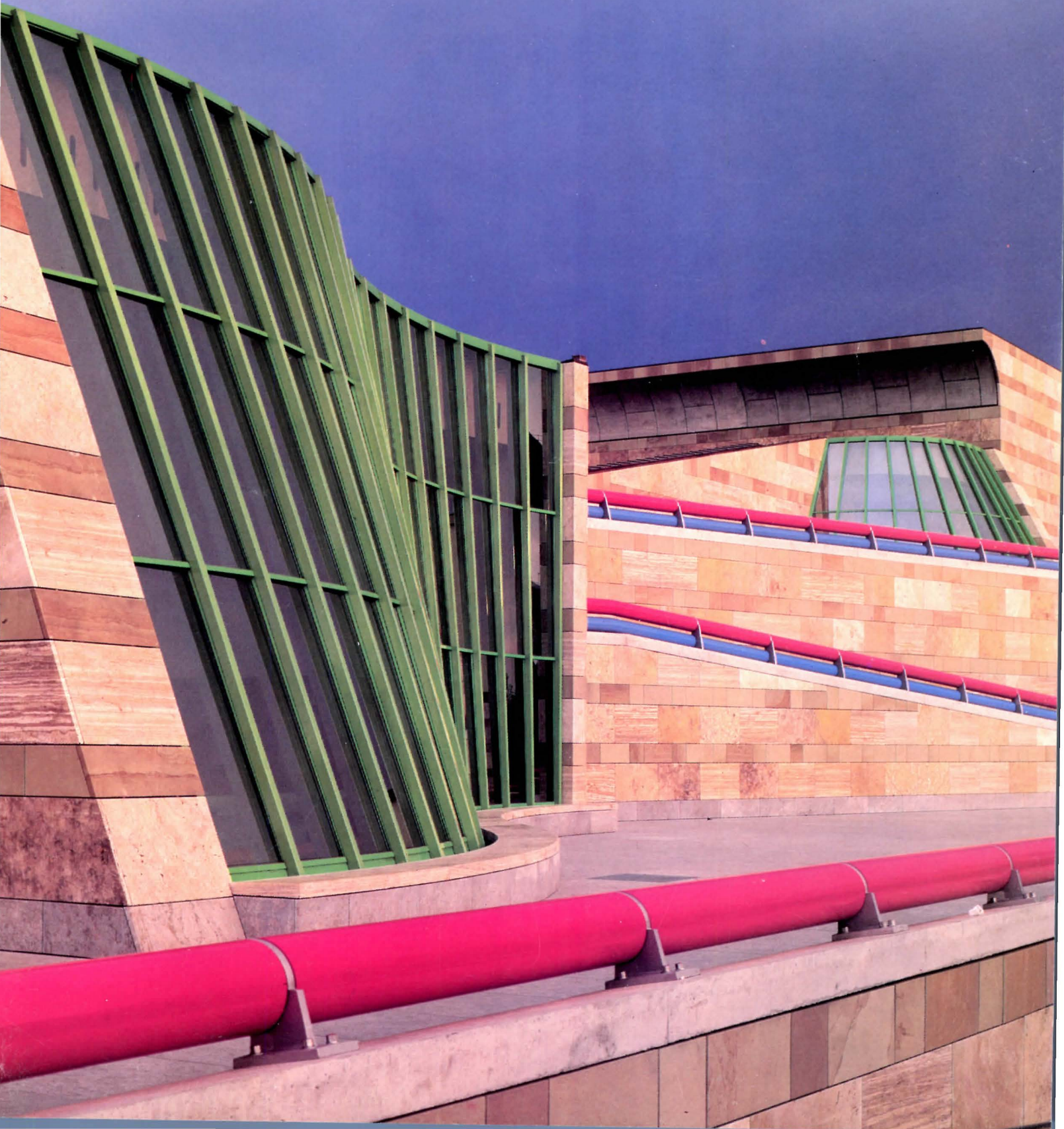


ARCHITECTURAL RECORD

Business Design Engineering
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September 1984



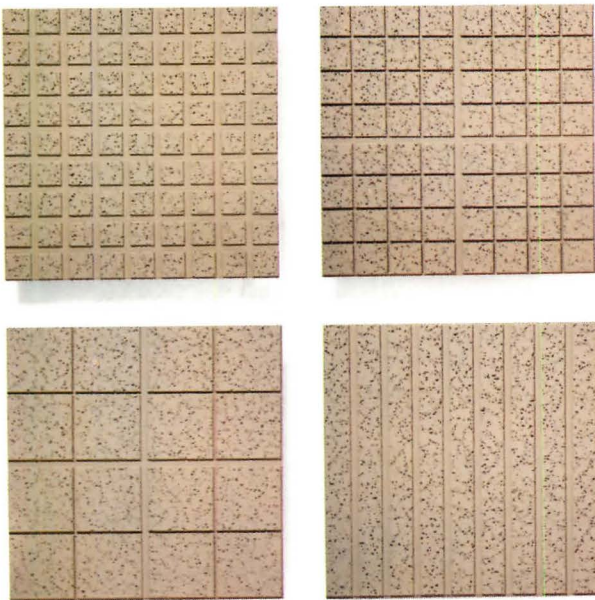
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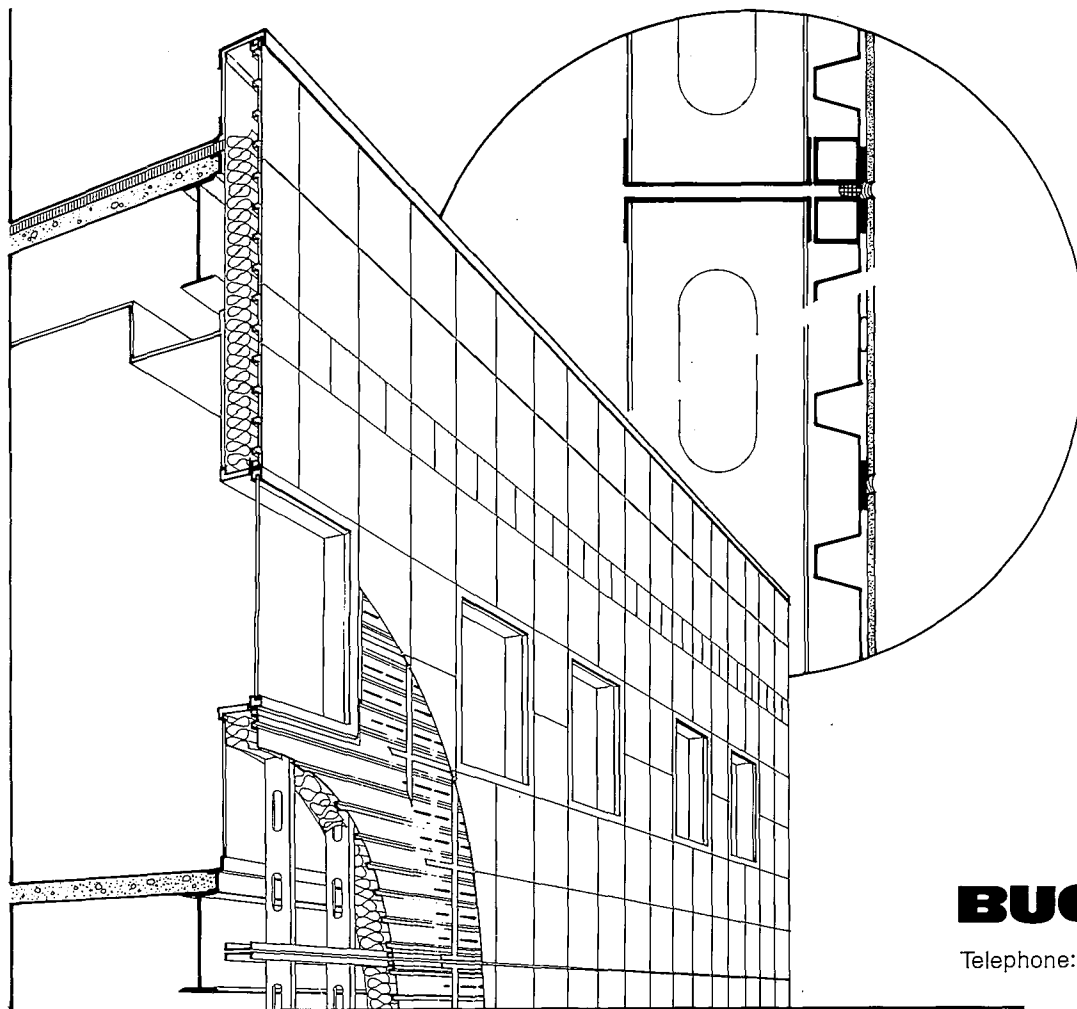
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Circle 2 on inquiry card

While I found the account of the RECORD Round Table on architectural education interesting [RECORD, June 1984, page 49 et seq.], basic issues were not really considered.

The first issue is the diversity of skills and specialization demanded by the complexity of the construction process in our time, the size of the projects, the functional, quickly changing requirements established by technical advances, budgeting, building codes, environmental considerations, changing expectations of the people using our buildings. . . . I need hardly continue since we are all familiar with the elaboration of means now customary.

Second, as many have observed, architectural schools all think of themselves as schools of *design*, i.e., all courses are *service* courses except design, and students who may be excellent thinkers and even devoted to architecture are considered second-class citizens. Yet it is obvious that only a few have the gift, and equally obvious that every Sullivan needs his Adler.

In the Round Table article, Dean William McMinn said there were 91 accredited programs in architecture and some 35,000 architectural students, the bulk of them just out of high school and in the large state universities. Just imagine if these schools designed their programs to conform to reality by recognizing the complexity of the task and the normal abilities of typical students.

I outlined such a curriculum in the *Journal of Architectural Education* (Vol. XXXV, No. 1), the essence of the outline being that (a) all students are taught to love and understand architecture—or, rather, the built environment—as an expression of human community and aspiration, and (b) the design of such environments calls for a multiplicity of abilities working together—a team each with a specialty, all with a general knowledge and appreciation of the end sought, all contributing to that end.

Percival Goodman, FAIA
New York City

In reading your June 1984 article concerning the state of architectural education, apprenticeship and the registration exam, it was disturbing to learn of several statistics. In a section below the heading "Is the licensing exam intended to limit the number of architects?" Ballard Kirk, president of NCARB, was quoted as saying that he believed only between 7 and 10 per cent of people taking the exam for the first time passed, in contrast with the 90 per cent of doctors who pass their national boards, as quoted by Pratt

design professor Stanley Salzman.

If these figures are correct, I can draw only four conclusions: (1) medicine is an easier discipline than architecture; (2) doctors are more intelligent than architects; (3) doctors receive extremely better education than architects; (4) interested parties are successfully limiting competition.

My belief is that medical interns are actually instructed in the tasks of the profession during their internship, rather than merely providing inexpensive labor, sans instruction, as is so prevalent in the drafting factories of so many architectural firms. Doctors, therefore, are better prepared for their exams.

I hope that our nation will not become one of exclusive guilds, for surely many talented artists will be left out, discouraged by exploitation. Exams in a democracy should be open to all, not just those who've paid dues with valuable years of labor. True and fair competition without predetermined results will change the statistics.

David Carnivale
New York City

I enjoyed your presentation of the Tanjon Jara Beach Hotel in Malaysia [RECORD, June 1984, pages 114-117]. I would like to comment, however, that the area is not quite as little known or unvisited as your article implies. Whether "peripatetic" or not, many current readers of RECORD, I am sure, served during the 1960s and 1970s in architectural and other capacities as Peace Corps volunteers in Malaysia, including myself. We noted even then the burgeoning tourist trade on Malaysia's east coast.

Incidentally, the name of the town is Kuala Trengganu, not Trenggnau.

Brian R. Percival, Architect
Somers, New York

Honest—we do try our best with transliterations of Tamil and other Far Eastern languages, and so, in this case, did our source.
—Ed.

Corrections

For the picture of Le Corbusier's Villa Schwob on page 136 of RECORD's June 1984 issue, Charles Jencks should have received photographic credit.

Photographic credits for the Statue of Liberty story (RECORD, July 1984, pages 128-135) should have gone to Dan (not Don) Cornish.

Through September 14

Restoring Liberty: A Bright Future for an Old Flame, an exhibition on the restoration of the Statue of Liberty, sponsored by the Municipal Art Society; at the Urban Center, 457 Madison Ave., New York City.

September 9 to November 4

The Architecture of Richard Neutra: From International Style to California Modern, an exhibition organized by the Museum of Modern Art; at the Sarah Campbell Blaffer Gallery, the University of Houston.

September 17-18

"Housing the Unhoused," a public forum and meeting of the AIA Housing Committee; at St. Paul, Minn. For information: Ravi Walden, American Institute of Architects, 1735 New York Ave., N. W., Washington, D. C. 20006 (202/626-7300).

September 27 to November 27

Exhibition, *Alvar Aalto: Furniture and Glass*, at the Museum of Modern Art, 11 W. 53rd St., New York City.

October 2-7

CERSAIE '84, the second annual international trade show focusing on ceramics for the building industry, sponsored by Assopiastrelle, the association of Italian tile manufacturers; at the Bologna Fairgrounds, Bologna, Italy. For information: Italian Tile Center, 499 Park Ave., New York, N. Y. 10022 (212/980-8866).

October 11-13

First annual convention, Professional Services Management Association, Westin Hotel/Copley Plaza, Boston. For information: Donna Tobin, 1213 Prince St., Alexandria, Va. (703/684-3993).

October 16-17

"Technology & the Managed Workplace," a two-day conference for senior managers, sponsored by *Business Week*, ARCHITECTURAL RECORD, and the Facility Management Institute; at McGraw-Hill World Headquarters, New York City. For information: Aida Vicente, *Business Week* Executive Programs, 1221 Avenue of the Americas, Suite 4049, New York, N. Y. 10020 (212/512-4930).

October 17 to January 6

Chicago and New York: More Than a Century of Architectural Interaction, an exhibition of graphics, models and architectural fragments, sponsored by the Art Institute of Chicago and the New York Historical Society; at the Octagon, the American Institute of Architects Foundation, 1799 New York Ave., N. W., Washington, D. C.

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STAC: a new reader service, OR

The computer age comes to inquiries

As all faithful readers of RECORD will know, each issue has three reader service cards bound into it, usually somewhere near the back of the book, which are intended to make it easy for you to write in for more information on something you've seen in an advertisement, or read about in the New products or Literature pages. And, faithful readers that you are (thank goodness), write in you do. In droves. Last year, there were 351,269 inquiries for more information on products or materials featured in an ad, 200,923 inquiries about a new product listing, and 282,832 requests for literature mentioned in our columns. That's 835,024 inquiries in all.

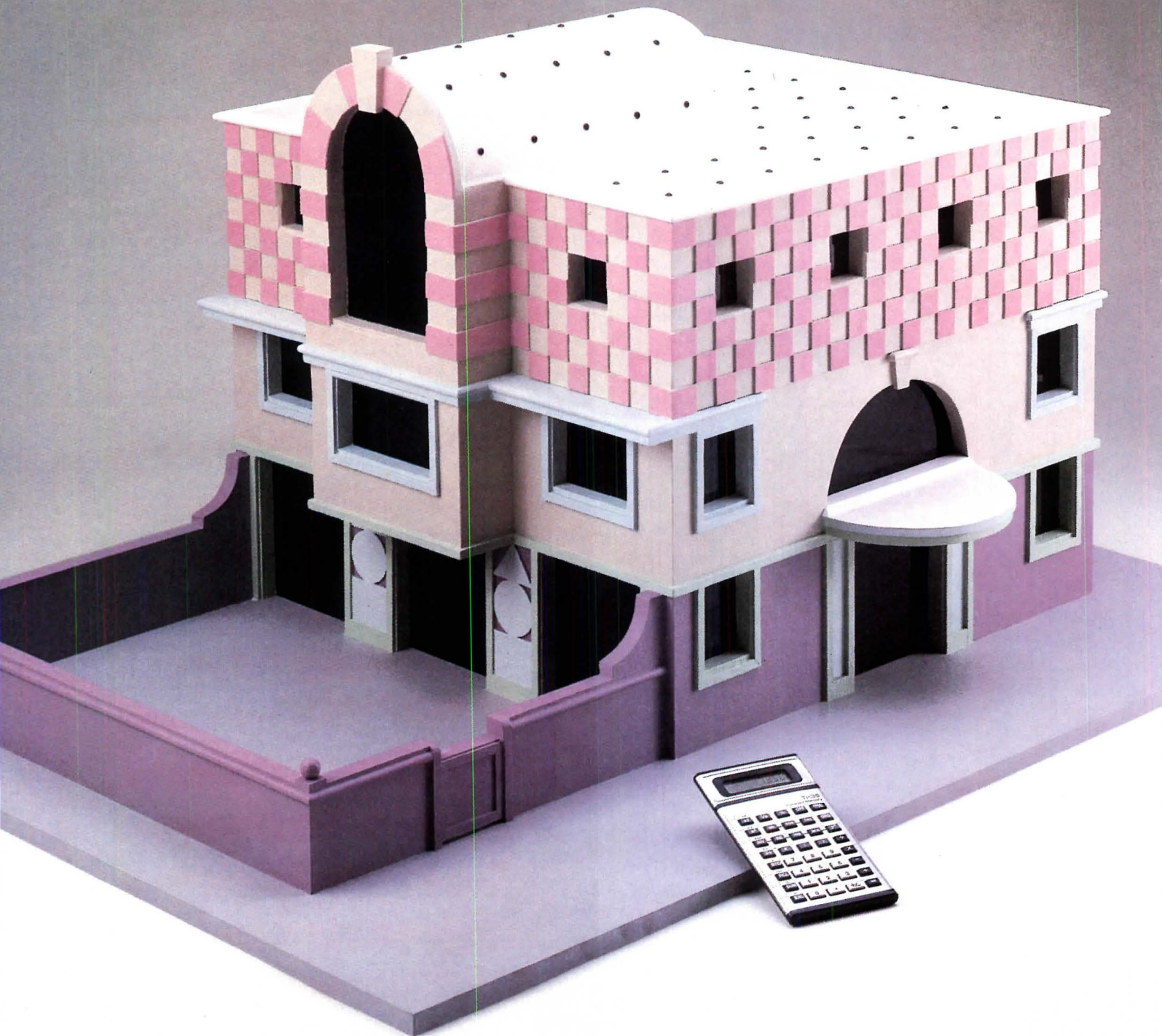
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5. End the call by punching **91# #.

The *next* day, manufacturers can access your request and begin to process it. If the advertiser is computer-linked (as many are and many more will soon be), our computer simply transfers all of the information from your request to its computer, and the advertiser can immediately mail the material you requested or (if you requested a phone call) call you or instruct its local office to call. That could happen within hours. If the advertiser is not computer-linked, our computer will print mailing labels and (as now) send them to the advertiser to service your request. That will take longer, but still save the time it used to take for your Reader Service Card to reach us (often a week) and the time it took us to input into our computer the hand-written information from your Reader Service Card.

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At its sixty-third annual meeting in Portland, Oregon, the National Council of Architectural Registration Boards reaffirmed the professional degree requirement as the education standard for issuance of council certification and adopted a set of educationally based standards and criteria, completion of which will be accepted in lieu of the accredited degree in architecture. These actions resolved one of the most serious issues that has faced the council for many years. The education standards for certification will be published in a new NCARB circular of information, number 3, to be issued by January 1985 (see Architectural education, this issue).

At the meeting, Robert E. Oringdolph, of Portland, Ore., assumed the presidency. He succeeds Ballard H. T. Kirk, Columbus, Ohio.

ASHRAE will accelerate energy code revision

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. voted at its annual meeting in June to accelerate a revised Standard 90 for "Energy Conservation in New Building Design." Building codes in all 50 states and in Canada are based on ASHRAE's Standard 90. Robert O. McDonald, installed as ASHRAE president at the meeting, called for a completion of a draft document within seven months. Following issuance of a draft, public comment will be invited. Periods of comment are part of the ASHRAE standards process and are used to gain broad-based input from all interested parties in standards development.

For more information, contact Steve Comstock, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1971 Tullie Circle, N.E., Atlanta, Ga. 30329 (404/636-8400).

Preservation conference in Baltimore

Other officers elected at the meeting are: Theodore L. Mularz, first vice president and president-designate, Aspen, Colo.; Robert L. Tessier, second vice president, Agawam, Mass.; Walter T. Carry, treasurer, Atlanta, Ga. NCARB's secretary William Wiese II, Burlington Vt., continues in the second year of a two-year term.

The 1984-85 regional directors are: George B. Terrien of Portland, Maine: New England; Gilbert D. Cooke of Baltimore, Md.: Middle Atlantic; Herbert P. McKim of Wilmington, N.C.: Southern; Donald E. Sporleder of South Bend, Ind.: Mid-Central; C. James Balderson of Overland Park, Kan.: Central; and Laura N. Cronenwett of Denver, Colo.: Western.

Latest attempt to erode Brookes Law fails

Design contracts for the Defense Department would have been subject to competitive bidding on fees if a recently attempted amendment to the Defense Authorization Act had passed. As in other such attempts to introduce competitive bidding frequently reported in these pages, this attempt failed to gain the required votes in the House. Sponsored by Congressman Berkley Bedell and 78 co-signers, the amendment would have not only required competitive bidding but would have repealed the \$85,000-project-cost cap on Defense Department small business set asides. The amendment was actively opposed by the AIA and ACEC among other groups, and its defeat marks a new milestone in a long uphill battle.

Baltimore's convention center, in the revived Inner Harbor area, is the setting for the National Trust's 38th National Preservation Conference, October 24-28, which for the first time will include a national exposition of preservation products and services—Rehabitat 84. For information, contact the Trust at 1785 Massachusetts Avenue, N.W., Washington, D.C. 20036 (202/673-4141).

Raymond C. Brown, the new director of the Justice Department's National Institute of Corrections, says new facilities as well as new approaches are needed to cope with the nation's sharply rising prison population. Brown, who came to Washington in 1983 from his previous job as chairman of the California Board of Prison Terms, says a doubling of the number of inmates in American jails has brought dangerous overcrowding and an unparalleled level of new jail construction at all levels.

"I can attest to the importance of educating architects in the intricacies of correctional operations and likewise educating correctional professionals in the concepts of sound planning and design," Brown told the American Institute of Architects' committee on architecture for justice.

The Institute for Corrections has commissioned two publications to aid architects in designing modern jail facilities. Last fall, the institute published a guideline called "Design Guide for Secure Correctional Facilities," developed in cooperation with the American Correctional Association.

Still on the drawing boards is a second publication dealing with design requirements for small jails. The document, which is supposed to identify "what worked and what didn't work" in jail planning concepts will, says Brown, "offer for the first time a concise analysis of relevant design and operational issues." During the past three years, says Brown, it became "painfully obvious" that facilities that didn't work shared some common problems.

His institute has emphasized the direct supervision approach which, instead of separating staff from inmates by barred grills or glass walls, emphasizes "secure housing with normalized interiors." This design typically employs a triangular-shaped housing unit with clear lines of sight into housing areas and dayroom space. The absence of architectural barriers between staff and inmates contributes to better, more secure observation and a more normal atmosphere, reducing tension, lessening vandalism and controlling assaults, says Brown.

The swelling of the prison population after a decline in the '60s has resulted in "at least 38 states facing court orders to eliminate prison conditions that are unconstitutional," Brown says, adding that "at least a quarter of the nation's jails have been under similar court orders in recent years. Peter Hoffmann, *World News, Washington, D.C.*

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Construction economy update: Short-term incentives combine to keep most balls rolling

By George A. Christie

After two years of recovery, the dynamics of the building cycle are shifting from residential to nonresidential building.

Ordinarily this would mean that the best is yet to come, as the combination of sustained high-level housing activity and still-expanding commercial and industrial contracting brings the cycle to its peak during the third year. However, the premature rise of interest rates early in 1984 is threatening to bring this cycle to an early end as housing appears headed for a second-half decline. In the light of this development, the short-term construction outlook is reduced to two questions:

• How steep will be the decline of housing starts in the months ahead?

• Is there enough potential in the commercial and industrial building sectors to cover the expected decline of homebuilding?

For the short term, interest rates won't come down—and here are the reasons why

There are several reasons why interest rates should be coming down, but they aren't convincing when matched against the Federal deficit as the reason why they are rising instead. Until the deficit's dominance of the credit market is relieved (and that won't happen in 1984), the present "loose fiscal/tight monetary" environment will have to be endured.

As the Federal Reserve restricts the growth of the supply of credit, the combined demands of the Treasury (which is pre-empting more than half of the economy's savings in order to finance its deficits) and the business sector (which is only now warming up to a strong wave of capital spending) are pushing rates higher. Under the circumstances, it is only a matter of time before housing starts begin to wither.

This uncomfortable situation isn't going to change much until the underlying problem—the deficit that everybody loves to hate—is addressed in a meaningful way. Proposals for deficit reduction that are now under consideration by Congress should eventually allow the Fed to relax its grip on the credit market by substituting fiscal restraint for monetary restraint. But whatever compromise solution is reached over the summer won't become effective until 1985 at the earliest, leaving interest rates hanging high for several quarters.

How high will interest rates go before turning down again? Are we on another trip to the realm of the 20 per cent prime and the 18 per cent mortgage?

Economic priorities are not the

same in 1984 as they were in 1980. Sustaining growth now takes precedence over driving inflation out of the system (at least until it can be shown that inflation is galloping again). Concern about third-world debtors adds a new dimension to credit policy. In line with these priorities, the interest rate assumptions underlying this forecast of construction activity are:

- Rates are close to the limit of their current upswing, but will continue to drift a bit higher through the second half of 1984 and into early 1985.

- There is the opportunity for a reversal of interest rates by the middle of 1985, when economic activity will have slowed considerably, and when fiscal policy will begin to address the deficit issue.

Housing is rounding the peak, but some incentives for multifamily remain high this year at least

Through mid-1984, the one-point-plus hike in mortgage rates had not yet turned the housing cycle down. Outstanding commitments at more favorable terms were still supporting a strong 1.9-million-unit rate of starts in the month of May, although the forces of decline were already in motion.

One-family housing starts averaged 1.05 million units (annual rate) through 1984's first half with only a modest (5 per cent) fall-off in the second quarter. If mortgage rates, which have recently advanced from 13 per cent to 14 per cent, do not reach 15 per cent by the end of the year, recent experience at these lofty levels indicates that a fourth-quarter rate of 925,000 one-family housing starts remains possible.

As the year's stronger first-half volume is eroded by rising interest rates during the third and fourth quarters, 1984's one-family housing potential must be adjusted back to 1.0 million units—approximately even with 1983's total, but moving in the opposite direction.

Multifamily housing is headed for an extraordinary 800,000 unit volume in 1984—the largest total since the early 1970s. Instead of leveling off at about 650,000 units, a rate that would have been consistent with the 1.1-million-unit peak reached by one-family housing last winter, multifamily building soared to 800,000 units where it still remains. The obvious implication: something besides the respite in interest rates has been stimulating multifamily building during the past several quarters.

Life styles of the 1980s, as much as the high cost of conventional one-family houses, are responsible for the popularity of condominiums as the starter home for many young families. But in addition,

accelerated depreciation has triggered a minor boom in apartment construction.

Rising mortgage rates are bound to lead to weakening of the condo market during 1984's second half, but tax-sheltered apartments are likely to remain an active market for a while longer as the probability grows that terms will be less favorable to investors in 1985.

Total housing starts in 1984's second half are expected to average 1,740,000. This compares with the 1,860,000 rate reached during the first half when the housing cycle was rounding its peak, and should bring the year's total to an even 1.8 million units.

Maximum stress of rising interest rates is most likely to bear on the housing market during the middle quarters of 1985, when the rate of starts is tentatively forecast to sink as low as 1,550,000 units. An improved final quarter is expected to bring next year's total to 1,575,000 units.

More nonresidential building springs from more "safe" than "unsafe" building types

The nonresidential building cycle, in typical fashion, is a year behind the housing market, leaving much of its potential still to be realized. For forecasting purposes, the several building types that make up this group can be put into two classes: safe, and risky. Most prominent among the "safe" categories (i.e. high assurance of continued gains): stores, warehouses, manufacturing buildings. The retail building market (stores and warehouses) is on its way to two years (1984 and 1985) of high-volume building as it responds to needs created by the recent surge of residential building. This year's strong 1.8-million-unit volume of housing starts is capable of supporting as much as 425 million square feet of retail building, but owing to the normal lag in this building market, the impact of 1984's homebuilding on contracting for stores and warehouses will be diffused throughout 1984 and 1985. Total volume of slightly more than 400 million square feet is anticipated for both years (vs. 300 million in 1983) as contracting in the retail building market achieves its peak early in 1985.

By the time the economy's expansion reaches its limit (in 1987), manufacturers will be operating at about 86 per cent of capacity—a rate not often exceeded. And by that time, contracting for industrial buildings, at 215 million square feet, will be approximately double last year's poor showing of only 107 million square feet. Between those extremes lie several years of prospective gains.

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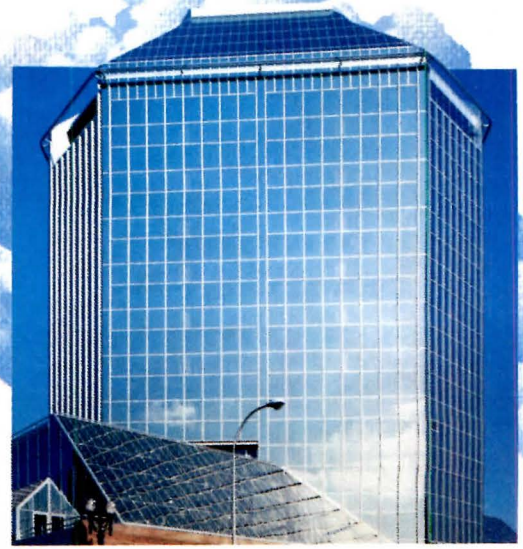
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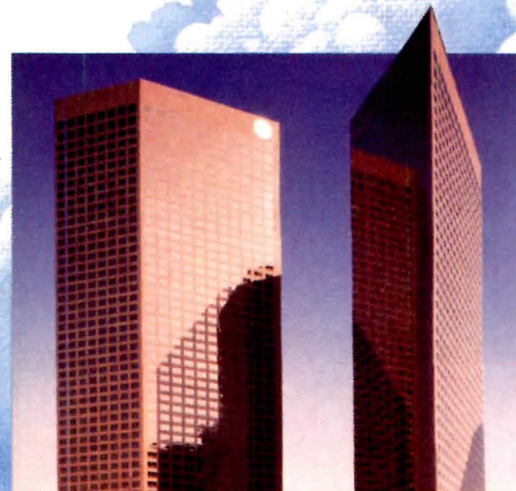
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1984 National Estimates		Second Update July 1984		
Dodge Construction Potentials				
Nonresidential Buildings		1983 Actual	1984 Forecast	Percent Change 1984/83
Floor Area (millions of square feet)	Office Buildings	281	275	- 2
	Stores & Other Commercial	362	480	+33
	Manufacturing Buildings	107	140	+31
	Total Commercial & Manufacturing	750	895	+19
	Educational	73	76	+ 4
	Hospital & Health	84	76	-10
	Other Nonresidential Buildings	116	118	+ 2
	Total Institutional & Other	273	270	- 1
	Total Nonresidential Buildings	1,023	1,165	+14
	Contract Value (millions of dollars)	Office Buildings	\$ 19,766	\$ 20,100
Stores & Other Commercial		13,798	18,375	+33
Manufacturing Buildings		5,080	6,900	+36
Total Commercial & Manufacturing		\$ 38,644	\$ 45,375	+17
Educational		\$ 6,157	\$ 6,900	+12
Hospital & Health		8,560	8,325	- 3
Other Nonresidential Buildings		8,544	8,975	+ 5
Total Institutional & Other		\$ 23,261	\$ 24,200	+ 4
Total Nonresidential Buildings		\$ 61,905	\$ 69,575	+12
Residential Buildings				
Dwelling Units* (thousands of units)	One-Family Houses	1,000	1,000	—
	Multi-Family Housing	719	800	+11
	Total Housekeeping Residential	1,719	1,800	+ 5
Floor Area (millions of square feet)	One-Family Houses	1,578	1,578	—
	Multi-Family Housing	682	769	+13
	Nonhousekeeping Residential	78	97	+24
	Total Residential Buildings	2,338	2,444	+ 5
Contract Value (millions of dollars)	One-Family Houses	\$ 61,765	\$ 65,525	+ 6
	Multi-Family Housing	25,919	30,400	+17
	Nonhousekeeping Residential	5,517	7,100	+29
	Total Residential Buildings	\$ 93,201	\$103,025	+11
Nonbuilding Construction				
Contract Value (millions of dollars)	Highways & Bridges	\$ 15,219	\$ 17,825	+17
	Sewer & Water	7,536	7,425	- 1
	Other Public Works	7,210	8,050	+12
	Total Public Works	\$ 29,965	\$ 33,300	+11
	Utilities	\$ 7,680	\$ 5,000	-35
Total Nonbuilding Construction	\$ 37,645	\$ 38,300	+ 2	
All Construction				
Contract Value (millions of dollars)	Total Construction	\$192,751	\$210,900	+ 9
	Dodge Index (1977 = 100)	138	151	

*FW, Dodge basis.

Prepared July 1984 by the
Economics Department
McGraw-Hill Information
Systems Company; George A.
Christie, vice president and
chief economist.

In 1984's first quarter, when capacity utilization had already advanced to 81 per cent, the rate of industrial building—120 million square feet—was clearly not keeping up with the rapid pace of economic activity. Quarter-by-quarter gains in contracting are expected to bring the fourth quarter rate to 160 million square feet, putting the year's total at an estimated 140 million. Another sizable gain in 1985 is indicated.

A few other nonresidential building types which are mainly derivatives of homebuilding—e.g., religious, social and recreational facilities—can be included on the ground of "safe" short-run gains. Examples of "risky" building markets where special situations are more important than general trends include offices, hospitals and health care facilities.

"Precarious" is as good a word as any to describe the current state of the office building market. The extraordinary office building boom of the past five years, which produced as much new office space as was built in the previous ten years, began with the firm support of strong demographics. After satisfying the space needs of a rapidly growing white-collar labor force, the boom was ready to call it quits in 1982. Instead, it was kept alive by a change in depreciation rules which turned into a speculative bubble sustained by tax shelters.

As Congress bends to the task of preparing a fiscal package of taxation and spending cuts designed to reduce the deficit, tax shelters are high on the hit list. The anticipation by real estate investors of the inevitable loss of some (not all) of the advantages of a 15-year write-off probably had a lot to do with the resurgence of office building in 1984's second quarter, when contracting soared above 300 million square feet.

So it becomes necessary to raise the 1984 forecast of office building activity to bring it into line with (un)reality. The possibility that some projects that had been planned for 1985 are being accelerated in order to qualify for present depreciation schedules is reason to expect a total of as much as 275 million square feet in 1984—virtually even with last year's strong volume. In 1985, a sharper drop (to about 200 million square feet) many now be indicated.

The hospital/health care building market is faced with another new source of uncertainty—the control of runaway Medicare/Medical expenses by adherence to standardized costs (Diagnostic Related Groups). As hospital administrators become increasingly cost-conscious in their attempt to

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1984 Regional Estimates Dodge Construction Potentials

Second Update
July 1984

Contract Value (millions of dollars)		1983		Percent Change 1984/83
		Actual	Forecast	
North-east CT, ME, MA, NH, NJ, NY, PA, RI, VT				
Nonresidential Buildings				
	Commercial and Manufacturing	\$ 5,972	\$ 7,300	+22
	Institutional and Other	4,160	4,350	+ 5
	Total	\$10,132	\$11,650	+15
Residential Buildings				
	One-Family Houses	\$ 6,871	\$ 7,675	+12
	Multi-Family Housing	3,607	4,175	+16
	Nonhousekeeping Residential	986	1,125	+14
	Total	\$11,464	\$12,975	+13
Nonbuilding Construction				
	Highways and Bridges	\$ 2,387	\$ 3,075	+29
	Other Public Works	2,830	2,925	+ 3
	Utilities	313	400	+28
	Total	\$ 5,530	\$ 6,400	+16
	Total Construction	\$27,126	\$31,025	+14

Contract Value (millions of dollars)		1983		Percent Change 1984/83
		Actual	Forecast	
North Central IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI				
Nonresidential Buildings				
	Commercial and Manufacturing	\$ 7,314	\$ 8,825	+21
	Institutional and Other	4,513	4,700	+ 4
	Total	\$11,827	\$13,525	+14
Residential Buildings				
	One-Family Houses	\$ 9,867	\$10,475	+ 6
	Multi-Family Housing	3,211	3,950	+23
	Nonhousekeeping Residential	683	975	+43
	Total	\$13,761	\$15,400	+12
Nonbuilding Construction				
	Highways and Bridges	\$ 4,204	\$ 5,125	+22
	Other Public Works	3,011	3,125	+ 4
	Utilities	1,376	900	-35
	Total	\$ 8,591	\$ 9,150	+ 7
	Total Construction	\$34,179	\$38,075	+11

Contract Value (millions of dollars)		1983		Percent Change 1984/83
		Actual	Forecast	
South AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV				
Nonresidential Buildings				
	Commercial and Manufacturing	\$15,575	\$17,875	+15
	Institutional and Other	8,941	9,450	+ 6
	Total	\$24,516	\$27,325	+11
Residential Buildings				
	One-Family Houses	\$29,148	\$29,775	+ 2
	Multi-Family Housing	12,686	14,200	+12
	Nonhousekeeping Residential	2,386	3,175	+33
	Total	\$44,220	\$47,150	+ 7
Nonbuilding Construction				
	Highways and Bridges	\$ 5,798	\$ 6,350	+10
	Other Public Works	5,259	5,500	+ 5
	Utilities	2,151	2,000	- 7
	Total	\$13,208	\$13,850	+ 5
	Total Construction	\$81,944	\$88,325	+ 8

Contract Value (millions of dollars)		1983		Percent Change 1984/83
		Actual	Forecast	
West AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY				
Nonresidential Buildings				
	Commercial and Manufacturing	\$ 9,783	\$11,375	+16
	Institutional and Other	5,647	5,700	+ 1
	Total	\$15,430	\$17,075	+11
Residential Buildings				
	One-Family Houses	\$15,879	\$17,600	+11
	Multi-Family Housing	6,415	8,075	+26
	Nonhousekeeping Residential	1,462	1,825	+25
	Total	\$23,756	\$27,500	+16
Nonbuilding Construction				
	Highways and Bridges	\$ 2,830	\$ 3,275	+16
	Other Public Works	3,646	3,925	+ 8
	Utilities	3,840	1,700	-56
	Total	\$10,316	\$ 8,900	-14
	Total Construction	\$49,502	\$53,475	+ 8

deliver medical care at DRG prices, targeted areas of economy are (1) payrolls, and (2) length of patient stay. In both cases, success in controlling these costs ultimately translates into a reduced need for space.

Our current estimate of contracting in 1984, reflecting experience to date, is a decline of nearly 10 per cent.

With more "safe" than "risky" elements to the nonresidential building outlook, 1984's contracting is now adjusted upward to 1,165 million square feet for an advance of 14 per cent over the 1983 total.

The Surface Transportation Assistance Act means a double-digit gain for public works

Partly due to a technicality, 1984 contracting for public construction is headed for a double-digit gain over last year's total.

The Surface Transportation Assistance Act, which was the biggest event in the public works arena in a long time, began dispensing approximately \$5 billion extra annual funding for highways, bridges, and mass transit in 1983's second quarter, and is still going strong. This means, simply, that in 1984 this new program will be operational for a full year after last year's late start. The result: an "automatic" increase in highway/bridge construction this year of 15 per cent or more.

Other public works construction contracting (for water resources, sewer and waste treatment facilities, etc.) was running a bit ahead of forecast in 1984's first half, presumably because many state and local governments found themselves with unexpectedly large budget surpluses.

Total public works construction for all of 1984 is now estimated to reach \$33.3 billion, a gain of 11 per cent over 1983's value.

The market will be considerably different by the end of the year than it was at the beginning

Before midyear, rising interest rates were bringing the housing cycle to a premature end. During the remainder of the year, nonresidential building will be increasingly dominant.

To a large extent, this is the normal sequence of cyclical development, but events since the start of the year are accelerating the process.

Nevertheless, there remains enough momentum in the nonresidential markets to carry 1984's contracting for total new construction forward another 9 per cent to a record \$210.9 billion.

The construction sector will be put to a more severe test in 1985 when the big issue will be: Will the deficit problem be addressed seriously enough to relieve the pressure on interest rates so housing can recover?

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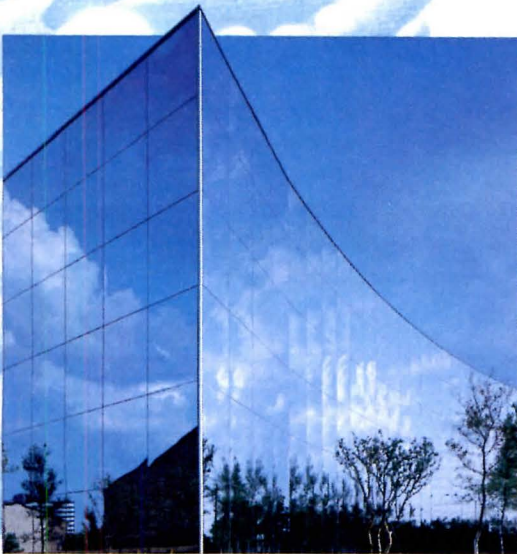
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The profitable professional: in search of excellence through staffing and a good business sense

By Barry B. LePatner, Esq.

Among the most significant stories in the business world in recent years has been the impact of the book, *In Search of Excellence*, by Thomas J. Peters and Robert H. Waterman, Jr. Their book, subtitled, "Lessons from America's Best-Run Companies," has been a bestseller for over a year. Its impact on the way successful businesses can be built and maintained will last much longer.

Though "how-to" books and books on business management are churned out on a daily basis, Peters and Waterman have struck a deeply responsive chord in the message they communicate as to why some businesses succeed at levels far beyond their competitors. And because the lessons they cite are so basic and applicable to businesses of all sizes, they are worth discussing as signposts for design professionals. For the next decade will undoubtedly test the abilities of design firms to effectively manage their business practices, as well as adapt to changing technologies and the need for creating new markets for their services. Successful architectural and engineering firms will see intensified competition, the onset of universal computerization, greater reliance on other technological advances, the increasing need for specialized areas of expertise, the merger or dissolution of prominent firms with lesser-known but more profitable ones and more spending to develop and market services.

Peters and Waterman tell of their study of America's excellent companies and the common traits that distinguish them. In essence, they found that such companies were "brilliant on the basics [and] worked hard to keep things simple in a complex world. They persisted. They insisted on top quality. They fawned on their customers. They listened to their employees and treated them like adults."

It is important to recognize the truth in the elements described above. For, if there is one common theme running through the chapters of this book—a theme essential to the effective management of a design firm—it is that successful firms will treat others, clients and employees alike, as they wish others to treat them.

Inner direction and insistence on excellence are, of course, important elements of a successful venture. But too many hard-driven, inner directed men and women founder on the rocks of their own obsessions. Rather, Peters and Waterman cite the need to add quality, reliability and service to a firm's sense of dedication. Commitment to a client's goals, in conjunction with quality, almost always ensures profitability.

Take the philosophies of several major companies cited in *Success*. In reading them, try to see the application of the basic tenets they convey and their applicability to your design firm.

- Growth is not our principal goal. Our goal is to be a quality organization and do a quality job, which means that we will be proud of our work and our products for years to come. As we achieve quality, growth comes as a result. *Digital Corporation*
- If you don't shoot for one hundred per cent, you are tolerating mistakes. You'll get what you ask for. *American Express*
- The organization should have objectives and leadership which generate enthusiasm at all levels. People in important management positions should not only be enthusiastic themselves, they should be selected for their ability to engender enthusiasm among their associates. *Hewlett Packard*

In seeking a philosophy, each firm should search its roster of talents and strengths to decide what the firm stands for as a whole. Professional pride is a tremendous motivator. It can be used in numerous ways to achieve common goals for a design firm and its clientele.

Recognizing the value of a loyal staff is integral to building quality

Yet, all too often, the most disregarded asset of an architectural, engineering or interior design firm is the "talent" itself. Consider this: the loss of a single trained professional employee with the concomitant need to replace him or her can, for a time, cost almost twice the salary of the lost employee—even if the new employee earns the same.

Those who study their successful competitors will observe that the better managed firms do not have a high turnover. Each year we read of widespread layoffs by design firms at year's end followed by new hirings in the following months on an as-needed basis. There is a terrible cost—both emotional and financial—that a firm must pay for such cavalier treatment. For one, how much loyalty and extra effort can a promising designer give to a firm with such a policy. Employees who are led to see themselves as "throw-away" talent can hardly be expected to do their best.

Also, any management that cannot accurately assess its manpower needs is not doing all it can to ensure the protection of the quality people who undoubtedly will be thrown out with the dirty bath water. Time after time, I have been told by the principals of a newly formed firm of their sincere

intention not to allow such employee uncertainty to permeate their business operations. It is this type of empathy which will do much to foster a greater sense of commitment and loyalty in design firms in the years ahead.

The principals of every firm would do well to encourage and reward the next generation of talent in their firms. Such approbation is needed by each of us as a means of recognizing our efforts to do a good job. In many ways, those who lead, lead best by example. They are the father figures by whose actions we judge ourselves and measure our growth in the pursuit of our careers. The universality of this human sentiment, applicable to both principals and staff alike, was best expressed some years ago by essayist and critic John Leonard when, referring to the need for that pat on the back, he wrote: "You can't get too much approval. The secret we keep from our children until it's too late is that we seek their approval as much as they seek ours. We will say that they are brilliant if they will admit we are grand."

Leadership is another important element that every successful firm will require. Each of the successful businesses pointed out by Peters and Waterman had a strong figure at the helm. "Associated with almost every company was a strong leader who seemed to have had a lot to do with making the company excellent in the first place." But leadership is more than that. Good leaders nurture and develop talent. They promote those who best exemplify the traits which strengthen the philosophy of the firm. Well-run firms foster winners; and winners who are rewarded in a firm encourage others to emulate their success.

Design professionals who read *In Search of Excellence* will be impressed by the emphasis the authors place on rewarding those who are innovative within a firm, who know how to both identify a problem and to resolve it on a cost-effective basis. Such individuals look at problems as a challenge and do not pass them on to others or shrug them off as impossible to solve. Recognizing and rewarding such individuals will assure the sound management of a design firm five and ten years from now.

But between reading an excellent book on successful management and achieving one's own success lies commitment as well as steadfast discipline. Most design firms will never achieve the level of prominence cited in any book on management. But most design firms can achieve some degree of success towards improving their

business basics. In order to do that, it will be necessary to build on the talents that exist in your firm so that financial stability can allow those talents to flourish.

To improve your firm's business, basic steps will set you on the right path

- Remember that, first and always, you are in a service business that rewards dedication to your clients' needs.
- The source of strength for your firm's future lies with the people who produce the work. They must always be treated as valuable resources.
- Innovation and creativity, at every level, should be encouraged, not stifled.
- Stick to the basics of what you are good at—entering fields with which you are unfamiliar will cause problems.
- Keep the format for managing your firm as simple as possible.

The most successfully managed (and financially secure) design professionals that my firm represents carry out defined programs which incorporate most, if not all, of these goals. And size is not an issue in discussing quality of management. Many small and medium-size firms can easily establish definable plans to improve service to clients, encourage employee participation and create a warm, working environment that entices talented people to develop to their fullest capabilities.

There will be no easy road to developing a sound financial future in combination with a reputation for design excellence. For some, marginal profitability will not only be possible, but in some cases, acceptable. The clarion call is to those who seek a better way. But, if recent history is any example of this new trend in design firm management, more and more firms will be devoting themselves to their own search for excellence.

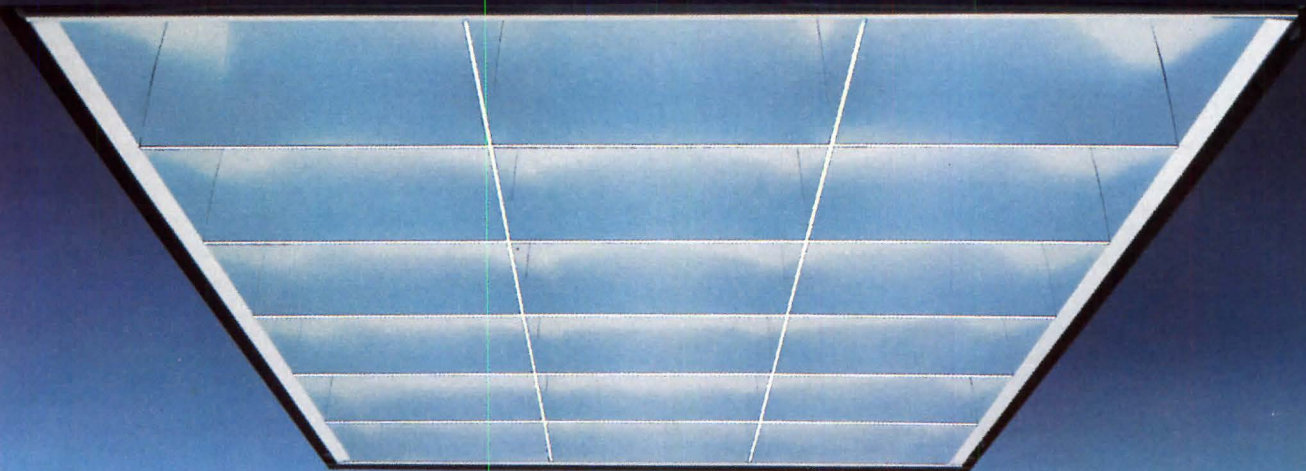
Mr. LePatner is a partner of Barry B. LePatner & Associates, which specializes in the representation of architectural and engineering firms. A frequent lecturer, he is active in the AIA, both on the national and local levels.

Portions of this article appeared in the "LePatner Report," a newsletter published by Mr. LePatner.

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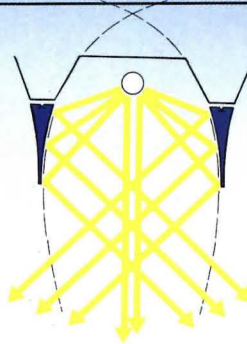
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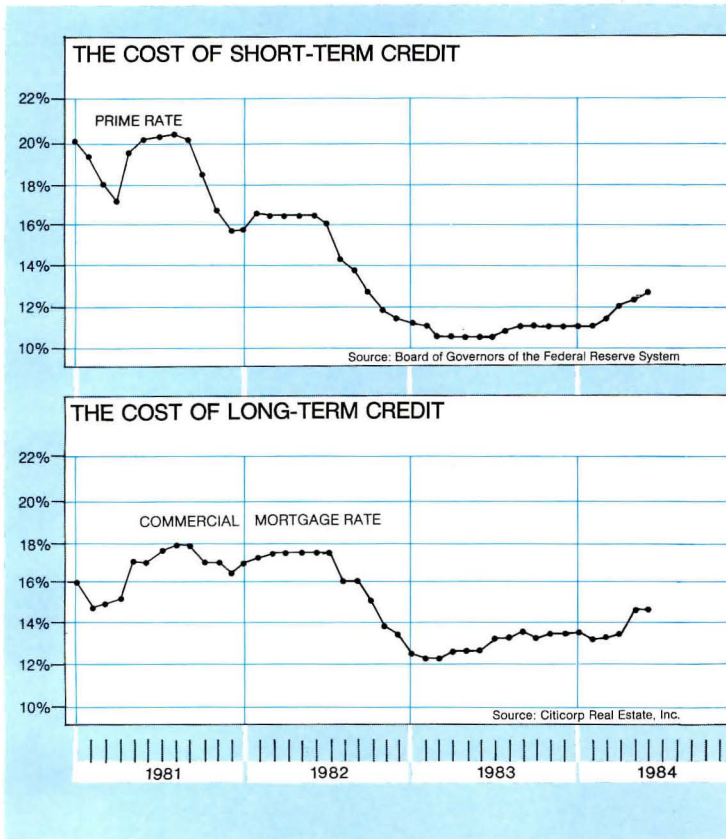


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Finance: Despite the pessimists, this expansion has staying power

By Phillip E. Kidd



Earlier this year, any news that even hinted that the economy was advancing at an exceptional real rate was viewed with alarm. Everywhere, there was scare talk that such a pace could not last. Interest rates had to rise, either because monstrous Federal deficits would collide with mushrooming private credit demands, or because the re-emergence of virulent inflation would force the Federal Reserve to clamp down on money growth. Higher rates, it was categorically stated, would break the recovery.

Against this very pessimistic backdrop, interest rates did increase from 150 to 250 basis points (1/100 of a per cent) throughout the spring. However, as the very robust 7.5 per cent second quarter gain in real GNP proved, higher rates did not stunt the economic revival.

In late May, interest rates actually stopped climbing. Since then short-term rates have bounced between 11 and 12 per cent and long-term rates have bounced between 13.5 and 14.5 per cent. Some believe that this is only a respite before rates resume their ascent and ultimately strangle the expansion.

The economy reflects a far different view than do the financial markets

Fortunately, either the economy cannot read, or it is only focusing on the good news. That good news is that inflation is down and employment is up. Approximately 4.5 million more people are working in nonagricultural sectors today than in the summer of 1982. No one expected that kind of recovery. Nor did anyone expect the buying spree it triggered.

Two years ago, families were worried about his and her jobs. In fact, they had already been juggling the household budget against shorter work weeks and/or possible unemployment for several years. That had meant months of retrenching, including postponing any significant purchases. When the economy reversed course and started improving, consumers, buoyed by increasing job opportunities and rising incomes, eagerly started buying. Now it is becoming evident that this pent-up demand, plus the additional demand from new hires, has much more breadth and depth than previously thought. Despite very high interest rates—15 to 16 per cent automobile loans, 13 1/2 to 15 1/2 per cent mortgage loans, and 18 to 20 per cent credit card rates—consumers are still vigorously purchasing goods and services because of their growing confidence that they will be employed.

Funny thing about that confidence; it acts as a self-fulfilling prophecy

To satisfy this exuberant demand for their products, businesses are hiring more people and spending more on new buildings and equipment, creating more jobs. Moreover, consumer demand is so healthy that it is encouraging a heavy inflow of foreign goods. This is forcing domestic businesses to control costs and boost productivity to meet that market challenge. In turn, prices of goods and services, except health care, are very slow to rise. Consequently, a broad array of price indexes, even including raw materials, are still signaling an encouraging outlook for inflation for the next six to 12 months.

Currently, the only major sector of the economy not yet reacting positively to substantial employment gains/low inflation is the financial markets. They remain distracted by the economic bad news—Federal deficits, uncertainty about monetary policy's direction, and international debt. Given the seriousness of those problems and the vigor of the economy, forecasting a decline in interest rates is hard to do. Yet several times during the summer, the markets themselves seemed on the verge of doing just that.

Rising credit demands, relative to supply, initially fueled the spring run-up in interest rates, but mounting fears of renewed inflation helped shove them even higher. Today, however, there are important differences. Government money needs, especially when Federal is combined with state/local borrowings, are somewhat less than projected. Foreign savings inflows, after a six-month lull, are reviving, and even domestic savings are improving. Equally important, inflation fears are much less pronounced, and monetary policy has remained accommodative. As a result, interest rates will gradually drift lower during the fall and winter, as some of the inflation premium built into them this past spring is removed.

Because the demand is there, even a modest dip in mortgage rates toward 13 per cent will help keep residential construction rolling along near its first half pace. Meanwhile, retail building this year and next will continue to benefit from strong consumer spending.

Mr. Kidd is a prominent economic consultant and former director of Economics Research for the McGraw-Hill Information Systems Company.

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Marketing: How big corporations choose design firms

This third part of a series based on a survey reports on subjective aspects of selection and how designers may turn them to advantage

By Martin C.P. McElroy with research by Donna M. McCourt

"At the beginning of a project, everyone thinks everything will be perfect. The truth is, there are always misconstrued ideas. Those ideas can last the life of the project." *An architect on doing corporate work*

In this examination of corporations' selection of architects and engineers, we researchers arrived at a conclusion that corporate managers have been conditioned by architects to hold strictly defined expectations about services, approaches and conditions of performance, and that these expectations are reflected in the selection process, and indeed tend to be enforced by the selection process. What makes a firm stand apart from its competition? How do firms contend with the constraints of competitive ritual? Has the focus on the "mating dance" become a threat to the future of the species?

To study this dilemma, we directed our inquiry to the other side of the table, interviewing principals in a number of the country's leading design firms as defined by size, consistent success in securing corporate work and professional recognition for design excellence. Predictably, the perceived basis for these firms' success varied from firm to firm and project to project. Individual personality, project approach, fees, organized selling skills and overall reputation were all cited as "most important" by various respondents. This reflects the profession's unscientific methods, the interaction of the variables and the variability of new business situations. We conclude that the key to success is flexibility that enables firms to respond to the circumstances at hand. The rubrics of competition are fully in control, and firms are prepared to make a case as they must.

It was intriguing, therefore, to have gained strong indications that once the contest for the client is essentially concluded, once the constraints of "all or nothing" competition are eased, a few firms have begun to take a remarkably substantive approach to negotiations and the project kick-off. We observed, though it was not directly expressed, a relief at the conclusion of the selection process so that the true complexities of the undertaking can be addressed collectively with the other participants in the project, especially the client.

Mr. McElroy is head of management consultants Sixty-Eight/52 Associates in New York. He is trained in architecture and in communications psychology and has headed the marketing departments of several large design firms.

The survey dramatized the extent to which "selling" can foul professional thinking. We shouldn't be surprised. This may be largely a consequence of the number of contenders for any given project. Each is engaged in preparing qualifications, tours, presentations and proposals, which prevents owners from having substantive discussions with any of the prospective architects. Under the best of circumstances, the client provides a reasonable description of the strike zone and offers an invitation to hit it. The process may actually inhibit architects and owner's development of a mutual approach to the project.

In a 1966 article in the *Harvard Business Review*, "How to Buy and Sell Professional Services," that is still the definitive work on the subject, Warren J. Wittreich established three key concepts to the process: that the clients' ultimate goal in the selection process is to increase his sense of certainty over a matter that is ambiguous; that the client should deal personally and directly with professionals of significant competence; and, that the professional should be selected on the basis of his approach to a *substantive* (author's emphasis) problem.

Presumably, Wittreich anticipates that the substantive problem will invite a substantive response. Our observations suggest that, too often, proposals and presentations are based on an outline or cartoon of the project and are riddled with assumptions about the scope of services, level of effort necessary to provide them, and time required to perform the incremental tasks. Add to these other assumptions about the owner, users, consultants and contractors and it is not difficult to surmise that Wittreich's concepts are merely being honored in form. "Substance" is the product of a mutual effort by all participants in the process.

A number of firms are using the post-award period to forge, with the client, a mutual approach. The firms that have formalized the negotiation and start-up process have engineered the bridge between their marketing programs and project operations. They are confronting the expectations of their clients, even while the echoes of competing proposals are still resounding, to forge the substantive management plan and articulate the working relationships for the project.

While there is no "standard" for starting up a project, in several instances the kick-off process is becoming highly formalized. Rather than ratify the unformed

assumptions of the selection process, these firms have begun to redress the weaknesses of the selection proceedings to bring as a consequence every member of the team to terra firma.

"Performance is not an accident. A team is the product of directed effort, not just collective activity. A project, any project, is the joint venture of many parties and requires a management plan which recognizes the capacities and resources of the participants."

A number of topics are appropriate to negotiation and start-up (the sequence can be so intermeshed that we must necessarily treat the two as integral); three themes dominated our interviews with the designers:

- *The players.* "We've got to identify the client's staffing and decision makers and understand the relationships involved," said one architect. "We cannot do a project without client involvement, but the client must also decide who is responsible for the project. Someone must be in charge!"

- "We need to spot the prime movers on the team and understand what each can and will contribute," said another architect. These and other comments affirm the owner's concern for individual competency during the selection process and suggest the obvious: individuals other than the design professional are going to help shape the project. The level of participation and authority of everyone around the table must be defined. The organization chart in the proposal that shows CLIENT in a box at the top or CONSTRUCTION MANAGER in a box on the side is a fallacy. The team is a group of individuals, and the project approach must reflect their individual nature, ability and authority.

- *The scope.* "The fee reflects the work to be performed. Each component of work has corresponding services and a fee is derived from them. This has to be understood. We have to agree on the finite set of work packages that we are to deliver."

- *The schedule* in the proposal must be plausible, nothing more, for it is part of a selling document. The only reality is the overstated (and unlikely to ever be discredited) "get the job, etc., etc." Once more, the composite tasks are a matter of mutual understanding and acceptance. Only the commitment of all participants will ensure that a schedule can be met. This is not easily done. Having won the client by combat, no one wants to be seen as a footdragger, least of all the client whose input and reviews are crucial. "The client can keep you moving in a refined direction or kill every shred of momentum."

The limitations and fallacies of selection are instructive for how professional firms market

- If the client is indeed sold by the architect who will execute the project, there will be greater consistency between the proposal and the ultimate approach to the project;

- With corporate clients in particular, the cultivation of the client through calls, letters and visits might develop the true mechanics of the project team. How often, we ponder, has a client been asked for the resumes of his project staff?

- Proposals and presentations, while addressing the client's basic questions, could well be less glib and self-assured and more provocative in exploring the actual consequences of the involvement of the client and other team members;
- The proposal may be reduced to the "for instance" scenario that it truly is, with negotiations deferred until after the entire team has negotiated the management plan for the project.

The selection process is not cast in stone. But the initiative for cutting through its rituals to create opportunities for fully developing the architect/owner relationship will lie with the design professional. Much of the selection process is the result of architects' demands for a "fair hearing" in what is an essentially subjective decision. It therefore falls to the architect to confront the excesses and liabilities of the system and put the client and project on a solid track once the competition is concluded.

We can well hope for these consequences. When I and many of my colleagues directed our architectural careers toward business development, it was not with a view of the profession being comprised of winners and losers. Such is not the nature of a fiduciary profession. The objective of marketing in a professional firm may be to "win more work," but marketing *for the profession* seeks to secure stronger, more beneficial alliances with clients. Only such collaborative, mutually supportive effort can stimulate the talent and skills that yield exceptional architecture.

Everybody tries to be objective, but the fact remains that selection is a subjective process

If the approach to compiling data about professional firms is at all consistent among large corporations, it only serves to contrast the diversity of approaches for the final selection. Again in researching the corporations, the compilation of this evaluation was like researching the recipe for
Continued on page 45



The Pepperdine University Plaza building was designed by Landau Partnership and is managed by Murdock Development Company.

At Pepperdine, Laminated Glass gets high marks for noise control.

The beautiful, all-glass skin of Pepperdine University Plaza was all



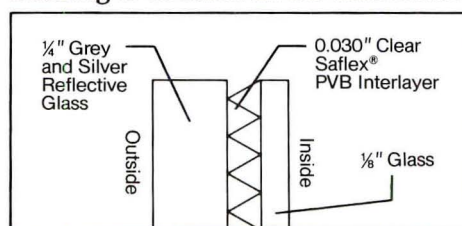
that separated the university administrative offices from the roar of this busy LA freeway.

To meet STC requirements of 36-38 would have required $\frac{3}{4}$ -inch monolithic glass. However, that thick-

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So $\frac{3}{8}$ -inch laminated glass, with a Saflex® interlayer by Monsanto, was proposed as a solution. Laminated glass achieved the STC requirements of 36-38 with half the thickness and weight.

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Marketing continued

Mulligan stew; while all agree on the intent, no one uses the same ingredients or prepares them in the same manner.

But this consistency of intent on the part of corporations offers useful insights and, before exploring the variants of the selection procedure (interviews and proposals in particular), two universal selection criteria should be examined. They are "chemistry" (also described as attitude commitment, insight and a litany of like expressions) and "understanding of the project," which was also expressed in terms of responsiveness, awareness and approach. The two criteria of each, and, indeed, one reason for the variety of selection procedures is the lengths to which corporate decision-makers go to expose these characteristics.

In the context of these interviews, it is interesting to note that chemistry is used colloquially to denote the indefinable something that clicks between two interested parties. We would call them sympatico. Yet, chemistry is a science, and the reactions between chemicals are predictable and reproducible. They follow laws of nature, and our interviews reveal that in a primitive way, the chemistry between design firm and client can also be axiomized, if not reduced to some fundamental formulas.

The personalities of the design team count more than you may think

"It is so fundamental it can't be ignored," said one corporate officer. "A firm is no better than the people on your project. You can't just pick a name."

Indeed it is fundamental, so much so that almost none of the corporate respondents failed to mention it at some level. Significantly, they are not satisfied with impressive resumes. There is a keen desire for personal contact. They are, after all, hiring the individual to assume a multi-million dollar responsibility. It is natural to want to know what makes the candidate tick and what contributions he can make toward this project.

"We like to look at the people who will be on the job: the project manager, the partner. We want people with their feet on the ground and a sense of control—horsesense. And good chemistry with our people. I want to know that they're going to get along with my project manager," said one respondent.

"Top management's attitude and involvement are primary," said another respondent. "I don't mean in selling the job, I want to know how they are going to participate in the work. We don't often pick the biggest firm; we want people who find our work important."

More impressive than the simple interest in evaluating individuals is the perceptiveness that corporate directors acquire after years of screening and comparing the strengths and skills of architects. Consider, for example, the pique expressed by an officer of a large corporation who had just completed the selection for a new headquarters installation. "I get

frustrated with people telling me what they think I want to hear. You get people trying to sell 'creativity' who just don't have those abilities and talents; they're businessmen. For certain projects, they would be well qualified. But they blow their credibility in the first ten minutes trying to be something they're not."

These officers can approach the evaluation with communication skills worthy of a psychoanalyst or the tool of a seasoned interrogator: "It's not usually a one-meeting process. I let 'em tell me what they want to tell me. I don't lead them; I let them talk. I listen to the language. You can tell what they know when they talk about a project. This way, I don't end up listening to an echo of myself."

Of course, the catalyst for the chemistry that develops between architect and client is a specific project and many, indeed most

companies extend themselves significantly to inform the architect about site, budget, program and other factors. "We work for weeks to get to the point where we know what we are talking about in terms of program and cost. We only like to talk to architects when we are serious about a project."

In another statement: "The greatest ambiguities occur at the beginning of the project. We tell them everything we know and try to reduce the variable."

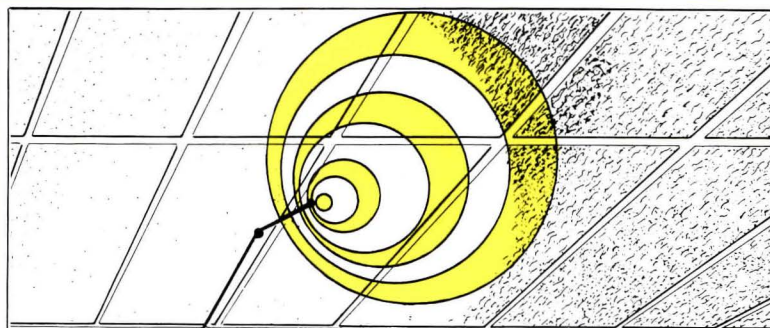
If this smacks of giving professional firms enough rope to hang themselves, it does appear that a basic tactic for reducing the short list permits contenders to self-destruct. Some firms are quite facile at the proposal and interview processes. However, the clear intent is to enable firms to "demonstrate that they understand the work. Now, nobody tries to demonstrate

that they don't understand the project, but you can tell if it went right over their heads."

And again, near-surgical skill is displayed in analyzing the posture of the professional firm. "I look for a listener. There is a distinction between those who listen and interpret and those who listen and comply. I want to know if the architect is going to come back with what he thinks we need or what I told him we want."

A similar distinction was raised, albeit less autocratically, by the facilities director who seeks to know "how well they grasp the concept, the design criteria and our goal for the design of the project. I want to know their ideas about what we are looking for."

The next part of this series will cover interviews and proposals.



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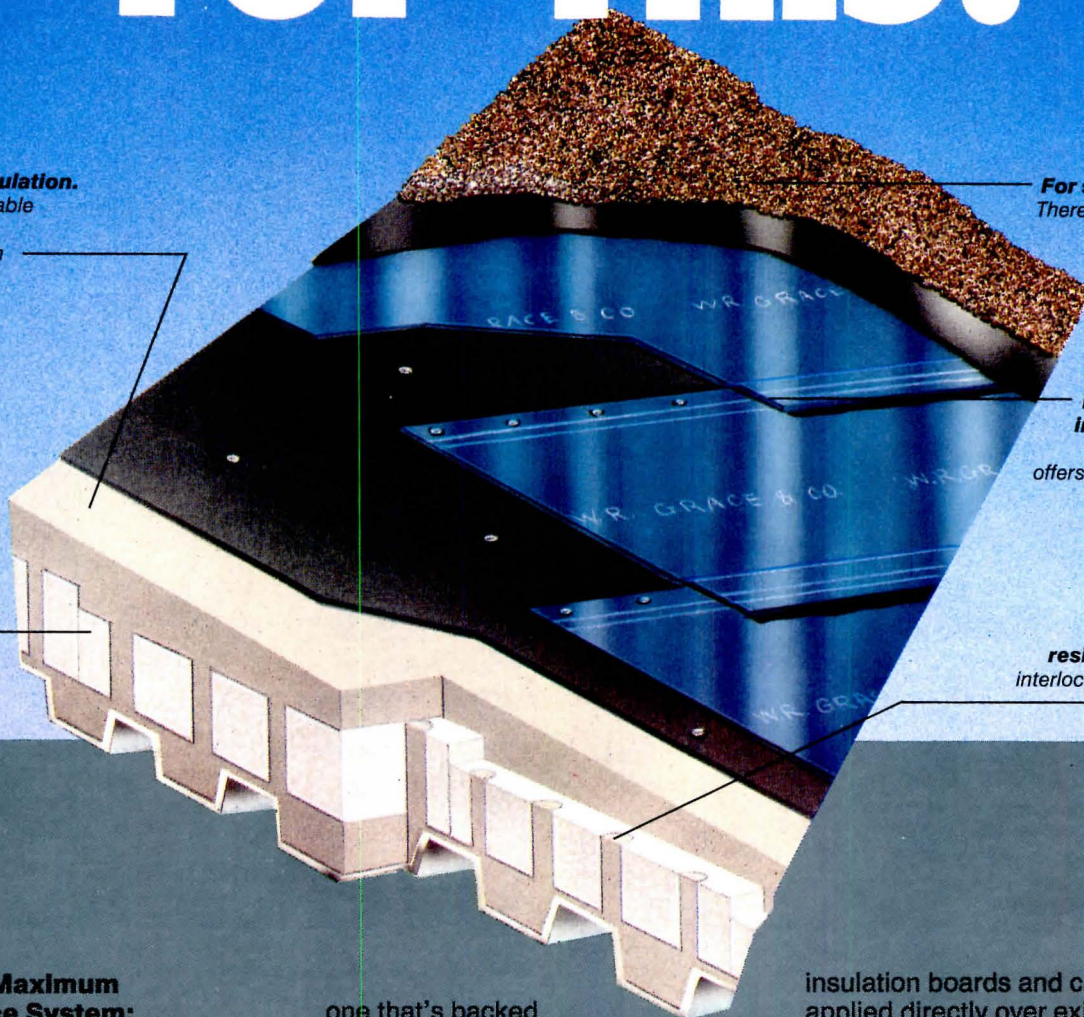
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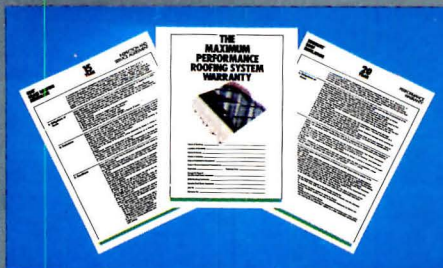
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Architectural education: NCARB's newest education standards

By Sid Frier



Last July 1, after many years of heated debate throughout the profession, the NCARB requirement of a first professional degree from an NAAB-accredited program—for NCARB Council certification—finally became effective. The actual resolution establishing the degree requirement was approved, as many will remember, at the Council's 1980 annual meeting. It was thought by those who framed this historically significant resolution that a four-year interval would be both desirable and sufficient for most candidates in the pipeline to complete their education before the new standard took effect.

But there was also an important second reason for the four-year interval. The degree requirement, always NCARB's most controversial issue, was still controversial. Although the resolution establishing it had passed by what most organizations would consider a comfortable margin, a number of the 54 state and territorial member boards remained unpacified.

Traditionally, NCARB's effectiveness has depended not merely on majority rule but rather on near-unanimous agreement—especially when its mission to maintain and strengthen reciprocity among all member boards is threatened. Thus, while the professional degree requirement nominally became a fact four years ago, the Council's leadership sensed that it would remain a divisive issue unless something could be done about reinforcing it.

But what? The question was laid in the lap of the Council's Education Committee, then passed along to a successor body known as the *Education Evaluation Committee* (EEC). The EEC's name hints at the new tack taken to solve the problem: in the apparent impasse between the pro- and anti-degree factions was ever going to be broken, well-defined educational standards would help clear the way.

It was my lot, though I was the Council's immediate past president and therefore entitled by precedent to look wise and do little, to be named by President Ballard Kirk to chair the 1983-84 Education Evaluation Committee. I think most of our committee shared my feeling that just when we thought we had all of life's answers, having passed the degree requirement, someone changed all the questions.

We began our work by building on the great volume of facts, figures and considerations assembled over the previous three years by the Education Committees. And throughout the year we were assisted, counseled, fussed at, and supported by educators from all parts of the country. They were members of our advisory panel,

At its 1984 annual meeting, the National Council of Architectural Registration Boards reinforced its accredited degree requirement and also approved new education standards for non-degree-holders seeking certification. Details of this not-so-simple process are outlined here.

which also included representatives from the AIA, NAAB, ACSA, and the AIA student components.

The EEC's charge from the 1983 NCARB annual meeting best describes both the philosophy and the strategy through which the member boards hoped to solve their collective dilemma. We were asked "to establish educational standards for certification; develop evaluation criteria for applicants *without* accredited degrees; identify acceptable delivery systems; and explore participation by U. S. schools of architecture."

The accredited schools' cooperation is vital

From the outset, we felt we really needed the schools' interest. So we contacted all institutions with NAAB-accredited programs and asked them to complete a questionnaire we had prepared. From their responses we learned that 39 schools across the nation were interested in providing all or part of the architecture courses that would be required of non-matriculated individuals seeking to satisfy NCARB's educational requirements for certification. Most importantly, some 35 schools also expressed an interest in providing on- or off-campus design studios/centers for this same no-accredited-degree-holding population.

Frankly, the schools' positive response was a very pleasant surprise. At the time we queried them, many of the specific elements of what we now believe is a viable concept had not yet been formulated. Clearly, the schools were agreeing with the EEC that, where architectural education is concerned, our accredited programs have both the credibility and the capacity to do the job.

The new NAAB criteria form the standard

In addition to a central role for the schools of architecture, the EEC early recognized the need for a set of education standards by which all applicants for Council certification might be evaluated. Such standards would have to apply to professional degree-holders and non-matriculated applicants alike. Fortunately, such standards were ready and waiting to be adopted. They were the product of a special committee of NAAB made up of past presidents of all the profession's collateral organizations, including NCARB. Known as "achievement-oriented performance criteria," they were adopted in 1983 by NAAB as the basis of its own accreditation process in evaluating the schools. (See RECORD, March 1984, pages 51-55.) As one of NAAB's member organizations, NCARB had already approved these criteria, thereby

signifying their importance to the member boards as a qualitative set of standards for evaluating architectural education as a matter of public interest. And, in principle, they will now be the education criteria for certification.

These NAAB criteria encompass the areas of general education, history, human behavior and environment, design, technical systems, and practice. When the Council's Procedures and Documents Committee issues a new NCARB *Circular of Information #3* in the near future, its education requirements can be expected to include the equivalent of three college level courses in English, two in math, two in arts and humanities, two in the social sciences, and one in natural sciences. As for course work in professional subject areas, we can anticipate that the non-matriculated candidate for certification must have acquired the equivalent of between 16 and 22 semester hours (as educators understand the term) in history, human behavior, and environment. In design, the candidate will probably need the equivalent of 55 to 60 semester hours; and in technical systems from 18 to 26 semester hours.

We believe there are three kinds of individuals who will be seeking certification or admission to the Architect Registration Examination as no-degree candidates.

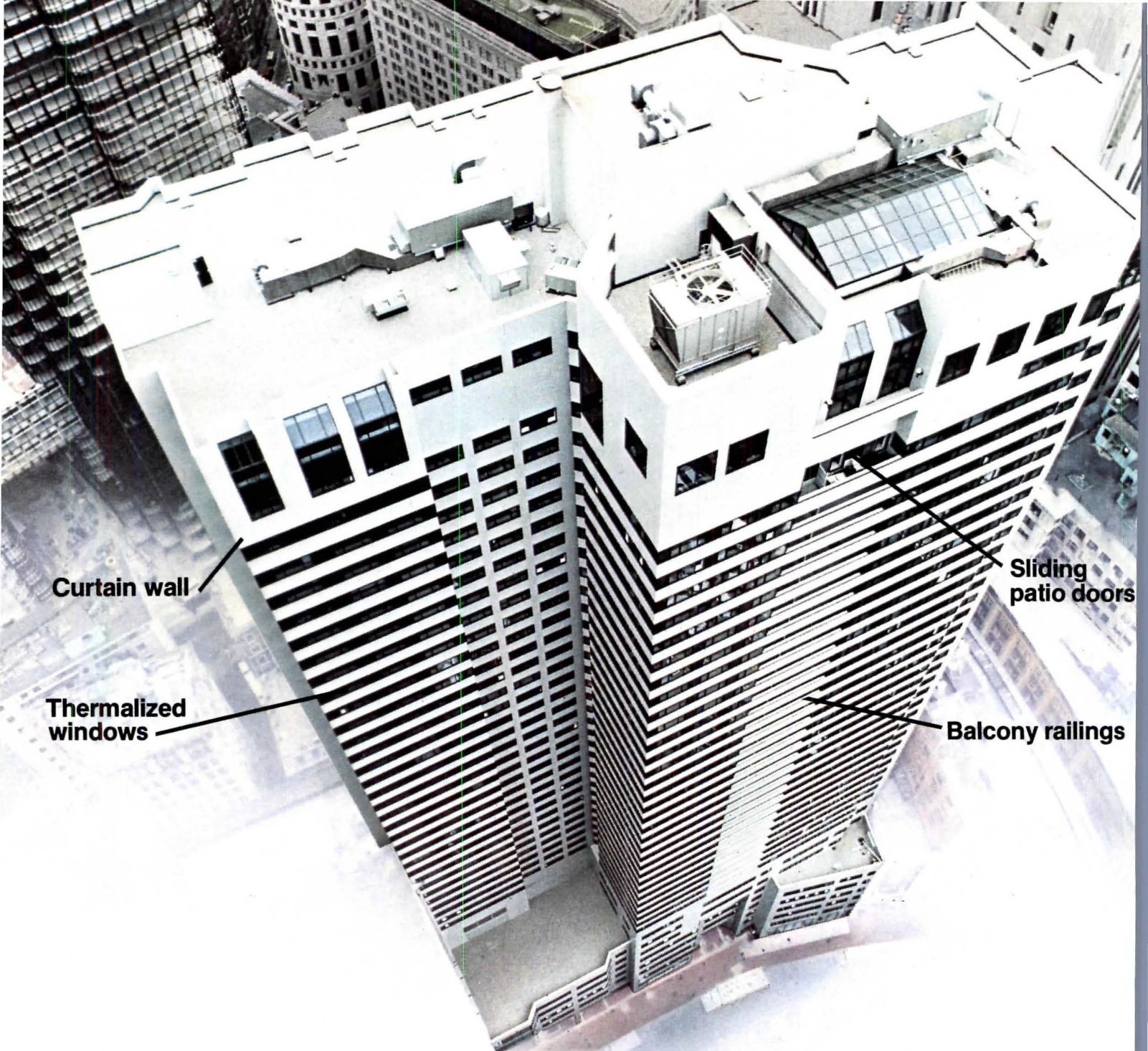
Procedures for those

licensed but with no degree Type Number One will be a person who has no degree but is licensed. (*Important to stress:* anyone who was licensed or met the NCARB education requirements prior to July 1, 1984, will be forever eligible for certification.) Where, you may wonder, do such people come from? From some few states which, due to their statutes or other reasons, may continue to admit such no-degree-holding persons to the examination. Though lacking a first professional degree, they may now seek certification through this process:

First, they will contact their state boards or NCARB offices and describe where they stand educationally. The typical Type Number One is likely to have studied architecture in four/two-year programs, in which the first professional degree is a master's awarded after six years, and then dropped out of school after the fifth year to go to work. Now he wonders how it might be possible to get certified.

According to the process developed by EEC and now being refined for early 1985 national implementation, the state board or NCARB offices will send this person a
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Sid Frier, FAIA, is chairman of the Education Evaluation Committee and past president of NCARB. He is also a principal of Stuck, Frier, Lane, Scott, Beisner, Inc., Architects, Little Rock.



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form furnished by an *independent organization* (to be identified in the forthcoming *Circular of Information #3*). This organization will act as a clearinghouse for institutions offering courses or design studios for candidates, as well as handling the recording, evaluation and transcript dissemination aspects of the process. The candidate will be instructed to complete the form and return it, together with career education information in the form of transcripts for evaluation. The clearinghouse, for a fee, will establish a record for the candidate and, for another, will evaluate his academic career. The evaluation will be made by an educator at an accredited school in the candidate's region. The clearinghouse will contact this educator directly and will then supply the candidate with a printout identifying acceptable past educational activities and work yet to be accomplished, or stating that the education requirement as stipulated by NCARB has been satisfied. A list of schools in the candidate's region that offer courses for such non-matriculated individuals will be furnished. Then the candidate may contact a school, map out a program for chipping away at the required work, and ultimately satisfy the NCARB education requirement. Throughout the process, the clearinghouse will compile the candidate's record.

No degree and no license is another route

Type Number Two is one of a group of approximately 2,000 candidates who sit for the exam each year. They have *no degree and no license*. Most of them are from four/two-year education programs, and did not complete their final two years. It is by far our largest group and will probably continue to be so as long as we have such programs.

Here is their route: They follow the same steps as the Type Number One—the no-degree-but licensed people—until they have completed the education requirements they lacked. Once they have achieved a certain level of academic work, these candidates begin to accumulate practical training credits in the Intern-Architect Development Program (IDP), or through other training procedures. Upon completing both the education and intern requirements, they are eligible to take the examination. They are at this point no different than professional degree-holders: if they pass the exam, they may be licensed and certified.

The "exceptional" person is a very special case

Finally, there is a Type Number Three who has frankly given the

EEC fits. This person is known as "the exceptional practitioner." To the many who have cajoled us to accommodate such a category, I have posed a single question, like the lady in the Wendy's ad: "Where's this person?" The reason I ask it is that such exceptional practitioners, far from being out there in limbo, are almost inevitably eligible for certification.

During my year as NCARB's president, I often encountered an officer in the AIA who would chastise me over our education requirements. "You know, we are considering O'Neil Ford for the Gold Medal this year," he would say, "but with your degree requirements, O'Neil couldn't even have got certified." My reply was always the same. Much as we all revere the memory of O'Neil Ford, who was both a great architect and a graduate of an uncelebrated correspondence school, O'Neil had been licensed by the Texas board a very long time before July 1, 1984. He was eligible for Council certification before some of us were even born.

Today, since nearly all states are licensing by examination only, I believe we will find the exceptional person a very scarce commodity. However, if one does show up, we do have a method in place to handle such an unlikely occurrence.

First, our Type Number Three—the exceptional person—has to be licensed by a member board. Then he must be recommended to NCARB for certification, either by the board that first licensed him or the one in whose jurisdiction he is currently licensed. NCARB then asks the exceptional person to contact the evaluation agency, the clearinghouse. It furnishes the candidate with forms that are completed, returned and evaluated. Then an in-depth interview is arranged with a qualified evaluator of the agency's choosing. The evaluator prepares a report to the agency following the interview which is then sent to the Council's Education Committee. An interview is arranged and conducted by the EEC, much as interviews have been conducted for years with foreign applicants by the Council's International Relations Committee. Finally, the EEC makes a recommendation to the NCARB Board as to whether or not the candidate should be certified. The Board acts on this recommendation.

The non-degree route is no shortcut

At this year's annual meeting, where a resolution to approve the NCARB education standards and criteria was passed by an impressive 42 to 5 vote, one question was asked repeatedly: Will

it be easier for a person to become certified as a non-matriculated candidate than it is for a person who completes a college education and gains a first professional degree in architecture?

The EEC's answer is that the process by which non-matriculated persons may gain registration will *not* be an easier route. The standard to be achieved in education by all candidates is the same as in intensive programs of architectural studies normally expected within university schools of architecture. Nor will the new process serve as a shortcut; there can be little doubt that the non-matriculated person will find it acceptable simply because it can be pursued over a long span of time while holding down a job or being otherwise engaged.

There are nine basic points for all non-degree holders

In summary, the essential elements of the new education process for non-degree-holders is as follows:

1. The education to be acquired must conform to the performance standards required of graduates of NAAB-accredited programs.

2. The education acquired as a non-matriculated individual must conform to the subject area and content levels as required of graduates of NAAB-accredited programs.

3. All education acquired by non-matriculated candidates must be evaluated by architectural educators who are on faculties at institutions where NAAB-accredited programs exist.

4. An organization, not affiliated with NCARB or any of the collateral architectural groups, will be engaged to operate the evaluation, recording, and transcript dissemination; such a measure is intended to eliminate the potential for improper control and possible discrimination in the process.

5. The process will be monitored by the EEC with Council staff assistance.

6. The EEC will conduct evaluations of individuals who can demonstrate satisfactory compliance with the education standard through exemplary and acclaimed professional practice in conjunction with other acquired formal education.

7. All educational offerings in the technical and design areas of architecture, to be acceptable, may be offered only by institutions where NAAB-accredited programs exist. Architectural design courses may be offered on- or off-campus, and must be controlled and design solutions juried by faculty from the accredited sponsoring institutions.

8. Non-architectural education, to be acceptable, must come from

nationally or regionally accredited institutions of higher learning.

9. Examinations in general education and architectural subjects will be accepted only if offered by recognized and accepted testing institutions and/or architecture schools where NAAB has accredited the professional degree program.

Implementation is aimed for the coming year

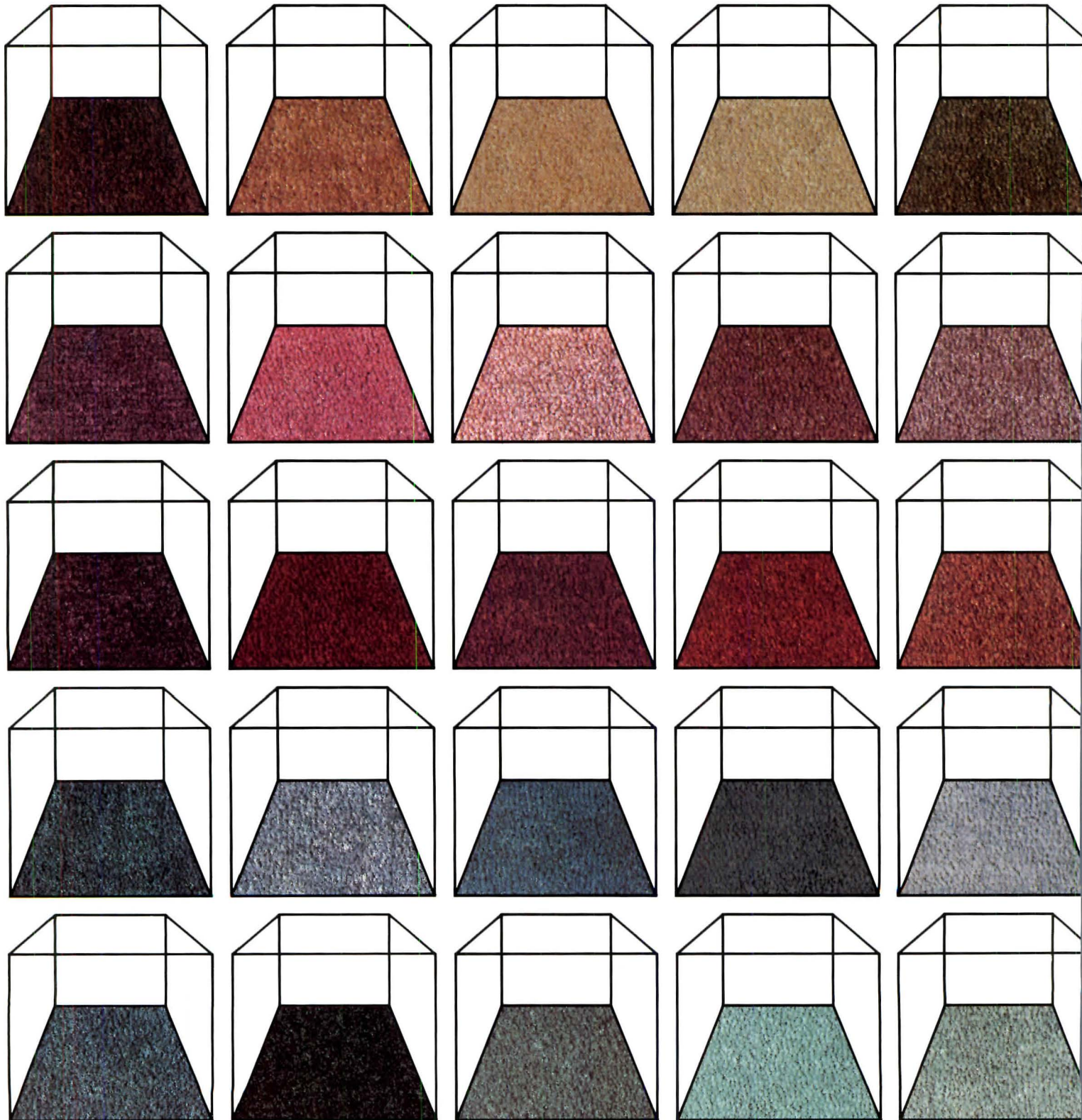
This process through which NCARB's education standards may be satisfied will not only be a lengthy, but also a difficult one. Moreover, to its disadvantage, it lacks those cultural and social aspects of education that are generally experienced by the student through association with other students and faculty in a university setting.

With many new, additional schools of architecture now being formed, we can anticipate that the population of non-matriculated individuals may decline over time. However, none of us can be sure that this will happen, what with spring and young men's fancies having changed little over the years. Meanwhile, probable activity in this educational mode has been estimated, during its initial three-year growth period, at between 3,200 and 3,500 persons on a nationwide basis. The candidate must bear all costs of this process. These costs, as reckoned by the providers of the required education resources, may be high; and, indeed, the cost to maintain such a process, when compared to the potential income to the providers, the beneficiaries and the public, may not justify its existence beyond the years immediately ahead.

But for the moment, those of us who have been so deeply immersed in developing the Council's education standards and criteria believe NCARB now has a process in place that accommodates the needs and aspirations of all candidates for certification. When it is fully and officially defined in the forthcoming *Circular of Information #3*, we believe all segments of the profession will accept it as a fair and equitable concept.

This process isn't easy, but often the consequences of decisions we make in life aren't easy. The committee is convinced that this framework will best implement the charge of the member boards to protect the health, safety and welfare of the public by producing the best prepared architects possible.

What new directions in color will interiors be following? Karastan offers 50 subtle hints.





After suffering through three traumatic decades of urban decline, St. Louis appears to be in the midst of a modest revival, due in part to generous tax incentives offered by the Department of the Interior for commercial and mixed-use projects in renovated historic buildings. The city, in fact, leads the nation in the number of projects submitted to the Federal tax credit program and is now embarking on its most ambitious proposal yet—the \$135 million conversion of Union Station into a mixed-use commercial center. Designed by local architect Theodore C. Link in 1891, this impressively proportioned railroad complex, with its 750-foot-long Romanesque Revival headhouse, 250-foot-tall clock tower, and 11.5-acre train shed, was for years the architectural symbol of the city. After World War II, however, the station languished and was



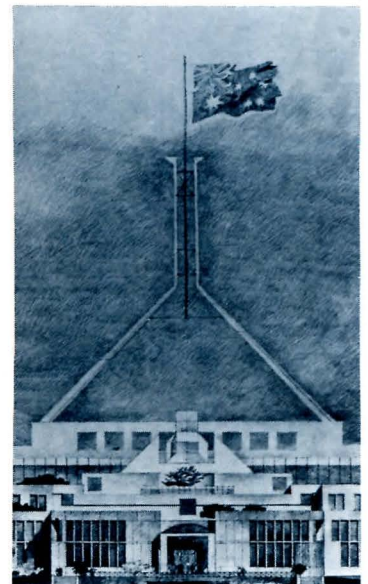
abandoned by Amtrak in 1978. (Trains stopping in St. Louis now call at a makeshift trailer known locally as the “Amshack.”)

The largest proposal ever to qualify for both a 25 per cent tax credit and a Federal Urban Development Action Grant, the Union Station development is a project of the Rouse Corporation, the people who brought you Faneuil Hall Marketplace in Boston,

Harborplace in Baltimore, and South Street Seaport in New York. Working in joint venture with architects Hellmuth, Obata & Kassabaum, the giant developer has proposed an elaborate scheme for the terminal that combines restoration of the limestone headhouse with new construction within the iron truss frame of the train shed. Phase I of the project comprises 825,000 square feet and includes a 550-room hotel that will incorporate some of the historically significant interiors of the headhouse into its restaurant, lobby, and atrium rotunda; 162,000 square feet of leasable retail space along an L-shaped commercial street; landscaped parks, plazas, and water features; and surface parking for 1,900 cars. A second phase will include a railroad museum and, it is hoped, a permanent new Amtrak station.

Gold medalists honored in AIA exhibit

An exhibition of architectural drawings by winners of the AIA Gold Medal—the Institute’s highest honor—will be on view through October 28 at the Art Institute of Chicago. Curated by architectural historian Richard Guy Wilson, the exhibit is sponsored by the AIA Foundation in honor of the Gold Medal’s 75th anniversary. Louis Kahn, Mies van der Rohe, Buckminster Fuller, Charles McKim, and Louis Sullivan are some of the 43 award-recipients represented in the show. The drawings cover a wide stylistic and geographic range, from Ragnar Ostberg’s Stockholm City Hall (1907-23, photo left) to Romaldo Giurgola’s Australian House of Representatives Building (1979-80, photo right). After leaving Chicago, the exhibit will be displayed at the AIA Octagon from February 5 to March 25, 1985.



A pair of office buildings for Prudential.

ELEVATORS BY DOVER

These two elegantly detailed buildings in Atlanta's Century Center Office Park have been developed by the Prudential Insurance Company of America for investment. Both structures are distinguished by lavish use of top-quality finishes, including marble lobbies and mirror-finish stainless steel elevator doors.

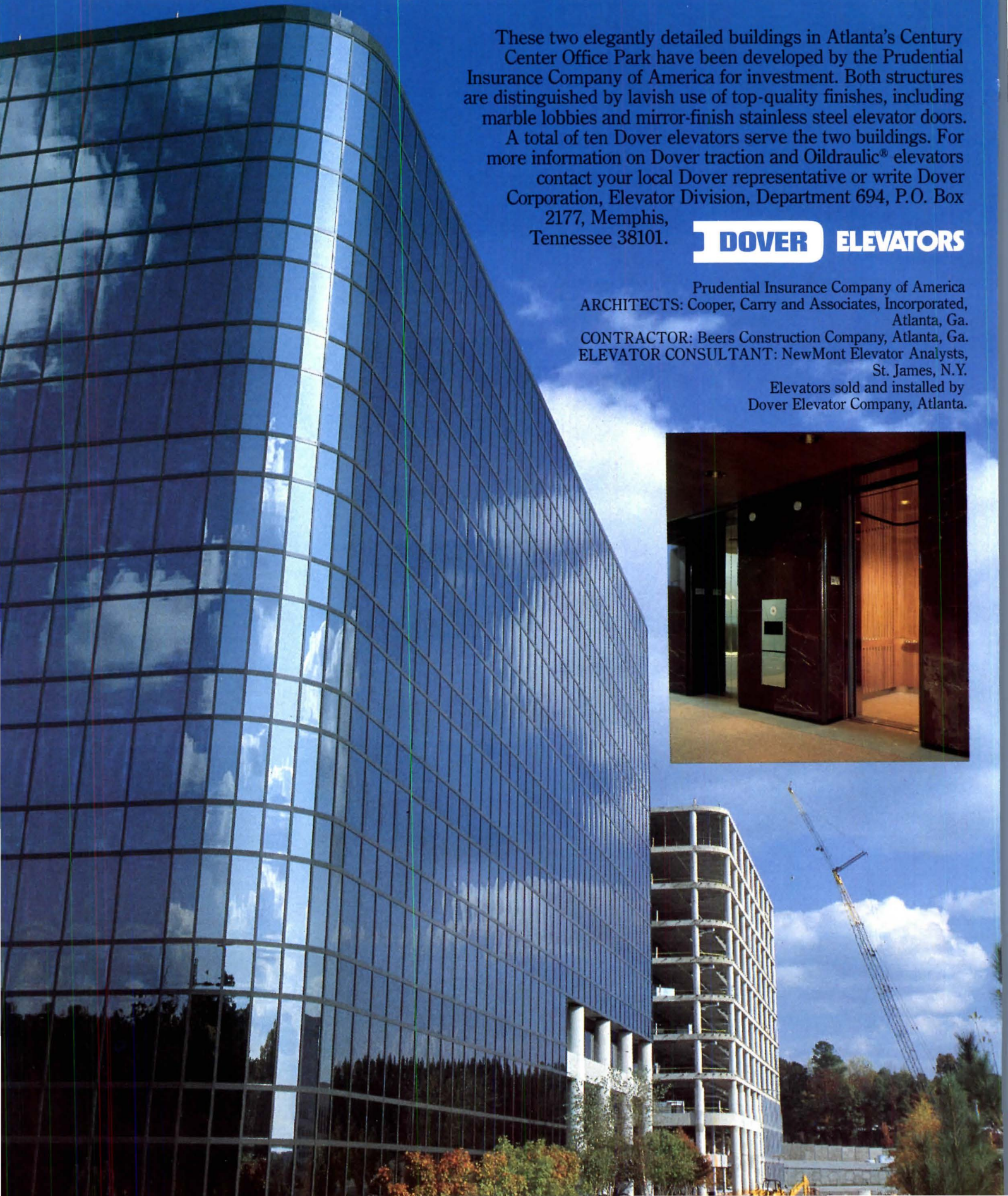
A total of ten Dover elevators serve the two buildings. For more information on Dover traction and Oilraulic® elevators contact your local Dover representative or write Dover Corporation, Elevator Division, Department 694, P.O. Box 2177, Memphis, Tennessee 38101.

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CONTRACTOR: Beers Construction Company, Atlanta, Ga.
ELEVATOR CONSULTANT: NewMont Elevator Analysts,
St. James, N.Y.

Elevators sold and installed by
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Competition calendar

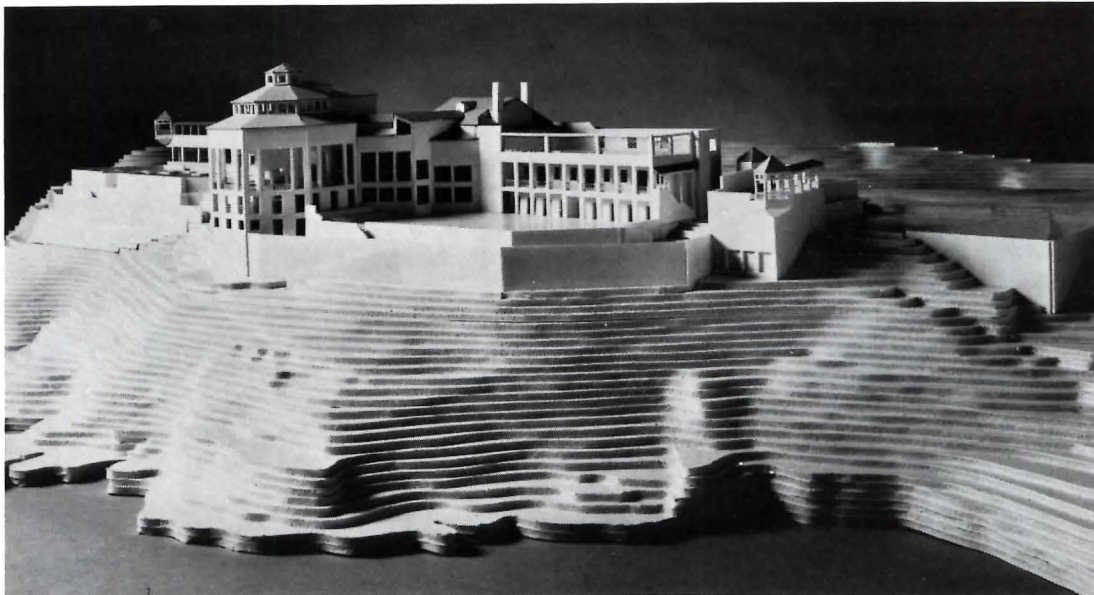
• The Florida South Chapter/AIA and the City of Miami are sponsoring a competition for the design of a pedestrian mall that will be built as a component of the Southeast Overtown/Park West redevelopment project adjacent to the city's downtown. The over-all project calls for the construction of 9,000 units of new housing and one million square feet of commercial space in the area over the next 15 years. Cash prizes totaling \$1,750 will be given to the top three submissions. Deadline for entry is October 26. For information contact the Florida South Chapter/AIA, 1150 S. W. 22nd Street, Miami, Florida 33129 (305/854-4790).

• The Town of Wethersfield, Connecticut is sponsoring a design competition that seeks "visionary ideas" for possible improvements to the Silas Deane Highway, the community's three-and-one-half-mile-long commercial corridor. Cash awards totaling \$30,000 will be given to the top eight submissions, and all winners will be included in an exhibition and brochure being prepared as part of the town's 350th birthday celebration. Entry deadline is November 5. For information and competition kits contact Joseph F. Pierz, AIA, Competition Advisor, Silas Deane Design Competition, c/o Pierz Associates, 115 Garden Street, Wethersfield, Connecticut 06109.

• The Building Stone Institute has announced its ninth annual Tucker Awards program for completed projects that incorporate natural stone. Architects may submit entries in the following categories: new residential structures, new nonresidential structures, new residential and nonresidential landscapes, building restoration, and buildings over 25 years old. Awards will be presented at an Institute luncheon in New York, and winners will appear in *Building Stone Magazine*. Deadline for entry is December 1. For additional information contact the Building Stone Institute, 420 Lexington Avenue, New York, New York 10170 (212/490-2530).

• The DuPont Company is sponsoring its annual awards competition for commercial and residential interiors completed since June, 1982, that incorporate carpeting of 100 per cent Antron nylon. First prize is a trip for two to the 1985 Milan Furniture Fair; up to three additional prizes of \$1,000 each will be awarded to honorable mention projects. Deadline for submission is March 15, 1985. For information and entry forms contact the DuPont Antron Design Award, DuPont Company, Room X-39534, Wilmington, Delaware 19898, Attention: Gary Johnston.

Playground of the Western world



Although British sway over Hong Kong is due to end in only 15 years, the prospect of impending Chinese control does not seem to bother the crown colony's resident capitalists. Witness plans for the new American Club, a lavish private enclave currently under construction on a site overlooking Tai Tam Bay that was once occupied by three villas. Designed by MLTW/Turnbull Associates in

joint venture with M. Moser & Associates, the sprawling, sand-finished concrete complex will have all the accoutrements of a typical suburban club—tennis and squash courts, swimming pools, restaurants, bars, and boat facilities—in addition to a multi-level 150-car garage terraced into the side of the steep site. The club's most distinguishing feature is a formal grill room housed in an

octagonal pavilion that evokes images of both American vernacular and British resort architecture of the 19th century. The intention of the design, according to the architects, "is to protect and segregate the membership from the pressure-filled 'outside' world and provide a multitude of locations for relaxation, sport, and culinary enjoyments."

Changes along the Chesapeake



Two ambitious mixed-use projects are adding momentum to the ongoing revitalization of downtown Baltimore. Market Center (left) is a planned office and retail development in the heart of the city's traditional shopping district that includes a combination of new high- and low-rise buildings, and the restoration of several older structures located near historic Lexington Market—all to be

connected by a brick pedestrian mall. Meanwhile, down by Baltimore's increasingly active waterfront construction has begun on Harbor Court (right) a red brick assemblage of buildings comprising a 200-room hotel, a 29-story tower with offices and retail space on the lower floors and 177 condominium apartments above, and a 750-car garage. The stepped configuration of the complex is intended to ensure

expansive views of the Inner Harbor from nearly all rooms. Arnold C. Savrann is the design architect for both projects. Associated architects for Harbor Court are Leo A. Daly and Murray Associates.

THE BEAUTY OF THESE BUILDINGS IS MORE THAN SKIN DEEP.



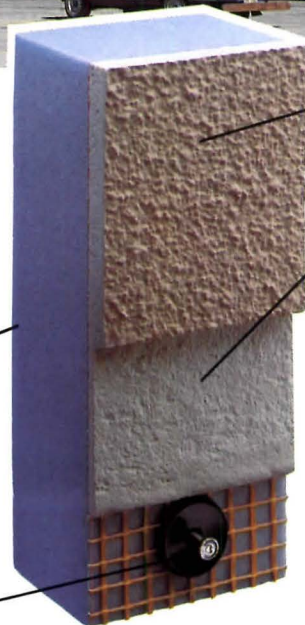
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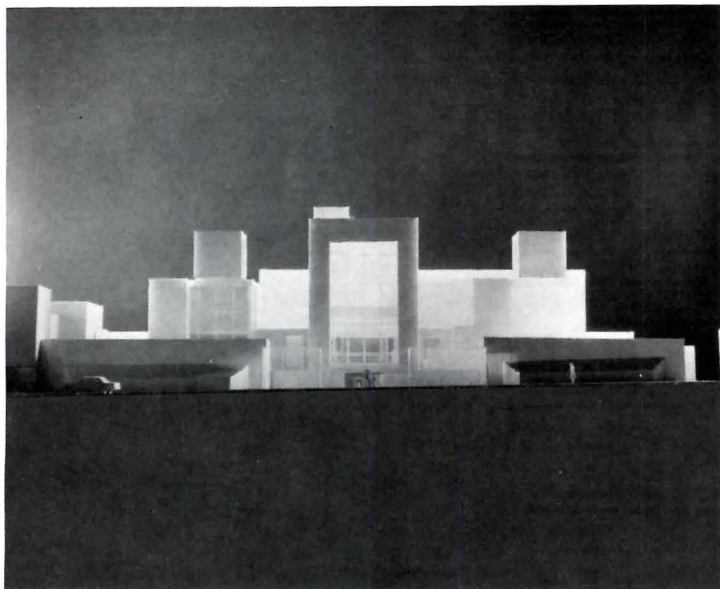
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A new library for Tinseltown

Designed to replace a facility destroyed by arson in 1981, the new Francis Howard Goldwyn regional branch library in Hollywood will consist of a two-story central entrance hall flanked on both sides by large one-story reading rooms. Stacks and administrative offices are located at the rear of the 19,500-square-foot building. The unusually restrained stucco and tile structure by Frank Gehry & Associates is

situated in a hectic commercial/industrial area of the film capital and is surrounded by a 15-foot-high wall at the property line that encloses private water gardens off the reading rooms. A series of overhangs shelters the interiors from the late morning and afternoon sun and provides "a quiet and protected place in the harsh neighborhood," according to the architect.



Conference report: Stanford stars Aspen ails

It's been a banner year for design conferences in the West, with no fewer than seven such conclaves having graced the cities of Phoenix, Monterey, Seattle, San Francisco, Los Angeles, Palo Alto, and Aspen. Although some have stood out, others were best forgotten. The high and low points? Those conferences held at Stanford and Aspen, respectively.

By an informal poll of the conferees, a large number of the 900 people in attendance found this year's Aspen Design Conference, held in late June, unusually dull. The decision of the conference's board of directors not to pick one country on which to focus (a traditional thematic approach that in the past had resulted in such successful selections as Italy and Japan) led to this year's theme of "Neighbors—Canada, USA, Mexico." Even in a week of

presentations that sought to explore cultural interrelationships and their design ramifications, the topic proved to be far too broad, the differences among the three nations more obvious than any common threads. Industrial designer and Aspen board member Ralph Caplan noted at the outset that the conference is really "a front for interaction" between the speakers and conferees. Unfortunately, there was precious little of this, as speakers left town early, and disillusioned conferees wandered off to enjoy the natural splendors of Aspen.

Nevertheless, there were some highlights. Through an examination of his own work, Mexican architect Ricardo Legorreta explained the impact that color and natural light have on his country's architecture as a whole. Art historian Hayden Herrera brought a clearer understanding of the life and art of Mexican painter Frida Kahlo through a well-crafted critical biography augmented by slides and film. The most intriguing new project presented at the conference was the National Gallery of Canada by Moshe Safdie. His design, distinguished by crystalline pavilions, will be a place of calmness and light, with rooms of brilliance and repose for viewing art.

Mediocrity takes a holiday



Although the Holiday Inn chain of hotels and motor inns has prided itself over the years on offering the weary traveler a consistent level of accommodation ("no surprises" as the advertising slogan goes), the company's banal collection of buildings carries consistency a bit too far and provides little visual comfort to guests possessing an architectural sensibility. Recognizing that a building in Beverly Hills need not look like one in Buffalo, southern California hotelier Max H. Baril has purchased a typical 1960s-vintage Holiday Inn on Wilshire Boulevard (small photo, right) and in one of the most startling renovations imaginable, transformed the five-story ugly duckling into the new 110-room Beverly Pavilion Hotel (drawing above). In addition to remodeling the interior, Welton Becket Associates have resurfaced the

exterior walls in stucco, added 22 windows on the end facades, and replaced decorative concrete screening on room balconies with wrought iron railings—a scheme that "combines traditional southern California elements with the charm of an intimate European hotel," according to the architects. Now if only Holiday Inns would take the hint. . .



In a special appearance, former California governor Jerry Brown was the only Aspen participant to address some of the political issues that divide the three featured nations. He stressed that by banding together, the governments of the United States, Canada, and Mexico could be a stronger force in the world's quest for peace—and, not incidentally, lessen the economic disparities and concomitant illegal immigration that has produced tensions between the United States and Mexico in particular.

As attendees became frustrated with the generally unsubstantive nature of the program at Aspen, they became more vocal, erupting one evening into cheers and countering boos at a fashion show of androgynously styled clothes by several Canadian fashion designers for Parachute. Dr. Jerome Lettvin, MIT biologist and engineer and 1985 conference chair, announced next year's Aspen theme, "Illusion is Truth."

The July Stanford Design Conference, in contrast to Aspen, was headlined by 16 international speakers who showed an impressive array of design work in such varied fields as naval architecture, film, furniture, footwear, illustration, photography, and interiors. Highlights included interior designer John Saladino's discussion

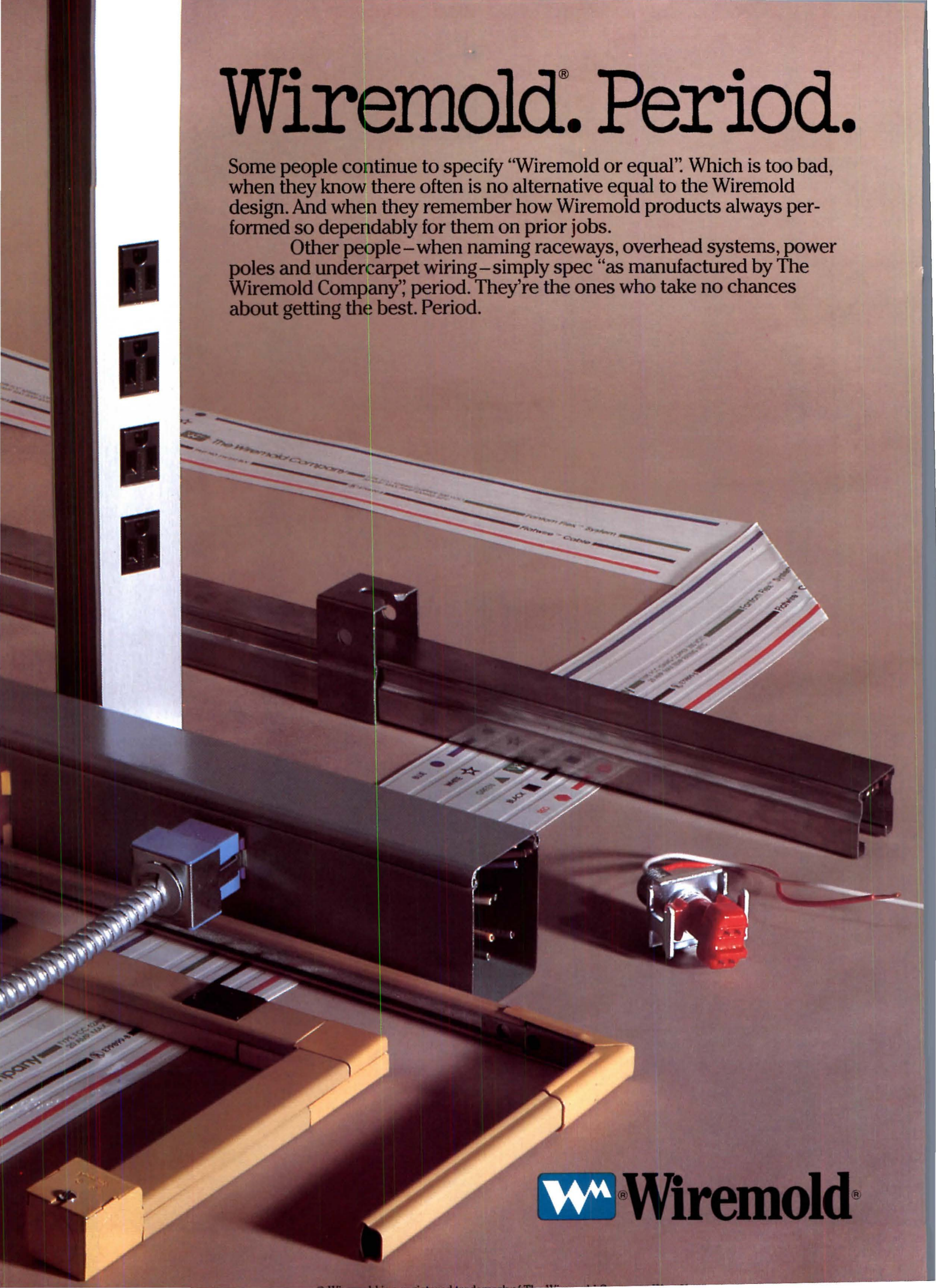
of the theatrical, illusionary nature of design that practitioners are currently achieving through an "antipasto of old and new" styles. Two publishing entrepreneurs—Sam Antupit, proprietor of Leaping Frog Press, and Franco Maria Ricci, owner of the extravagantly produced Milan-based *FMR Magazine*—recounted the joys and problems of producing the printed word.

The most off-beat presentation, but one that was quite well received, was by Bruce Nicholson, supervisor of optical photography at Industrial Light and Magic, a division of Lucasfilms. Nicholson demonstrated the technology used to create the special effects for *Star Wars* and *Raiders of the Lost Ark*. All told, over 350 people attended the Stanford conference, and most seemed to leave Palo Alto with a heightened enthusiasm for the possibilities of design—which unfortunately is more than one can say of the other conferences held in the West this year. *Janet Nairn*

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Public lectures and student symposiums to highlight Designer's Saturday

Continuing the trend developed over the past several years, the 17th annual Designer's Saturday, scheduled for October 11-15 in New York, will combine a market for 51 manufacturers of contract and residential furnishings with a series of lectures and symposiums geared toward the architectural and design community. This year's event has been expanded to four days and includes a special day of student-related activities on Monday, October 15. A complete schedule of activities follows:

Thursday, October 11

8:30-12:00 noon: Facilities Management Seminar, Fashion Institute of Technology Theater, 227 West 27th Street. Anne Fallucchi, editor of *Facilities Design & Management*, will address the role and future of facilities managers. Featured speakers include Dr. Franklin Becker, associate professor of design and environmental analysis at Cornell, and Kenneth Kirsch, vice-president of the headquarters building project for Goldome. Lawrence Lerner, chairman of Environetics International, will preview the office of the future. Michaelene Doyle, Atlantic Richfield's manager of office development and engineering, and Philip Stone, professor of psychology and social relations at Harvard, will join the speakers in a panel discussion.

1:30 and 3:30 p.m.: Facilities management talks in members' show rooms.

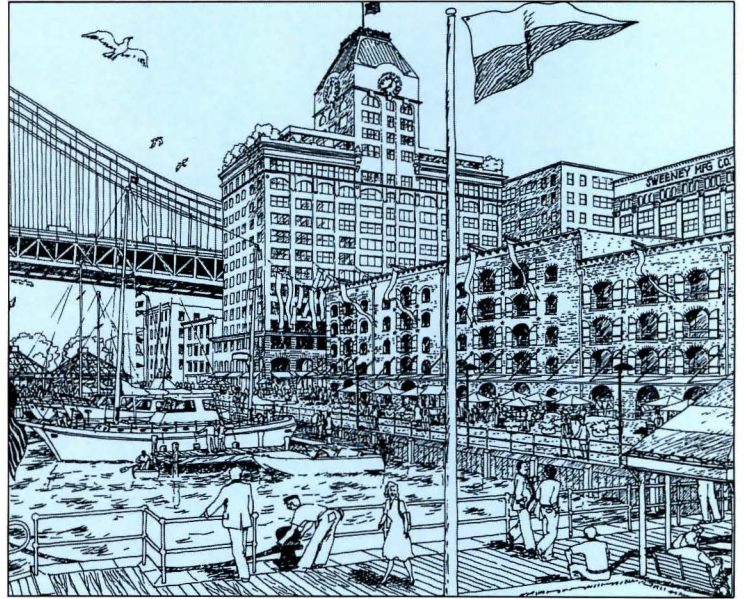
All-Steel: Terry Lautzenheiser, "Lighting for Comfort and Productivity in the Office"; **Alma Desk Company:** Barry Hirsch, "Stretching Your Open Plan System to the Limit"; **American Seating:** Tim Walker, "Designer/Client Problems, Solutions and Rewards"; **Atelier International:** Morton Glatstein, "Using Computers for Total Facilities Planning"; **B&B America/Stendig:** Bjarne Skjonnemand, "The Italian Influence on Furniture Design"; **Baker, Knapp & Tubbs:** Albert Herbert, "Craftsmanship in Today's Office"; **Beylerian:** Jay Ross, "Creating Public Places"; **Brickell Associates:** Marvin Afrime, "Making Executives Accept Open Plan"; **Brueton Industries:** Charles Pollock, "The Development and Installation of Institutional Seating"; **Castelli:** Mitchell Cohen and Carl Brosius, "Space Utilization and Furnishings: Developing Corporate Standard Programs"; **CI Designs:** Joseph Arico, "Computer Information Systems at AT&T"; **Conwed:** Parker Hirtle, "How to Gain Control of Office Acoustics"; **GF Furniture Systems:** Anthony

Zulkeski, "Futurability: Will Your Facilities Be Ready?"; **Gunlocke:** Kenneth Walker, "Design is a Deluxe Cheeseburger"; **Harter:** Hank deCillia, "The Team Approach to Facility Development"; **Haworth:** David Schowalter, "Coping with Behavior Changes in Open Plan"; **Helikon:** William Pulgram, "Automated Offices: Emerging Trends"; **Howe:** William C. Ellis, "How Space-Saving Furniture Fills Changing Office Needs"; **ICF:** Darryl Scherba, "How the Fortune 500 Choose a Design Firm"; **ii:** George Cedeno, "Flexibility in Corporate Design"; **Intrex:** Larry Gellert, "Quality Furniture: Do You Know What You Paid For?"; **JG Furniture Systems:** Patricia Conway, "Report on the New Procter & Gamble Headquarters"; **Kimball/Artec:** Will Chung and Paolo Gucci, "The Sisyphus Syndrome: Overcoming the Uphill Task of Post-Installation"; **Knoll:** Stanleigh Morris, "Facility Management: Value Versus Cost"; **Krueger:** Philip Stone and Robert Luchetti, "How to Design Offices Based on Behavioral Settings"; **Jack Lenor Larsen:** Alexandra Stoddard and Jack Lenor Larsen, "The Executive Office: The New Romanticism"; **Lehigh-Leopold:** Eugene Daniels, "The Design Professional's Changing Role"; **Herman Miller:** John Adams, "Facility Management: Taking Charge of the Work Environment"; **Modern Mode:** Richard Eppley and Steven Leach, "Managing the Development of Facilities on an International Basis"; **Pace Collection:** Steven Holl, "Interior Architecture: Modes of Composition"; **Harvey Propper:** James Moske, "The Dynamics of Pre-Lease Space Planning"; **Shaw-Walker:** Clifford Gross, "Ergonomics—Its Impact on Workman's Comp in the Office"; **Steelcase:** Mike Webster, "Electrical Requirements for Electronic Offices" and Dave Benson, "Lighting in Today's Office"; **Stendig:** Edward Weller and Thomas Fritzstein, "Planning and Design for the Electronic Office"; **Stow/Davis:** Kathy Jendrick Winkler and Ira Grayboff, "The Economic Case for Remodeling"; **SunarHauserman:** Niels Diffrient and Michael Clevenger, "The Diffrient System"; **Thonet:** Warren Snodgrass, "A History of the Desk in the Office"; **Vecta Contract:** Richard Coronato, "Planning Facilities for Facilities Planners"; **Westinghouse:** Carol Groh and Robert Najarian, "Getting the Most from Your Design Team."

5:30-7:30 p.m.: Cocktail reception for facilities executives and corporate designers at the Asia Society, 725 Park Avenue.

Continued on page 63

Reviving the Brooklyn waterfront



Now that the South Street Seaport complex in lower Manhattan is a reality, watchdogs of New York's waterfront have turned their attention across the East River to Brooklyn, where developer David Walentas is converting 10 industrial buildings into two million square feet of office space. Spectacularly located between the Brooklyn and Manhattan bridges, the project is the core of a larger mixed-use

redevelopment plan for the area called Fulton Landing that will include a six-acre riverfront park and promenade, a 100-slip marina, a pier pavilion and farmers' market, and a group of restaurants and shops within the restored shell of the Empire Stores, seven brick warehouses built after the Civil War. Joint architects for the project are Beyer Blinder Belle and John T. Fiffeld Associates.

New life for a tower in Tulsa

One of the most striking building expansions in recent memory, the Mid-Continent Tower in Tulsa incorporates a 16-story office structure erected in 1918 with a 36-story addition whose lavishly ornamented terra-cotta facade harmonizes with the English Gothic decoration of the original building. Structurally independent, the addition rises to the existing cornice line and then cantilevers out on five, two-story-high trusses that support a 20-story tower suspended 12 inches above the original building. A copper-sheathed mansard roof crowns the structure and completes the unified architectural effect. Architects and engineers on the project were HTB, Inc. Gladding McBean, the last remaining producer of terra-cotta in the country, fabricated the 90,000 ornamental pieces utilized in the addition.



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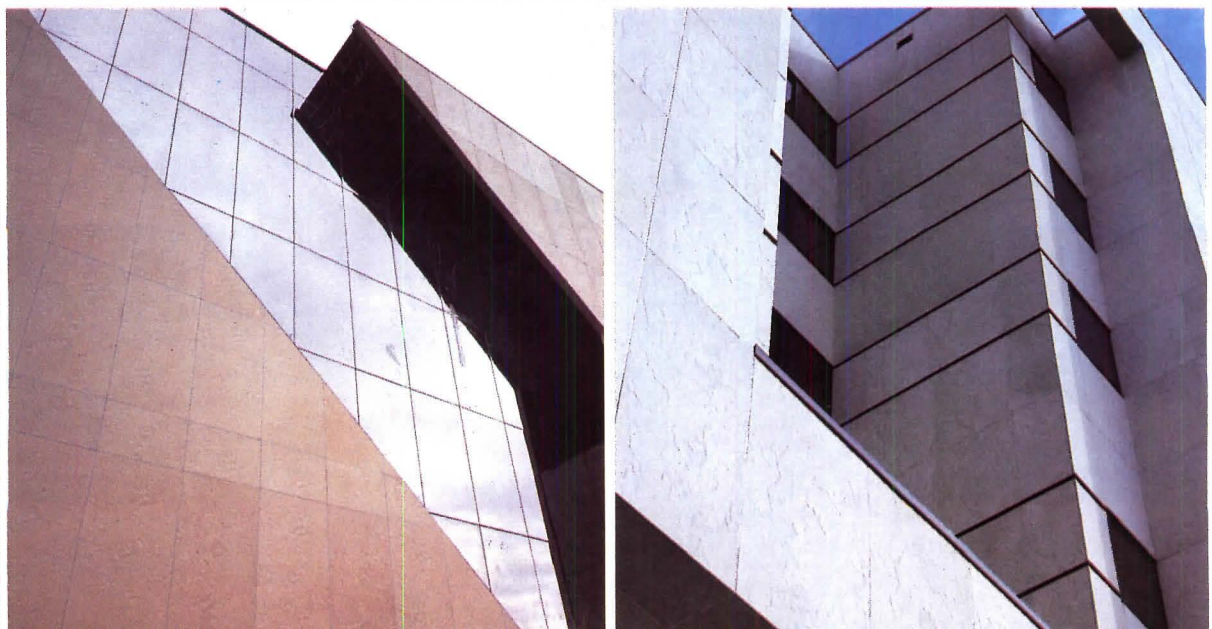
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Friday, October 12

9:00 a.m.-5:00 p.m.: All member showrooms will be open.

5:30-7:30 p.m.: "Meet the Trendsetters" film, seminar and cocktail reception, Fashion Institute of Technology Theater. The film *Beyond Utopia: Changing Attitudes in American Architecture* will be shown. The film examines the work and philosophy of architects Robert Venturi, Denise Scott Brown, Peter Eisenman, Michael Graves, and Frank Gehry. Martin Filler, scriptwriter for the film and editor of *House and Garden*, will discuss recent developments in architecture, and Suzanne Slesin, assistant editor of *The New York Times*, will reveal future trends in home furnishings. A cocktail reception sponsored by the International Design Center New York will follow. (Film will be repeated on Sunday, October 14, at 2:00 p.m.)

Saturday, October 13

9:00 a.m.-5:00 p.m.: All member showrooms will be open.

7:00-9:00 p.m.: Reception at the Metropolitan Museum of Art.

Monday, October 15

9:00 a.m.-5:00 p.m.: All member showrooms will be open, and several will feature the following seminars directed at design students.

Alma Desk: Kenneth Zick, "Product Development and Design from Concept to Retirement," 10:30 a.m.; **Atelier International:** RitaSue Siegel, "How to Conduct a Successful Interview," 1:30 p.m.; **B&B America/Stendig:** Bjarne Skjonnemand, "The Italian Influence on Interior Design," 11:30 a.m.; **Beylerian:** George Beylerian, "Product Portfolio Review: Show and Tell," 11:00 a.m. & 2:00 p.m.; **Castelli:** Judith Erger and Robert Turetsky, "The Working Relationship Between the Manufacturer and the Design Professional," 1:30 p.m.; **Haworth:** "Computer-Aided Design: Cadvantage," all day; **Knoll International:** Jeff Osborne, "The Design Continuum," 2:30 p.m.; **Krueger:** Dick Cantwell, "The Impact of Designers on the Contract Furniture Market," 10:30 a.m.; **Jack Lenor Larsen:** Mark Pollack, "The Evolution of a Textile Designer," 10:30 a.m.; **Steelcase:** Open discussions with principals of leading design firms at 9:00 a.m., 12 noon, and 3:00 p.m.; **Stendig:** Larry Pond, "Career Options for Designers with Manufacturers," 10:30 a.m.; **Stow/Davis:** Richard Ogg, "How the Freelance Designer Interfaces with the Manufacturer," 10:30 a.m.



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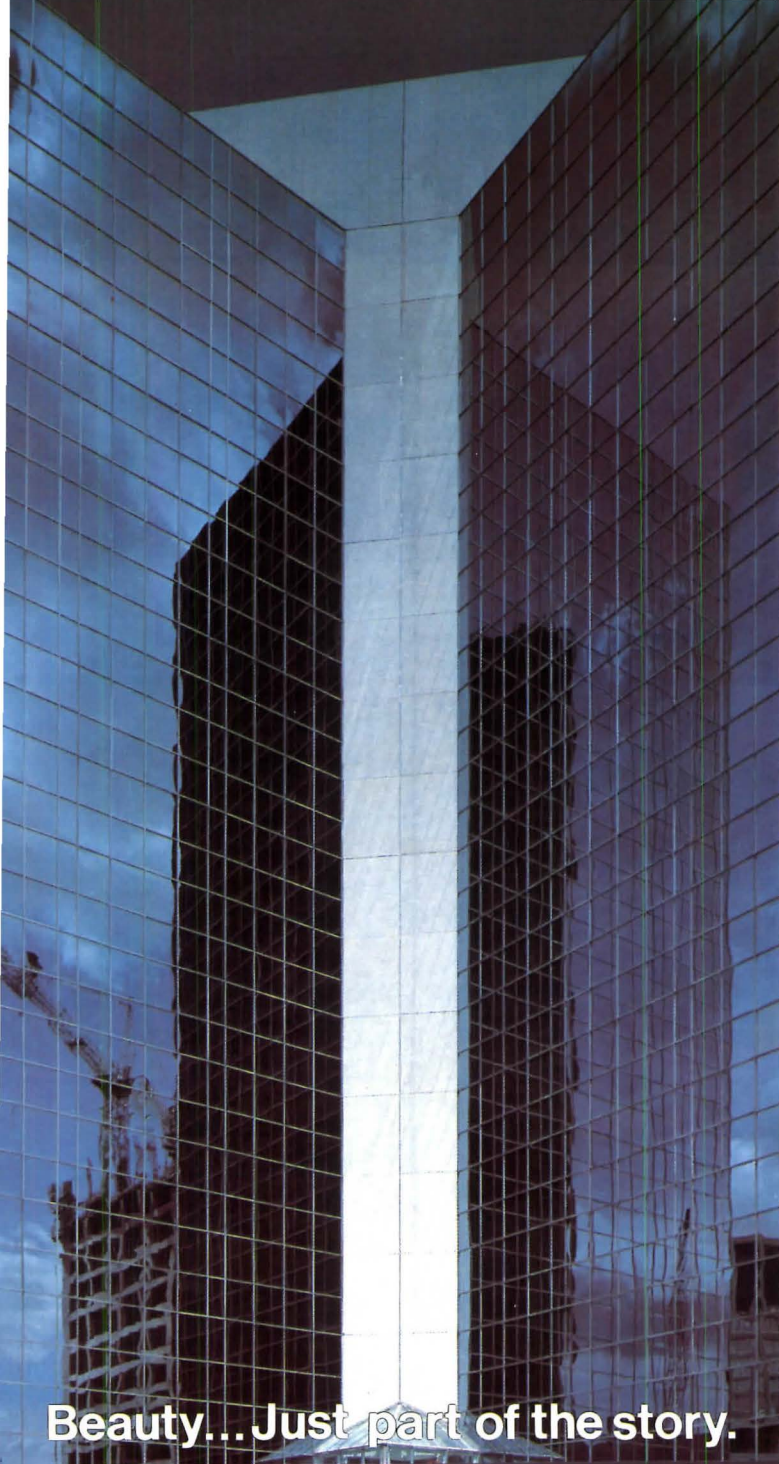
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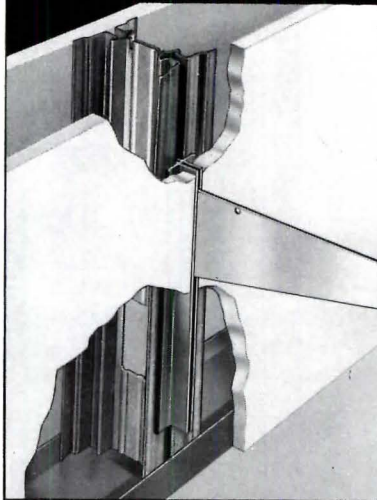
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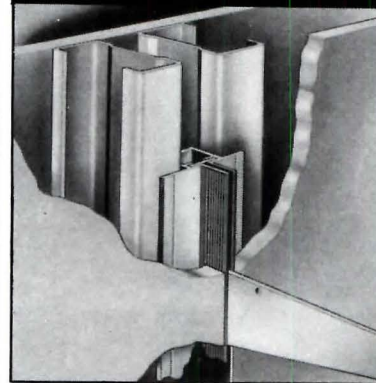


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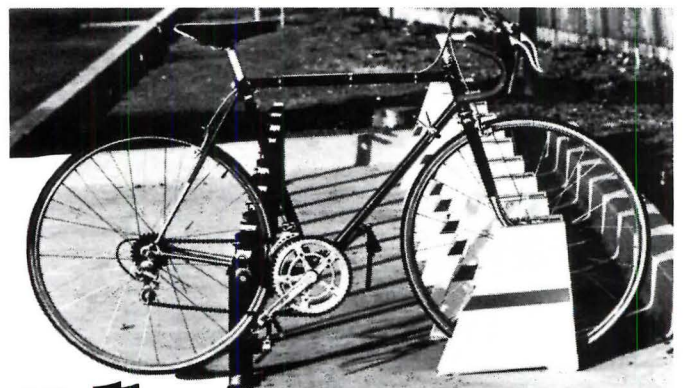


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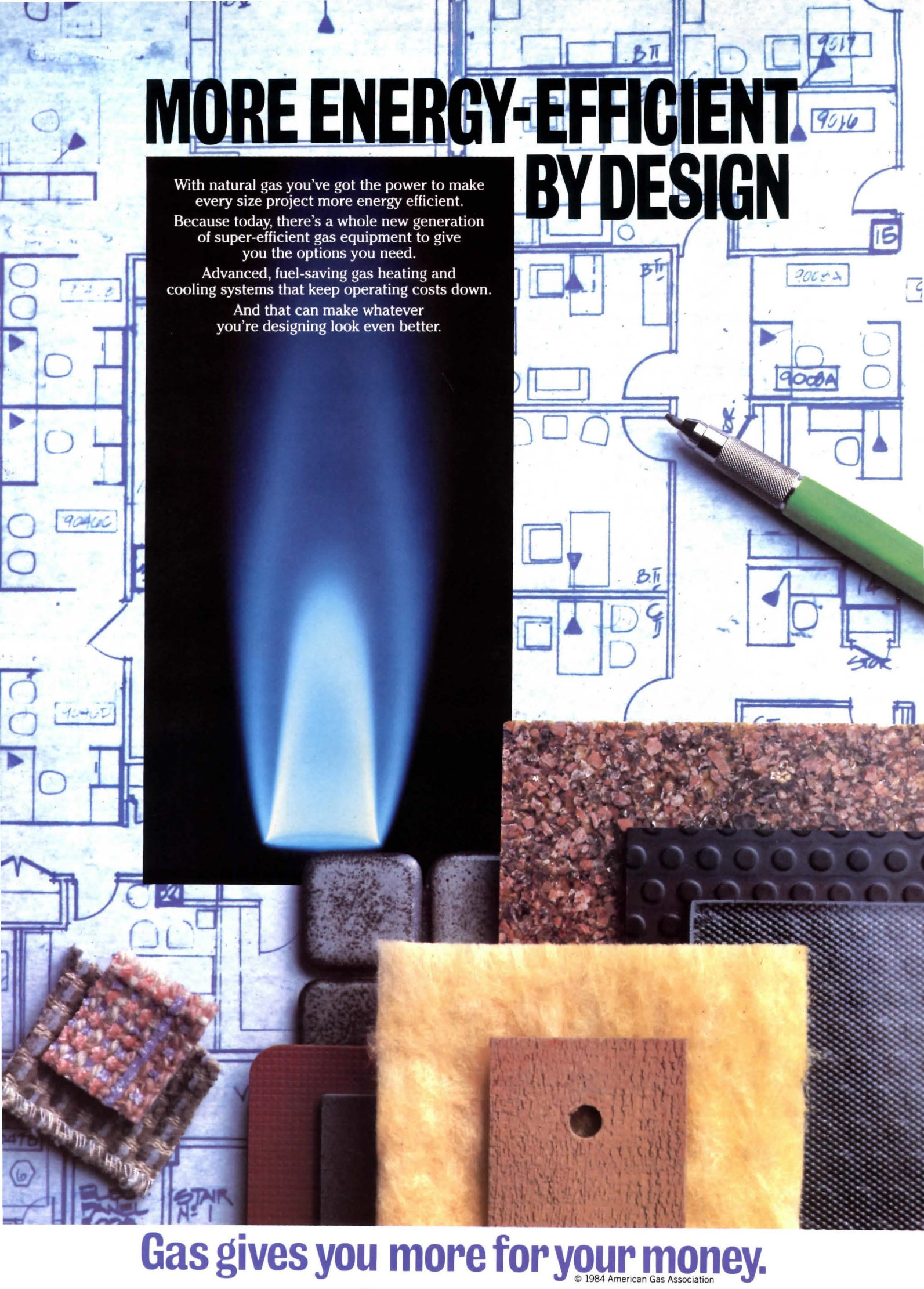
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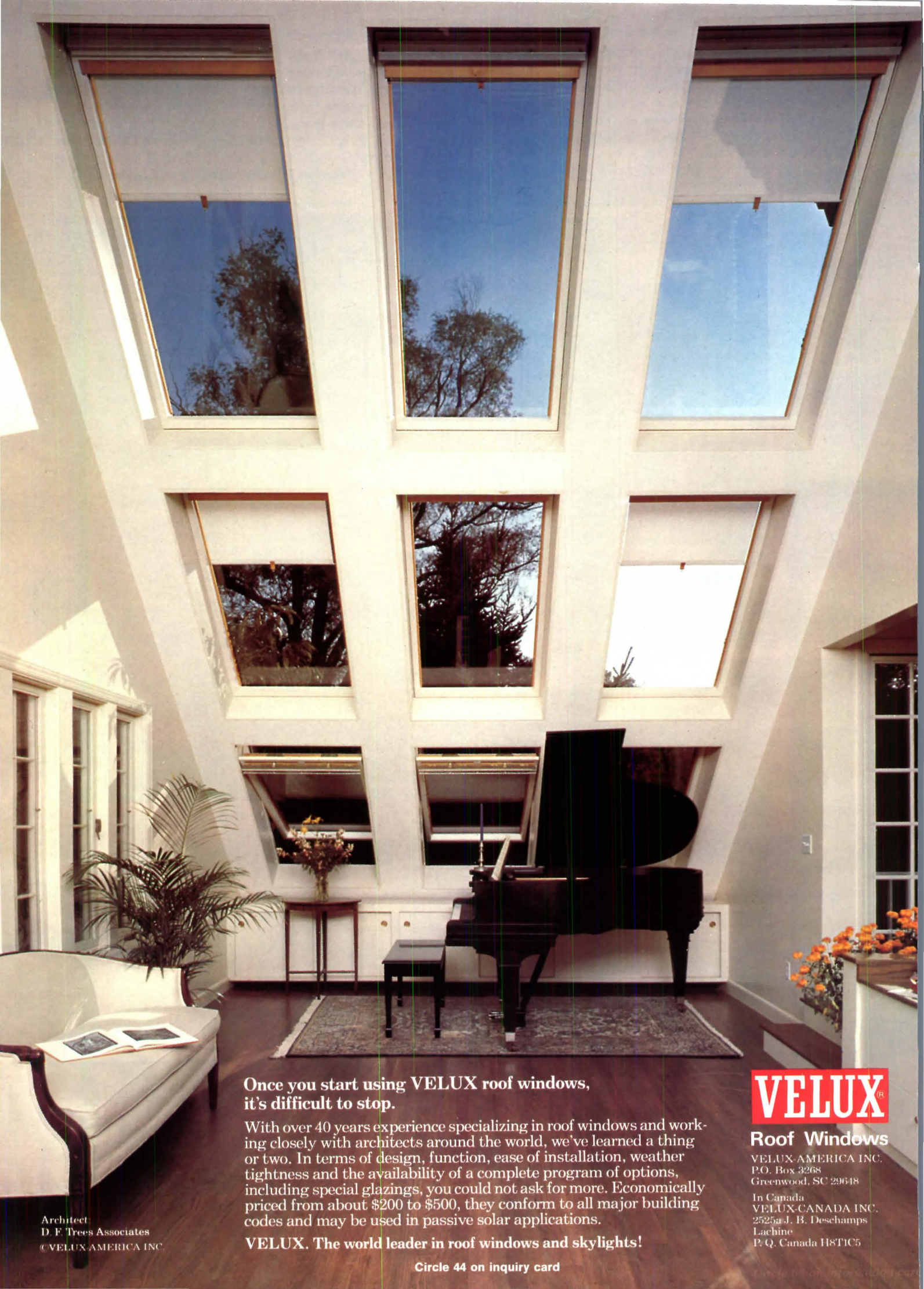
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Reassessing the art of landscape design: Central Park as a case study

By William Hubbard

Out of the current ten-year plan to restore Central Park in New York have come a series of notable projects, all carried out under the leadership of the Parks Department and Central Park Administrator Elizabeth Barlow. Two of these projects—the reconstruction of the Dairy and Belvedere Castle by James Lamantia and the firm of Russo and Sonder, as well as the ongoing restoration of the Bethesda Terrace by The Ehrenkrantz Group—are precise restorations of parts of the park that had fallen into disrepair. Others such as the plan for the restoration of the landscape of the Ramble by Philip N. Winslow and Bruce Kelly are careful proposals for future work. A third type of project has required the insertion of wholly new designs into the context of the park. Richard Oliver's information desk and gift shop, recently installed in the Dairy, is one; two others are the redesigned concourse around the Cherry Hill Fountain and the new Central Park lamps done by Gerald Allen—the former in joint venture with Peter L. Gluck and Associates, and the latter through his own firm in collaboration with Kent Bloomer. To produce these new projects, the designers have had to grasp the spirit of the park, but in so doing they have also had to learn two important lessons.

The first lesson is not so much about design as it is about a way of perceiving the world. The second is about design, a general conception valid for all architecture. These lessons are important, for us as designers but also for us as people, and so they are worth sharing here.

A way of thinking

Why, first off, do we even have parks?

"The word 'parks' has different significations, but that in which we are now interested has grown out of its application centuries ago, simply to hunting grounds; the choicest lands being those in which the beasts of the chase were most happy and consequently most abundant. . . . Parties of pleasure occasionally met in these parks, and when these meetings occurred the enjoyment otherwise obtained in them was found to be increased. . . . People took pleasure in them without regard to the attractions of the chase—and this pleasure was perceived to be, in some degree, related to the scenery, and in some degree to the particular manner of association which occurred in them; and this was also found to be independent of intellectual gifts, tranquilizing and restorative to the powers most taxed in ordinary social duties."

The writers are Frederick Law Olmsted and Calvert Vaux, the

designers of Central Park, and the time is the middle of the 19th century, just as their designs for the park were being built and planted. The words have that ring of the mid-Victorian about them, that lacy grandiloquence that makes us smile. But there is also that other side of the mid-Victorian temper which sometimes makes us envious—the ability to penetrate to the heart of a phenomenon and come away with an explanation that is clean of theorizing, convincing in its matter-of-factness.

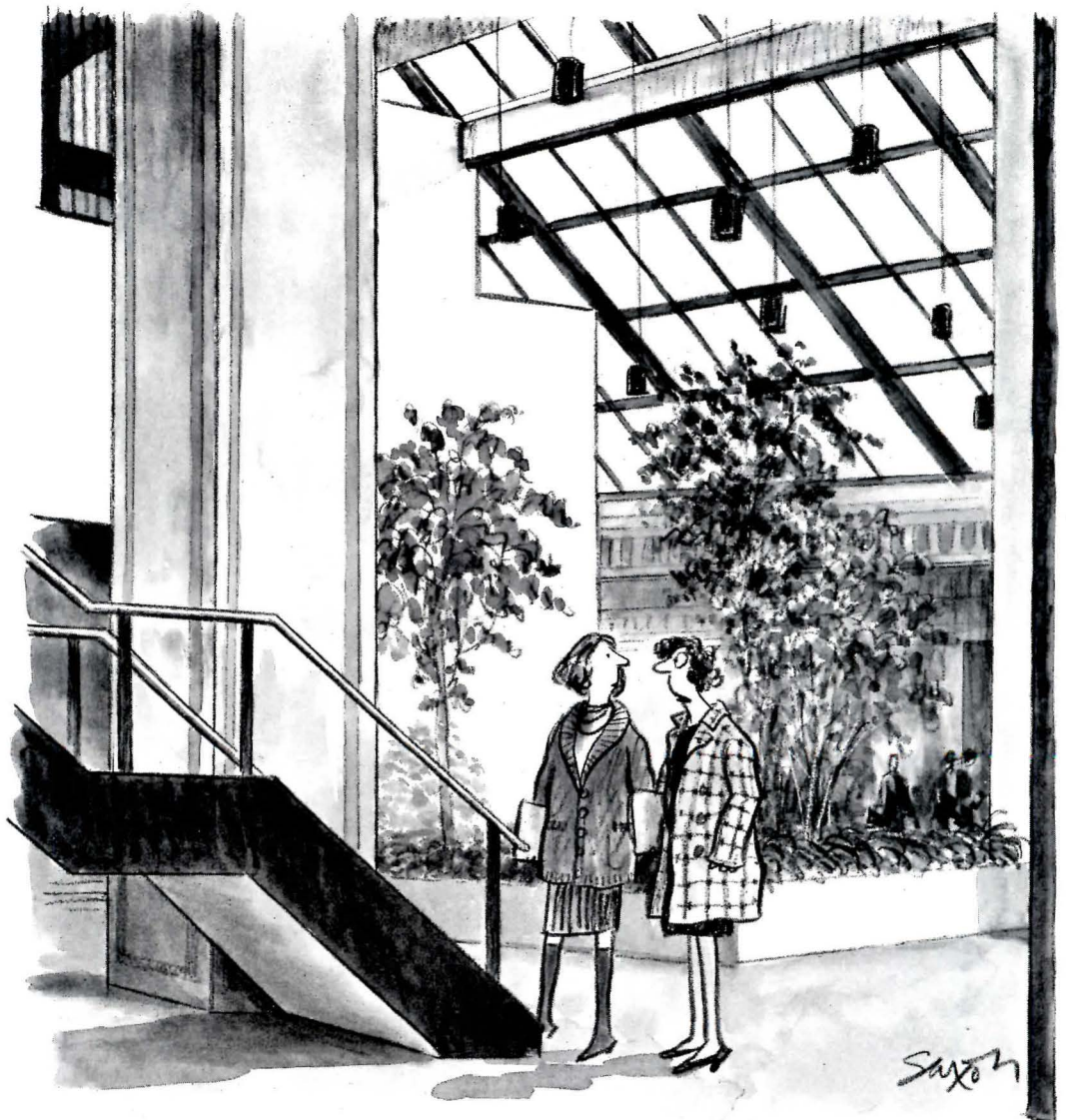
How did parks happen? Parks happened, according to Olmsted and Vaux, simply because people found that when they tarried in hunting grounds, they enjoyed the thoughts and feelings that came into their minds. And how does landscape stimulate the imagination? The answer is equally self-evident. If we see. . .

"... a broad stretch of slightly undulating meadow without defined edge, its turf lost in a haze of the shadows of scattered trees under the branches of which the eye could range—the imagination, looking into the soft commingling lights and shadows and fading tints of color of the background would have encouragement to extend those purely rural conditions indefinitely. No one, looking into a closely grown wood, can be certain that at a short distance back there are not glades or streams, or that a more open disposition of trees does not prevail."

Landscape invites us to ponder, to imagine, to fabricate possibilities for what we see. It invites us not to resolution, to paring down all the possibilities and deciding what a thing must be. Rather, landscape

encourages us to do just the opposite, to entertain all the possibilities of what something might be.

Olmsted and Vaux knew that as human beings, our spirits have those two complementary tendencies—the urge to winnow down and the desire to speculate. They saw this as the natural human condition—inevitable, and even desirable. And they did not consider speculation the junior partner of the pair, a merely pleasurable respite from the workaday, purposive mode of thought that actually gets things done. Reflection was a real human need, without which a person would be altogether incomplete, even uncivilized, in the full sense of that word. But they knew that life in a city can be inimical to that kind of thinking (we can't sit and ponder what a green light might mean), and so they made Central Park a



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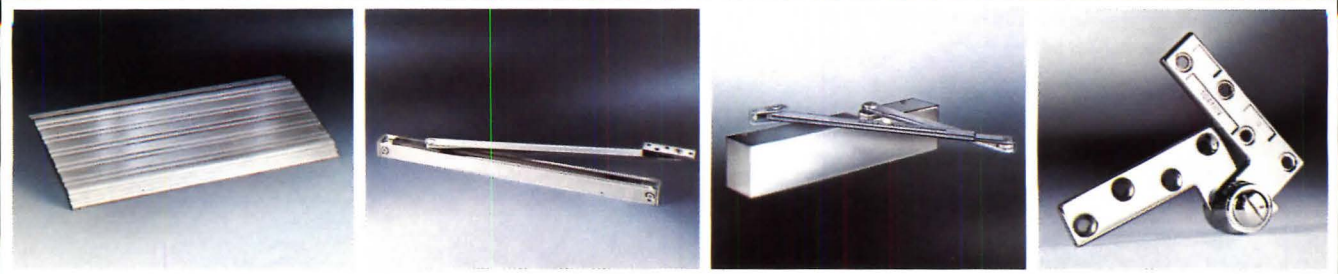
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Spiraling pathways (site plan right) lead visitors to the restored concourse and fountain (small and large photos) at Cherry Hill in Central Park. Restoration architect: Peter L. Gluck & Associates; project architect: Gerald Allen.



place that would systematically and conscientiously invite speculation. The park was not just a piece of ground free of buildings and bustle, an absence of the city. It was also a presence of scenes, each shaped as consciously as any building, each offering up chances to exercise that very imaginative faculty that city life can suppress.

Thus, the Sheep Meadow, a vast lawn in the middle of the park, was laid out so that it would be that kind of grassy plain edged with trees "under the branches of which the eye could range," fancying what might be in the shadows. And the Ramble, a patch of dense woods clinging to rough terrain, was also planned as an invitation to ponder, to look into its grottoes and gorges and conjure up images of wild places both remembered and imagined. Walking in the Ramble, one might be reminded of, say, a trail in the Adirondacks—the rocky outcroppings, the stream beds, the ferny glades. But once those thoughts came into our heads, we might also begin to attend more intently to the ways in which the Ramble is different from that other place—its particular mix of trees, the unique color and texture of its rocks, the size and steepness of its gorges. Through comparisons we would become more acutely aware of the specific character of the place we were actually in.

Is it not, in fact, in just this way that we come to know a place? Is it not, indeed, in just this way that we come to know anything? When you stop to consider it, you realize that we do define things largely in terms of other things: "This is like that but different in these ways. . . ." That being so, the wider we can cast the net of those comparisons—the more places we can compare this place to, and the more we can speculate—the better we can really know a place. And through knowing it, we can sense that it is our place and feel at home there.

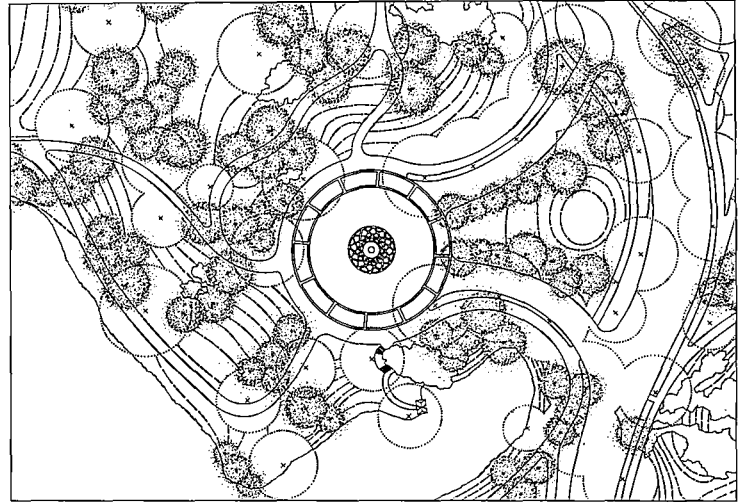
Because Olmsted and Vaux recognized this fact, they made landscape scenes that were not merely pretty but "stimulating to the imagination." They saw to it, moreover, that the built as well as the natural parts of the park—its steps and fountains and bridges—were suggestive in exactly the same way. One of those built parts, the Bethesda Terrace, in fact looms into view when we emerge from the Ramble. When we walk out onto the point of land overlooking the lake, we see the terrace and its fountain. And when we ponder the view of the terrace juxtaposed against the lake, connectable comparisons come to mind. We notice, for instance, the way our eye slides along the edge of the terrace and how like that is to the way our eye moves around the

edge of the lake, and how different too. We might also compare the shapes of the leaves near at hand and the shape of the angel's wings in the distance, or the shape of the arches at the back of the terrace and the shapes made by the trunks and canopies of the trees behind them. As was true in the Ramble, comparing makes us know the place more fully, and in more detail.

Olmsted and Vaux intended all this and planned Central Park with the conviction that it would make us have those thoughts. Because they put comparable things together right before our eyes, works like the Bethesda Terrace and its landscape guide us toward thinking and give us back pleasure and enlightenment when we do. But even more than this, they attune us anew to our own capacity to think in this way. They reawaken in us our ability to fashion imaginative connections "independent of intellectual gifts"—not just from scenes in the park, but indeed from all the scenes we may encounter in our daily lives. By teaching us how to see, the lesson of Central Park is not, in the end, a lesson about nature: it is a lesson about the speculative cast of mind, and about a way of perceiving the world. If the lesson "takes" on us, we can carry it away from the park and realize that one does not need a backdrop of nature to notice, know, and feel the specific qualities of the world one inhabits.

From the park into the city Olmsted and Vaux were deeply concerned about the fact that city living can make us forget this lesson. But they also saw the paradox of life in the city: even though urban life pinches and stifles the speculative mode of thought, the city itself can hold out to us the richest possible mix of connectable images, if only we would attend to them. If only we would, the city itself could leaven urban life with resonance and delight. But how different from that Victorian city of decoration and ebullience is the contemporary city. So much of what we have built since World War II thwarts speculation. If the Victorian city looks to us now like an open invitation to the speculative frame of mind, the modern city seems the very embodiment of that other tendency in human thought, that drive to winnow down, to make things ineluctable, irreducible, and definitive. To the extent that this is true of the contemporary city, the culprit is not so much modernism, but our own pared-down and peculiarly contemporary mode of thinking, of which modern architecture and city planning are only reflections. In our present-day

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temper we tend to discount the speculative as somehow "extra"—desirable, yes, but in the final analysis (be that analysis financial, esthetic, or whatever) nonessential. Something will be sufficient, maybe even better, if it is pared-down rather than elaborated, definitive rather than suggestive, generic rather than unique.

It is this attitude that has in large part built the modern city, adopted at some times out of idealism, at other times out of bottom-line venality. But regardless of the provenance, the results stand among us, and as we contemplate those modern cityscapes, we feel sure that something is missing. It is not just that the modern city can be unpleasant (the city of Dickens was probably a more "unpleasant" place to live in); it is rather that we have the sure sense that there has to be more than just this. Our minds sense that a city true to only the pared-down, definitive way of thinking cannot be completely true to what we fully are.

Whatever the reasons, the city feels wrong somehow, and we don't know quite how to go about getting it right again. All of us—architects as well as people who hire architects—have done bottom-line thinking for so long that we've lost the knack, the attunement, of perceiving the world in any other manner.

A way of designing

It is this kind of thinking that has caused us in the 20th century to conceive design in a way that Olmsted, Vaux, and other designers of their time never did. With our passion for the ineluctable, we see design as an all-or-nothing proposition. We reserve the word "design" for the invention of something wholly new. Everything else is "restoration," "reuse," or "intervention."

These are false distinctions. Olmsted and Vaux knew that if having a tree seen against a certain backdrop engenders speculation in us, then any act that achieves that result is an act of design. Whether the act is one of planting both tree and backdrop, or planting a new backdrop behind an existing tree, or planting a new tree in front of an existing backdrop, or leaving in place a tree and backdrop that are already there—all are the same design act because all are after the same goal of putting into the world an *orchestrated source of speculation*. Seen in this light, the current restoration of Central Park is not really a restoration to a certain physical state. It is restoring to the park its power to engender reflection in us. The reconstruction of the Belvedere Castle and Dairy put back into the world two

orchestrations of Olmsted and Vaux. The new projects—the lamps, the Cherry Hill Concourse, and the information desk—take old work and re-orchestrate it. Each weaves the new work into the existing in such a way that old and new together engender speculation not before seen or imaginable.

The Cherry Hill Concourse

The Cherry Hill project involved both restoring the central fountain to its original state and providing a new concourse around it. The first thing to notice about the concourse is the way we approach it along pathways that follow flowing curves in from the trees. As we swing toward the concourse, our eyes are caught by the stone paving ribs that curve in to the fountain basin, and we can imagine a sweeping spiral line that would carry us toward that basin as smoothly as a whirlpool conducts toward a drain. Sensing our movement along that imagined line makes us aware of the motion of our bodies through this space and the specific qualities of this path, its rises and falls and curves, and the ways it is like and unlike other paths in the park and elsewhere.

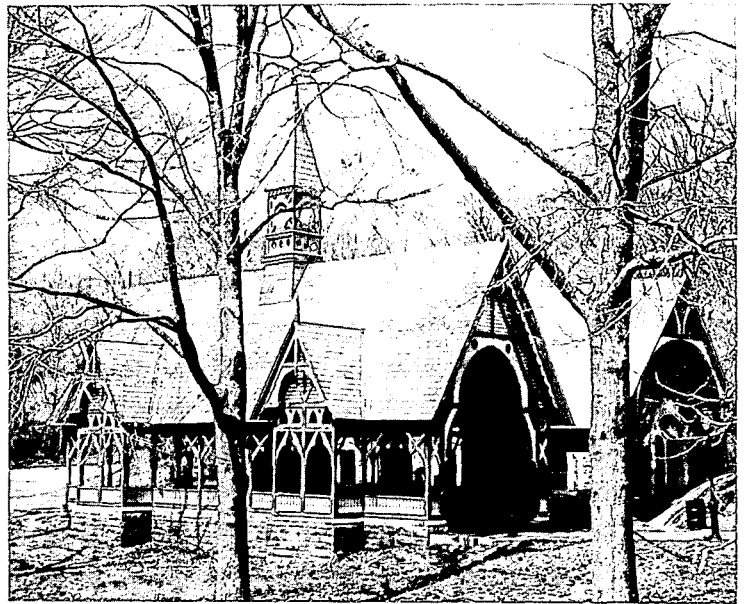
Arriving on the concourse, though, we notice that those spiral lines are crossed by others, and all those lines together catch our eyes and sweep them around the edges of the concourse. As our eyes move this way, the fountain comes repeatedly into view against its backdrop of trees, and we notice how tree-like is the metal finial on the fountain. And if it is the right season, we will notice that there are birds splashing in the little birdbaths suspended in the branches of the finial. Birds in the metal tree, birds in the real trees—a comparison set up by Olmsted and Vaux and offered up to us again, but in a new way, by new work.

If you happen to notice that the paving pattern of the concourse resembles that of the Campidoglio in Rome, well, then, so much the better for speculation. Perhaps one of the thoughts that will occur to you is that the ribs of the Campidoglio's paving likewise cause your eyes to sweep around the edge of that plaza. The real point, though, is not so much where the spirals came from but what they do. They heighten our experience of the place, make us attend more intently to its character, and so insinuate in us the idea that this is a place to ponder.

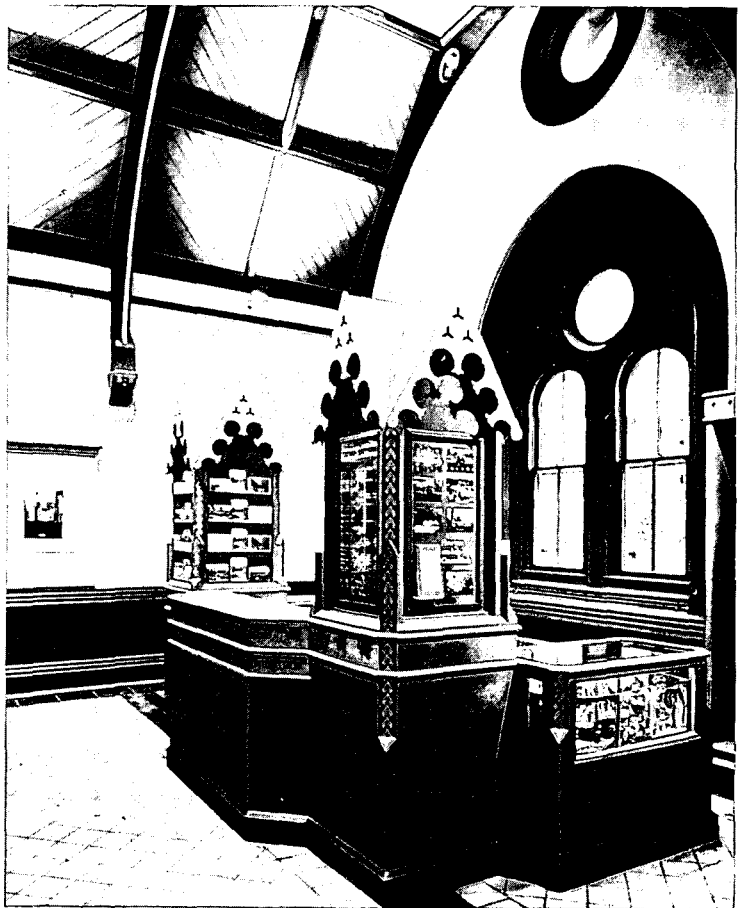
Robert Moses Information Desk

The information desk in the Dairy shows another way of accomplishing this invitation to fantasy. One of the first things we might perceive about the desk is the

The restored Gothic Revival Dairy (below) now serves as a center housing park-related public programs. The new Robert Moses information desk (bottom) was designed by architect Richard Oliver.

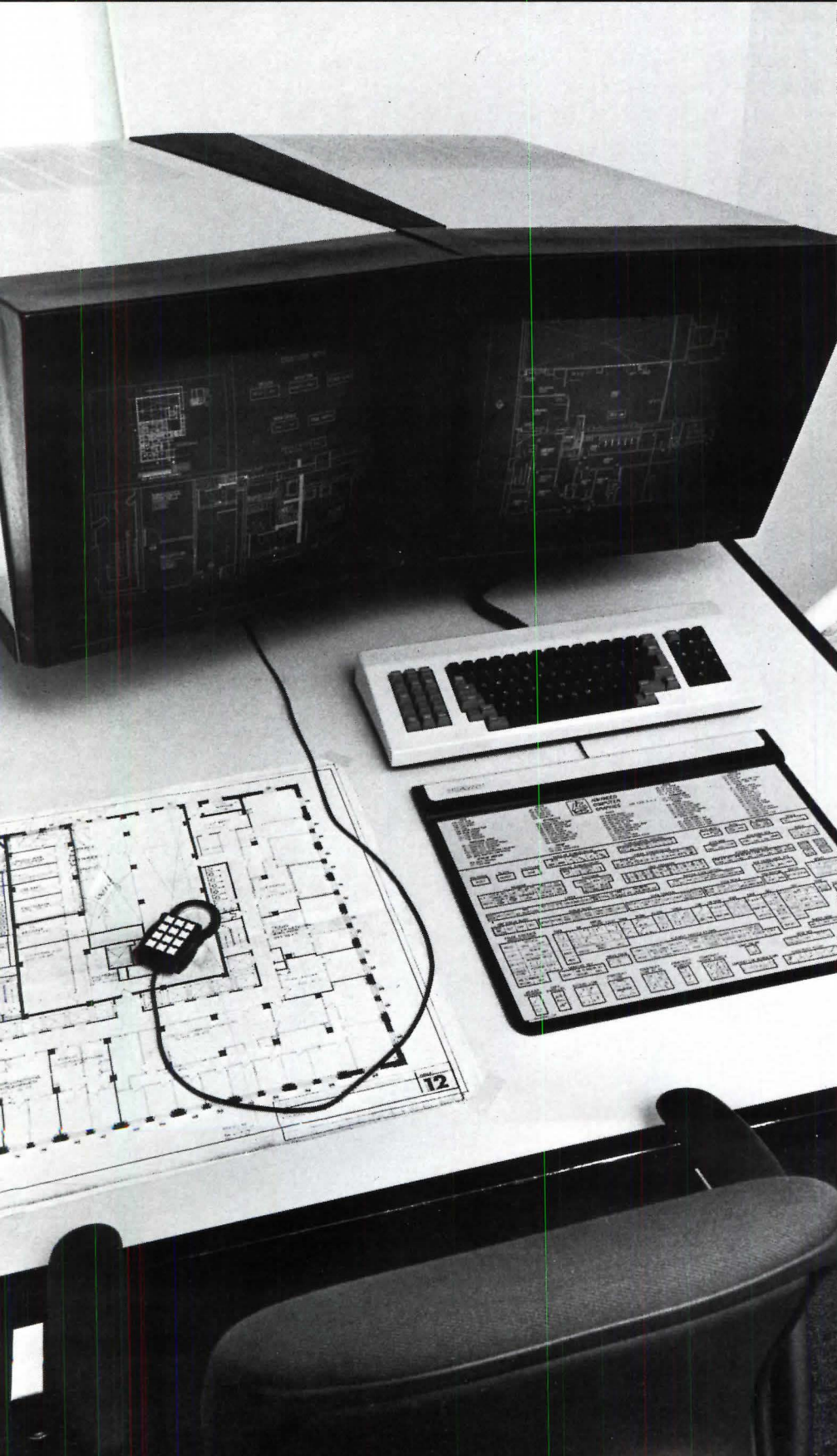


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Gerald Allen and Kent Bloomer designed new luminaires for the lamps in Central Park. They feature botanical forms that echo floral motifs created for the light posts by Henry Bacon in 1910.

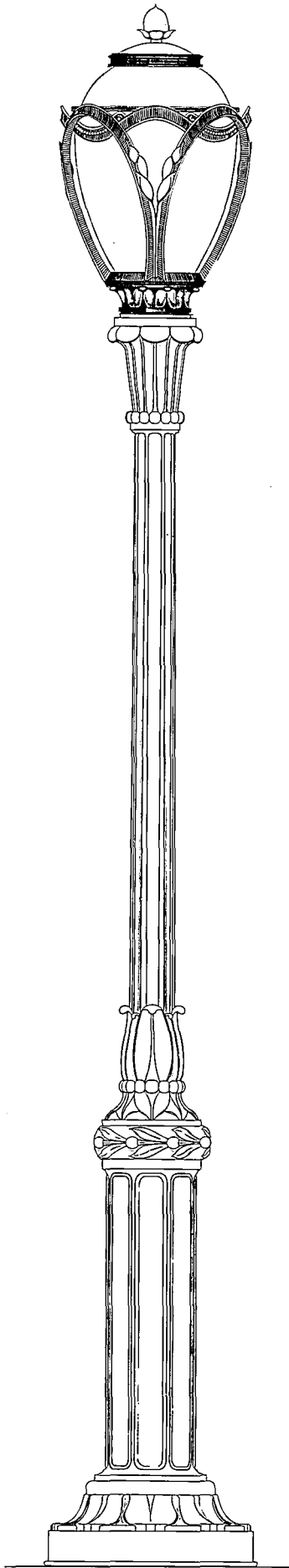
stencilled images of winged cows deployed around its rim. On one level these cows remind us of where we are (the Dairy) and that in this place milk was once dispensed to the children of the city. But on another level there are those wings: what are we to think about them?

Which is precisely the point. Winged cows are not something we encounter every day, and that calculated strangeness plants in our heads the thought that fantasy, not ordinary thinking, is the operative mode here. If we catch the tip-off of the winged cows and look closely at other parts of the desk, we will realize that strangeness abounds: taking a step back from the desk, we see that it is like a little building inside a bigger structure. If we look at the elaborate gables on this little building, we might remember that the bigger building also has elaborate gables. But we then realize the ways in which the gables of each "building" are different. These over the desk are more plate-like and geometric than those outside, with only a few careful chamfers (How many chamfers are on the big gables?) and made out of a single piece of wood. (How many pieces of wood make up the big gables?) Looking still closer, we realize that each of the desk's corners has chevronlike decoration but that each corner is different. (What sorts of decoration are in the big building? Does it also differ from place to place?)

It is this calculated strangeness that makes the desk seem such an integral, orchestrated part of the Dairy. Its axial placement helps, of course, along with "Gothic" styling. But the orchestration exists, on a deeper level, in our minds, in the ways that our thoughts flit from desk to building and back again, the desk asking us to look at the building, the building asking us to look at the desk, and both inviting us to speculate what this "strangeness" all might mean.

New lamps

The kind of second-take strangeness that we saw in the information desk shows up again in the 1910 design of the lampposts in Central Park. That design by Henry Bacon, the architect of the Lincoln Memorial in Washington, departed from the usual form of a city lamppost of that era which was a post with a foot, base, pedestal, and shaft. Those elements are here shaped into suggestions of plants—buds, stems, and garlands of leaves. The result is that the parts of the lamppost appear to be growing up out of each other, like the parts of plants do, and not stacked up on top of each other the way parts of buildings are. Here again is a calculated strangeness that invites



us to speculate about how the parts of a building go together, and especially about the many ways (available for contemplation all through the park) in which the parts of plants grow out of each other.

Bacon, however, was unable to devise a way of making the light fixture atop the post carry on that suggestion of growth. And the succession of luminaires that were later installed on the posts did not even make the attempt. So when the commission came to design a new light to go on the old posts, co-designer Kent Bloomer seized the chance to complete the botanical idea that Bacon's design had begun. Thus the hoops of the new light fixture "grow" upward from a new ring of out-turned leaves, that suggestion of growth enhanced by more leaves climbing up the hoops' sides. But in real plants, the feel of one thing growing out of the preceding stops at the end of a stem where a plant exfoliates. And so the light, too, opens itself out: the hoops spread and release a double cap that hovers like an upturned bowl held aloft by outstretched fingertips.

As was the case at the Cherry Hill concourse, we can both see the object and feel it with our bodies. But we can also view it in other ways that are new and specific to our time and perceptions. One of the things that has shaped the way we see today is Cubism and its idea that a single object can present radically different aspects when viewed from different angles. That notion is so natural to us that we hardly think twice when an object does what this lamp does—*i.e.* looks spread open from one angle of view and then looks closed in upon itself if we move a few degrees around it.

If we continue that circling walk, the lamp presents to us the image of repeated opening and closing, almost like a time-lapse movie of a budding flower. And so Henry Bacon's original idea—that the lamp would suggest to us the growth of plants—is completed in a way addressed right to our present-day way of seeing. It is worth remembering that time-lapse and the perceptions of Cubism are ways of seeing that the modern age has given us. Shown this lamp, a person of the 19th century would likely have been bothered by the "two-faced" hoops, and would probably have never conceived the time-lapse image at all. But we can both see the lamp's two aspects as one, and we can imagine the analogy with time lapse. And we do it "independent of intellectual gifts," with nothing more than the normal mental equipment that living in the modern world has given us.

Is that not a true definition of "modern?" To be modern is to speak to thoughts that come out of

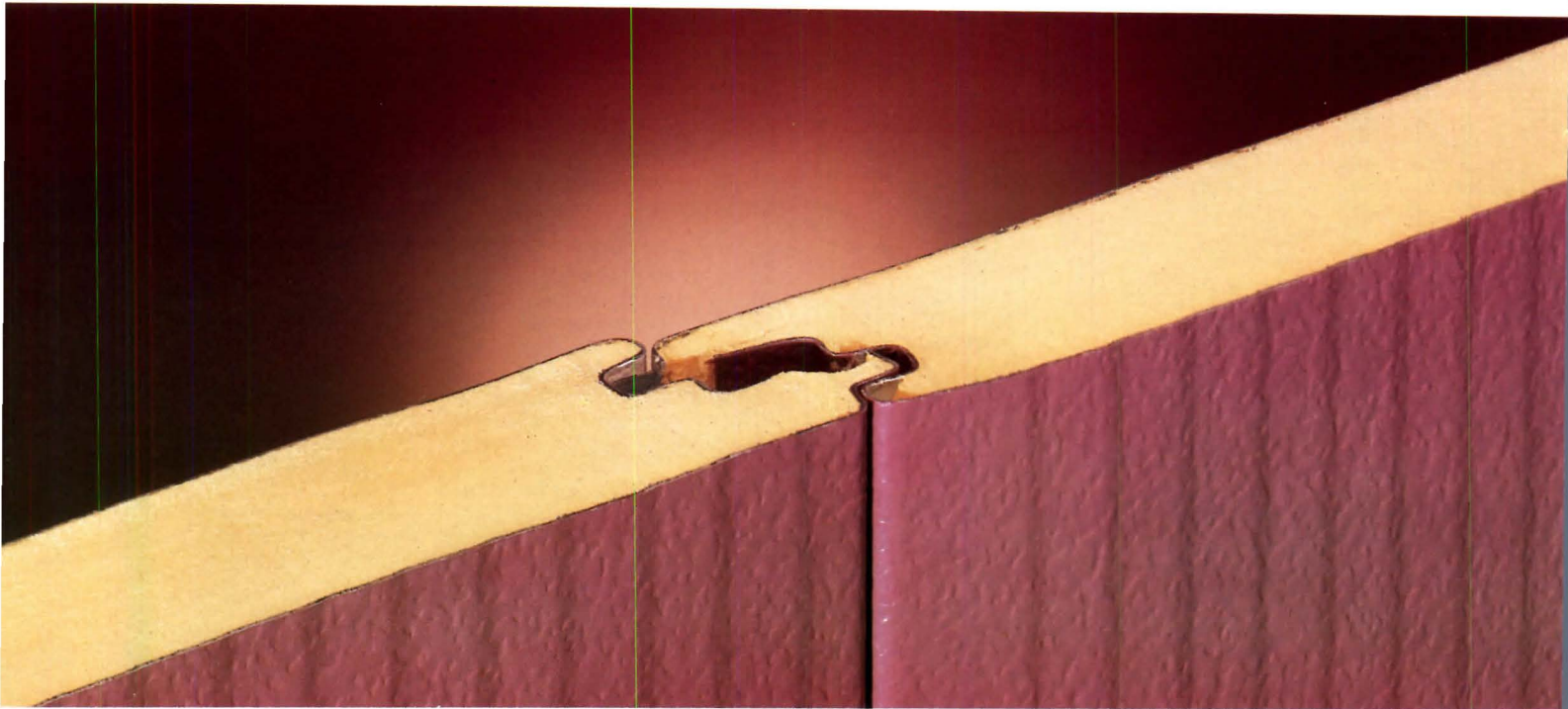
the experience of living in this age. If modern means that, and is not just a set of stylistic conventions, then all three of these new works—apprehensible as they are to normal late-20th-century thinking—could be called modern even though cloaked in shapes we might call traditional. But more importantly, these works, by tapping modern perceptions to invite speculation, show us that reflection is not an activity that can be engendered only by traditional shapes. Nor is it an activity that requires that we "think as they thought." The shapes that can set the mind imagining are traditional shapes *and* modern shapes. The visions that engender speculation are both perceptions that previous ages had *and* perceptions that have come about only in this age.

William Hubbard is director of architecture of the Urban Innovations Group at the University of California at Los Angeles. He is the author of Complicity and Convictions: Steps toward an Architecture of Convention (MIT Press, 1981).



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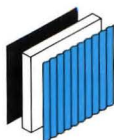
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Building a corporate image

From time to time, but very rarely, the ARCHITECTURAL RECORD Building Types Study, almost always a collection of structures within a category, focuses upon a single building. We deviate from our pattern when an individual work of architecture boldly addresses and brilliantly solves one or more of the difficult and challenging problems of the type. The building in this instance is the General Foods Corporation Headquarters in Rye, New York by Kevin Roche John Dinkeloo and Associates. It is notable for the manner in which the architects have successfully solved two problems, the first functional, the second symbolic.

Corporation headquarters buildings constructed on rural or suburban sites are reached by automobile. Most such buildings, however, do not acknowledge this. Parking is almost never planned for direct proximity to the individual workplace and entrances and lobbies are usually positioned for the convenience of an imaginary pedestrian. KRJD&A's solution to access and parking for GF is bold, direct and merits study.

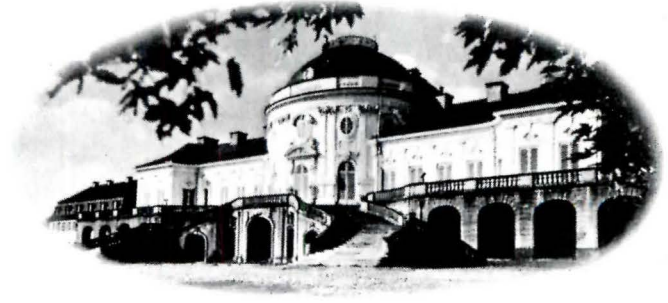
The other problem shared by corporate headquarters constructed in rural landscapes is one of image. Such buildings tend to be look alike, anonymous, forgettable. Although there are exceptions, corporations usually don't want to be forgettable, not in the minds of their public, nor of their employees. KRJD&A has designed headquarters buildings for many of the world's most outstanding corporations. They have learned, thereby, that no two corporations are alike. Each is a particular social entity with a complex character of its own. To better design the General Foods Corporation Headquarters in Rye, New York, they sought to understand that company's unique quality and to express it—architecturally. Discovering GF's strong sense of itself as a corporate family, Roche Dinkeloo built it a proud house, a work of architecture everyone will remember. *Mildred F. Schmertz*

General Foods Corporation Headquarters
Rye, New York
Kevin Roche John Dinkeloo and Associates, Architects





Symbol and workplace: an interview with Kevin Roche



MFS: Your design for the General Foods Corporation Headquarters reminds me of many of the great European palaces and country houses I have seen. What were you up to?

KR: As we designed the building, we kept thinking of what it would actually be doing in its physical and social landscape. In a sense it is an administrative center. It is not administering the immediate neighborhood, of course, but it is administering a business which is related in some way to this neighborhood. So you look for historical precedents, and of course you find all over Europe the castle, the chateau, the private country house. These weren't just places to eat and sleep. Those who built them used architecture to create a certain kind of presence, ascendant, regal, but also administrative.

But all great country houses are not classically composed. What brought you to a Palladian solution?

We began to design GF in 1977. This was not long after Arthur Drexler came through with "The Architecture of the Ecole des Beaux-Arts" exhibition at MOMA, and of course I saw the handsome book that went with it. I never did have time to get to the show. It all related to my own background. In Ireland, where I first studied architecture, I did have a Beaux Arts education initially, a very good grounding in it, in fact, for the first couple of years. Then I had the opposite experience in studying with Mies and working with Eero. Getting back to GF, we had just designed a little building for Deere (RECORD, June 1982) which has a classical ante-bellum composition and I wanted to carry these ideas a bit further. My interest, however, was in the principles of classical composition. I did not want to get into mimicking any of the other aspects of classical architecture, not attempting column capitals, cornices, swags, base courses, dados or anything else. And I did it all from memory. I didn't research classical plans or buildings because I don't like to work that way.

Did you have trouble fitting GF's program into a classical format? You must have had to ignore certain classical rules.

Of course. We wanted to see how far we could go and what we could do with classical forms, but while we were respecting some classical standards we were violating others. Take the visitors' driveway and entrance through the rotunda. This is the wrong way to approach a classical building. The rotunda usually overlooks the park and you would approach it from the opposite side. So this is a flip.

Palladio didn't have to worry about automotive access. Or parking.

It makes a difference. There is no public transportation to rural or suburban office buildings, so all employees and visitors must arrive by car. Yet architects consistently refuse to recognize, much less celebrate, the role of the automobile as the means of arrival. Our Union Carbide Building (RECORD, October 1983) is an exception. Because the office floors directly adjoin the parking garage, employees drive directly into the building and park near the wing in which they work. But Union Carbide was made, deliberately, virtually invisible on the exterior. It was designed so that its employees would be aware of the inside and the outdoors from the inside. Carbide gives no experience of the outside of the building at all. But GF, which has the same function as Carbide, needed to make a strong statement. It had to be a building that anyone could look at and say: "Well now, that's a building."

You are saying that the GF building needed to be a powerful public symbol and that the Union Carbide building did not. What is the difference?

Carbide makes batteries and everybody knows they make batteries, but they make a whole host of other products that nobody ever sees or identifies as Union Carbide. Carbide, therefore, only occasionally has a direct symbolic relationship with the consumer. In contrast, everything that General Foods makes is on the grocery shelf and these are products that are identifiable with their manufacturer. You will remember that 19th-century merchants were proud of their factories as well as their products. There was an identity between the product and the place where it was made. The image of the headquarters and the founder with the side whiskers appeared on the product label. Your jam jar had a little drawing of the factory and so did the company letterhead. The building was part of the identity of the product and the merchandising of the product. *I will look for an axonometric of the GF Headquarters Building on my next box of Grape Nuts. But you didn't design the building primarily to be an image for the consumer. You were creating a symbol for all the people who will work there.*

I am very interested in the idea of the corporate headquarters as a house. The house analogy really has to do with the family—the idea being that any group of people who work together becomes a family that can be as important to the individual as the family he or she may belong to. A working group

establishes relationships similar to those of a family. Many people spend more time with their fellow workers than they do with family members. All of us spend 30, 40, 50 years of our lives working, and these are the daylight hours. It is important from the human point of view that the worker form a sense of identity with other people as a working group.

So we talk about families of workers and we talk about houses. Houses have certain identities—front doors, living and dining rooms where people get together, bedrooms and studies for separating out. The office building parallels these identities. The community space in the office building corresponds to the living and dining area of the house. In all of our office buildings, ever since we designed the Ford Foundation building, we have tried to introduce that community space. It is not just an architectural idea, it is in part a social idea—almost an animal requirement. It is the space where people meet each other, where the community spirit is fostered. It gives identity to the place where the employee goes to work. We hope that when the worker conjures images of GF, he thinks of the outside, of his own workspace and of the huge community atrium. Furthermore, where is the opportunity in the modern office building for the architectural experience? On the exteriors you may have it, but most modern office buildings have no real interiors—just little boxes. Community spaces satisfy one of the roles architecture must fulfill, that of providing exciting theatrical experience. *I like the staircase and bridge you devised to connect the community atrium with the island in the pond.*

The podium comprising the parking posed questions. A huge podium isolates you from the ground. The GF employee may drive to the garage, take an elevator to his office, go to the cafeteria for lunch, go back to the office for the afternoon, return to the garage, get in his car and drive away without ever touching the ground. So it seemed very important to make a connection from the cafeteria in the atrium to the ground where people get together and spend their leisure time. An actual connection and a symbolic connection.

The stair and bridge have a further architectural purpose. They create a processional way which allows the employee to enjoy the entire landscape as he descends to the island. And the stairway becomes the arch under which the visitor drives into the building. *If I had simply looked at GF, before talking to you, I would have*

thought that your sole intention was to create a building that symbolized corporate wealth, corporate power, corporate vanity. It does seem to be the virtual embodiment of GF's eminence as a corporation. But another message comes from talking to you and visiting the community spaces and workplaces. The building does say that GF is a rich and important company—in the board room and on the executive floor—but it also says something else. The other message is that GF cares for everyone who works there.

True, but in fairness to GF, I should take the blame for any pretentiousness in the building's architectural expression.

I didn't say "pretentious."

I know you didn't. But GF didn't ask me to build them a marvelous monumental thing. I imposed it upon them because they are important, not in the ways they might think, but because they are a major social force. Perhaps they are wearing the wrong overcoat. Perhaps we should have selected a more carefully tailored, less flamboyant outer garment. That's what we did at Union Carbide. We made it invisible, and modest on the inside—all the same size offices. But one assumes to oneself the right and the responsibility to make these expressions. Sometimes we prod them along. I knew instinctively that GF was going to respond positively, so I went a little further than I would have done otherwise. And I knew that at Carbide it wouldn't have been what they wanted.

These corporate entities have very definite characters, and one tries to express that. If you don't have to deal with corporations you tend to think of them either as the bad guys responsible for whatever is happening in South America or India or Pakistan—or as having a purpose and providing employment. When you get into them, you discover that they have characters. GF is an amalgam of several different influences, but it has a strong family feeling beginning with the descendants of C.W. Post of Post Toasties. So finding the appropriate architectural expression for these corporations is an interesting study in itself.

The GF headquarters building recalls the form and composition of grand 18th-century European country houses (photo top). It was not a direct source for Kevin Roche, however, nor was any other specific historic building.





Located on a 54-acre site, unfortunately too small to grandly accommodate a building of GF's size and elegance, the structure was limited by local codes to eight floors, one below grade. It comprises 560,000 square feet of office building and on the first three floors 500,000 square feet of enclosed parking for 1,250 cars. Eventually 1,600 employees will work there: corporate departments—law, personnel,

controllers, tax, etc. About 24 acres of the property are in a flood plain. The seven-acre pond was devised to serve as a natural flood control basin. The remaining terrain is varied, a mix of dramatic rock formations, woodlands and a marsh. Footpaths and a jogging track have been woven into the landscape for the use of GF employees and the public as well.

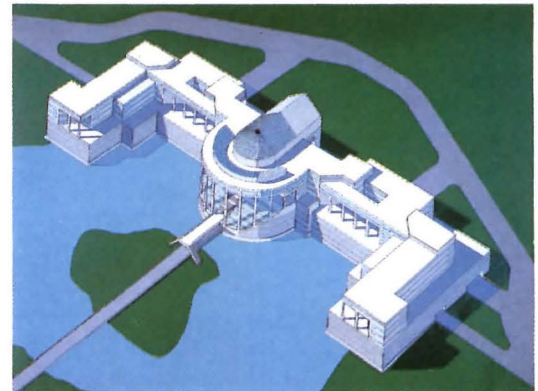
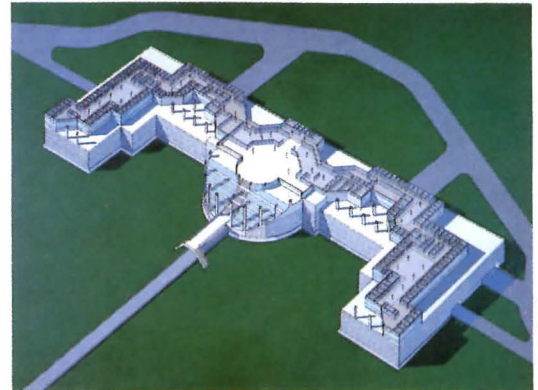
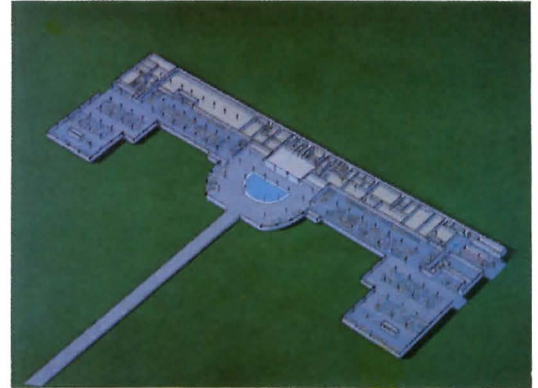
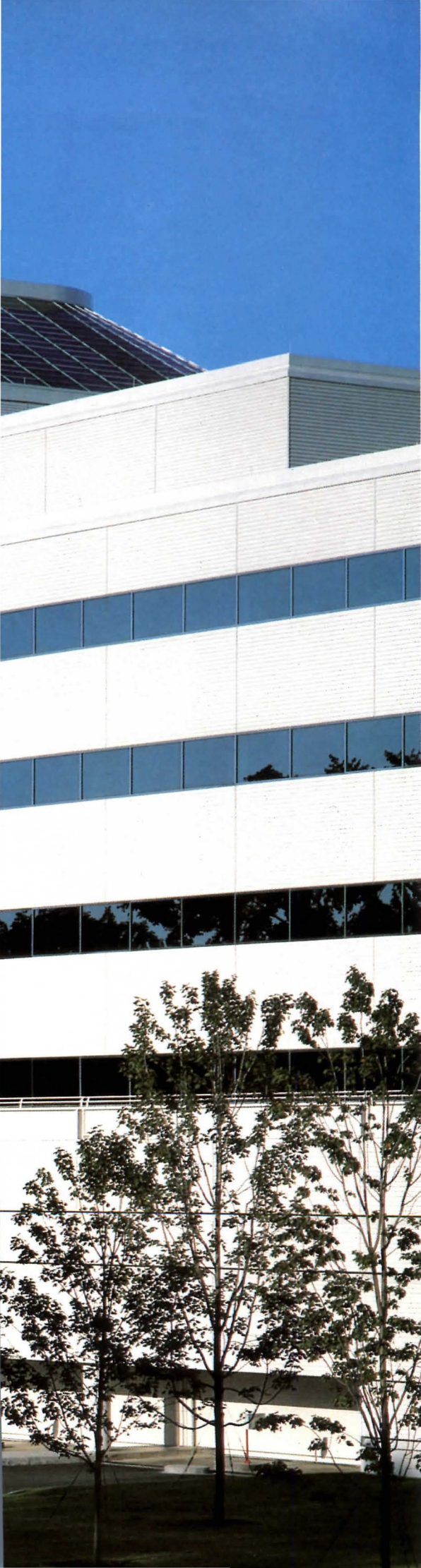




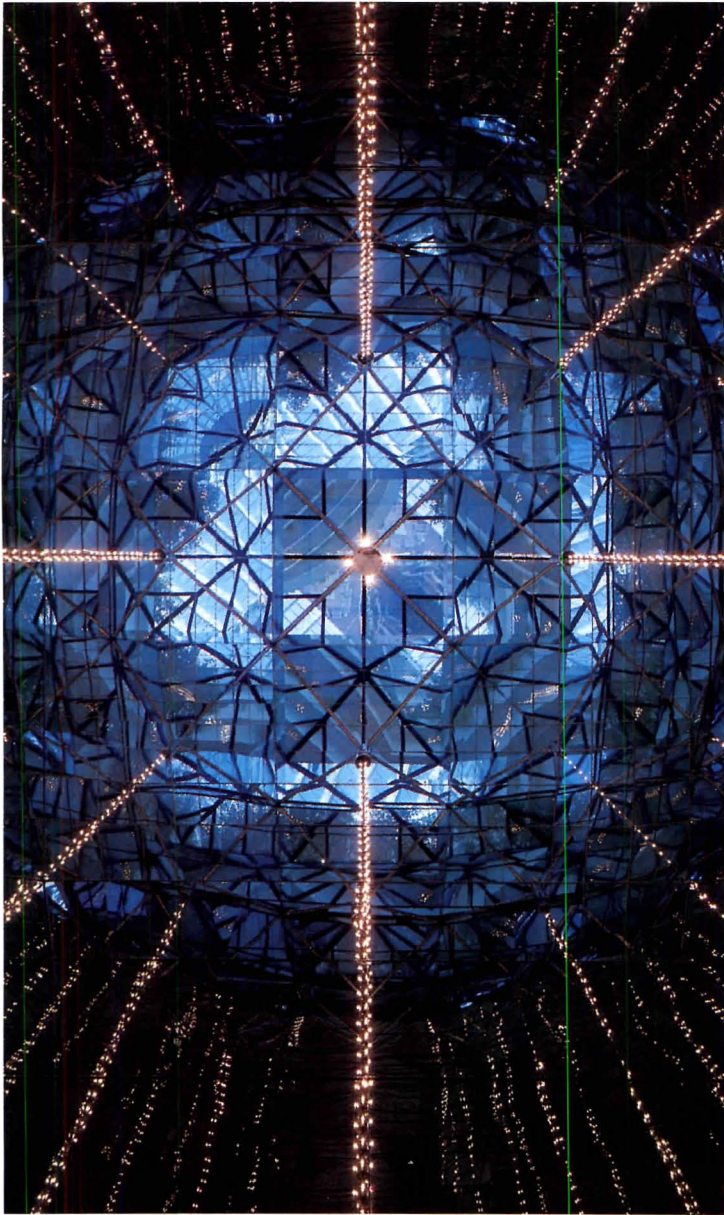
As suggested by the photos on this and the opposite page, less than 50 per cent of the enclosure wall area is glazed. This reduced glass area is part of the architects' effort to exceed the requirements of the 1978 New York State Energy Conservation Construction Code utilizing the "Building Design by Component Performance" approach. In a further successful effort to exceed the energy code criteria, the vinyl-coated

aluminum-siding-clad surfaces were designed for minimal air infiltration and thermal transfer. The wall construction was fully tested by an independent testing lab, and the final wall system details for air- and watertight construction were refined and advanced during the testing program.





If the principal facade (axonometric above) suggests a giant Monticello, the rear (photo left) has the look of a grain silo appropriate for the manufacturer of Post Toasties, Grape Nuts, Fruit & Fibre and Alpha Bits. Whatever one makes of the symbolic dichotomy between the back and the front, however, the fundamental massing of the building is rooted in Kevin Roche's decision to combine offices and parking into a single eight-story structure. The footprint of the three-tiered parking garage needed to be larger than that of the five-story office element above it and thereby became a generous podium. For reasons of order and economy a 30-foot-square structural module arranged in 60-foot strips was selected as suitable both for parking and office layouts. Private offices are on window walls.



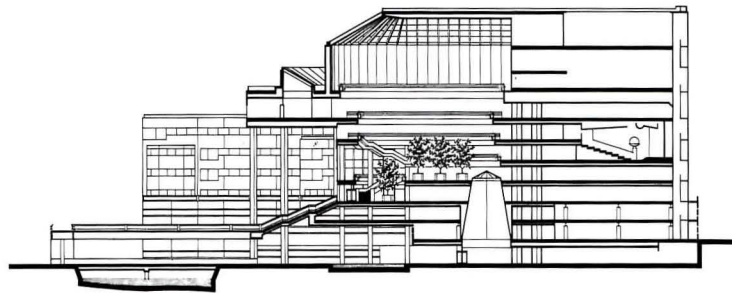
The mirrored, top-lit cone (photo above) surmounts the visitors' entrance lobby (photo right). In addition to those on corporate business, visitors include the general public who are taken on regularly scheduled conducted tours of the building. Employees do not customarily use this space. Asked why he gave the lobby the glitz of an elegant nightclub or smart restaurant rather than a more usual conservative treatment, Roche responded: "The GF Headquarters is not a cathedral, it's not a museum. There is nothing profound or awesome about the products they make." So for Roche it was a chance to get away from the monotony of too much symbolic dignity. "People like freshness at certain times. And after all, what is available for modern interiors? You can paint different colors. But paint is not a permanent material. When you try

to do colors in permanent materials, it can get a little ponderous." But whether he uses paint or colored marbles Roche finds that he doesn't get much life in the surfaces. "The marvelous thing about mirrors is that they are very lively. They sparkle and they are deep. They change constantly with the light. I am thinking of 'Nude Descending a Staircase'—multiple images as a way for underscoring an idea, and as artistic expression. So I look at those mirrored surfaces not as mirrors, but as paintings—a fractured environment endlessly changing, a fractured reality. Of course this is very dangerous stuff because you can drift into a Las Vegas environment very quickly. I hope we avoided that, although we skirted close to it at times."



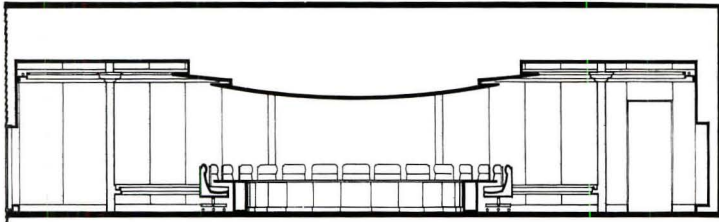






The focus of the building is the 95-foot-high central atrium (top and left photos) with a pitched skylight on both sides of the central axis, rounding into a half cone. The central ceiling panel and side walls are covered with a highly reflective, tough plastic film. The atrium provides light for surrounding work and circulation areas, houses the employee cafeteria (seating 480) and is the center of the building's

communal activity. The section above shows the three levels of parking and the visitors' lobby with its coned ceiling thrusting upward to capture light from the atrium. The oculus of the cone is surrounded by a ledge and chairs to allow solitary lunchers to peer down into the visitors' lobby to watch the comings and goings. Just below the curved skylight are the executive offices.





Adjacent to the atrium is the cafeteria serving area (photo opposite top) and a small museum for the general public as well as the GF employees (above). A collection of 1,000 beautiful objects used in the storage, preparation, cooking and serving of food and drink, it includes artifacts that span the centuries of recorded history from all the continents of the world. The exhibition area is so located that

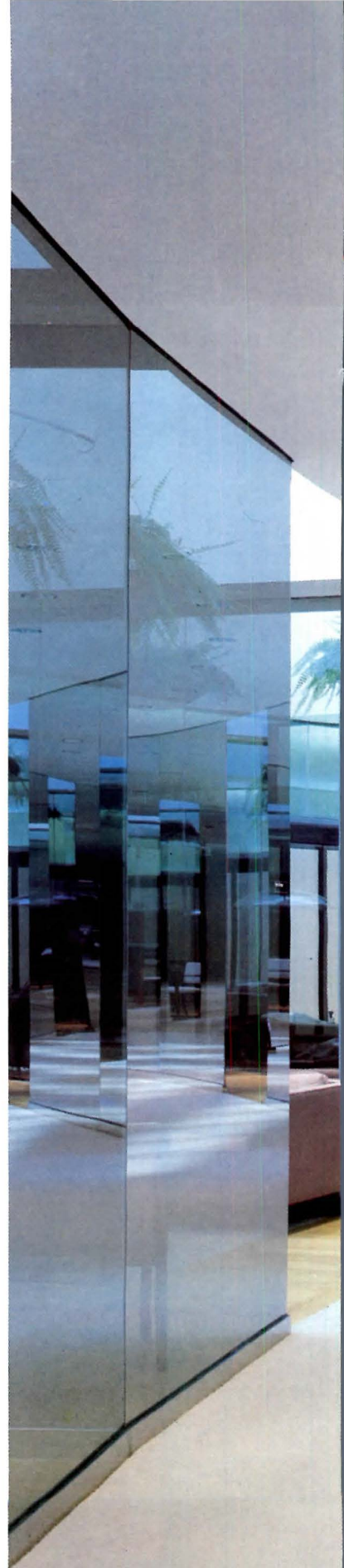
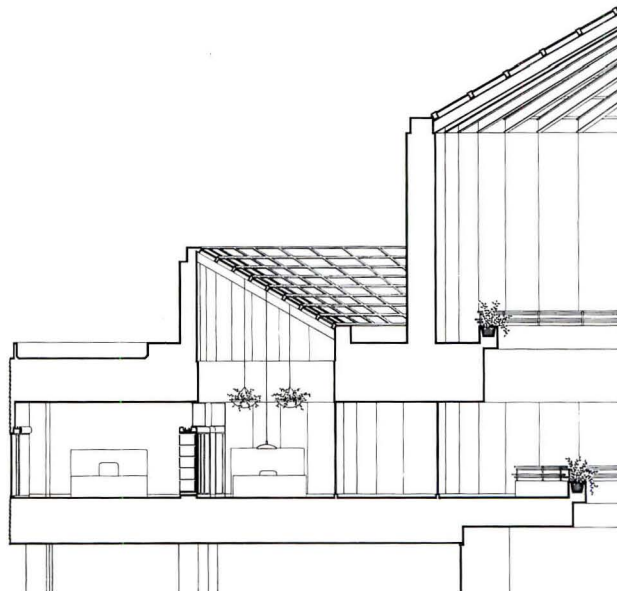
everyone walks through it on the way to lunch. The auditorium (left) can be used for all-day meetings. The two globular lamps, designed and made by Martha Turi, consist of circular bands of lucite rods lit from within by ordinary appliance bulbs. The walls are fabric over a soft fiberglass backing. The board room (section and bottom photo opposite) is of elegant design, detailing and execution.



The executive offices occupy the top floor of the rotunda just below the atrium skylight. As the section reveals, these spaces have an interesting configuration of their own. A continuous pitched skylight illuminates the open reception areas in front of each office (top photo left). These spaces are high, well lit, hung with plants and welcoming. The top echelon offices they front (bottom photo left) have lower ceilings but, to compensate, magnificent views of the pond and woods below. The panel between each office and its reception area is an ingeniously detailed storage wall, a more luxurious version of the corridor partition for each of the 800 private offices in the rest of the building. The executive circle has its own private corridor beyond the glass walls of the reception spaces and access, beyond yet another glass wall, to the topmost atrium balcony (photo right).



**General Foods Corporation
Headquarters
Rye, New York
Architects:**
Kevin Roche John Dinkeloo and
Associates; Kevin Roche, John
Dinkeloo, Philip Kinsella, David
Jacob
Engineers:
Weiskopf & Pickworth (structural);
Cosentini Associates (mechanical
and electrical)
Construction manager:
Lehrer/McGovern





While other architects grope for verbal chestnuts from Wright or Venturi, Emilio Ambasz is apt to garnish the conversation with offhand references to Pascal, Henry James, Sol LeWitt, or Gaston Bachelard. Ambasz drops an allusion with the sure hand of a polymath, one who refuses to limit the reach of his learning. Understandably, it has often been his lot to be applauded—or dismissed—as a prodigy. Born in Argentina in 1943, Ambasz gained his undergraduate degree from Princeton in one year, and, while still in his 20s, helped found New York's Institute for Architecture and Urban Studies and served as curator of design at the Museum of Modern Art. He has subsequently won international recognition for his work as architect, interior and industrial designer, and author of commentary and parables such as *Working Fables: A Collection of Design Tales for Skeptic Children*. Though now released by age from his own role as skeptical wunderkind, Ambasz has sustained the prodigious range and influence of his creative efforts. The results encompass many media, with cultural implications extending well beyond the borders of architecture narrowly defined. Even under the rubric of building design, the projects illustrated here represent only a segment of his current work—excluding, for example, a scheme for the reconstruction of the 18th-century Plaza Mayor in Salamanca, Spain, a proposed mixed-use high-rise for the Museum of American Folk Art in New York, and interiors for the Manhattan branch of the Banque Bruxelles Lambert.

Of course, it is more than versatility that distinguishes Ambasz among his contemporaries. His forte is what he calls the “poetics” of architecture, a language of form that appeals directly to the senses and emotions, without sacrificing intellectual rigor or technical refinement. He emphasizes the universal human need for surroundings imbued with ritual, myth, and magic—a line of reasoning that links him to the French school of philosophers associated with Bachelard, as well as to forerunners in other disciplines, such as the turn-of-the-century architectural theorist W.R. Lethaby. In Ambasz's own designs, this impulse yields secular buildings that distantly resemble the sacred precincts or temples of the past; he devotes his own hallowed ground to the ceremonies of everyday existence. Like Luis Barragán, whose work he exhibited at the Museum of Modern Art, Ambasz is most affecting as a master of pure geometry and sculptured landscape that seem to echo with the resonance of eternal archetypes. If the intensity of his achievement sometimes falters, the rare lapse usually results from an embarrassment of riches: a project overcharged with fantastic conceits, densely embroidered symbolism, or period motifs (see, for example, the quasi-Gothic confection called *Celestial Gardens*, on pages 130-133). As a rule, however, Ambasz is loath to delve through history books or esoteric lore for ornamental footnotes; he prefers to invoke memory only when it immediately conveys some expressive or emblematic force.

Notwithstanding his lyrical pronouncements on the atavistic longing for a primal home, or the necessity for passion in architecture, Ambasz is a hard-headed pragmatist; his castles in Spain are always equipped with the latest plumbing. He delights in discovering new applications for available technology, and has a genius for making flights of fancy *altogether practical*. The inventory of his oeuvre runs from calendars to ballpoint pens, lighting systems, and an ergonomic chair he developed with Giancarlo Piretti. One finds the same ingenuity among the architectural projects collected here, all of which exist in working

drawings as cogently detailed as the renderings and models are seductively atmospheric. It is impossible, for example, to consider the sculptural variety of the San Antonio Botanical Conservatory (pages 126-127) without admiring its precise fit with the ecosystems it houses; the stylized sailboat forms of floating galleries at the New Orleans Museum of Art are not whimsy, but a feasible solution to the changing needs of temporary exhibitions.

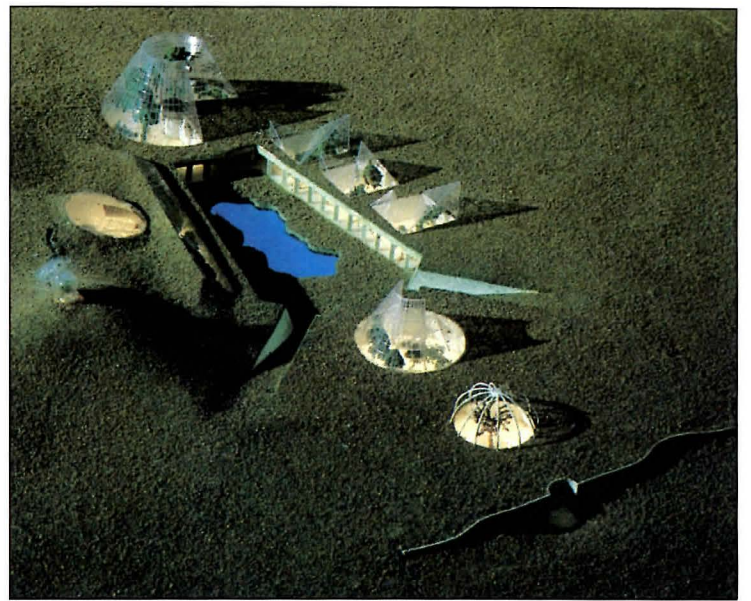
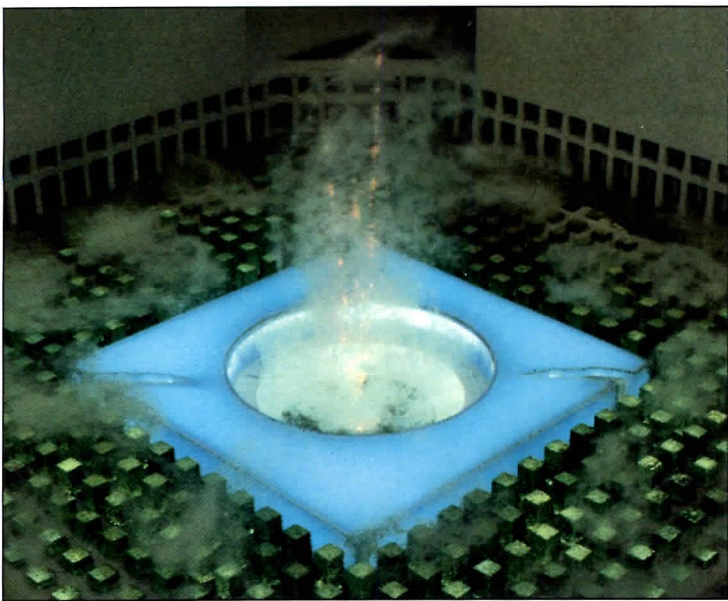
The immutable finality of the ideal archetype stirs the poet in Ambasz, but it is the unrealized potential of a specific prototype that sparks his creative invention. He reveals this duality most consistently in the integration of landscape and human artifice—a leitmotif that unites all of the works on these pages, and relates them to earlier projects such as a diverse series of earth-bermed houses; the Cooperative of Mexican Grape-Growers, where vine-hung trellises shelter farmworkers' mobile homes; the Four Gates to Columbus, Indiana, civic portals defined solely by groves of trees; and the Pro Memoria Garden in Ludenhausen, West Germany, whose hauntingly emblematic ground plan is both a cenotaph and a harbinger of rebirth.

In all of these endeavors Ambasz transforms an evolving physical process into an allegory of man's desire for harmony with nature. When he designs an earth-sheltered building, one of his favorite devices, Ambasz is equally conscious of thermal efficiency, impact on the existing terrain, and the psychological associations of underground enclosures (he in fact almost invariably builds walls above grade and mounds earth against them, as at the Schlumberger laboratories, overleaf). He plays on the empathetic awareness of gravity, containment, and mass to induce awe, anticipation, or the stillness of sanctuary, while manipulating open space, transparency, light, and sleek materials to modulate the potentially oppressive effect of caves or catacombs (these are not the cozy burrows of Mr. Badger or Frodo). Shades of archaic rites coexist with advanced technology, at once suggesting an archaeological dig and the foundations of some yet-to-be-completed wonder. The elements of water, fire, and air also govern Ambasz's cosmology. By drenching a wall in water or shrouding it in scented mist, Ambasz fills the simplest enclosure with portentous mystery; by setting buildings afloat or draping them in foliage he makes solid structure seem the ethereal stuff of dreams. The pitfall in these metamorphoses is a blurring of conventional gauges of scale or context, and a lingering uncertainty whether anyone but the wizard controlling the special effects is really essential to their enjoyment.

Beyond the concrete boundaries of site and program, Ambasz locates his projects within an imaginative space whose coordinates are the Old World and the New. He has explained this dichotomy in an oft-quoted aphorism: “Europe's eternal quest remains Utopia, the myth of the end. America's returning myth is Arcadia, the eternal beginning. While the traditional vision of Arcadia is that of a humanistic garden, America's Arcadia has turned into a man-made nature, a forest of artificial trees and mental shadows.” As a native of Argentina who maintains offices in the United States and Italy, Ambasz is well placed to attempt a reconciliation of these divergent outlooks—or, at least, to delineate the scope of their influence. The designs shown here attest to the acuity of his vision and the breadth of his ken. Being as yet unfinished, or suspended, these projects can be judged only in the realm of ideas, though the mental shadows they cast are long. *Douglas Brenner*

*Emilio Ambasz & Associates—
Emilio Ambasz, architect; Dwight
Ashdown, job captain; Richard
Rudman, Ann Cederna, Toshio
Okamura, Jonathan Marvel,
project team.*

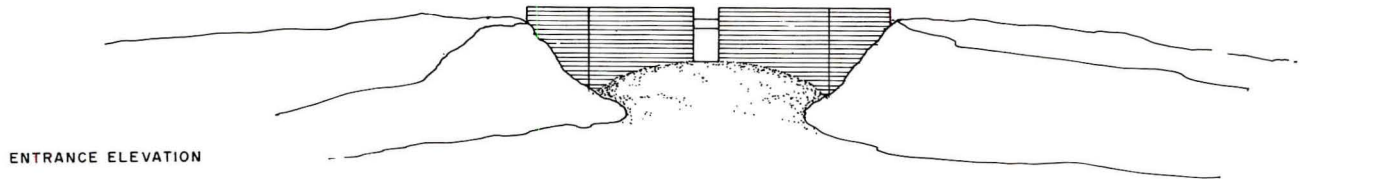
1. Houston Center Plaza
2. San Antonio Botanical Conservatory
3. Schlumberger Research Laboratories
4. New Orleans Museum of Art
5. Celestial Gardens



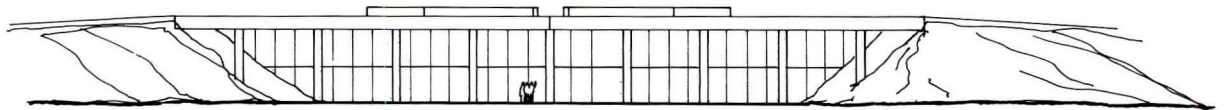
When the directors of Schlumberger Ltd. outlined their requirements for a computerized oil well research facility near Austin, Texas, they stressed the importance of a campuslike ambience conducive to the open exchange of ideas, and flexible layouts attuned to varying laboratory needs. Given the substantial asset of a gently rolling, 220-acre rural site, Ambasz opted for a low-profile design that

distributes program spaces among a cluster of separate, earth-bermed units. Though it minimizes the traces of the hand of man, this scheme in fact demands considerable artifice. Besides sculpting the terrain to embrace earth-sheltered buildings, form an ornamental lake, and furnish recreational amenities for 120-160 Schlumberger employees, Ambasz has thoroughly restructured the

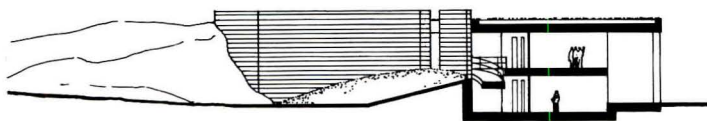
inner workings of the laboratory environment. The seemingly casual arrangement of architecture and natural features, composed as a sequence of picturesque vistas, adheres to the great tradition of English landscape gardening. Other architects have appropriated the aristocratic country house as a fitting perquisite for the modern corporation; Ambasz, it would seem, has forsaken the villa for the



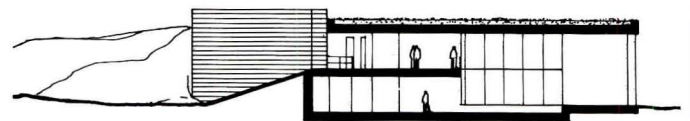
ENTRANCE ELEVATION



WEST ELEVATION



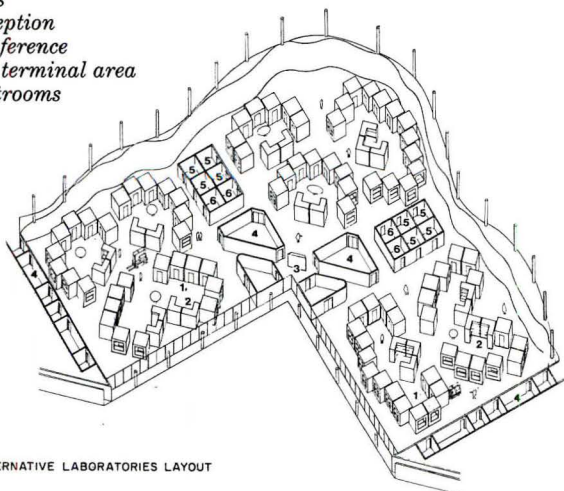
SECTION



SECTION

ADMINISTRATION BUILDING

1. Offices
2. Labs
3. Reception
4. Conference
5. CAD terminal area
6. Restrooms



ALTERNATIVE LABORATORIES LAYOUT



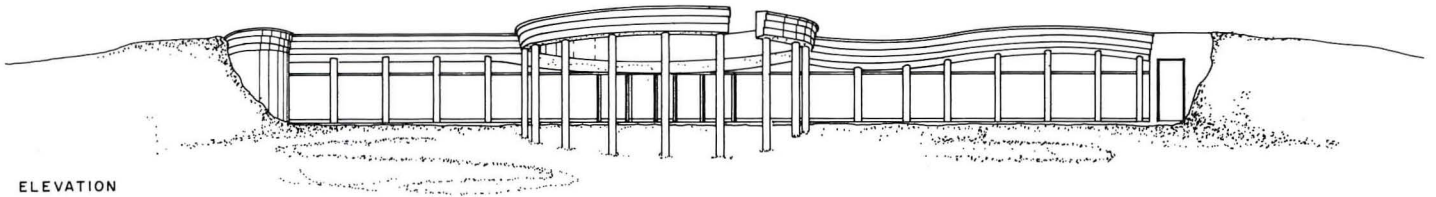
park—or has fused both elements into a single, less overtly hierarchical whole. The affinity between Schlumberger's Texan demesne and the English gardens at Rousham or Stowe is reinforced by Ambasz's use of colonnades, amphitheaters, tempiettos and other classical embellishments beloved of 18th-century dilettanti. Within this context, the modern berm might seem a near relation of

the ha-ha that kept the squire's cattle decoratively at bay. Ambasz does not deploy his embankments as camouflage, however, but as a positive esthetic medium. One enters the laboratory compound between wedgelike pylons that recall the gateway to some ancient ceremonial precinct, an awesome, even intimidating, passage that dramatizes the ultimate revelation of bright, airy facades open to

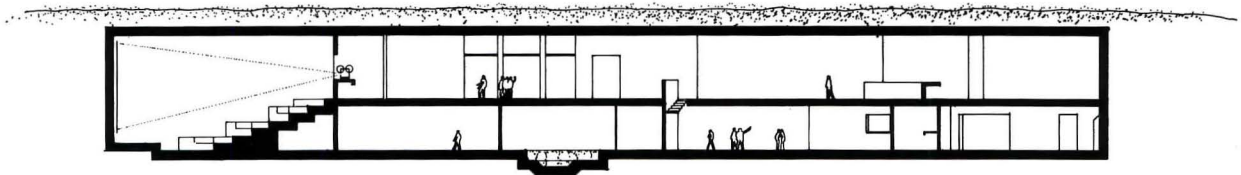
sunlight and views. Inside the pavilions, Ambasz has installed a hybrid of the traditional enclosed office and the modular open work space (axonometrics below). Intended to merge the privacy, controlled environment, and perceived stability of the former with the convenience of the latter, this new system comprises two basic individual units, one for researchers (shown below) and the other for

support staff, both gauged to a nine-foot module. All units are movable by forklift, enabling easy reorganization of laboratory layouts within clear-span enclosures. There is ready access to communications, electricity, and computers through outlets at every intersection of the nine-foot floor grid. Construction of the research center is expected to be complete by the end of 1985.

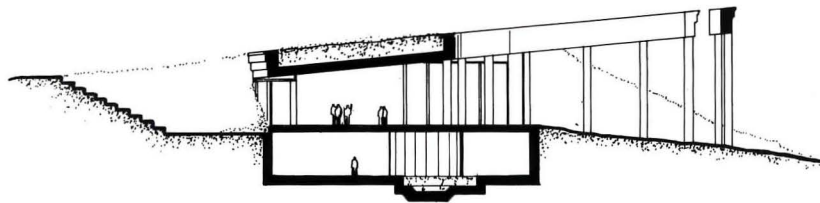
GYMNASIUM / AUDITORIUM / CAFETERIA



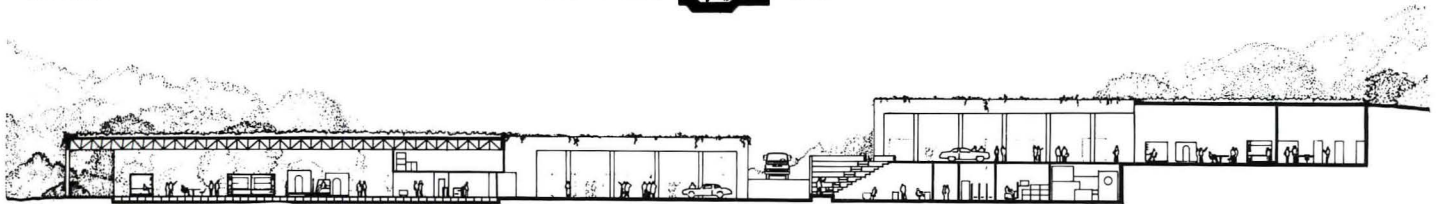
ELEVATION



SECTION



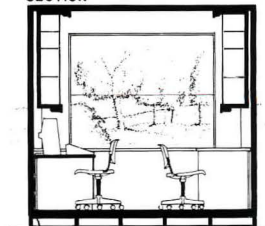
SECTION



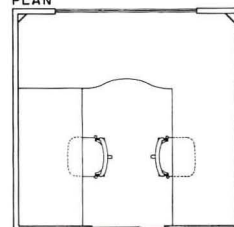
RESEARCH LABORATORY



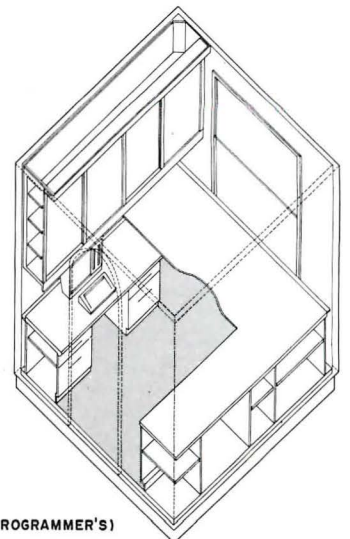
SECTION



PLAN



MOBILE OFFICE UNIT (ENGINEER'S AND PROGRAMMER'S)

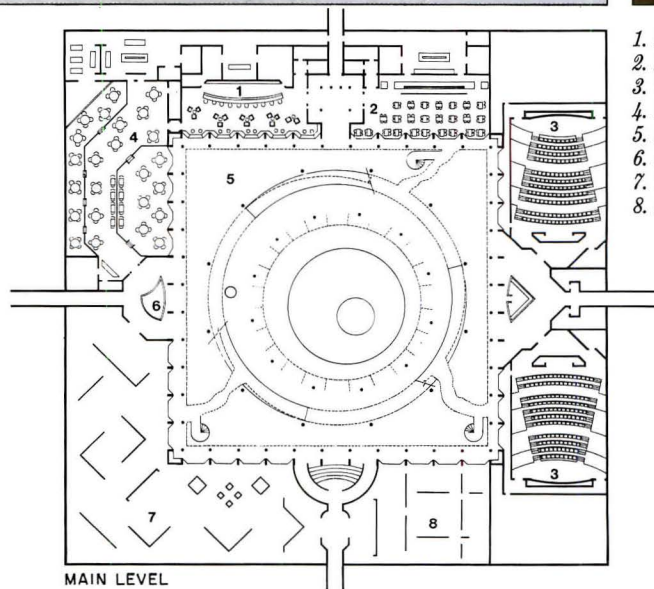
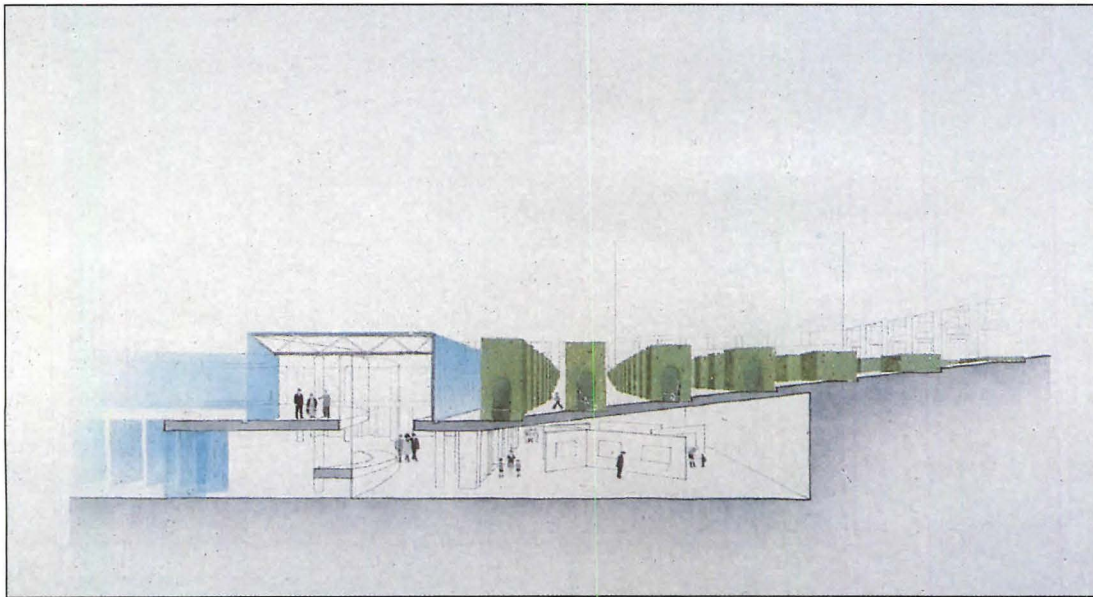
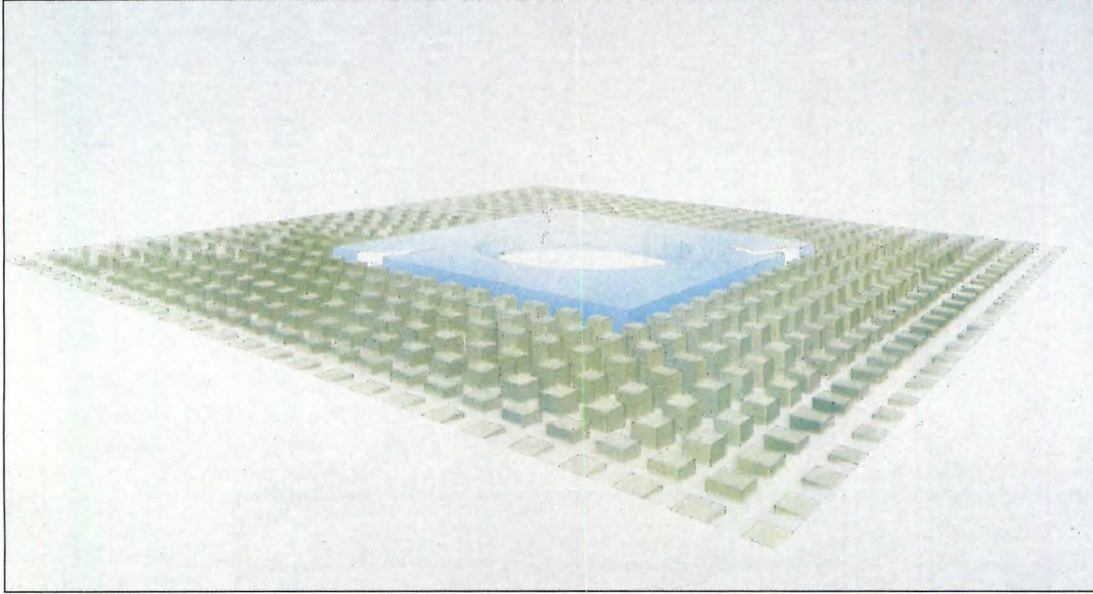


Houston Center Plaza
Houston, Texas

In his design for a city square in Houston, Emilio Ambasz addresses one of the least poetic aspects of the modern metropolis, the plaza bounded by high-rises—in this instance, standard glass boxes of the 1960s. The full-block site represents only a fraction of a proposed complex that includes office towers, a hotel, a convention center, and Celestial Gardens (see pages 130-133). Acknowledging that a public space

in such colossal surroundings can hardly rely on scale alone to lend it a memorable presence, Ambasz resorted to visual magic: the allure of a sunken garden enlivened with fountains, shimmering lights, and an array of theaters, galleries, and restaurants. His client, a Texas-based corporation, asked for a symbolic tribute to Houston, prompting Ambasz to adopt the city's gridiron plan as a geometric

schema for the park. Translated into ranks of extruded-aluminum trellises draped with flowering vines, the grid became an armature for his own luxuriant fantasy. The grid, he concluded, epitomizes Houston's lack of a definite center, as well as its capacity for continuous expansion. By focusing the concave plaza on a single nucleus—albeit an indentation rather than a fixed object—he converts the grid from an



1. Bar
2. Snack bar/ice cream parlor
3. Theater
4. Restaurant
5. Enclosed atrium
6. Fountain
7. Temporary exhibition
8. Permanent exhibition

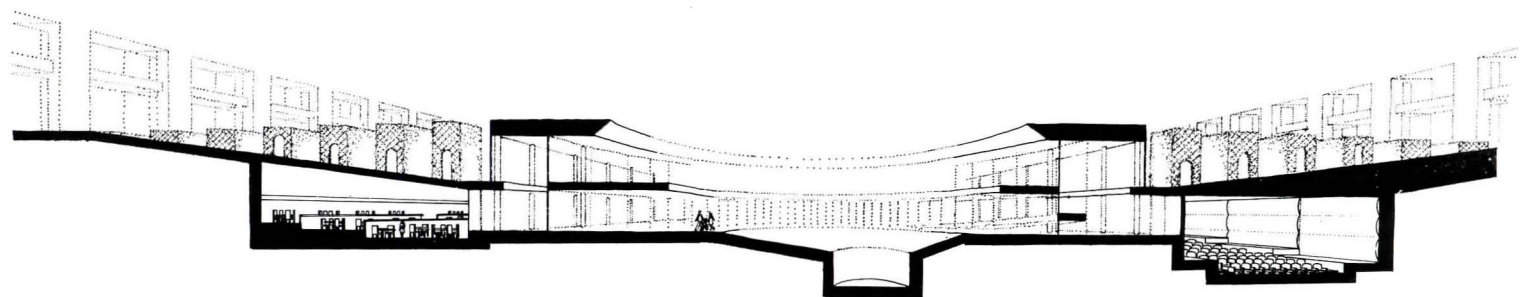
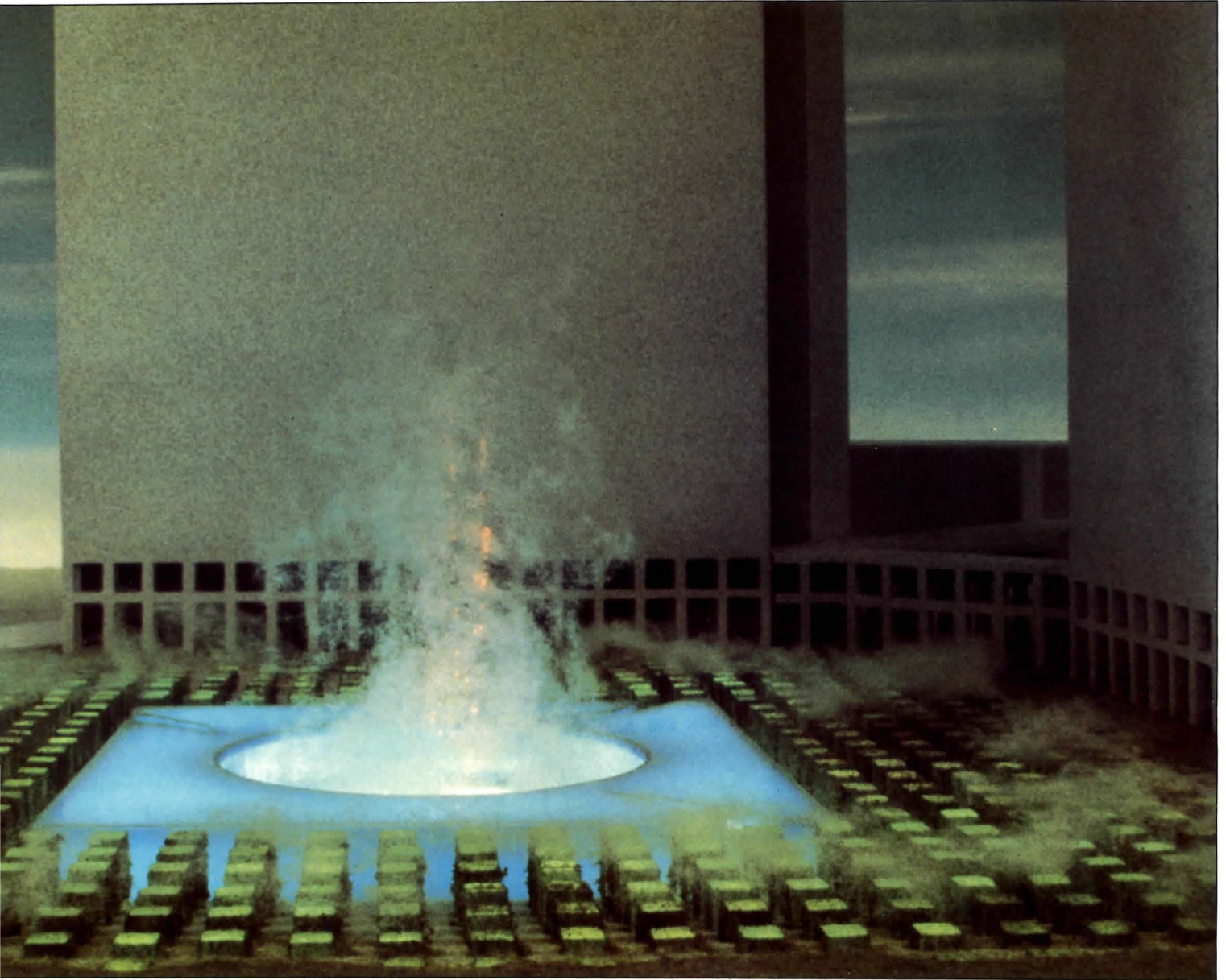
MAIN LEVEL

expedient diagram for urban sprawl into the matrix within which vital cultural centers can shape the expanding city. Framing the core of Houston Center Plaza is a translucent blue structure of resin-impregnated fiberglass—a square within the square of trellises—whose outer walls are continuously washed by sheets of cascading water. The perimeter of this pavilion is eroded by three irregular fissures (images,

says Ambasz, of Houston's still incomplete development), which lead to subterranean program spaces and to a cylindrical open-air courtyard ringed by waterfalls. Hydraulic machines in the atrium emit clouds of mist to catch rainbows and colored laser beams. Additional nozzles atop the trellises mingle a cool spray with the scent from trailing jacaranda and jasmine. Ambasz envisions office

workers strolling among these fragrant gazebos to meet with friends or meditate in peace (he would also line the adjacent streets with trellises to prepare motorists for the spectacle that awaits them). As a celebration of Houston's pursuit of civilized pleasures, the square is as exquisitely artificial as a Baroque parterre. Ambasz cherishes critics' comparison of the plaza to an Islamic garden, but admits that

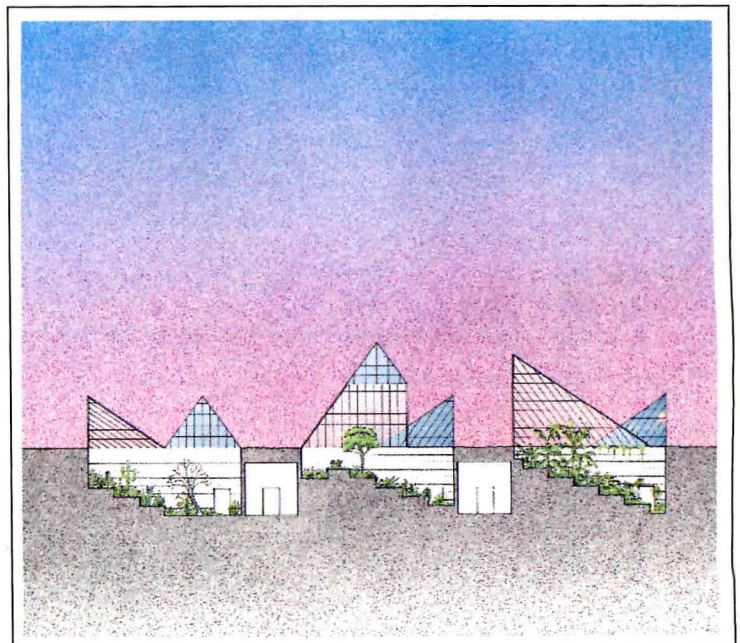
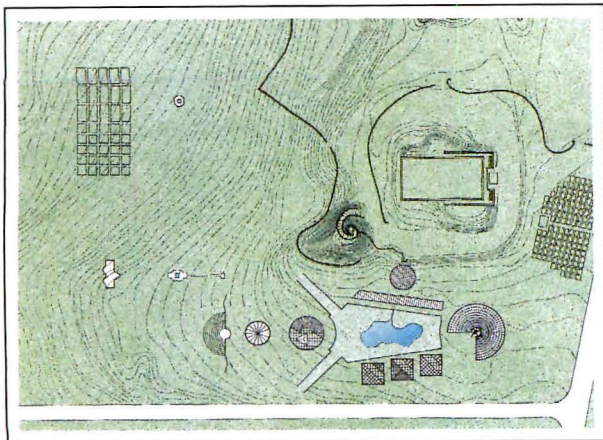
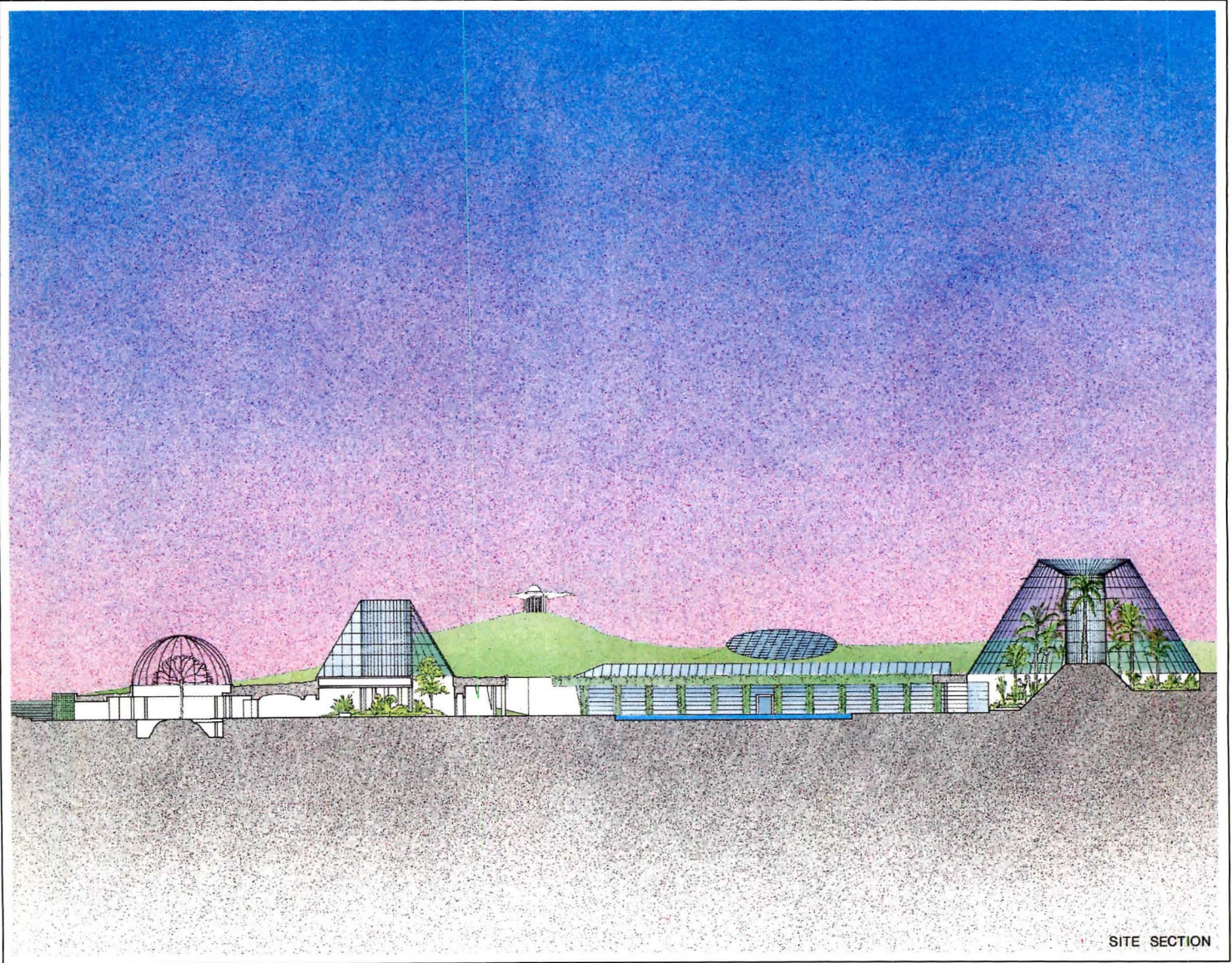
the models in his own mind were the surrealist paintings of Giorgio de Chirico and Paul Delvaux. One can indeed imagine a surreal malaise overtaking the Houstonian who wanders into Ambasz's relentless grid. This mini-Versailles without a monarch strikes an off-key note of Old World obedience in the capital of untrammelled individualism.



At the San Antonio Botanical Conservatory, nature is both precious charge and brutal adversary, a duality Ambasz honors in a design that metaphorically joins the reliquary and the bunker. Fierce winds and sudden frosts in this part of Texas necessitate shelter for vulnerable plants, although a generally hot, dry climate precludes the conventional greenhouses of northern regions. Rather than

amplifying the thermal effect of the sun, as conservatory designers usually must, Emilio Ambasz's task was to temper solar energy. He developed an architecture as variously sensitive as the organisms it nurtures, separating different ecosystems among a series of domed and tentlike pavilions, and adjusting their exposure to the elements by mounding earth-berm insulation and regulating the area

and pitch of glass walls. If the contrasting shapes of the pavilions mirror any gardener's delight in the multiplicity of plant forms, the axial parti of the entire complex reflects a taxonomist's passion for order. As at the Schlumberger research labs, earth-sheltering tucks buildings into the contours of the landscape, striking an easy balance between classical order and picturesque asymmetry. Here,

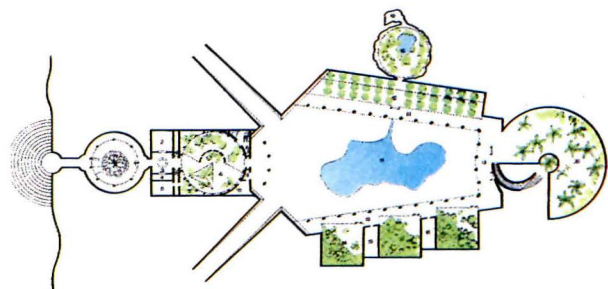
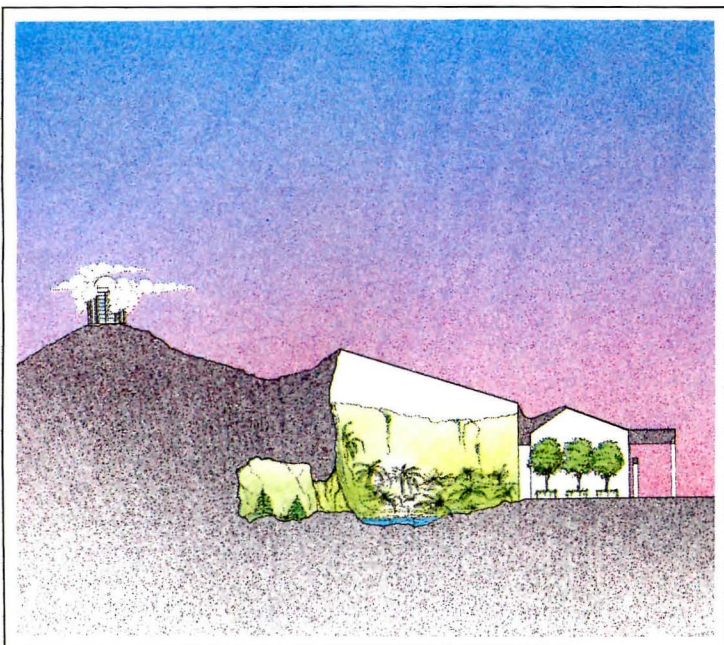
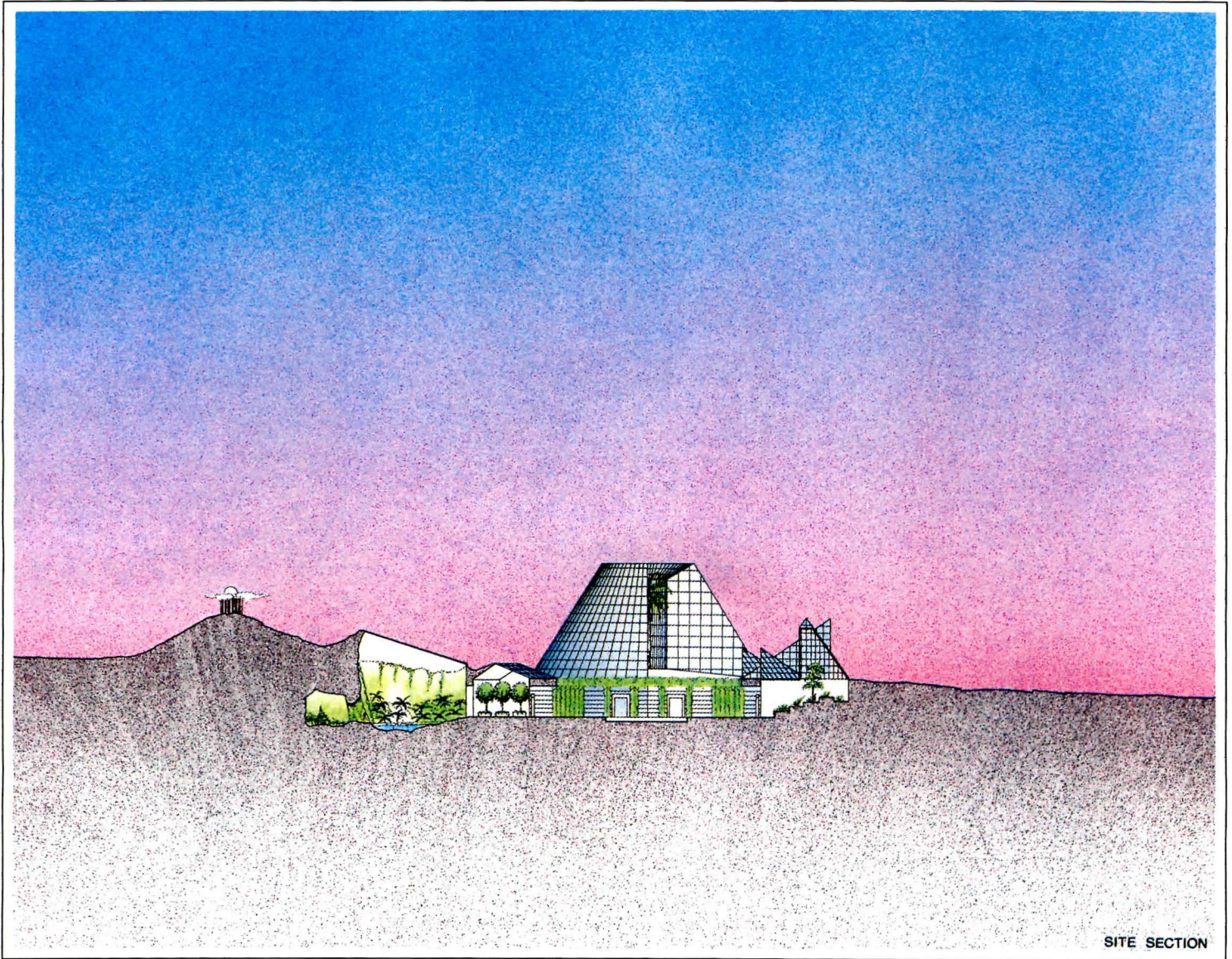


however, devotés of historical precedent are likelier to cite ancient shrines than the jardins anglais of the 18th century. Ambasz himself describes the conservatory as "an arrangement of secular temples," grouped to convey "a hieratic presence." The arriving visitor passes through a cleft in the earth, very much, one feels, as he would have approached an oracle or an altar of the mysteries. This

propylon gives onto a rotunda spanned by an open steel-framed dome, beneath which a sculptured tree spreads its bronze limbs. The avatar of all plants, this arboreal totem also symbolizes the fabricated habitat of the greenhouse. Beyond the rotunda, an orangery lined with live fruit trees leads to the fern room, a dim bower animated by trickling water and wafting mist. It is here amid the maidenhair and

staghorn, Ambasz contends, that the sacral air of the place is purest; this is not only a scientific display of "plant materials," but a restorative haven for the troubled spirit. The visitor's circuit continues along shady arcades on either side of a sunken courtyard inspired by the traditional patios of the Southwest. At the culmination of the tour is the palm house, a conical structure that enfolds full-grown trees in a

delicately protective gesture. Lest sentimentalists abandon themselves to reveries of a peaceable kingdom, Ambasz has not neglected nature in the raw. The glass-domed kiosk mounted on a hillock commanding the site is a greenhouse for carnivorous plants, "a nice object lesson for children," observes the architect. The conservatory is scheduled for completion at the end of next year.

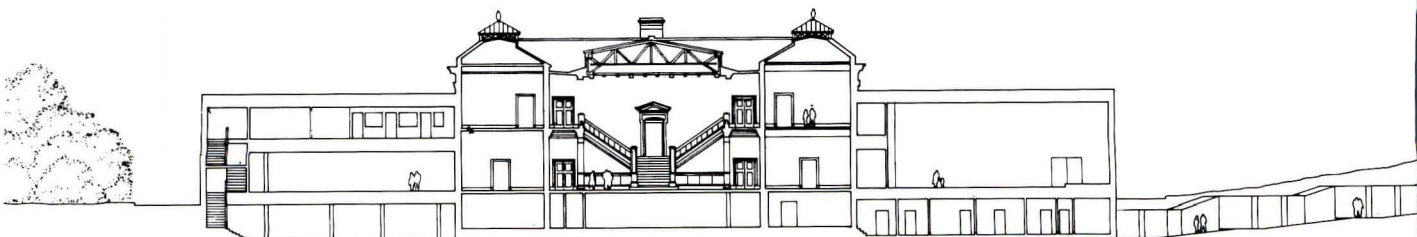
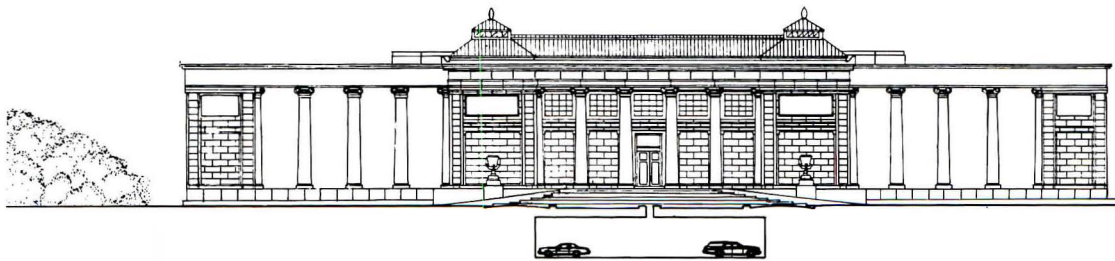
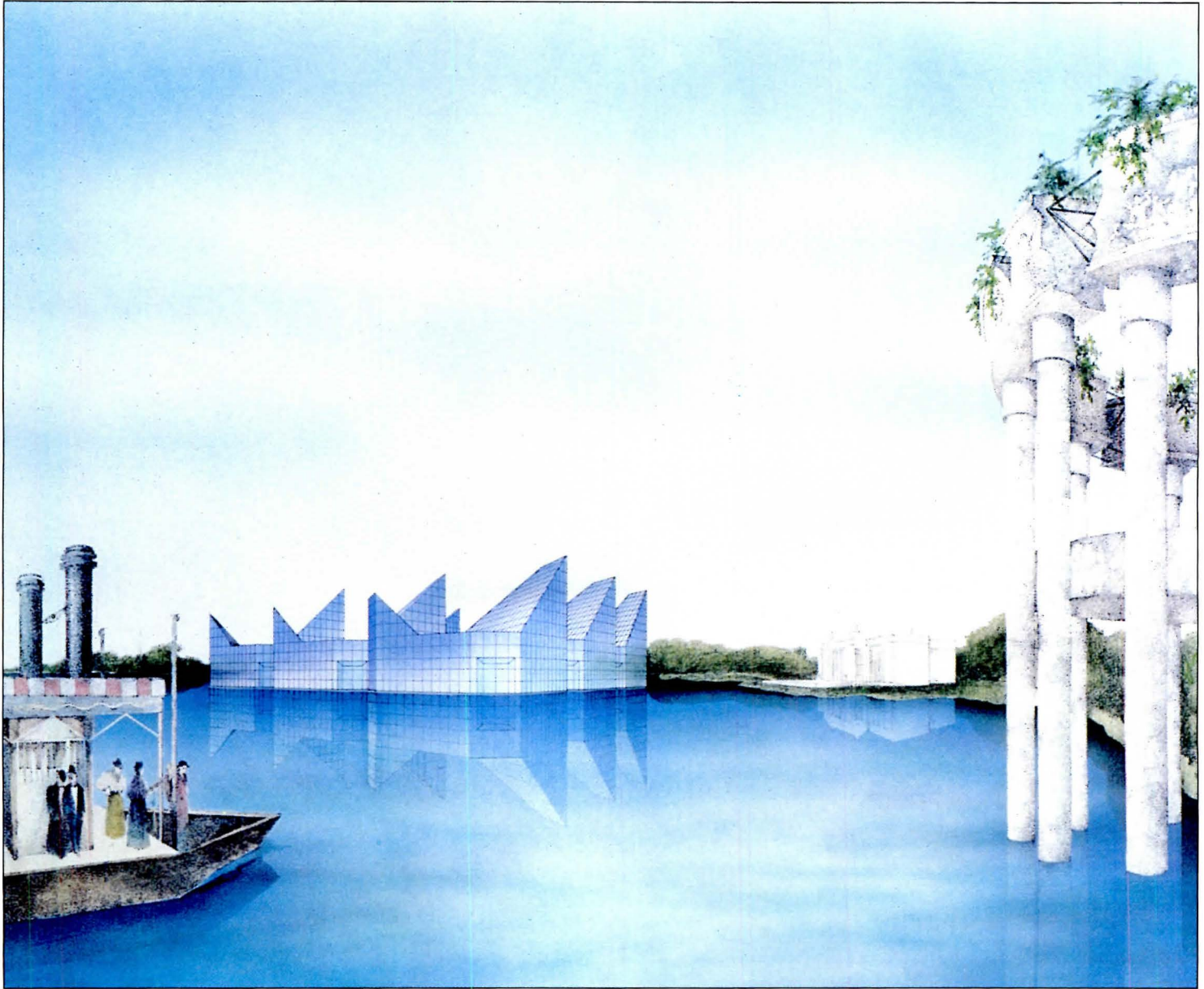


Addition to the New Orleans
Museum of Art
New Orleans, Louisiana

Ambasz developed his proposed addition to the New Orleans Museum of Art as a competition entry. (Though chosen as one of six finalists, the design was ultimately rejected in favor of a scheme by W.G. Clark of the Charleston Architectural Group.) The museum's program called for substantial enlargement of its present home, a masonry edifice built in 1910 alongside a chain of

lagoons. Ambasz elected to retain this neoclassical structure as a discrete object in the landscape, and whenever possible, his plan retains original circulation patterns. Administrative offices, library reference rooms, loading docks, and other ancillary spaces were accommodated within the museum basement or in new lower-level quarters forming a broad podium on the southeastern front. Along

with a ring of new reflecting pools, this stepped plinth enhances the monumentality of the museum's entry facade, as does the removal of parking to an underground garage beneath an axial avenue. As a dazzling foil to this classical ensemble, Ambasz houses temporary exhibition galleries, a shop and restaurant in a flotilla of water-borne pavilions on the nearby lagoon. The configuration of this

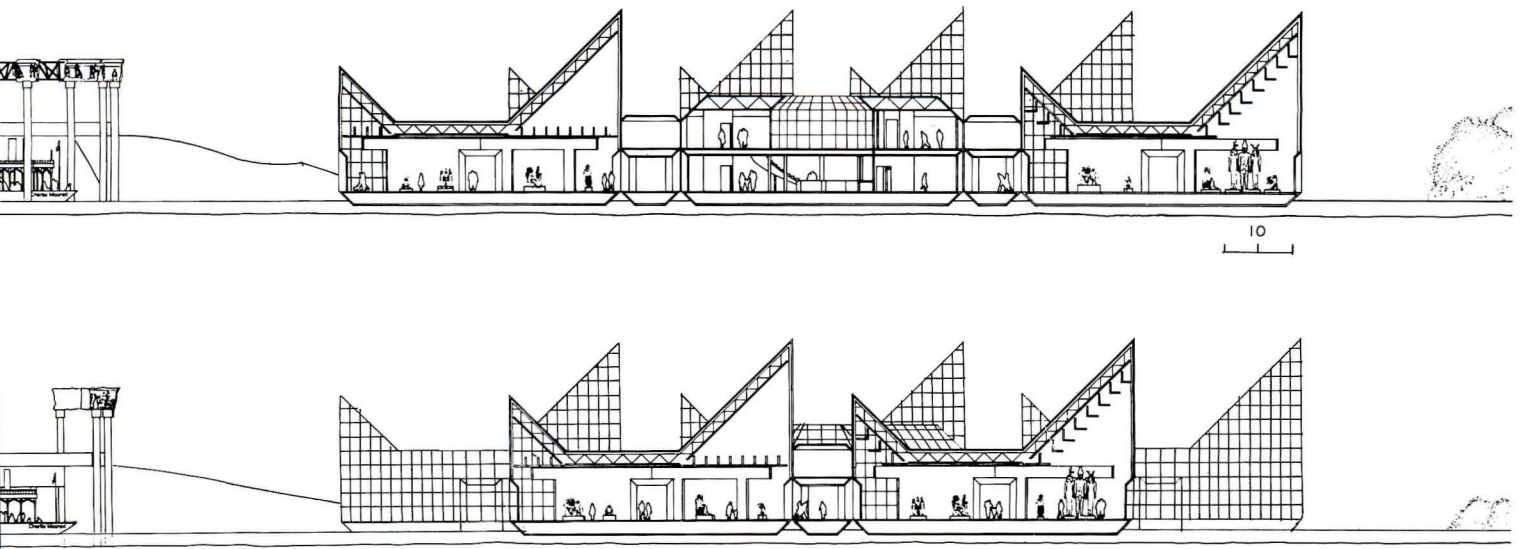
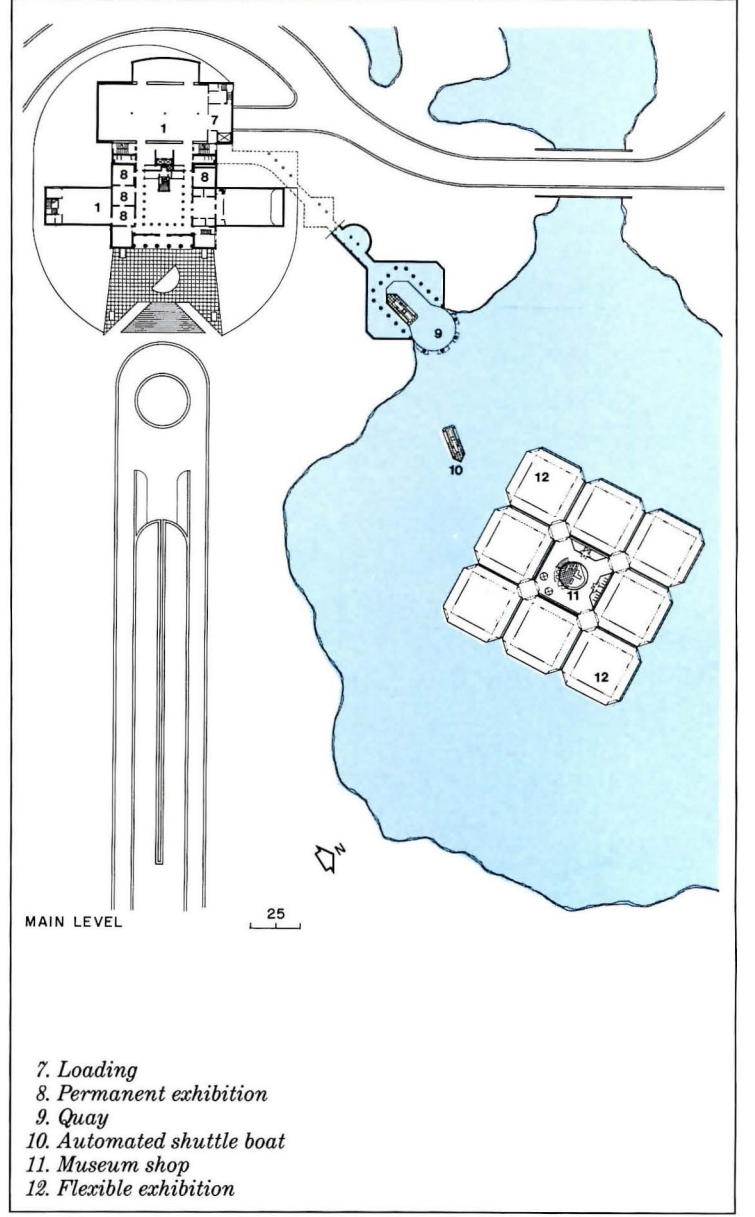
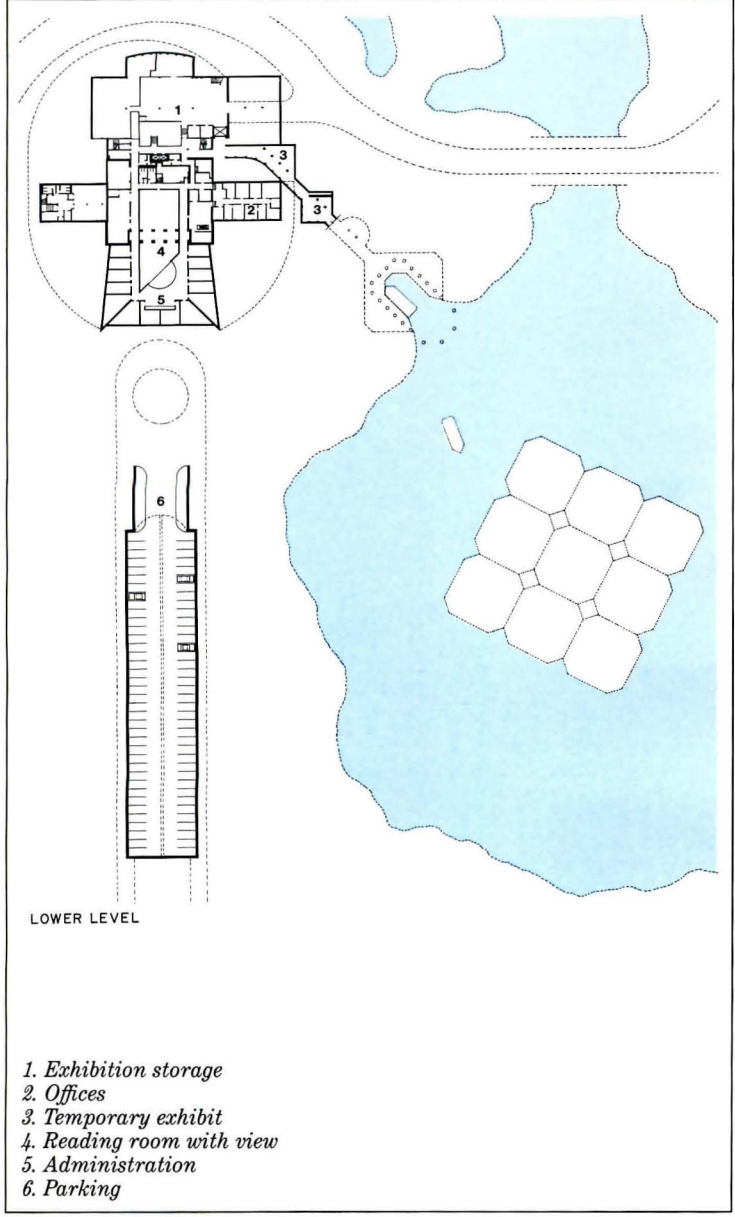


manmade archipelago would shift to suit changing curatorial requirements (floating on concrete pontoon barges, the modular units could receive chilled water through flexible insulated connections to a central system). Museum-goers would ride to the barges in motor launches reminiscent of Mississippi steamboats, piloted automatically by a network of electronic beacons on the lake bed. The landward quay

for the launches is a semicircular colonnade linked to the old museum by a subterranean passage. Segments of the pier's metal skeleton are exposed between attached fragments of antique sculpture, alternately suggesting a construction site and a ruin. This ambiguity expresses Ambasz's central theme, an alliance between past and future. "New Orleans comes back to our memory as a city

where tall European ships are reconciled with low Mississippi barges," he says, in a typically lyrical vein. "Its salty waters are the depository of ancestral European homes left beyond the ocean; its fresh lakes and mighty river are pregnant with hopeful abodes that may yet become." If the colonnaded pier evokes the romantic vistas of Piranesi or Hubert Robert, it also recalls the porticoes of antebellum

plantation houses. Juxtaposed with high-tech riverboats this classical folly conjures up anachronistic visions of Huck Finn joining a party of courtiers for a picnic on Watteau's Isle of Cythera. Incongruous, but richly engaging, the mixed icons compose a fitting metaphor for the contemporary art museum, a highbrow theme park that is quintessentially American.

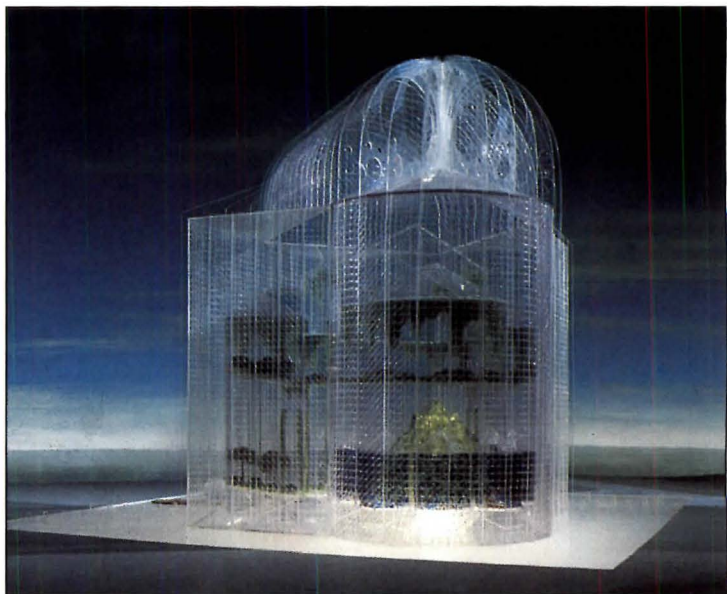
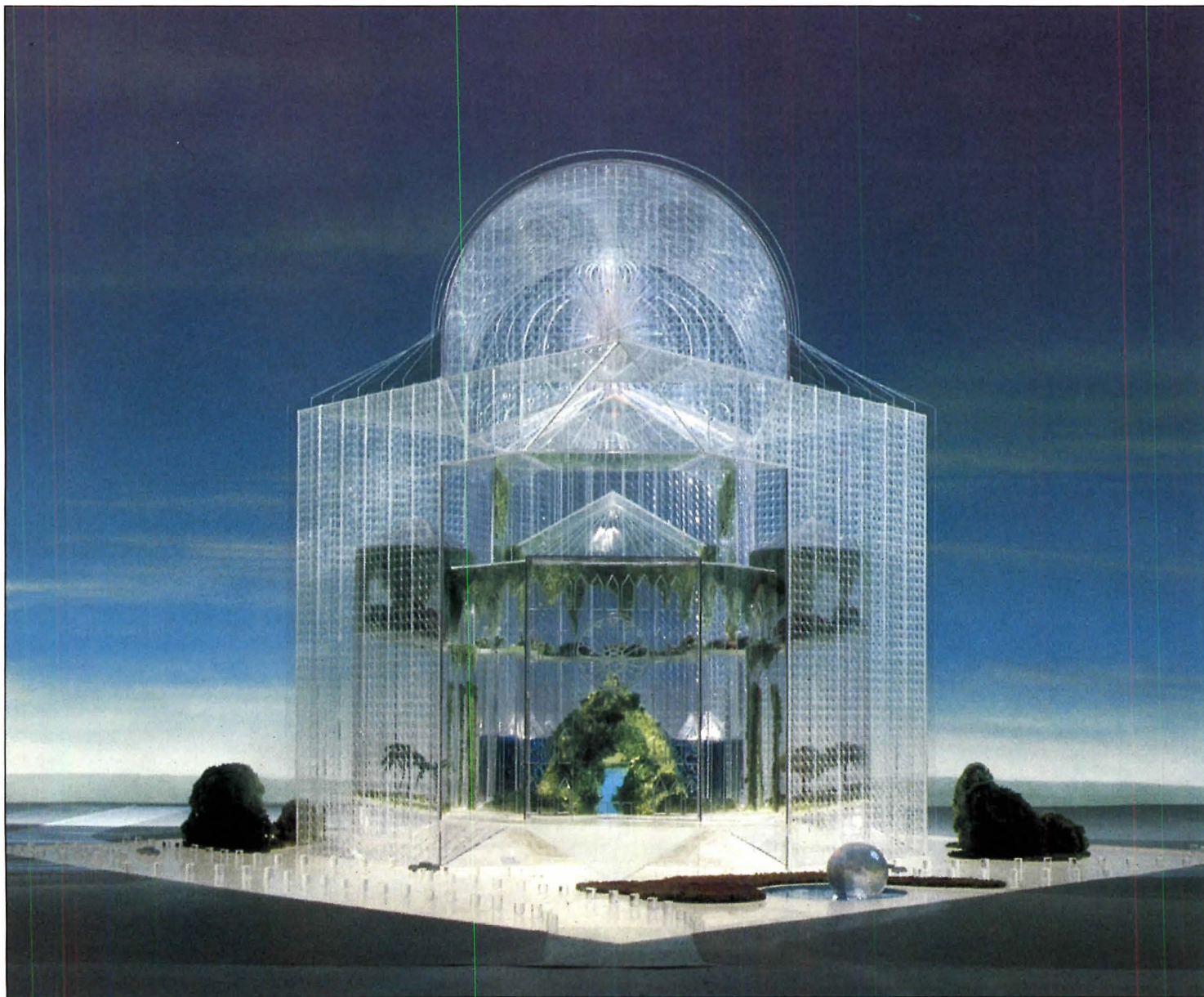


Celestial Gardens
Houston, Texas

The alchemy by which Ambasz transforms the mundane into the sublime is especially potent in his scheme for Houston's Celestial Gardens. Commissioned by the corporation behind Houston Center Plaza, this stately pleasure dome is likewise meant to satisfy a need for great urban forums. The client envisioned a giant greenhouse whose lush plantings would provide a public object lesson in energy

conservation. It would also be a splendid setting for holiday celebrations and civic festivals, and an everyday town common where local resident and traveler would both feel at home. Because the program also includes some 250,000 square feet of retail space, the atrium would serve the purpose of malls everywhere, luring suburbanites to shop—no mean feat in a city with more than its share of

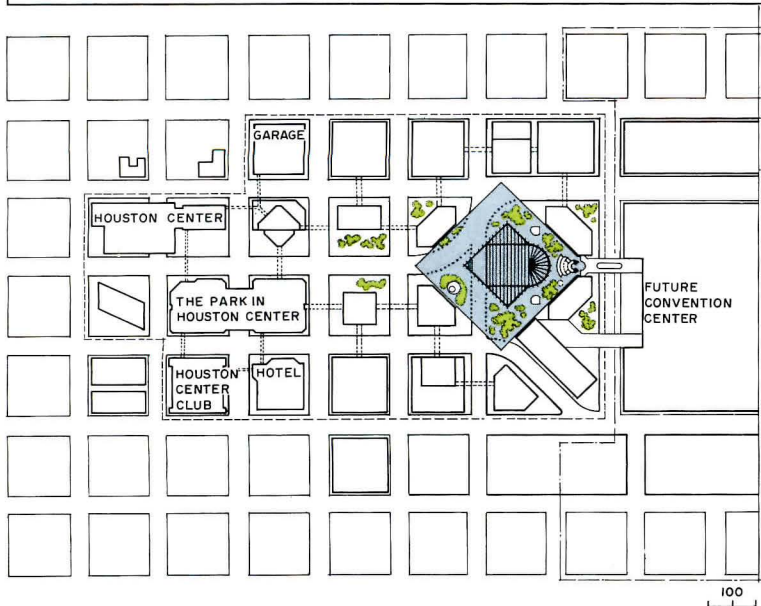
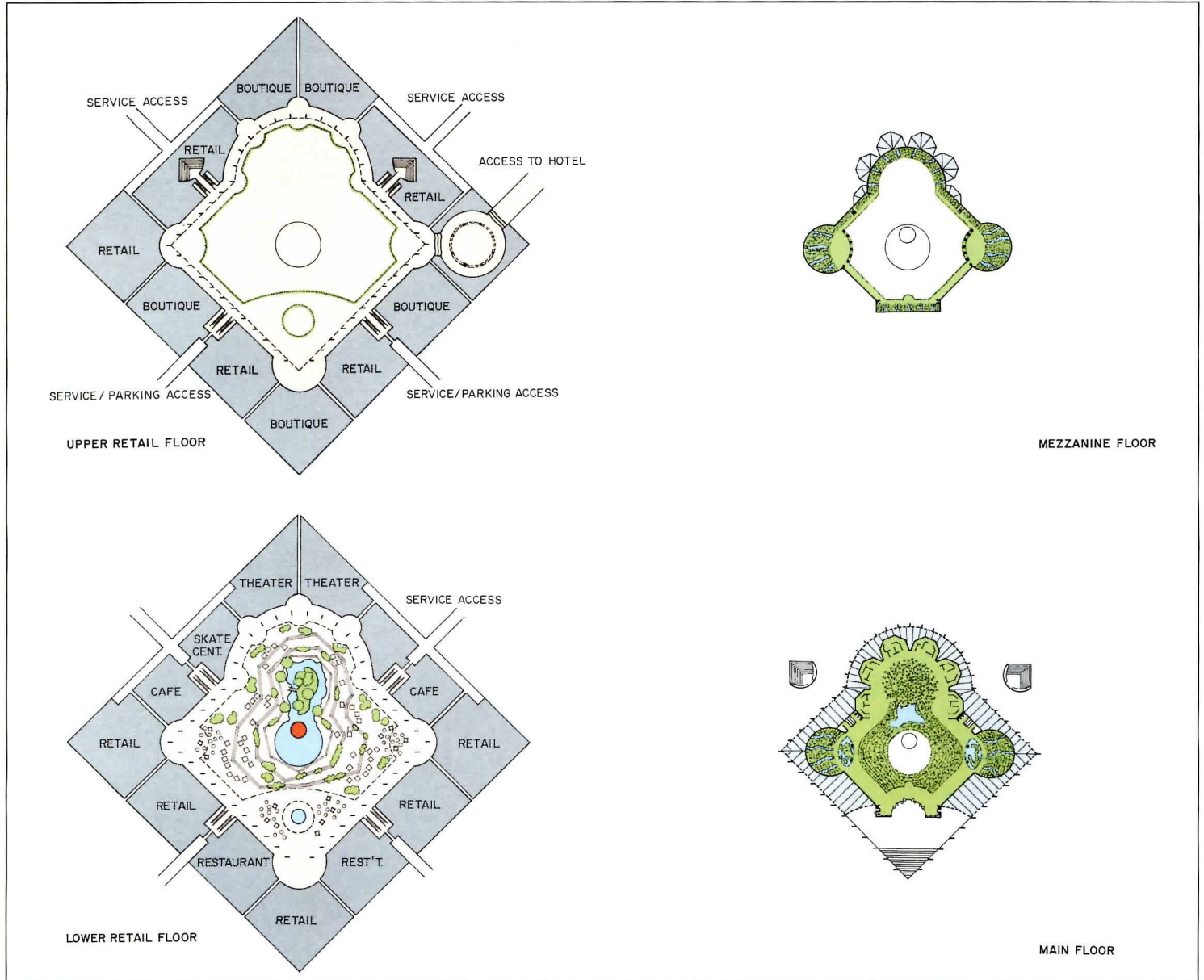
opulent emporiums. When he heard the request for an energy-conscious Sun Belt greenhouse, the architect's first impulse was to tell his clients: "All you need to do in Houston is open the window." Nevertheless, the farfetched design problem piqued his ironic sensibility and his bent for solving technical puzzles. Ambasz has proposed a greenhouse nesting inside a greenhouse, with cold-water vapor permeating the cavity between



inner and outer membranes. This configuration would reduce the interior air temperature to a level agreeable to both plants and people, without the expense of air conditioning and without harmful drafts or cold air pockets. The space-frame-and-girder structure comprises a 27-story outer greenhouse sheathed in polycarbonate plastic and a 20-story inner shelter clad with glass.

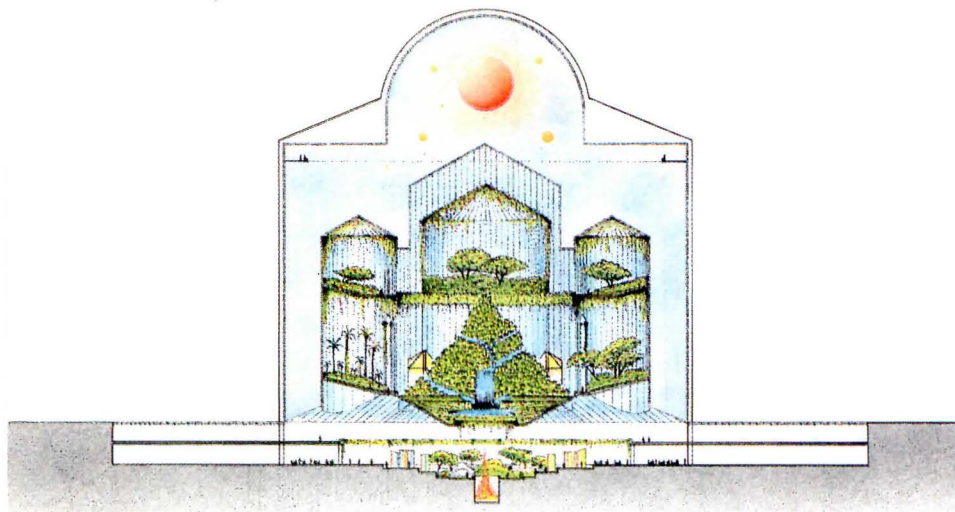
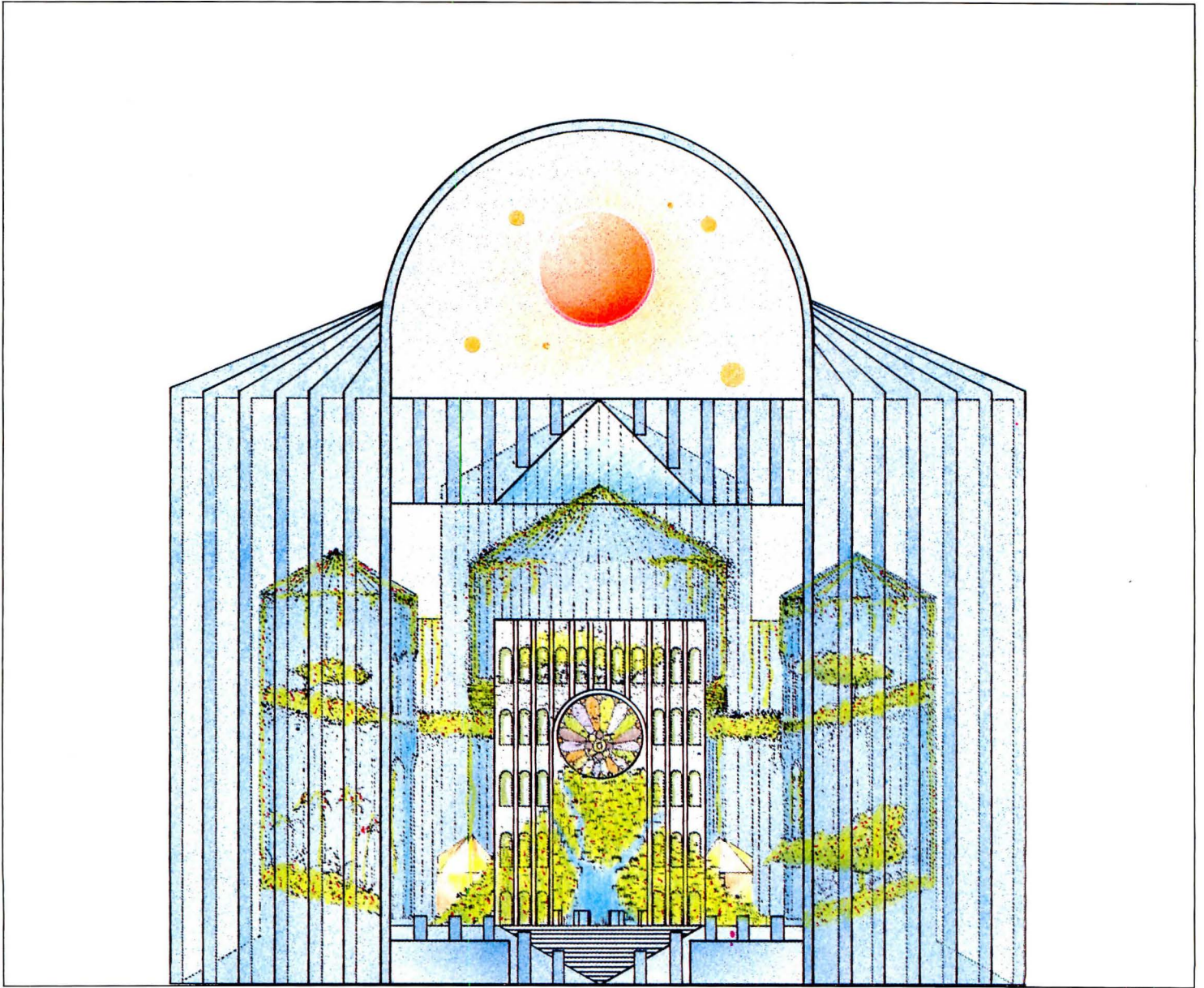
Ambasz was intrigued by the idea of a transparent building veiled in perpetual mist: amid the arcs of rainbows he could picture lasers simulating stars and planets on the three-dimensional "screen" of vapor. The medium for this celestial theater is a planetarium projector studded with high-intensity discharge lamps and polygonal reflectors, suspended like a lesser sun above a miniature mountain

(cast in cement) and a glowing fire pit (fueled with natural gas). The materials of the building and its use for didactic spectacle relate it to the modern tradition of glass houses that encompasses Joseph Paxton's Crystal Palace and Bruno Taut's Glasarchitektur. In details of massing and elevation, however, Celestial Gardens harks back to earlier prototypes, most notably the Gothic churches that also turned

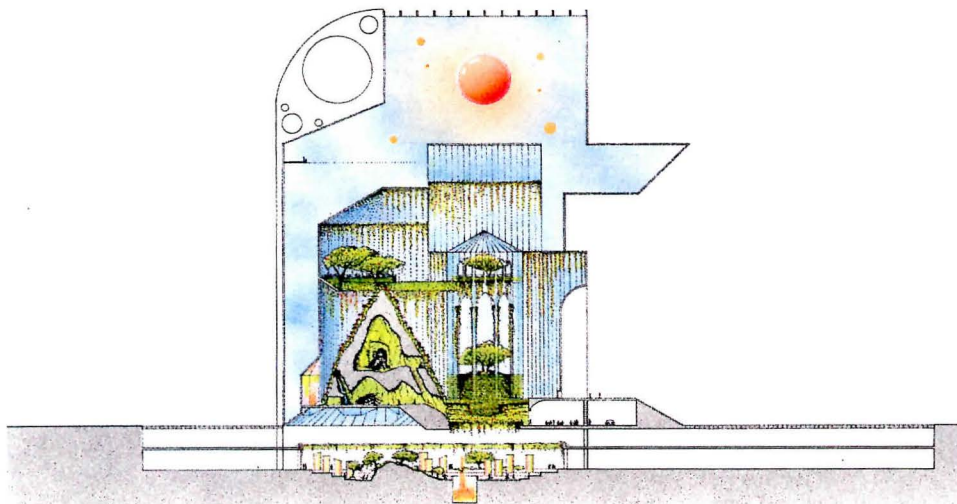
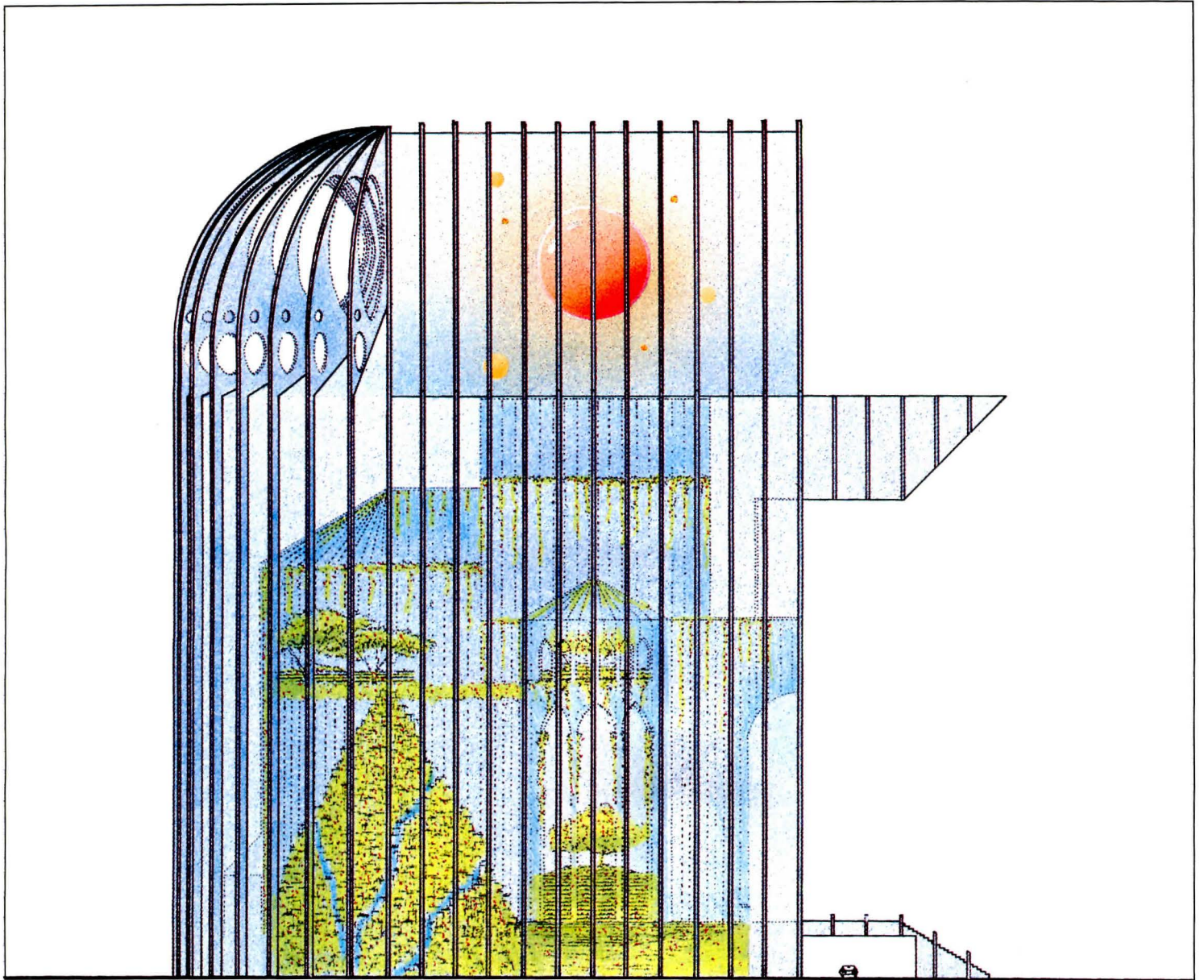


dematerialized structure, soaring volumes, and effulgent color into the earthly substance of a heavenly city. The lineaments of tracery, flying buttresses, nave, transept, and choir are recognizable in the Texas greenhouse, even if their proportions have suffered in translation (the eccentric rose window and the overbearing, beaklike canopy above the "narthex" are especially awkward). Of course, unlike the

speculum mundi of the Gothic cathedral, Ambasz's allegorical microcosm is oriented toward a secular, not sacred, goal. For those who are interested, there is a specific program of symbolism. The planetarium "sun" embodies the ultimate origin of all energy; the gas flame in the pit, one of the primary resources tapped for human use; and the laser, a potential still being explored. To complete the tableau



vivant, the plants now thriving on solar rays will eventually wither, die, and become the fossil fuels of tomorrow. It is unlikely that shoppers will search for parables in the holographic stars, or tourists ponder lessons in the mist, but if Emilio Ambasz has his way, all who enter here will stop and marvel.





Finding new functions to save a landmark form

Restoration and recycling of the Charles Street Meeting House
 Boston, Massachusetts
 John Sharratt Associates Inc.,
 Architects

© Steve Rosenthal photos

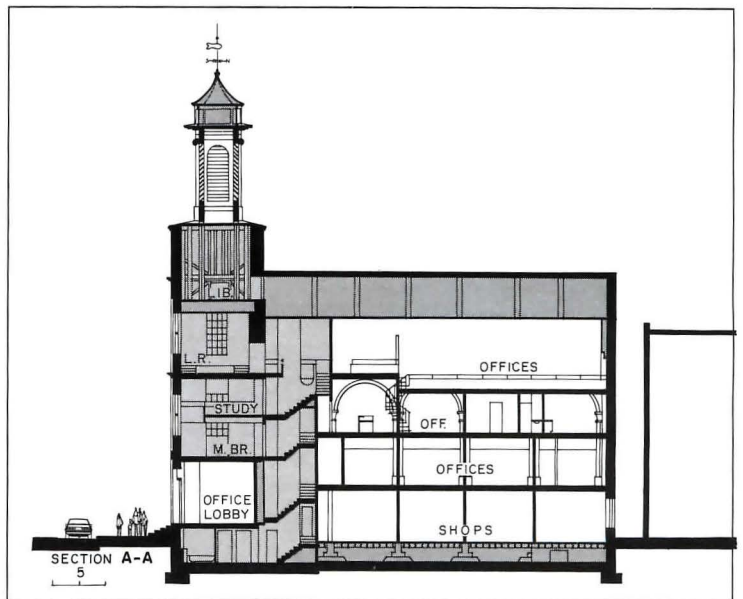
Boston's Mt. Vernon Street has been called by Henry James "the only respectable street in America." For James, evidently, only a virtually unbroken row of magnificent houses could make a street "respectable." The wonderful walk down Mt. Vernon to the Charles River begins at Charles Bulfinch's glorious Massachusetts State House near the summit of Beacon Hill and on past houses by Bulfinch, Alexander Parris, Edward Shaw and Richard Upjohn. At the foot of the hill is the Charles Street Meeting House, designed in 1807 by Asher Benjamin, a gifted follower of Bulfinch. Were James to return to the corner of Mt. Vernon and Charles Street today, he would be pleased to note that this lovely Federal church is in excellent repair. Looking up at a tower clock (one on each face of the rectangular base for the cupola), he would discover that it keeps accurate time. Only if he attempted to enter the nave would James discover that all was not as respectable as before. The church is now a church in exterior form only. The interior has been turned into an architect's home, his office, space he rents to top-quality tenants, and, on the first floor—shops. Would Henry James cry "sacrilege"? Perhaps not, if he could somehow hear the story.

The Charles Street Meeting House, a landmark of sufficient note to be included in the National Register of Historic Places, had been owned, in the 171 years of its religious life, by several different congregations. The last was the Unitarian-Universalist Association Congregation, which dissolved in 1978. Between 1975 and 1980, the meeting house was used only sporadically and it fell into serious disrepair. The church's owners had to find a buyer who could afford to restore it in a manner that would conform to local preservation standards. But when the Beacon Hill Civic Association, a group with no legal authority, just clout, held a public hearing to review presentations by different groups who aspired to purchase the building, Boston architect John Sharratt, in joint venture with a dance company, was considered more of a risk than a developer who proposed to fill the church with condominiums. Piqued at being turned down, he began to think harder.

At the time, Sharratt needed the dance company or a similar organization because of a deed restriction that the building could be used only for religious, educational or cultural purposes. So the first step was to try to get this deed restriction changed. He recounts: "The Society for the Preservation of New England Antiquities had a wrench on the deed restrictions. I explained to the society's director that I intended to preserve the outside of the building and to keep the fabric of the interior intact. Columns, caps, arches, the ceiling etc. would remain. If everything I would install were taken away, the interior of the meeting house could become a church again.

"The director gave me a verbal promise that they would rewrite the deed restrictions to allow me to use the building for commercial and residential purposes as long as I did all these things. So based upon that, I just went out and bought the building. It was for sale in the right location at the right price, very cheap for the area. I got it for so little because I took an enormous risk. Every rule book says don't buy the building until you have your variances, until you have the legal right to do what you want to do. But I broke the rules. Then I went back to the Beacon Hill Civic Association and told them that I was the new owner of the Charles Street Meeting House."

Sharratt's battle had just begun. There were zoning and FAR change approvals to be won, along with the right to install modest signs along the shop facade. It was the architect's genuine commitment to preservation that caused him to prevail, finally winning the support of Boston's three major preservation organizations as well as its public agencies. Sharratt suffered one defeat. He was not allowed to put modest, flat skylights in the roof of the church to brighten his drafting room and stair hall. The Beacon Hill Civic Association, now that it is all over, is delighted with the outcome. John Sharratt is currently on their board of directors. *Mildred F. Schmertz*



Sharratt's home, shown shaded in the section above, consists of the entire tower and most of the first bay of the nave. The church's narthex is now the entrance lobby to his architectural office and the tenant space. Two antique shops, a flower store and an ice cream parlor bring in revenue at the street level. Except for modest signs, the Charles Street facade (photo top) remains unaltered.

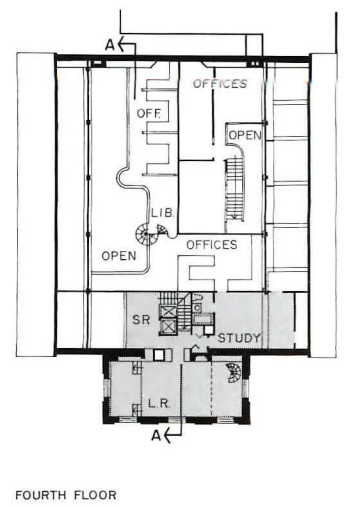
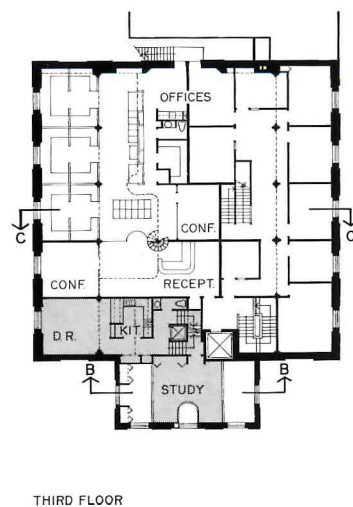
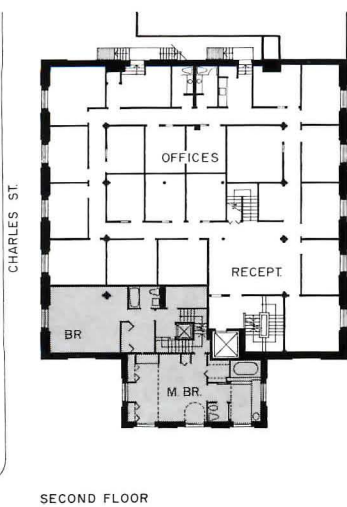
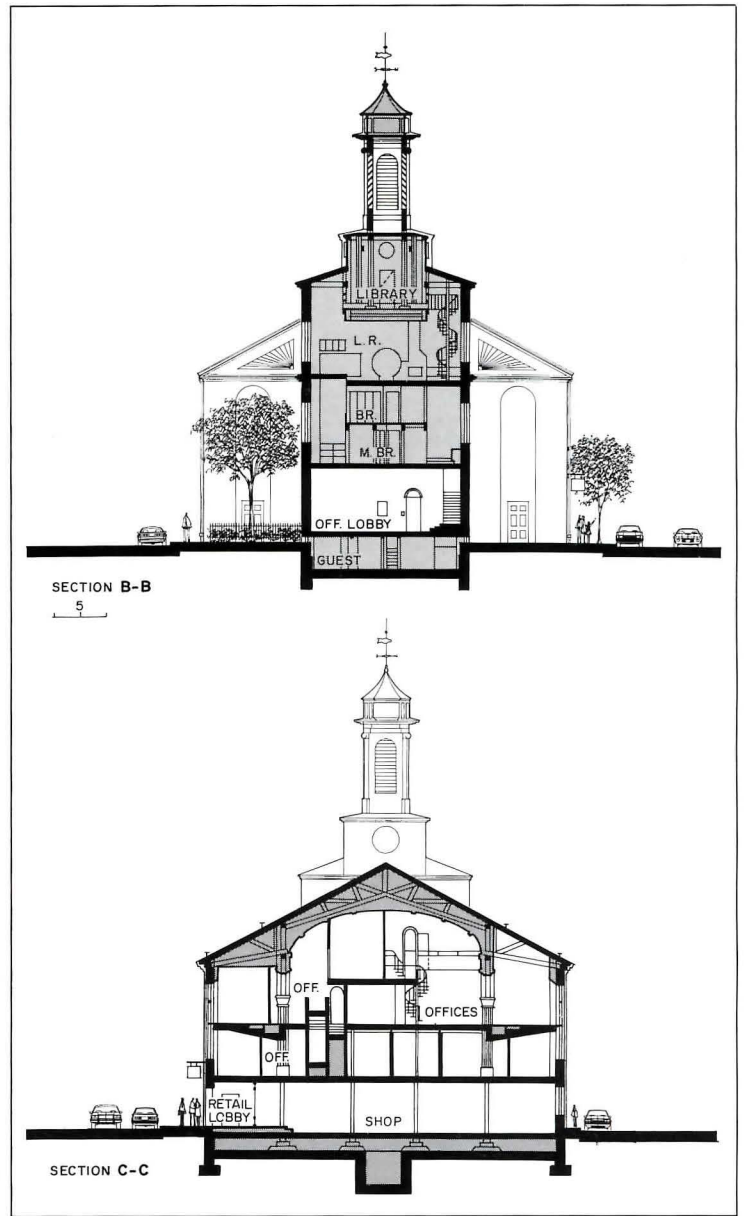
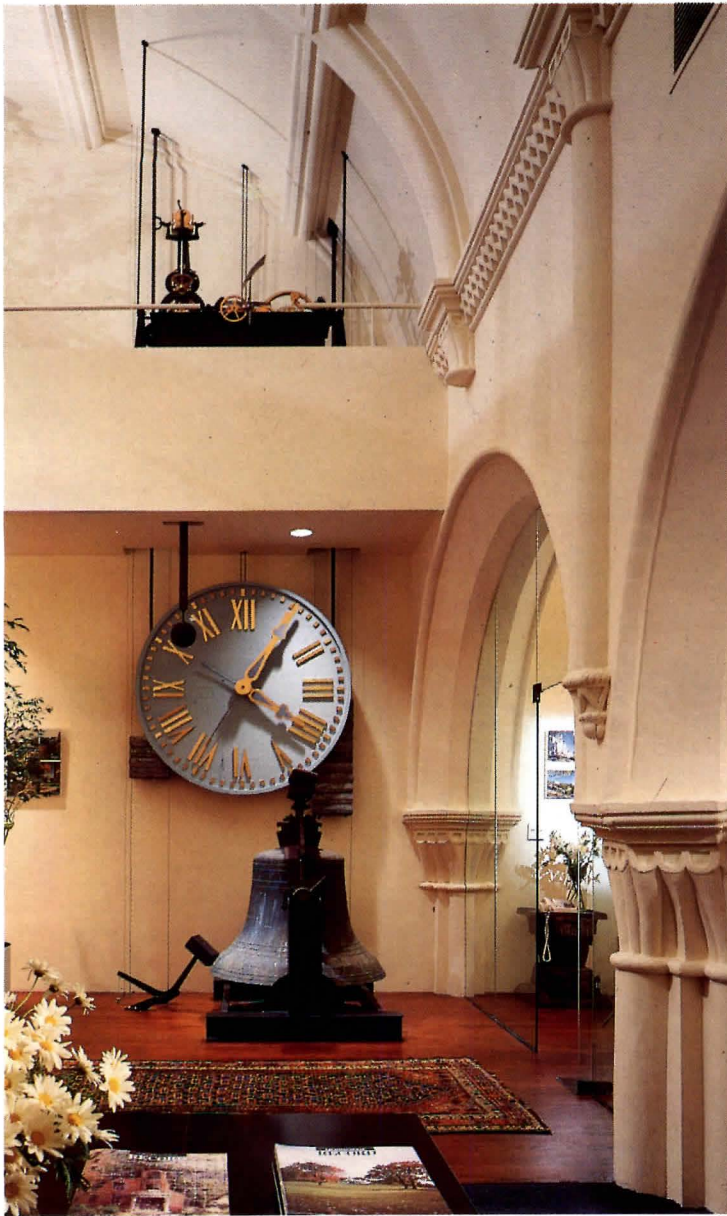
Sharratt's top floor office (photos below) occupies a little more than half the width of the four remaining nave bays. The new floor is an extension of the existing balconies (section opposite page bottom), and is level with the top of the balcony railing. Sharratt and his tenants on the opposite side of this floor enjoy the upper half of the church's beautiful arched windows, just as the members of the congregation

who sat in the balcony once did back in the days when the church was a church. This floor can be taken out, should the building ever become a church or auditorium again—not as unlikely a possibility as it may seem, for the building is a truly eminent landmark and 20, 40 or 60 years from now some benefactor might offer to take it back to what it was. The existing windows were restored and new windows were



placed on the inside. The ceiling, arches and column caps were refurbished, and a mezzanine installed in Sharratt's office space. One of the original church clocks and the bell (below) adjoin Sharratt's conference room and are rigged to keep time and toll the hours, but softly. The ground floor plan shows the street level with the main office entrance in the narthex. Sharratt's tiny garden and the front

door to his home are to the left of this entrance. Sharratt found that because of the desirability of his location he has been able to charge office rents equivalent to what tenants must pay to occupy the best of the renovated older buildings downtown. He also found that he had no trouble attracting the level of shops he wanted.





Sharratt's dining room (above) is at the balcony level in the first bay of the nave. The windowpanes are very old, and the texture of the glass causes the light to shimmer instead of glare, so no shades are needed. The corridor (above right) connects the dining room and kitchen to the stair and the elevator which ascends one floor to the living room. This space (above far right) completely fills that level of the tower and is entered

through a moon gate. A spiral stair (not shown) at the corner of the living room leads to the library above, which is in the space once occupied by the church's bell (now in Sharratt's office). And a ship's ladder from there to the cupola will soon make it the family lookout. Tower floors below the living room serve as bedrooms and a weaving studio.



*The Charles Street Meeting House
Boston, Massachusetts*

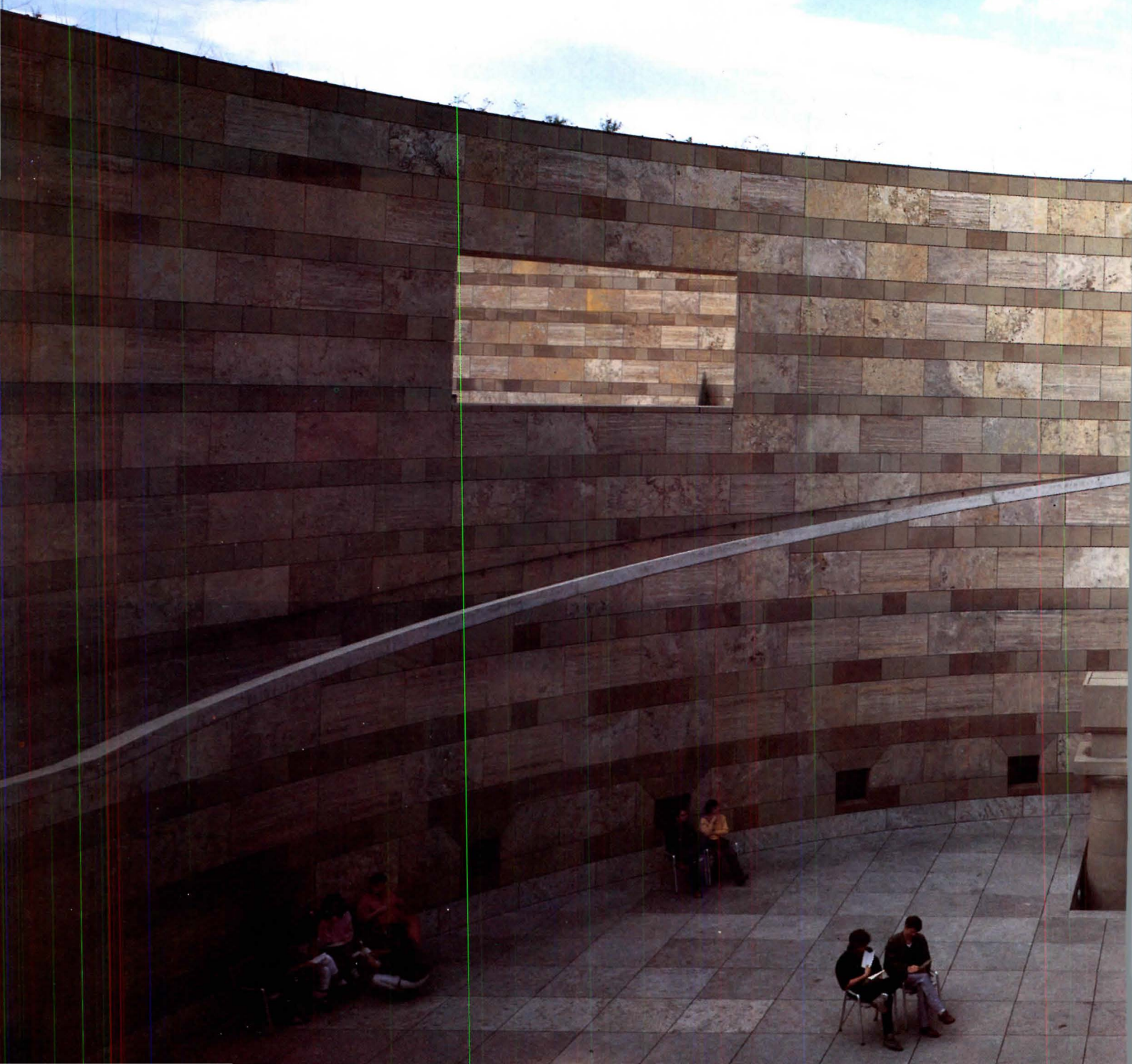
Owner:
*Charles Street Meeting House
Associates*

Architects:
*John Sharratt Associates Inc.;
principal-in-charge—John A.
Sharratt*

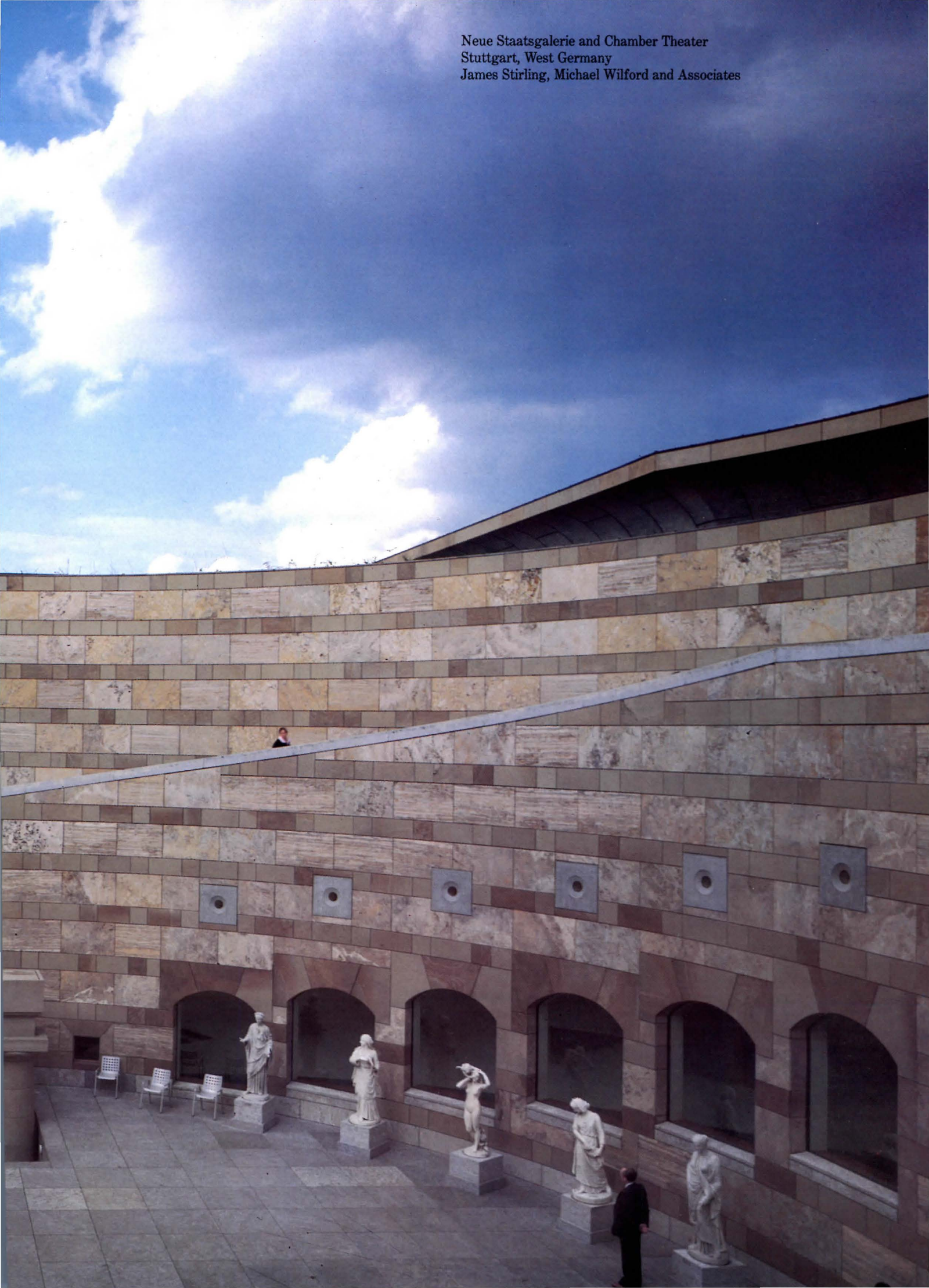
Engineers:
*Brown, Rona Inc. (structural); Sam
Zax Associates (electrical);
Environmental Design Engineers
(mechanical)*

Contractors:
*Sid Kumins, Inc. and Gentel
Construction*

Cultural centering



Neue Staatsgalerie and Chamber Theater
Stuttgart, West Germany
James Stirling, Michael Wilford and Associates



Timothy Hursley photos



The main facade of the Neue Staatsgalerie, facing Konrad Adenauerstrasse (photo top), is a collagelike composition in which historicizing details are played off against brightly colored high-tech elements that recall Stirling's designs of the 1960s. At the center of the inverted U-shaped plan is the circular sculpture court (photos preceding pages, above, and facing page), in which 19th-century

sculpture adds to the classicizing mood. The sculpture court and portions of the facade are clad in alternating bands of local Canstatt travertine and Weiler sandstone. Its color harmonizes with the pale stucco of other portions of the new exterior, intended to relate to that of the old Staatsgalerie (drawing bottom right), constructed to the designs of Gottlieb Georg Barth from 1838 to 1843.

By Martin Filler

Although James Stirling (in the characteristically sly assessment of Philip Johnson) "has been the *Wunderkind* of modern architecture for some twenty years," the British architect's considerable international fame has until recently been based on an unusually small number of built works, the best known being the great 1960s sequence of university buildings, most designed in collaboration with James Cowan. Established by these structures as his country's most important avant-garde architect in generations, Stirling nonetheless had completed by the end of the 1970s only a dozen or so executed designs. These, however, were extraordinarily high in quality (as well as highly publicized), and projects of uncommon interest continued to issue from his office during the increasingly long lulls between construction.

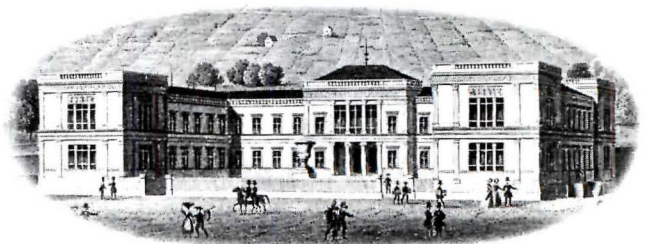
Now that Stirling is generally acknowledged to be among the most talented and influential of his peers—a fact endorsed by his being awarded the Gold Medal of the Royal Institute of British Architects in 1980 and the Pritzker Prize in 1981—some of his countrymen have become rather defensive about his desert years as the proverbial prophet unhonored at home, where the deep-seated British ambivalence towards modern design resulted in his cultural exile. Rejected in England, Stirling was taken up by the West Germans and since 1969 has produced no fewer than ten projects for various German clients.

It is easy to understand Stirling's strong appeal to his new constituency. His gradual stylistic shift—especially after his new partnership with Michael Wilford in 1971—from High-Tech Modernism to a kind of Post-Modern Classicism coincided with a growing sentiment in Germany for an architecture that evoked the qualities of the Biedermeier period, now esteemed as *die moderne Vergangenheit*: "the modern past." Apotheosized in the designs of Karl Friedrich Schinkel from 1810 to 1840, Biedermeier architecture at its best balanced human scale with civic grandeur, material richness with decorative simplicity, and respect for historical precedent with interest in technical innovation.

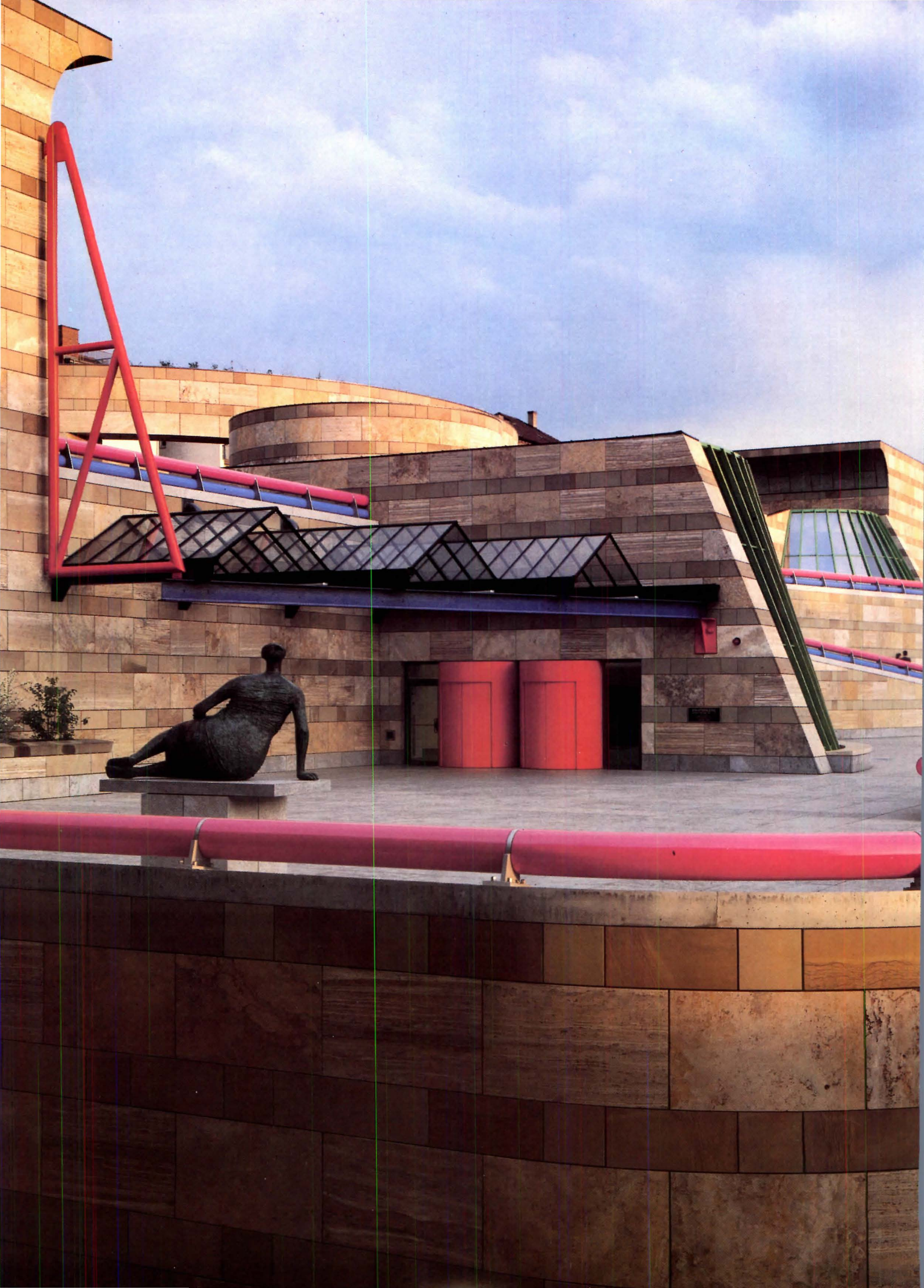
It is within that context that we must view Stirling and Wilford's recently completed Neue Staatsgalerie in Stuttgart. This is certainly the most significant building to rise in the Cleveland-sized city since Paul Bonatz's and E. F. Scholer's Hauptbahnhof of 1911–27 and is also arguably the most important structure erected in Germany during the 1980s. It addresses and brilliantly resolves a number of the major questions that contemporary architects have been grappling with but have not often answered: user satisfaction, urbanism, contextualism, monumentality, historicism, technology, and materials. But it also provides impressive evidence of the arrival of a major talent at the full mastery of his mature powers. For this is James Stirling's *Meisterwerk*, the justification for a reputation that for too long preceded him; finally Stirling has caught up with his name.

Stuttgart was the capital city of the old kingdom of Württemberg, which was absorbed into the new Reich in 1871. By that time the city had already attained its essential urban character: ringed by mountains that delimited its growth, Stuttgart turned inward. Its focus was the

Martin Filler frequently writes criticism on architecture and design for a number of publications. He is editor of *House & Garden*, where his profile of James Stirling will appear early next year.



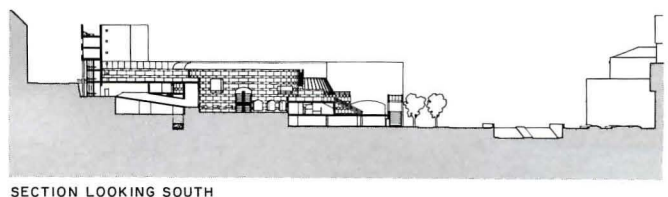
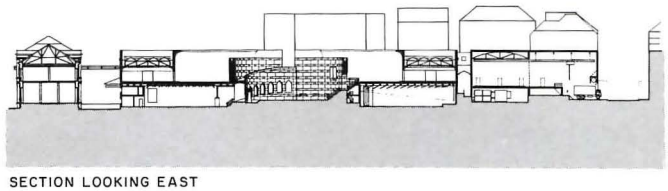
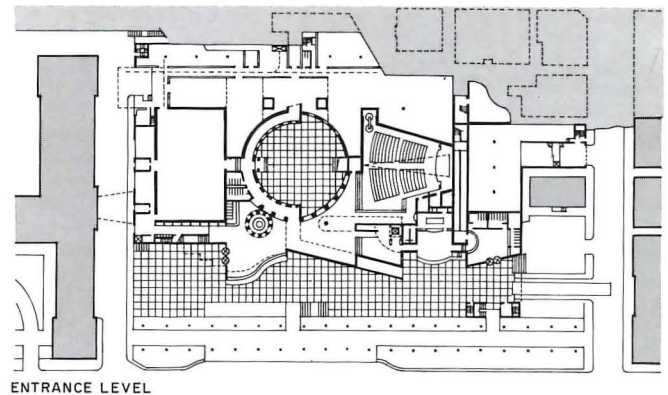
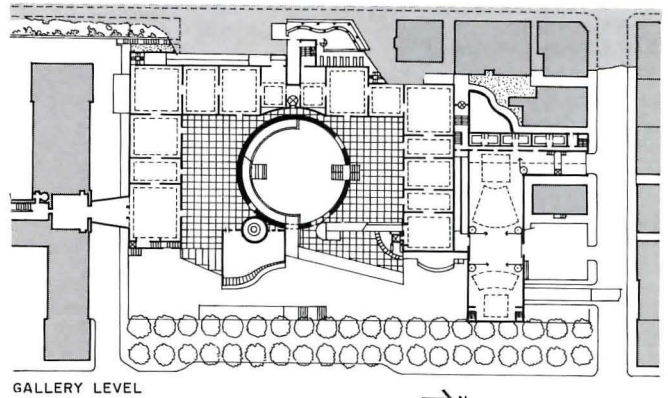




royal town palace, which faced a pleasant park on which also fronted its opera house and art museum, the Staatsgalerie. The severe bombing of Stuttgart during the Second World War did not lead to either a local adaptation of the glittering-showcase-of-democracy Modernism of postwar West Berlin or the meticulously archaeological restoration of Munich but was more of a compromise: the handsome if unremarkable structures of the historic city center were maintained, but new construction was for the most part undistinguished. Perhaps the most lamentable alteration was the conversion of the old Neckarstrasse—renamed Konrad Adenauerstrasse during the 1960s—from a street separating the Staatsgalerie and the park into a four-lane feeder for the highway that now encircles the city. The museum was thereby cut off both physically and psychologically from the heart of Stuttgart.

The reintegration of the Staatsgalerie with the city's other cultural institutions (a fine opera company, a world-renowned chamber music ensemble, and a ballet that achieved international recognition under the late John Cranko) was one of the key programmatic requirements put forth in 1974, when a competition was announced by the State of Baden-Württemberg for designs for a new extension to the old, marooned museum. The seven German architectural offices and four foreign firms asked to submit proposals were presented with an extraordinarily detailed roster of requirements, including stipulations that the small scale of existing buildings adjacent to the site on the south and east be respected; that a pedestrian path be provided across the site to the residential neighborhood behind it; that a ten-foot-high terrace be constructed along the main front to allow a footbridge over Eugenstrasse to the south; and perhaps most determinative of all, that the scheme confront and resolve the problematic presence of the impossible-to-ignore Konrad Adenauerstrasse.

To the best known of the foreign invitees—James Stirling, Michael Wilford and Associates of London—this rigorous set of conditions was nothing if not a welcome challenge; after all, it was James Stirling who at the topping-out ceremony for the Neue Staatsgalerie was to aver that “compromise is the essence of architecture.” The uncompromising imagery of his earlier designs tended to obscure the fact that in almost all of them he had triumphed over equally demanding programmatic terms, including sites even more unappealing and prerequisites even more contradictory than those that came with the Stuttgart job. The best measure of the architects' virtuosity in giving the client what was wanted is the extent to which they have achieved functional ends without resorting to means so obvious as to undermine the strong overall presence they were asked to provide simultaneously. So high on the list of design requirements was the restitution of “the historic relationship of public buildings facing a Mall,” that the coherence of the whole was as important as the merits of its component parts. Coherence the Stirling-Wilford scheme unquestionably provided. It was the only submission, for example, that in dealing with the problem of Konrad Adenauerstrasse did not propose a strongly defined street wall facing that thoroughfare. The English architects instead suggested setting the new addition even farther back from the street than the old Staatsgalerie directly to the north, but took significant cues from the original structure so that the new would relate to the old in scale, materials, and color. Their strategies have worked well: if the street



A ten-foot-high sculpture terrace (photo facing page) was part of the program given the architects. The stone, too friable to be used as a load-bearing material, was applied as a veneer over the reinforced concrete structure, but detailing gives it the implied weightiness of Classical rustication. At the rear of the multi-structure complex are the library (photo top left) and piano-shaped music school (photo top right), which

maintain the modest scale of the existing buildings on Urbanstrasse. The plan of the sculpture court and the surrounding galleries owes an obvious debt to Karl Friedrich Schinkel's Altes Museum of 1822-30 in Berlin. The sections show the level change between Konrad Adenauerstrasse at the front of the site and Urbanstrasse at the back—and how well the parti resolves it.



The exhibition galleries fulfill the program's call for "a sequence of well-defined and well-proportioned 'rooms,' avoiding 'endless flexible space'... to achieve a chronological 'journey' through the history of painting and sculpture." Organized along a traditional enfilade, the galleries are joined by portals surmounted with simplified pediments (photo opposite). The Neue Staatsgalerie has the world's

largest collection of works by the Bauhaus artist Oskar Schlemmer, and the forms of his sculptures are echoed in the flared columns of the temporary-exhibition gallery (top photo). The galleries are illuminated by skylights that follow the request for "a flat surface of diffusing glass, allowing passage of shadowless natural light."

does not disappear, it does seem significantly diminished.

The Neue Staatsgalerie is built in an inverted U-shape that reiterates the frontal configuration of the original museum (which is actually H-shaped in plan), except that here the courtyard is not open but contains the cylindrical sculpture court. Viewed from across Konrad Adenauerstrasse, the main facade of the addition seems an architectural collage. For while the new building partakes of a stylistic vocabulary that makes gestures of accord to its old neighbor, the likenesses are not strong enough to be truly contextual.

In his Pritzker Prize acceptance speech in 1981, James Stirling took exception to this writer's assertion (see Martin Filler, "Architect for a Pluralist Age," *Art in America*, April 1981, pp. 102-110) that Stirling's career could be divided rather easily into four distinct phases, insisting that "there is only one. . . and what we do now is not very different from what we have done since the beginning." Even allowing for the tendency of artists to stress the consistencies rather than the contradictions within their *oeuvres*, one might be inclined to take Stirling at his word on the evidence of this one building in that it is a veritable compendium of the architect's major themes and most familiar motifs. Here are the ingeniously wrought pipework elements that recall the heady, high-tech excitement of Leicester and Cambridge; the undulating glass walls of the unbuilt schemes for Derby, Milton Keynes, and St. Andrew's; the primitivist scale and historicizing detail of his unexecuted Manhattan townhouse scheme; and the first completed example of the dominant cylindrical form that has recurred in most of his German projects. Each is perfectly legible but nonetheless melds into a unified order that begins to reveal itself after an initial impression of too many diverse elements is dispelled.

On closer inspection, the sheer excellence of craftsmanship confirms the image of formal solidity: this is certainly the firmest Stirling structure ever built. As such, the Neue Staatsgalerie stands in diametric contrast to the sadly decomposing monuments of Stirling's early career. Be it German conscientiousness, a watchful client, the return to favor of traditional materials, or an ample budget (the Neue Staatsgalerie cost an estimated \$34 million), this has a better chance of surviving well into the next century than most other Stirling buildings.

The Staatsgalerie addition can be entered in one of three ways: through the main entrance adjacent to the S-curve wall on the sculpture terrace, through the bridge that connects the new wing with the old, or via the subterranean garage. At the approximate center of the terrace on Konrad Adenauerstrasse, a skeletal red-and-blue-painted steel aedicula announces the beginning of the primary arrival route, up stairs to the right or a ramp to the left, both leading to the raised terrace. The overscaled handrails of those ascenders and the podium are painted shocking pink, which together with the other bright—not to say loud—colors that appear on metal detailing throughout the Staatsgalerie complex comprise one of the most controversial aspects of the scheme. Given the particular postmodern interest in softly faded hues, these highly assertive colors seem rather like a throwback to the 1960s. However, the resulting effect seems to be the correct one, especially if one considers how pompous this building could look without the leaven of incongruity and wit that Stirling has given it. Stirling has said that he wanted the Staatsgalerie to be "a non-monumental monument," and

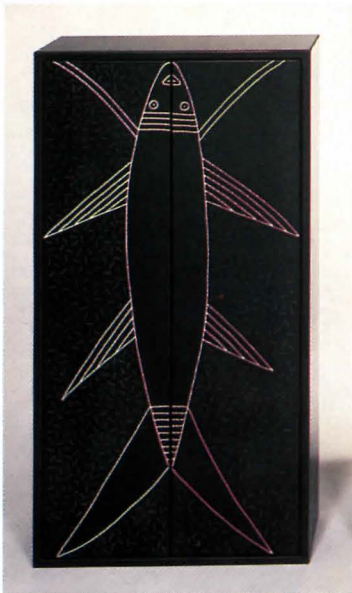




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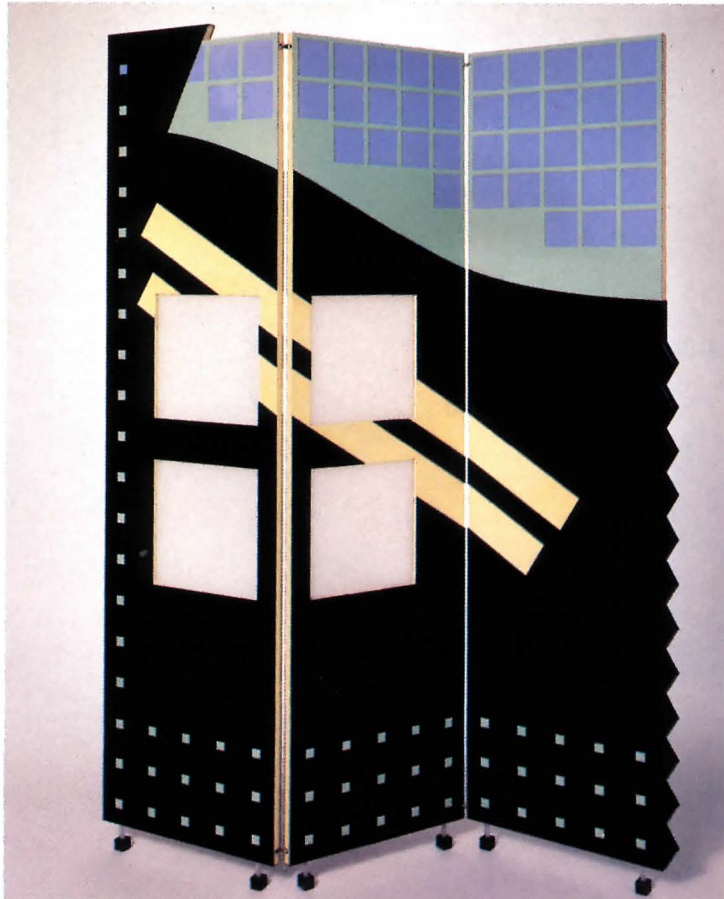


2



3

Taking it to the limit
In order to explore the design possibilities of its *ColorCore* surfacing material, the Formica Corporation, in conjunction with The Gallery at Workbench, recently sponsored an exhibition of hand-made furniture featuring the new product. Nineteen woodworkers were asked to participate in the show, entitled "Material Evidence: Master Craftsmen Explore *ColorCore*," which was on display in New York City this spring and, according to most recent plans, will tour 12 major U.S. cities during the next two years. Each piece of furniture combines the interests of its designer with his or her own interpretation of Formica's directive to take the potential of *ColorCore* and notions of custom-made furniture to the limit. Garry Knox Bennett's desk (1) expands the conventional applications of



4

laminates by juxtaposing 14-kt gold-plate, brass, aluminum, and rosewood with *ColorCore*. Edward Zucca's *Harlequin* table (2) attempts to broaden the accepted usage of *ColorCore* in an even more dramatic manner. Fluorescent, diode, and large red incandescent lights literally "highlight" the *ColorCore* construction. A series of wall-hung cabinets—*Fish* is shown (3)—

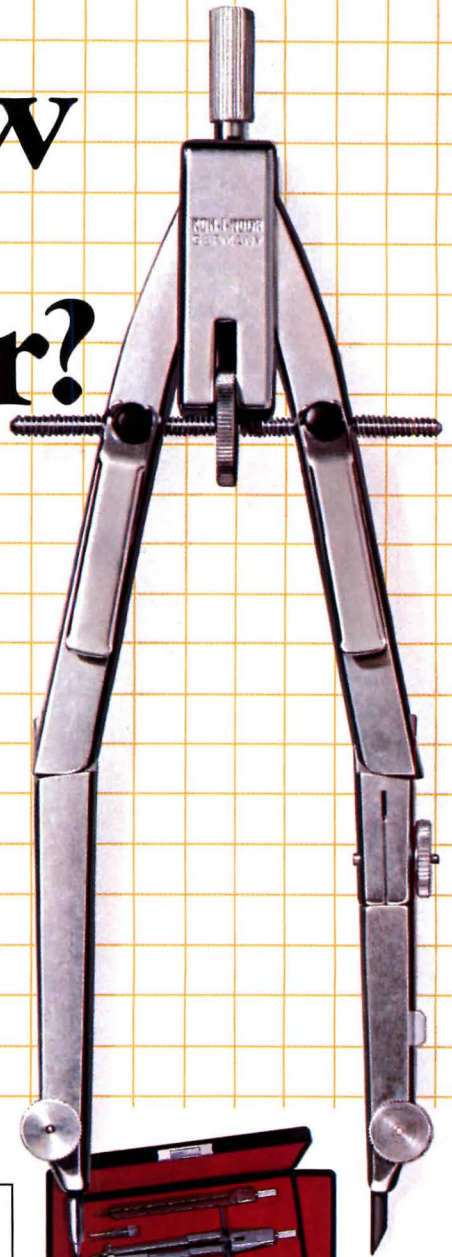
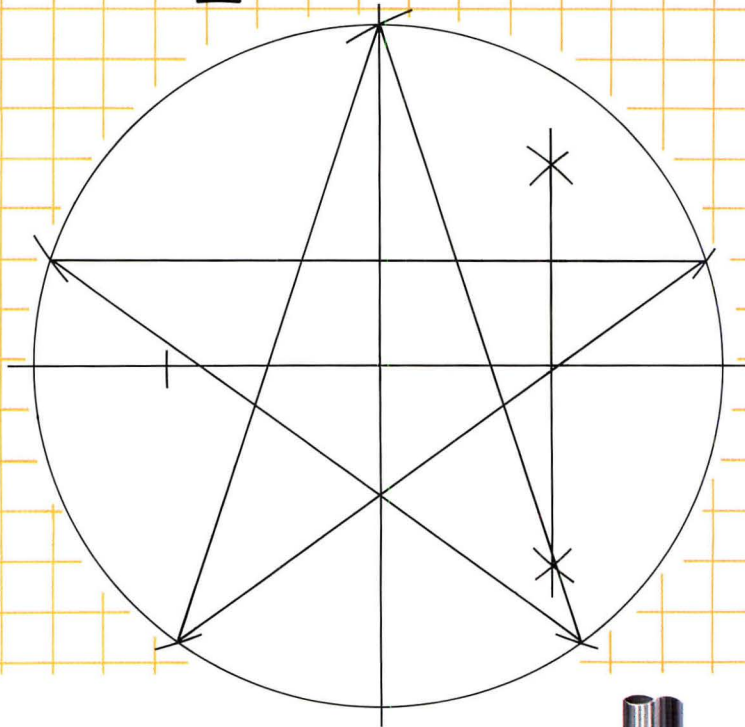
designed by Judy Kinsley McKie uses two layers of *ColorCore* on the front surface to make a figure and its background. Similar to the etching process, white *ColorCore* is routed through to reveal a black image underneath. Shapes and patterns are inlaid and sandblasted for a graphic effect on James Schriber's folding screen (4). The whimsical attitude suggested in several of the designers' works also



5

has a serious side, as Jack Larimore's *Chair's Chair* (5) implies. His concern with the "loss of ritual in our culture, specifically the ritual of power" adds an ironic twist to an understanding of this brightly colored chair with ribbon-like *ColorCore* inlays—a piece that seems appropriate for the court jester. In all of their designs the woodworkers emphasized how *ColorCore* could be used in the construction and detailing of hand-made furniture, whether it was employed for its particular material characteristics, for the variety of colors and textures it comes in, or for the flexibility that allowed the designers to explore their own ideas about furniture. Formica Corp., Wayne, N.J.
Circle 300 on reader service card
More products on page 169

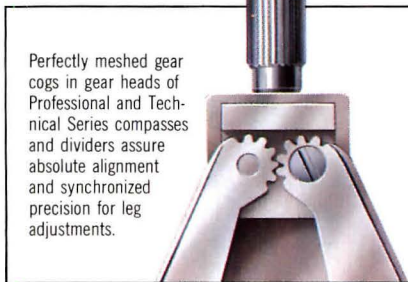
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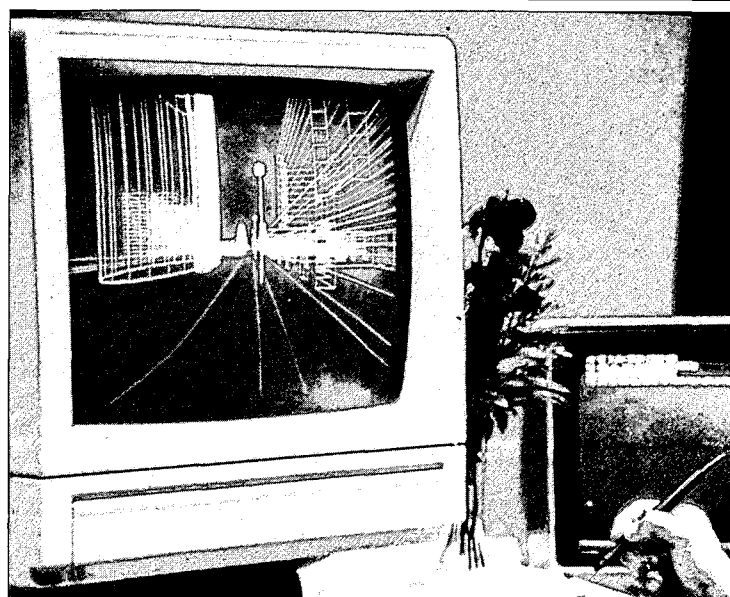
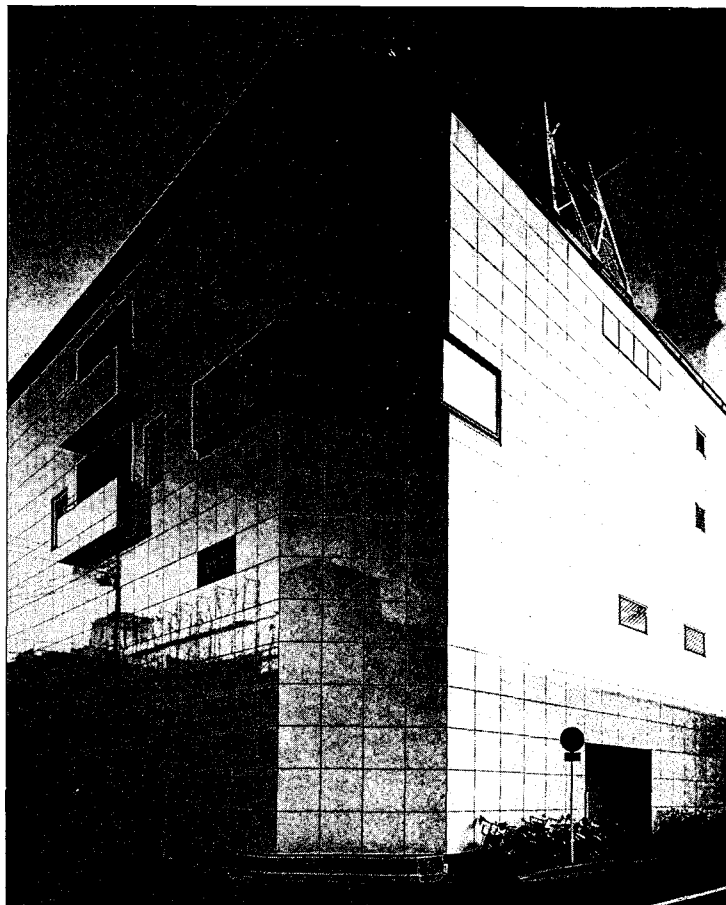
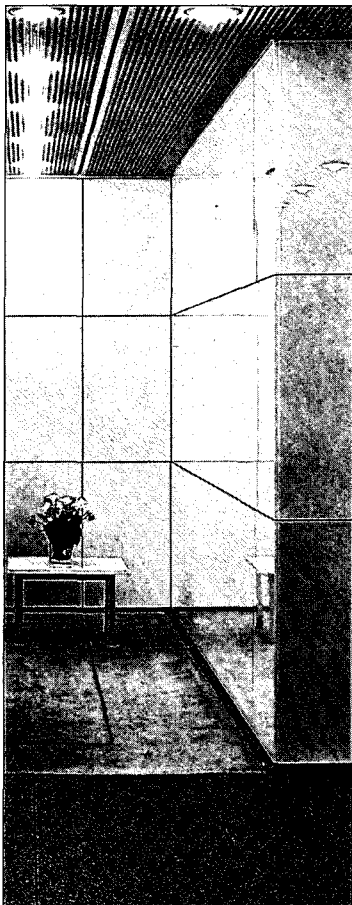
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Exterior/interior surfacing panels
Previously available only in Japan, the surfacing material *Neoparium* is now being distributed in the United States. It is produced from a crystallization process that fuses granular glass particles into a material that is said to be harder and stronger than granite and more resistant to inclement weather. Curved panels, formed during the manufacturing process, are available with a maximum arc segment of 90 degrees. Straight panels come in a standard size of approximately 35 ft square. *Neoparium* can be used for exterior or interior walls, floors, columns, or counter tops and comes in two thicknesses—8 mm for interior applications and 15 mm for both interior and exterior applications. A dowel pin, connected to a concrete anchor, is inserted in the top of each panel to attach it to the building facade. The fasteners permit alignment of the panels and eliminate the need for mortar between them. Although the standard panel color is white, panels may be custom-ordered in light, medium, or dark beige or gray. Forms + Surfaces, Santa Barbara, Calif.

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CADD system
An electronic pencil, or stylus, activates the new *Artech* CADD system, designed for architects and engineers. The stylus can move a cursor around the screen, draw, edit, retrieve information from the computer library, and relay information to the database. A menu card with color-coded command buttons lies on a graphics tablet and makes 300 instructions

directly accessible through the stylus. The *Artech* system permits the placement of fixtures like doors, windows, walls, and furniture using symbols that are stored in the computer's library; the integration of such design components as structural, hvac, and plumbing and electrical layouts; and the electronic layering of drawing sheets in color, each layer shown either separately or with any of the other layers. A

workstation consists of a 32-bit computer, a keyboard, two screens, and the graphics tablet with a stylus. The entire system can be upgraded through the installation of a graphics processor, which permits zooming to magnify selected areas of drawings or panning for broader views, or through the addition of bigger disk-drive units. Skok Systems Inc., Cambridge, Mass.

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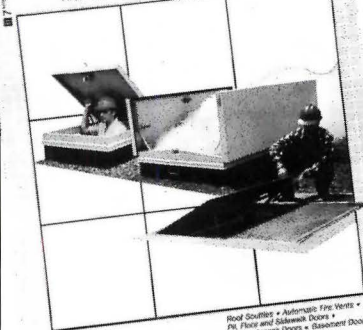
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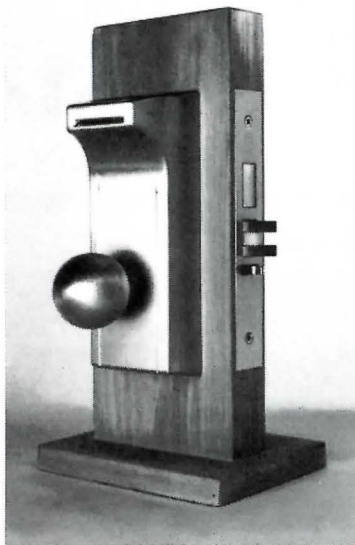
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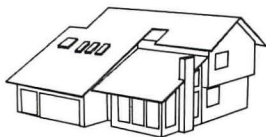
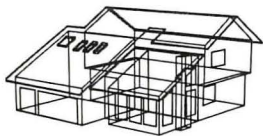
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Door locking system

Saflok includes an electronic door lock (shown), a host computer with a hard disk drive, a keycard encoding station, and a printer. Eight separate levels of access are contained within the program. A validated keycard unlocks the assigned doors. Computerized Security Systems, Inc., Troy, Mich.
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CADD software

Design Board 3D allows the user to create and modify designs in three dimensions, work with flat and free-form curved surfaces, design in plan and simultaneously view in perspective, remove hidden lines in one step, and view and generate drawings of any desired orientation. The software runs on the IBM PC and compatible personal computers. Mega CADD, Inc., Seattle.
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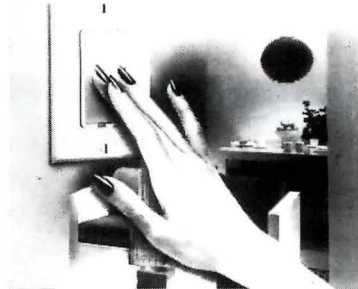
Sun room

The *Four Seasons* room can be made from a selection of heat tempered curved glass, said to reduce glare, and is supplemented with an exhaust system to vent heat. A built-in shading system, installed on tracks, is available in 48 colors. Four Seasons Solar Products Corp., Farmingdale, N. Y.
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Touch dimmer

The *Decora* touch dimmer has a sensitive plate which responds to fingertip touch. Built-in micro-circuits remember the last light level set and return lights to the same level when turned on again. Switches and receptacles are available with silver or gold-color touchplate. Leviton Manufacturing Co., Inc., Little Neck, N.Y.
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Roofing system

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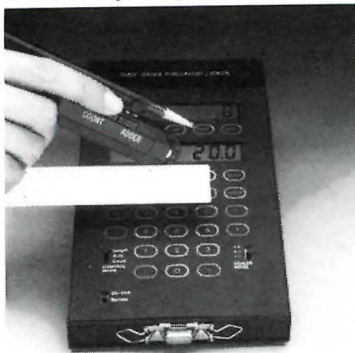
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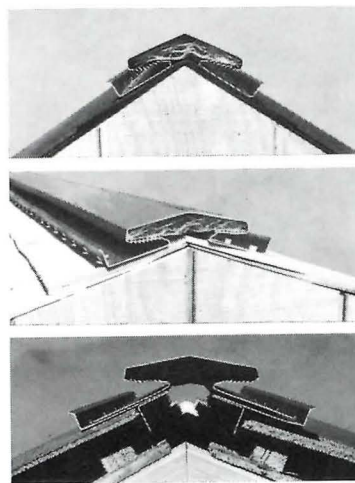
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Air vents

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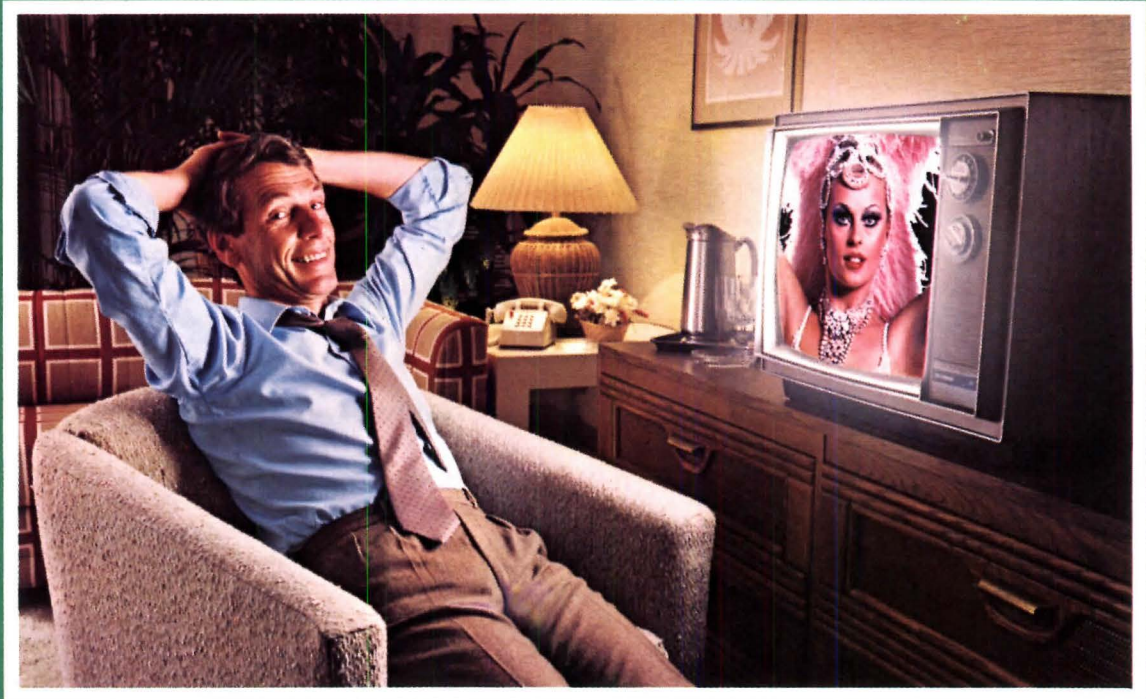
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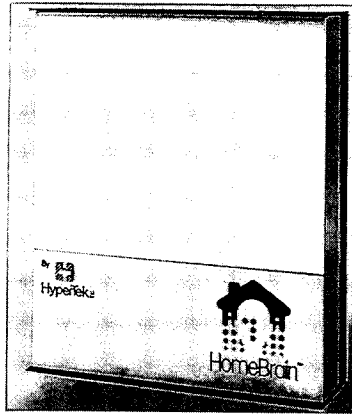
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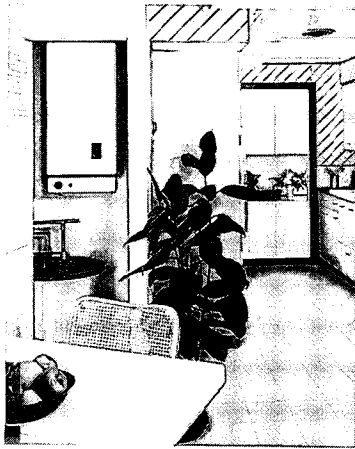
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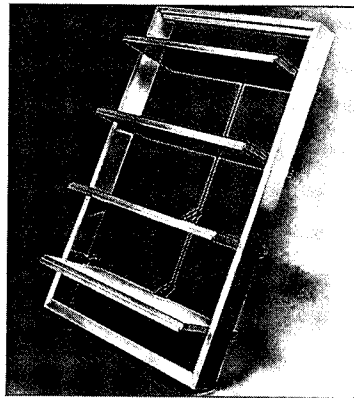
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Home management system
The *Homebrain* computer allows a homeowner to control and monitor internal energy consumption, security and fire safety, the environment, and lighting and appliances. The product consists of three parts: inputs, outputs, and a microprocessor between them. HyperTeck Inc., Whitehouse, N.J.
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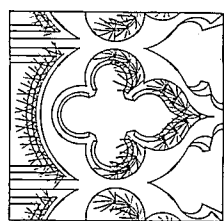
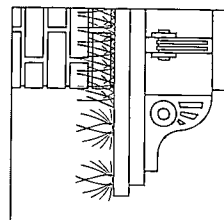
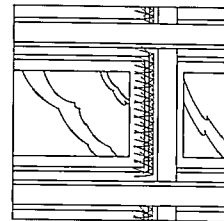
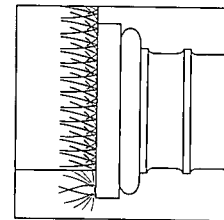
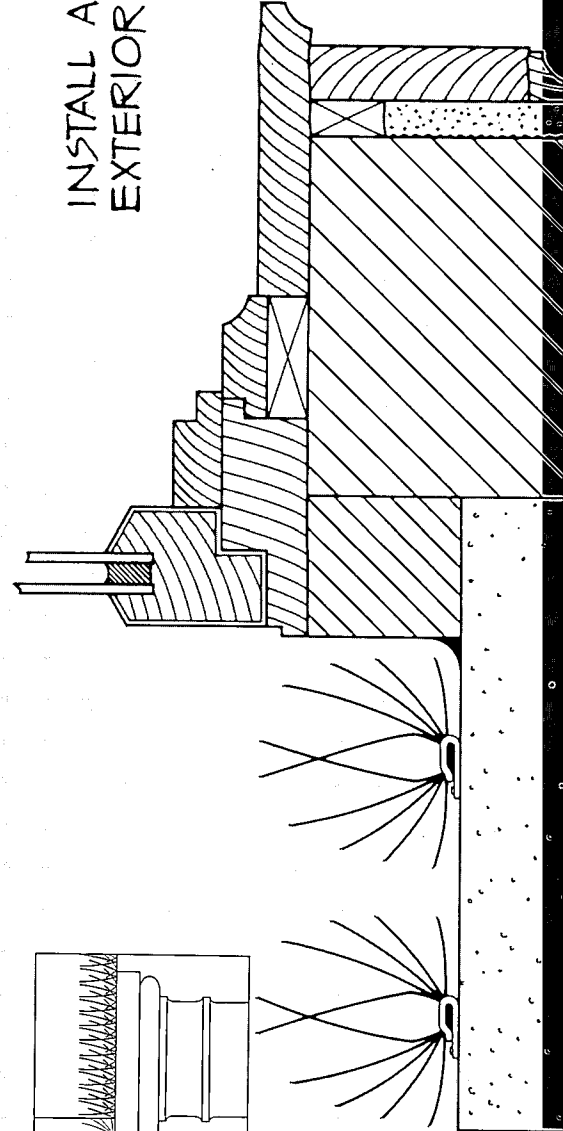
Boilers
The *Netaheat* boiler and *Aqua-Stor* water heater units can be installed in 5 sq ft. The gas-fired boiler works on a sealed combustion principle and vents through the wall. Both units have cast-iron heat exchangers. Ener-Quip, Hackensack, N.J.
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Automatic louver system
Automatic *InsulLouvers* have factory-mounted high torque electric motors attached to the louver back. Designed for skylights, greenhouses, and clerestory glazings, the product is pre-hung in a hardwood frame and can be mounted in any position. InsulShutter, Keene, N.H.
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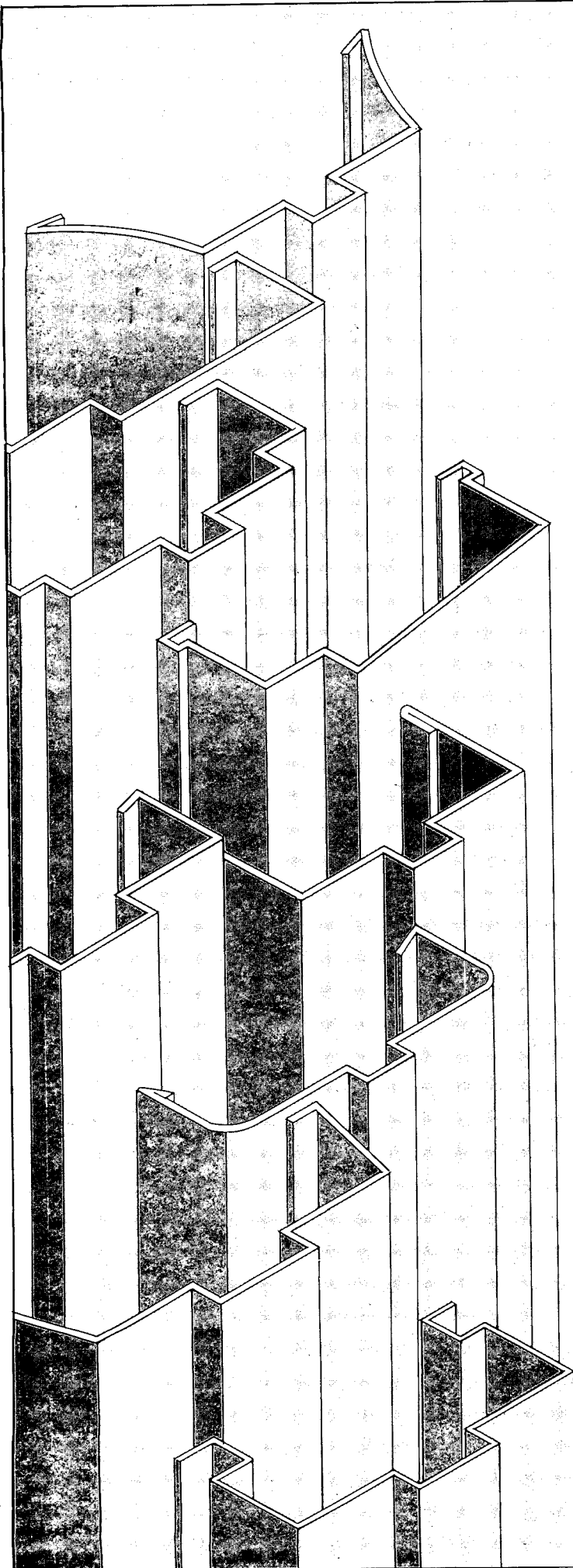


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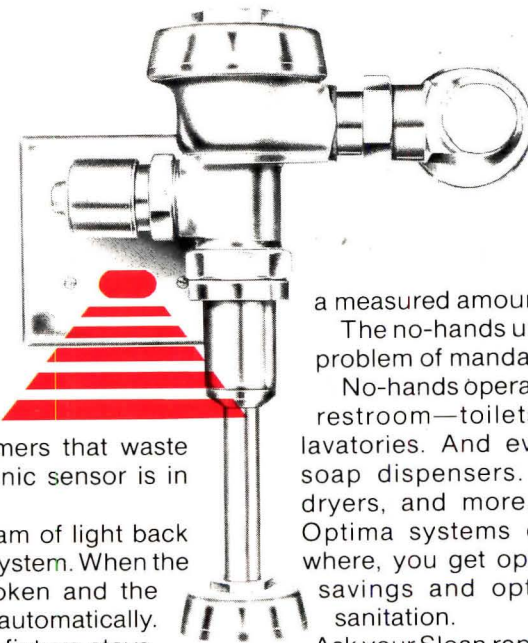
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Take the operation of the urinal *out* of people's hands, and it becomes a cleaner, more cost-efficient fixture.

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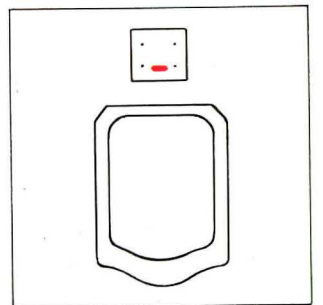


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