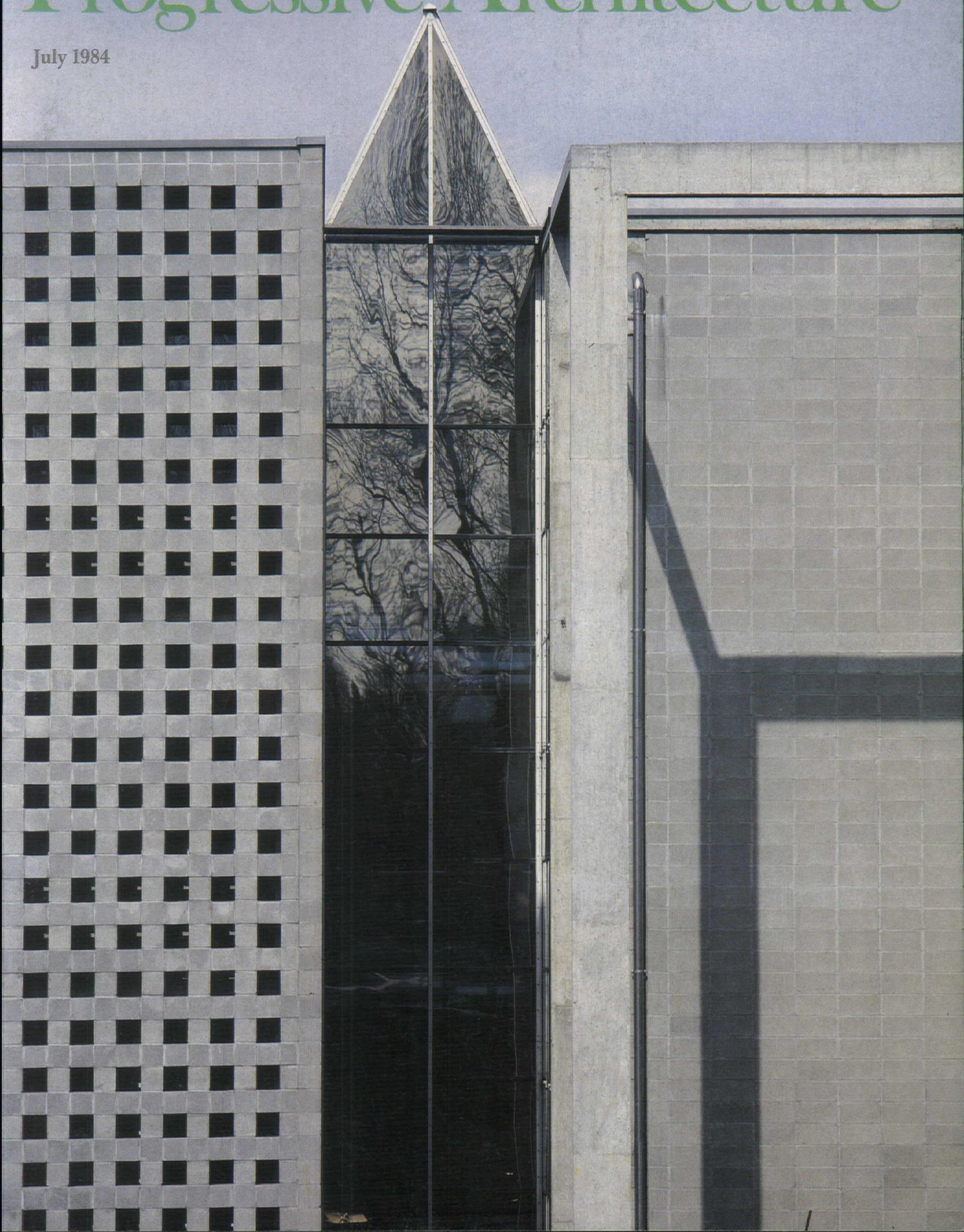


# Progressive Architecture

July 1984

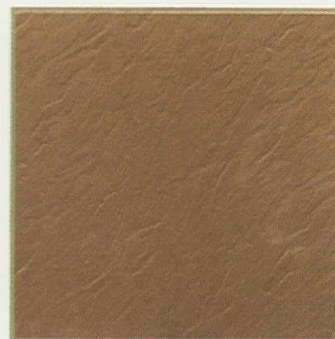




# Azrock's new Vinylcraft I Color System offers unlimited design opportunities.



Floor shown: Vinyl Slate



Azrock has expanded the Vinylcraft I line to five patterns and grouped them in the Vinylcraft I Color System for more floor design versatility.

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Project: Offices, Environmental Planning & Research, Inc., Los Angeles

Interior Architect: Environmental Planning & Research, Inc.

Lighting: 6" Lite Duct Wide Spread Down Light with specialized Softshine optics and 6" Lite Duct Up Light with baffles. Lite Duct is one of the 13 Longlite systems and comes in seven diameters and configurations, in any finish, and extends to any length.



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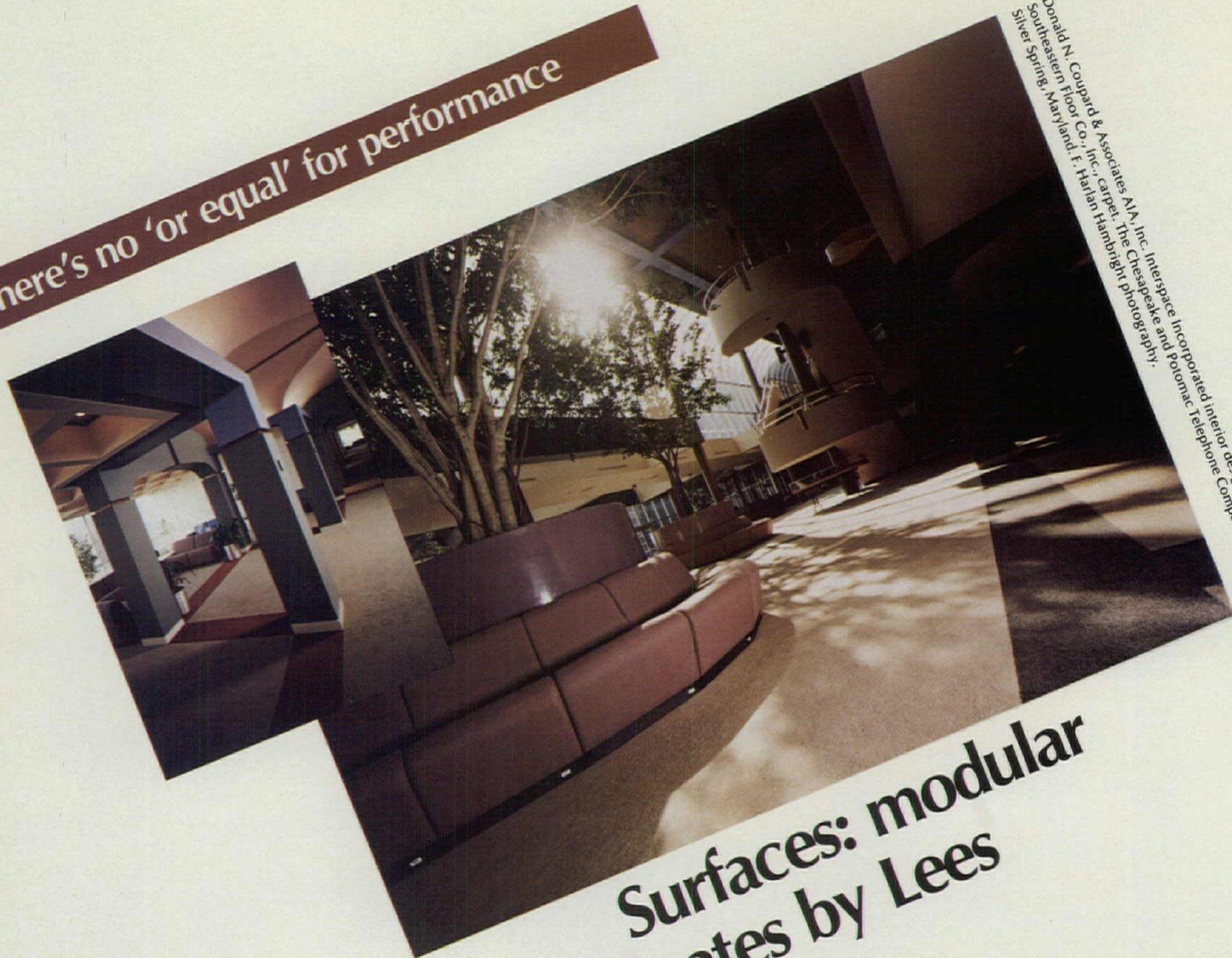
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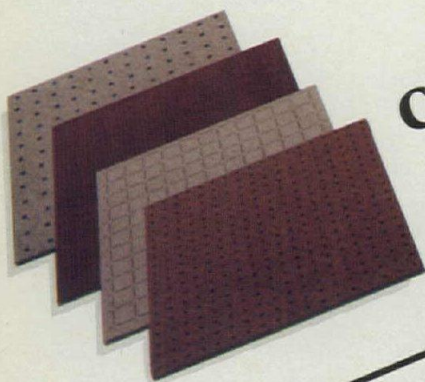


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Progressive Architecture (ISSN

0033-0752) is published

monthly by Reinhold

Publishing, A Division of

Penton/IPC, P.O. Box 95759,

Cleveland, OH 44101: Philip H.

Hubbard, Jr., President; Harry

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## Cover

Cheese consortium headquarters, Reggio-Emilia, Italy (p. 92), by Guido Canali. Photo: Gabriele Basilico.

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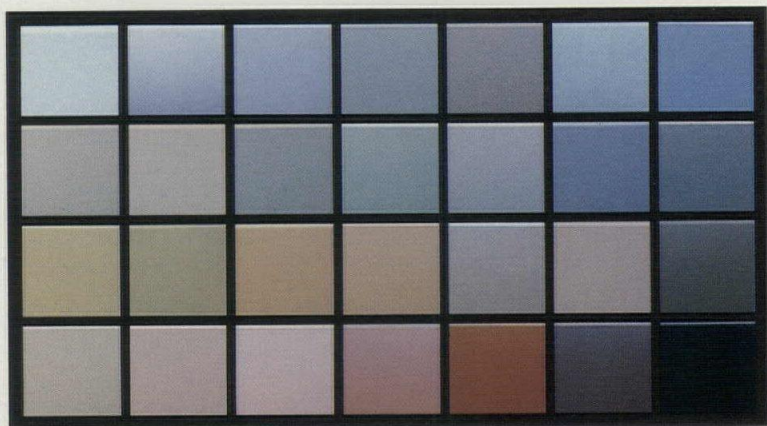


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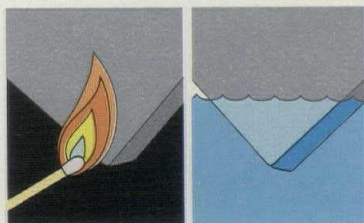
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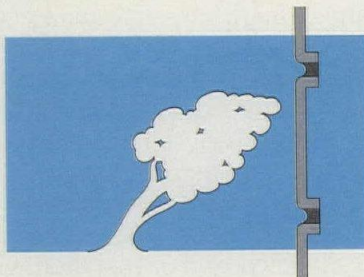


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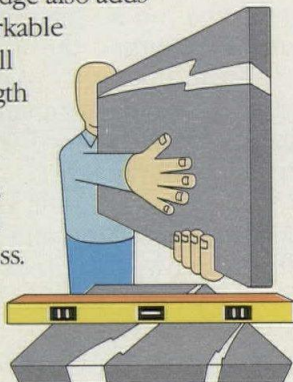
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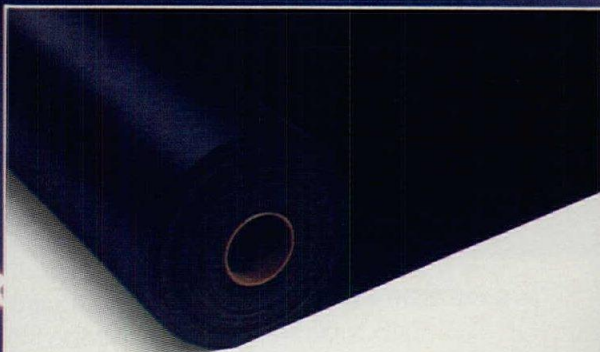
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# American dreams

*The elusive objective of an adequate home for every American family needs to be redefined if we are to make any headway against our housing deficiencies.*

In the most devastated section of New York's South Bronx area, ten ranch style houses have risen from the rubble, their flat front lawns bounded by picket fences of defensively massive design. Plans call for 80 more of these houses on adjoining plots. An article in *New York* magazine (June 18, p. 26) takes up the construction of these houses under the direction of Edward J. Logue, veteran urban renewer and former chief of both the Boston Redevelopment Authority and the New York State Urban Renewal Corporation. These houses, says *New York* writer Joe Klein, "are a surreal—almost hallucinogenic—sight. One is tempted to view it as a perverse Celtic practical joke: Reagan and Carter wanted to see the American Dream revived in the South Bronx, and Ed Logue gave it to them in spades, right down to the white picket fence."

Why is the sight of suburban-tract style houses rising from the urban wreckage so unsettling? The dream of a private, single-family house for every family, revived so powerfully by the federal home loan programs of the past half-century, is shared even by the poor minority families of our inner cities. Why not use land now vacant there to deliver this dream to them on their own turf?

For one thing, this outrageous little project mocks the dreams of its residents—who are paying dearly, subsidies notwithstanding—by giving them the form of the suburban house without the relative safety and neighborhood stability that it symbolizes; the houses look extremely vulnerable behind their decorative iron window grilles. On the other hand, they forfeit the traditional benefits of urban living by using land and infrastructure as wastefully as in the suburbs and by failing to promote any sense of community—or offer any shared facilities. For architects and planners, of course, the houses represent a rejection of the skills required for multifamily urban housing developments, and substitution of a product they have no part in.

What these houses do offer is that measure of self-determination that has come with the privately controlled dwelling throughout history. These residents can change the shutters to suit, choose plantings and objects for the front lawn, and display their vehicles in their own driveways. They also have backyards, for their barbecues and their kids only.

These qualities of self-determination and privacy are what we must try somehow to build into the multiple housing that we now need in large amounts, in both the cities and

the suburbs. For there is no way we could meet our current needs with single-family housing, even if we wanted to.

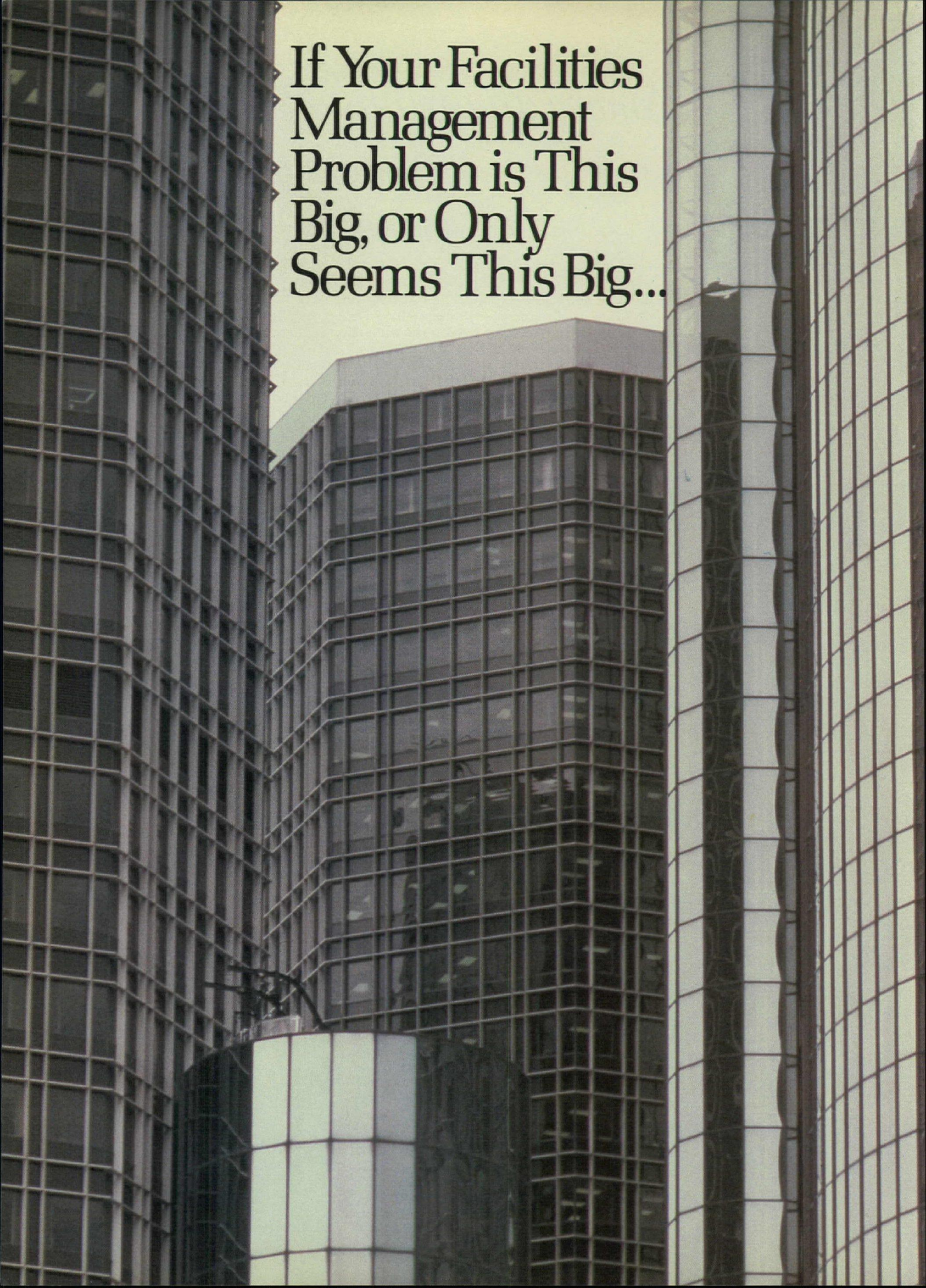
And we should not even want to, because the families that shared that traditional American dream have changed so radically (see Dolores Hayden's essay, page 85). The stereotypical family of Mom, Dad, and the kids no longer dominates in an array of resident types that includes singles, singles sharing units, one-parent families, and the elderly—mostly single. Most of them do not need—and few of them can afford—the space and the facilities of the American dream home. They need shared day-care facilities, social halls, gyms, and laundries, and they might quite effectively share such facilities as kitchens and TVs as well. They need developments that will accommodate different stages of life without requiring relocation. They need nearby shopping and work opportunities, as well as convenient public transportation, to reduce dependence on private cars.

Unfortunately, none of this is part of the established American dream. All of us who care about the living environment and about social equity should be working for and promoting a new dream—of economically reasonable housing, with *community* benefits of greater value than the tenuous privacy and every-man-for-himself symbolism of the suburban tract. Many of our cities and older suburbs (even our military posts) contain well-planned multiple housing, with community spaces and facilities, which should be preserved and celebrated. Based on these, along with examples from abroad and current American efforts (pages 66–81), we should be generating new, more appropriate patterns for living in America.

*John Morris Diefen*



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# Views

## Building automation decentralized

I read with interest "Intelligent Architecture" about building automation systems in your May 1984 issue and found it quite informative.

I would like to take this opportunity, however, to correct one misconception that appeared in this article. The author notes that "A central computer is still necessary in the newest energy management systems." This was true a short time ago, but is no longer so.

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now manufacture energy management systems using direct digital control which do not require a central computer. Instead, the software and processing power is contained within the electronic cabinet that controls various HVAC functions.

Most systems for very large buildings still require a host computer. These new stand-alone models, however, are making sophisticated energy management affordable for owners of buildings under 100,000 sq ft—a market that at one time could not cost justify an EMS.

Jim Leman, Manager, Public Relations  
MCC Powers  
Northbrook, Ill.

## Computer horizons

Congratulations! Your May, 1984 issue of *Progressive Architecture* magazine focusing on computers in architecture is excellent.

It is my belief that computer aided design is the most exciting technological advancement in the history of the architectural design processes. The computer is rapidly redefining the architectural process and shortly will supplant the drafting table and tee square as the primary instrument of architects.

Possibly the most important notion to dispel is the idea that computerization confines or limits the creative process that is the essence of architecture. Architects experienced with CAD have found the opposite to be true; that CAD expands the architect's design vocabulary.

In the profession of architecture computers are expanding creative horizons and simultaneously introducing heretofore unmatched precision and efficiency. And for the client, firms with CAD are finding these advantages translated into tighter budget and schedule control, reduced production time, and far more thorough analysis of design alterations. In short, more responsive and superior service.

R. Bruce Patty, FAIA

PBNA Architects Incorporated  
Kansas City, Mo.

## TVA headquarters credit extended

Credits for the Chattanooga headquarters building for the Tennessee Valley Authority (P/A, April 1984, p. 97) should have included Travis Price among the team of architects.

## BOSTI study credit

BOSTI Director Michael Brill's study (P/A, May 1984, p. 164), *Using Office Design to Increase Productivity*, is distributed by Westinghouse Furniture Systems.

## Photo credit

We regret the omission of credit for photos of the SunarHauserman office system ("The human factor," P/A, June 1984, pp. 94-99), all of which were the work of Paul Warchol.

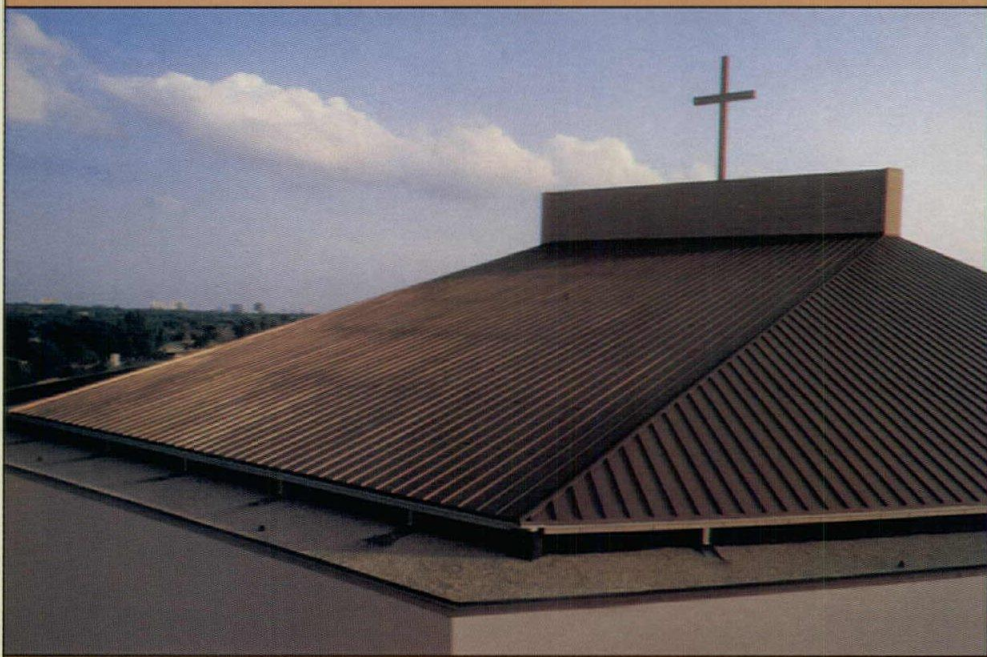
## Book credit extension

Oswald W. Grube was responsible for editorial review of commentaries and captions for the book *SOM*, reviewed in the May issue of P/A, as well as the German translation.

## Design credit correction

Dining room furniture for Eric Moss's Petal House (P/A, June 1984, p. 103) was designed by Peter Shire for his own firm.

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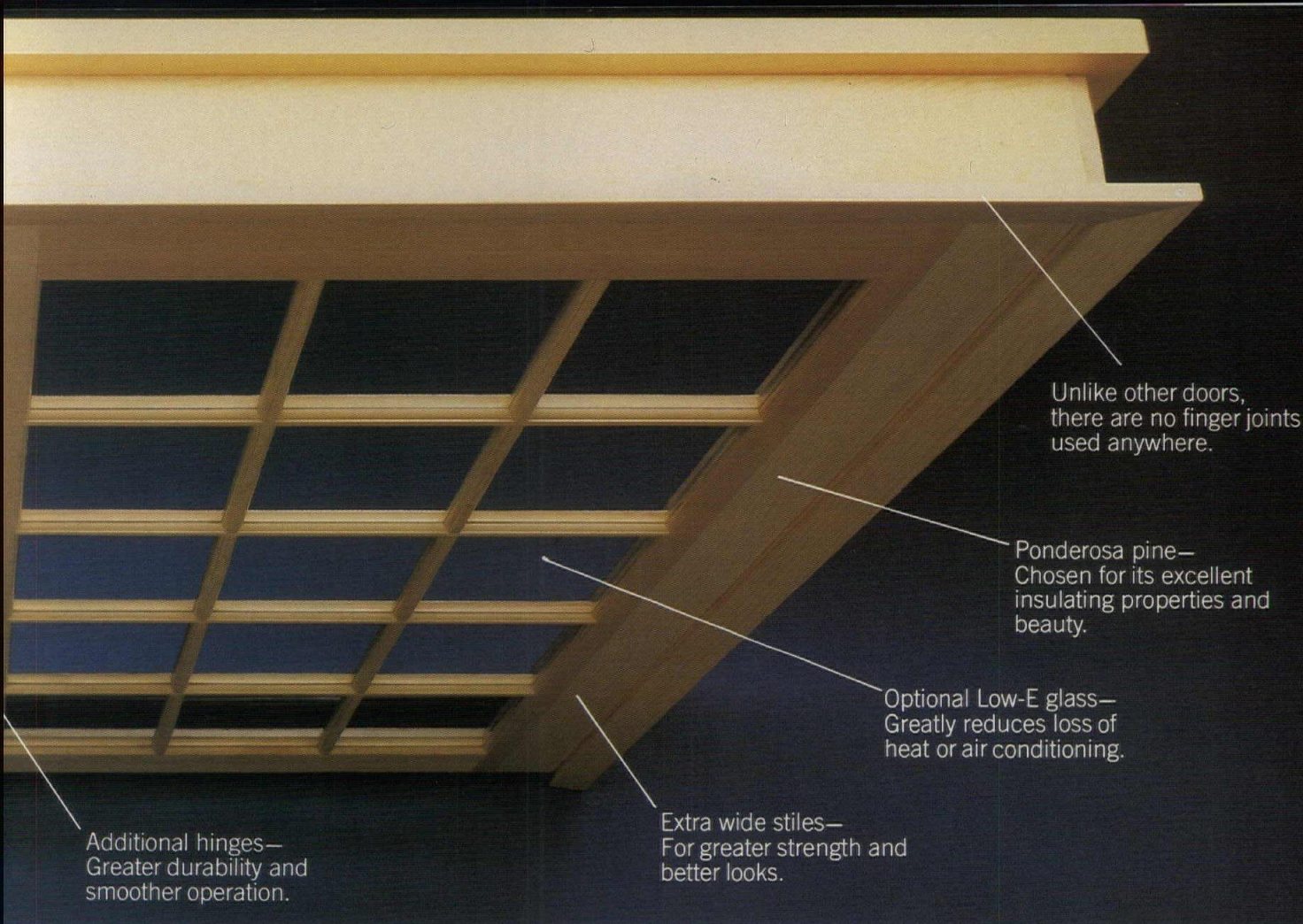
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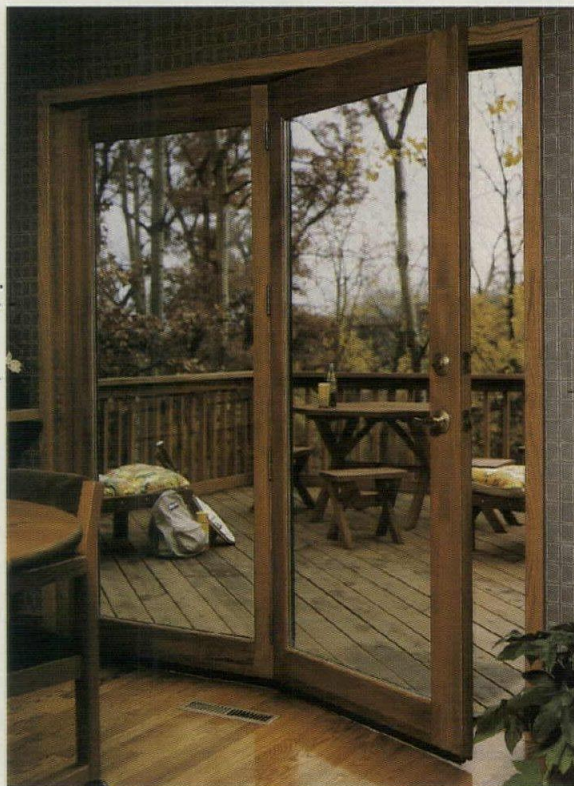
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**Urban design and planning:** Reginald W. Griffith, Executive Director, National Capital Planning Commission, Washington, D.C.; Peter Walker, President, The Office of Peter Walker and Martha Schwartz, Architects, Inc., San Francisco; Adjunct Professor of Landscape Architecture, Harvard Graduate School of Design, Cambridge, Mass.

**Research:** Susan Weidemann, Environmental Psychologist; Associate Professor, University of Illinois, Urbana/Champaign; Steven Winter, Founder and President, Steven Winter Associates, Inc., Architects, New York.

**Judging** will take place during October 1984. Winners will be notified, confidentially, before October 31. Public announcement of winners will be made at a ceremony in New York on January 25, 1985, and winning entries will be featured in the January 1985 P/A. Clients, as well as professionals responsible, will be recognized. P/A will arrange for coverage of winning entries in national and local media.

*Turn page for rules and entry forms.*

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**DEADLINE FOR SUBMISSIONS: SEPTEMBER 17, 1984**

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## Entry form: 32nd P/A Awards Program

Please fill out all parts and submit, intact, with each entry (see paragraph 13 of instructions). Copies of this form may be used.

Entrant:

Address:

Credit (s) for publication (attach additional sheet if necessary):

Entrant phone number:

Project:

Location:

Client:

Client phone number:

Category:

Entrant:

Address:

Project:

I certify that the submitted work was done by the parties credited and meets all Eligibility Requirements (1-7). All parties responsible for the work submitted accept the terms of the Publication Agreement (8-9). I understand that any entry that fails to meet Submission Requirements (10-17) may be disqualified. Signer must be authorized to represent those credited.

Signature \_\_\_\_\_

Name (typed or printed): \_\_\_\_\_

### Awards Editor/Progressive Architecture

600 Summer Street, P.O. Box 1361, Stamford, CT 06904

Your submission has been received and assigned number:

Entrant:

Address:

(Receipt)

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Entrant:

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(Return label)

### Eligibility

**1** Architects and other environmental design professionals practicing in the U.S. or Canada may enter one or more submissions. Proposals may be for any location, but work must have been directed and substantially executed in U.S. and/or Canadian offices.

**2** All entries must have been commissioned, for compensation, by clients with the authority and intention to carry out the proposal submitted. (For special provision in Research category only, see Item 6.) Work initiated to fulfill academic requirements is *not* eligible (but project teams may include students).

**3** Prior publication does not affect eligibility.

**4** Architectural design entries may include only buildings and complexes, new or remodeled, scheduled to be in any phase of construction in 1985. Indicate schedule on synopsis page (Item 12).

**5** Urban design and planning entries must have been accepted by the client, who intends to base actions on them in 1985. Explain implementation plans on synopsis page (Item 12).

**6** Research entries may include only reports accepted by the client for implementation in 1985 or research studies undertaken by entrant with intention to publish or market results. Explain basis of eligibility on synopsis page (Item 12).

**7** The jury's decision to premiate any submission will be contingent on verification by P/A that it meets all eligibility requirements. For this purpose, clients of all entries selected for recognition will be contacted by P/A.

### Publication agreement

**8** If the submission should win, the entrant agrees to make available further graphic material as needed by P/A.

**9** In the case of architectural design entries, P/A must be granted the first opportunity among architectural magazines for feature publication of any winning project upon completion.

### Submission requirements

**10** Entries must consist of legibly reproduced graphic material and text adequate to explain proposal, *firmly bound* in binders no larger than 17" in either dimension (9" x 11" preferred). No fold-out sheets; avoid fragile spiral or ring bindings.

**11** No models, slides, films, or videotapes will be accepted. Original drawings are not required, and P/A will accept no liability for them.

**12** Each submission *must include* a one-page synopsis, in English, on the first page inside the binder, identifying the project and location, clarifying eligibility (see Item 4, 5, or 6), and summarizing principal features that merit recognition in this program.

**13** Each submission must be accompanied by a signed entry form, to be found on this page. Reproductions of this form are acceptable. All four sections of the form must be filled out, *legibly*. Insert entire form, intact, into *unsealed* envelope attached inside back cover of submission.

**14** For purposes of jury procedure only, please identify each entry as one of the following: *Education, Houses (Single-family), Housing (Multiple-unit), Commercial, Industrial, Governmental, Cultural, Recreational, Religious, Health, Planning and/or Urban Design, Applied Research*. Mixed-use entries should be classified by the larger function. If unable to classify, enter *Miscellaneous*.

**15** Entry fee of \$60 must accompany each submission, inserted into *unsealed* envelope containing entry form (see 13 above). Make check or money order (no cash, please) payable to *Progressive Architecture*.

**16** To maintain anonymity, no names of entrants or collaborating parties may appear on any part of submission, except on entry forms. Credits may be concealed by any simple means. Do *not* conceal identity and location of projects.

**17** P/A intends to return entries intact, but can assume no liability for loss or damage.

**18** Deadline for sending entries is September 17, 1984. Any prompt method of delivery is acceptable. Entries must show postmark or other evidence of being en route by midnight, September 17. Hand-delivered entries must be received at street address shown here, 6th floor reception desk, by 5 p.m., September 17.

### Address entries to:

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# P/A News report

*Events in Venice, Paris, Liverpool, and Cambridge, Mass., are the subjects of this month's News report, plus a Neocon wrap-up and a glance at the Four Seasons' quarter-century.*

## *Carlo Scarpa revisited*

Much activity whirls this year around the figure of Venetian architect Carlo Scarpa. Several volumes are soon to be published, one by Bruno Zevi; others have just seen the light, including a work

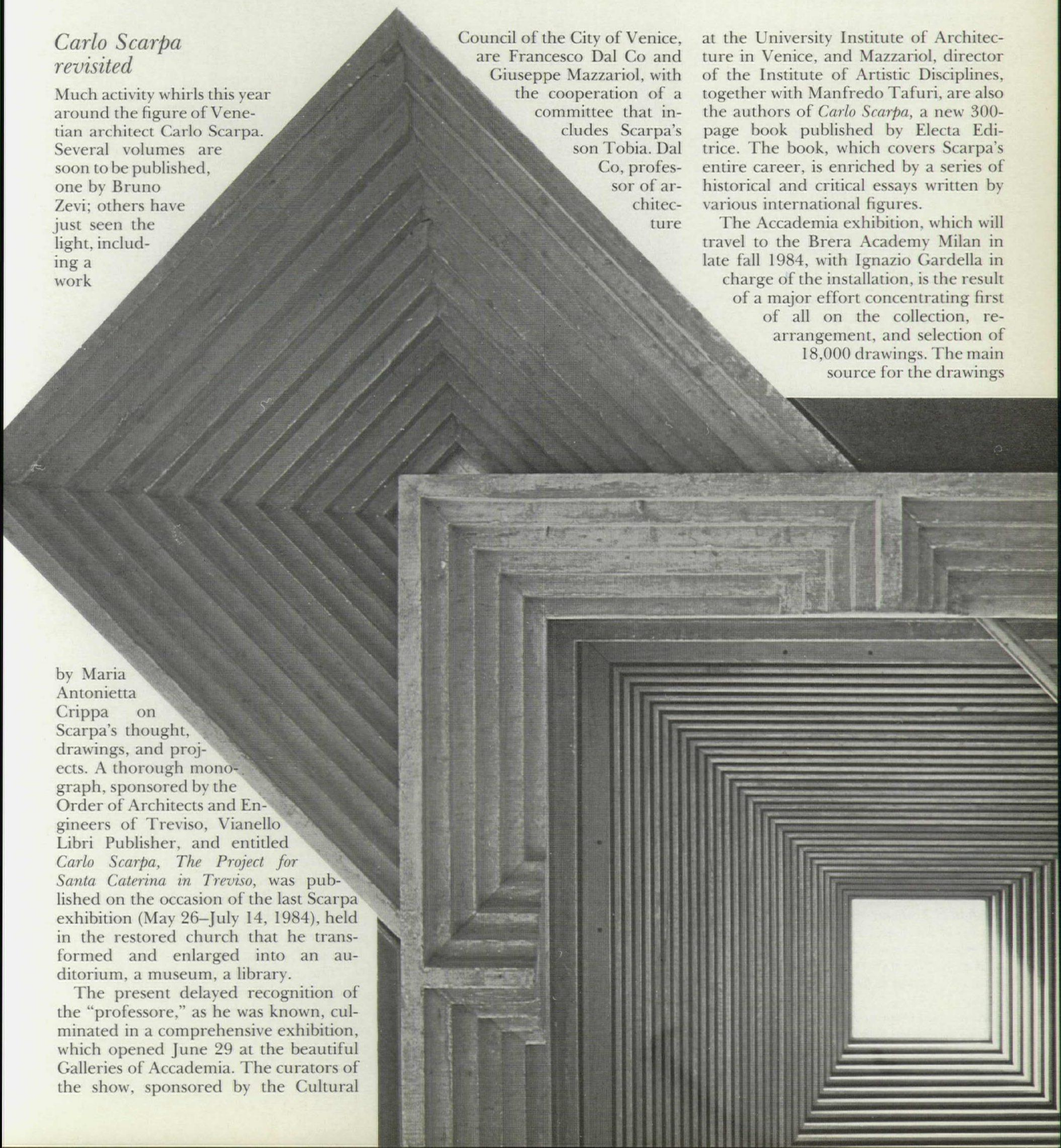
Council of the City of Venice, are Francesco Dal Co and Giuseppe Mazzariol, with the cooperation of a committee that includes Scarpa's son Tobia. Dal Co, professor of architecture

at the University Institute of Architecture in Venice, and Mazzariol, director of the Institute of Artistic Disciplines, together with Manfredo Tafuri, are also the authors of *Carlo Scarpa*, a new 300-page book published by Electa Editrice. The book, which covers Scarpa's entire career, is enriched by a series of historical and critical essays written by various international figures.

The Accademia exhibition, which will travel to the Brera Academy Milan in late fall 1984, with Ignazio Gardella in charge of the installation, is the result of a major effort concentrating first of all on the collection, rearrangement, and selection of 18,000 drawings. The main source for the drawings

by Maria Antonietta Crippa on Scarpa's thought, drawings, and projects. A thorough monograph, sponsored by the Order of Architects and Engineers of Treviso, Vianello Libri Publisher, and entitled *Carlo Scarpa, The Project for Santa Caterina in Treviso*, was published on the occasion of the last Scarpa exhibition (May 26–July 14, 1984), held in the restored church that he transformed and enlarged into an auditorium, a museum, a library.

The present delayed recognition of the "professore," as he was known, culminated in a comprehensive exhibition, which opened June 29 at the beautiful Galleries of Accademia. The curators of the show, sponsored by the Cultural





## Pencil points

**St. Bartholomew's Church** in New York lost a bid to raze its Bertram Goodhue-designed community house on Park Avenue and build a 59-story tower designed by Edward Durell Stone Associates in its place. The controversial scheme was rejected by the New York Landmarks Commission as inappropriate.

- Also rejected was Hardy Holzman Pfeiffer's piggyback scheme for the New York Historical Society. The commission praised its design but deplored the decision to build atop the landmark.

- Both institutions may now choose to revise and resubmit their proposals, prove that the ruling constitutes economic hardship, or challenge the ruling in state or federal court.

**Alvar Aalto's** 1959 design for an opera house in Essen, West Germany, will now be built, under the direction of Elissa Aalto and Aalto enthusiast Harald Deilmann, who plan only those changes necessary to meet contemporary codes and acoustical requirements. Completion: late 1987.

**The World's Fair** in New Orleans (P/A, May 1984, p. 19) is not yet the success expected. Attendance is far below the break-even 69,000 a day, and a group of contractors, including Fair architects Perez Associates, have reportedly sued for outstanding payments. Domsayers are already crying another Knoxville. . . .

**A Center** for the Study of the History and Theory of Interior Design is to be established at the University of Cincinnati.

- The history/theory center—first of its kind—and a Resource Testing Center are funded by a grant from the State of Ohio.

**The Marriott Corporation** is moving into retirement.

- The hotel and food service conglomerate plans to develop two or three retirement "hotels" with limited life-care facilities accommodating 300–400 guests.

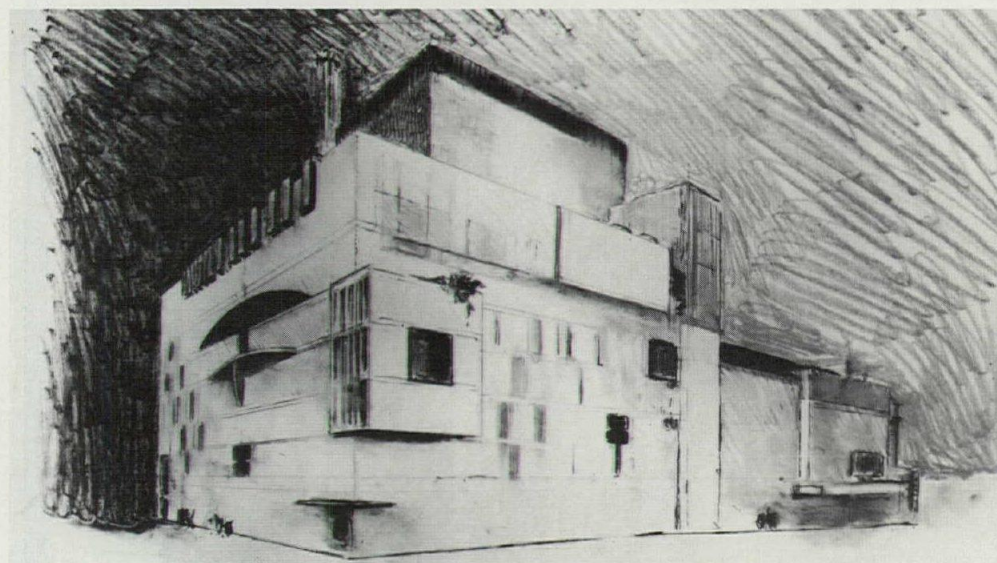
- Marriott also plans a chain of moderately priced suburban motels running \$35–65/night.

**Nathaniel A. Owings**, founding partner of Skidmore Owings & Merrill and in recent years vocal champion of the environment, died June 13 of cancer at the age of 81.

**A dismantled Usonian house**, long considered lost, has been found—and sold.

- The model home, designed for an [Pencil Points continued on page 32]

Giuseppe Davanzo



is the archive of Scarpa's son in Trevisano, but a considerable number also come from RIBA. The selection and organization of these sketches was an excruciating job. Scarpa seldom produced a complete drawing; each detail went through stages and modifications, so that every subject is documented in numerous sketches. Moreover, Scarpa never had models made of his projects. (The twelve models, realized by Igor Silic for the Venice exhibition, are to be considered an "interpretive effort.") He liked to supervise construction personally, and often followed step by step the

work of his bricklayers, metal workers, carpenters, and "marmorino" painters. He had a special relation with the men, who became, under his direction, unique craftsmen, and they reciprocated, working night and day when the "professore" desired, ignoring the strict rules of Italian unions.

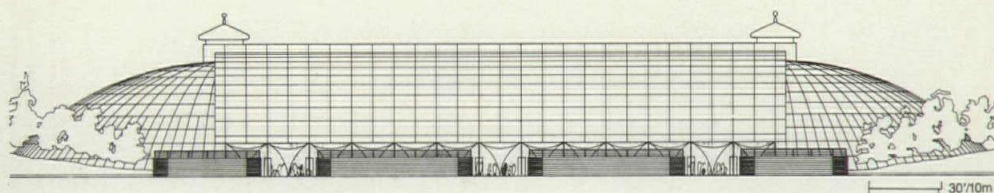
The pearwood models, together with unknown drawings, are by themselves a main attraction, but the Accademia exhibit reserves more surprises for



Scarpa admirers, including 40 recently found vases blown in the Cappellin (later Venini) Murano furnaces and a number of oil paintings by young Carlo Scarpa.

The exhibition, designed by Mario Botta and Boris Podrecca, both former Scarpa students, is divided in three parts. The Accademia's Chiesa della Carita is occupied by 400 drawings, hung horizontally by myriad silver metallic wires to form a series of rising waves. In the same space, sterling silver objects (realized by Cleto Munari), architectural models, and the Cappellin vases are displayed. A second scholastic section presents Scarpa's works chronologically, and a third, located in a space restored by Scarpa where the Deposition from the Church by Bellini and Carpaccio is hung, displays Scarpa's oil paintings, the earliest dating from 1927. The magnificent Querini-Stampalia Foundation library, restored by Scarpa in 1963, will show other works.

Many people worked hard to carry out this successful Scarpa "festival" but a few have been left out, including his dear wife Nini and his long-time friend Aldo Businaro, who assisted Scarpa to no avail after his accident in Japan. Who knows, the "professore," a genius, a loner, an unpredictable man, might have preferred to join them, ignoring the party in Venice. [Donatella Smetana]



Arup Associates, Festival Hall.

### Liverpool's flower festival

Liverpool's International Garden Festival (through October 14) on the banks of the Mersey is Britain's largest derelict land reclamation scheme ever and, say the publicity blurbs, the biggest national exhibition of any kind since the 1951 Festival of Britain. The festival was set up several years ago by the British government in the wake of a series of riots in Liverpool's suburb Toxteth, which adjoins the festival site. A new government development corporation was established to administer reclamation and development for the festival months and beyond.

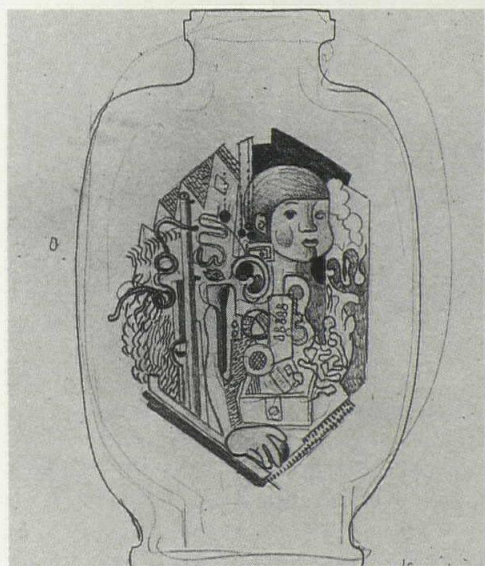
The vast 125-acre site, two years ago a riverside garbage dump, a set of silted-up docks and an oil storage farm, is now a sweeping, swooping, terraformed landscape with mini-mountains, lakes, ponds, garden enclosures, sculptures, tents, pavilions, and greenhouses—all nestled cozily in the lee of a new land-formed ridge ranging down the squally Mersey, and linked together by a mini-railway and lacework of wiggly paths.

It is all disappointingly predictable: the layout, landshaping, pathway system, little theme gardens (including a Beatles' maze and full-size Yellow Submarine, which was actually floated across the Mersey from its fabricating shop),

and "typical" national gardens, offer nothing new or noteworthy for the landscape design/theory buff.

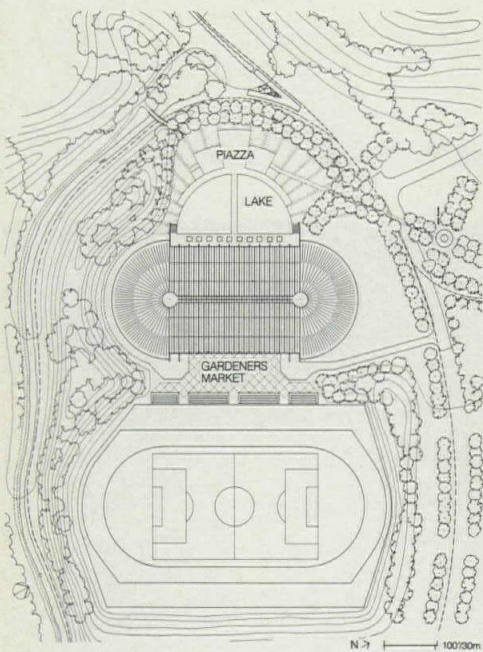
But there, in the middle of this excessively busy panorama, is the feature garden pavilion, a lineal descendant of those great international exposition centerpieces from the Crystal Pavilion of 1851 onwards. Designed by Arup Associates, who won the competition for the design, its long, double-skin, polycarbonate barrel vault terminates in aluminum-clad apses. Covering 7500 square meters, it is a big building, but, as its architects had hoped, it appears to fit comfortably into the landscape, its simple shape consonant with the relatively massive earthworks around.

Arup Associates produces some of the most elegantly well-mannered, immaculately detailed and thought out architecture in Britain, and this Festival Hall is no exception. The smooth profile of the aluminum cladding running true from crown to base (the slightly fan-shaped and curved sheets had to be specially formed), the understated simplicity of the three-pin arch trusses, and the unob-



Top, facing page: Chapel, Brion-Vega cemetery, San Vito di Altivole, 1969; bottom: project for Carlo Felice Theatre, Genova, 1963. Above: Cappellin vase from Carlo Scarpa exhibit.





trusive connections to the polycarbonate sheeting—all these details seem effortless and entirely logical.

There is, too, a certain amount of relief for the pedestrian, fresh from his relentless ups and downs and roundabouts among the mini-hills and country lanes, to find the little haven of formalism immediately surrounding the pavilion. It is the only such respite to be found amid the heavy "naturalism" of the Liverpool Garden Festival.

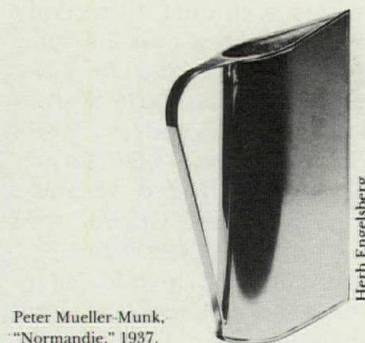
It is hoped that the Festival Hall will be reusable as a regional sports facility and that about half the site will be converted to housing and light industrial development. The riverside section of the festival site will become a public park. But the local Liverpool council, locked in a major constitutional confrontation with central government, has put the short-term future of the site in question. There is, says the council, no money to pay for running the sports facility in any event. And the locals, nearly 20 percent of whom are unemployed, are not greatly impressed with a large injection of cash into what they see as an irrelevance. As my taxi driver said on the way back to Liverpool's Lime Street station, "Fifteen million quid is a lot to pay for a flower show." [Sutherland Lyall]

Sutherland Lyall is a freelance journalist and architectural consultant to the British weekly *Building*. He is former editor of the architectural newspaper *Building Design* and author of *The State of British Architecture*.

## Aesthetics of Progress

The design show "Aesthetics of Progress: Forms of the Future in American Design 1930s/1980s" (Hayden Gallery, MIT), which juxtaposes objects from the 1930s and the 1980s, has as its unusual curatorial objective the confrontation of two aesthetics of progress. Close observation, aided by Tod Williams' intelligent installation in a made-to-measure environment, reveals some of the underlying connections.

Curator Katy Kline compares the notions of 1930s streamlining with the "black box" aesthetic of the 1980s, contrasting in particular a "consensus in forward motion" on the one hand and the "dissolution of a convincing notion of the future" on the other. The parabolic curve of nature was used in the 1930s as the streamlined metaphor for the



Peter Mueller-Munk, "Normandie," 1937.

interior light of its spine and back-lighted display windows turns the high-ceilinged gallery into a black box, but seen from within the exhibition walls, that same light suggests the siren call of the future. Slits within the cruciform allow chance glimpses of other quadrants and objects. Independent pedestals seem to slide away from the



Tod Williams & Associates, installation, Hayden Gallery.

speed with which today was becoming tomorrow. Objects of the Depression years sometimes quite literally sprouted wings, as did an iron exhibited at MIT; others were stripped down to essentials.

The 1980s "black box" motif, whether electric or electronic, applies equally to lap computers, telephones and turntables, electric guitars and desk lamps. Rather than express, it eliminates any specific reference to function and obscures identification of its inner workings or component parts.

The MIT installation has its own aesthetic of progress. Williams, who has sought to resolve the problems of the architectural environment for electronic processes in his Cooper Union Computer Science Center (P/A, Sept. 1983, p. 126), here chose the fundamental cruciform shape as a space-defining support that affirms the human scale. The

cruciform space-divider, taking forms that offer pleasing counterpoints to the objects they carry.

The 1980s objects reveal a new impatience with the box and a revival of chubby, chug-along friendliness in objects as varied as hairdryers and vacuum cleaners. This return of the familiar knobs and handles of the mechanical object does not signify a turn-about in the vision of the future or the definition of progress. Is it, however, coincidental that these forms reemerge at the very time that the computer has become a household appliance sporting names like Apple and Junior and features like the Mouse? The exhibit stimulates reflection—and, one hopes, future exhibi-



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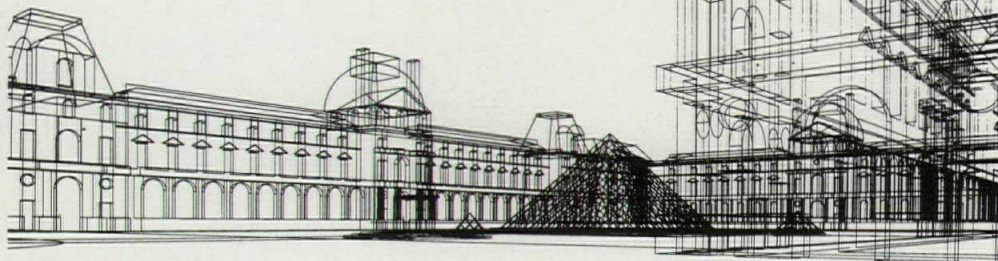


tions of this intelligence in design philosophy and forms. [Hélène Lipstadt]

Hélène Lipstadt is an architectural writer in Cambridge, Mass.

## The Four Seasons at 25

This month, the Four Seasons celebrates its 25th birthday. The restaurant, which occupies the ground floor of Mies van der Rohe's Seagram Building at Park Avenue and 52nd Street, was designed by Philip Johnson in 1958; the embodiment of International Style elegance, it seems only to improve with age. Its grand, expansive Pool Room and clubby, wood-paneled Bar Room continue to attract a faithful stream of New York's elite, not least of whom is the architect himself, a regular lunchtime patron. In honor of this silver anniversary, Tom Margittai and Paul Kovi, who have owned the Four Seasons since 1973, commissioned artist James Rosenquist to produce a mural that will hang on the "upper deck" of the Pool Room. The 24-foot-long mural features glamorous women, flowers, and fish. If it sounds Pop, it is. But you unreconstructed and newly converted Modernists, not to worry. Mecca is better than ever. [PV]



I.M. Pei & Partners, Grand Louvre, 1984.

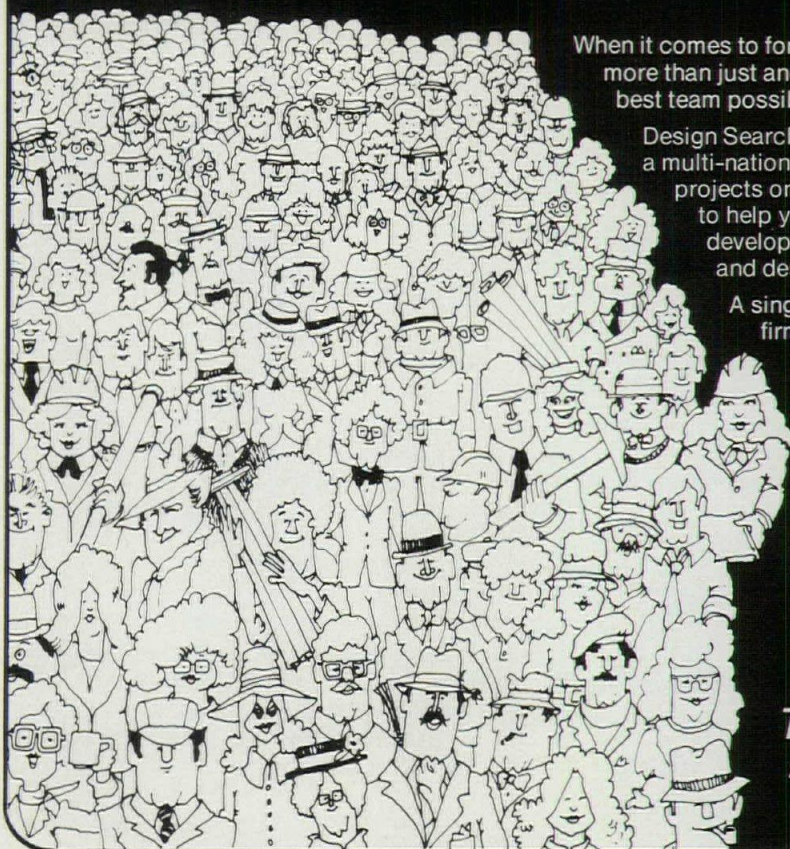
## Parisian public works

"Construire la Culture" (To Build Culture), an exhibition held at the Institut Français d'Architecture this spring, marks the first stock-taking of the projects sponsored by the French Ministry of Culture since 1981. From the controversial project for the Grand Louvre, which will plant I.M. Pei's crystal pyramid on Paris's monumental "grand

axis," to a series of provincial lending libraries, the fifty-odd projects share a program of public access to culture.

The Louvre, for instance, is to be reorganized, not by rehangings works in its galleries, but by the superimposition of a rationalized circulation system and the addition of underground auditoriums, sales counters, restaurants, and library pivoting around the reflective pyramidal entrance pavilion in the Tuileries.

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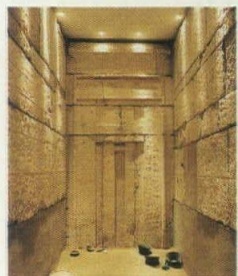
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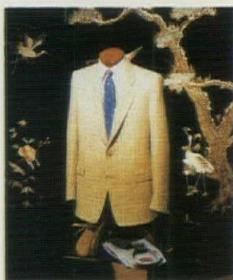
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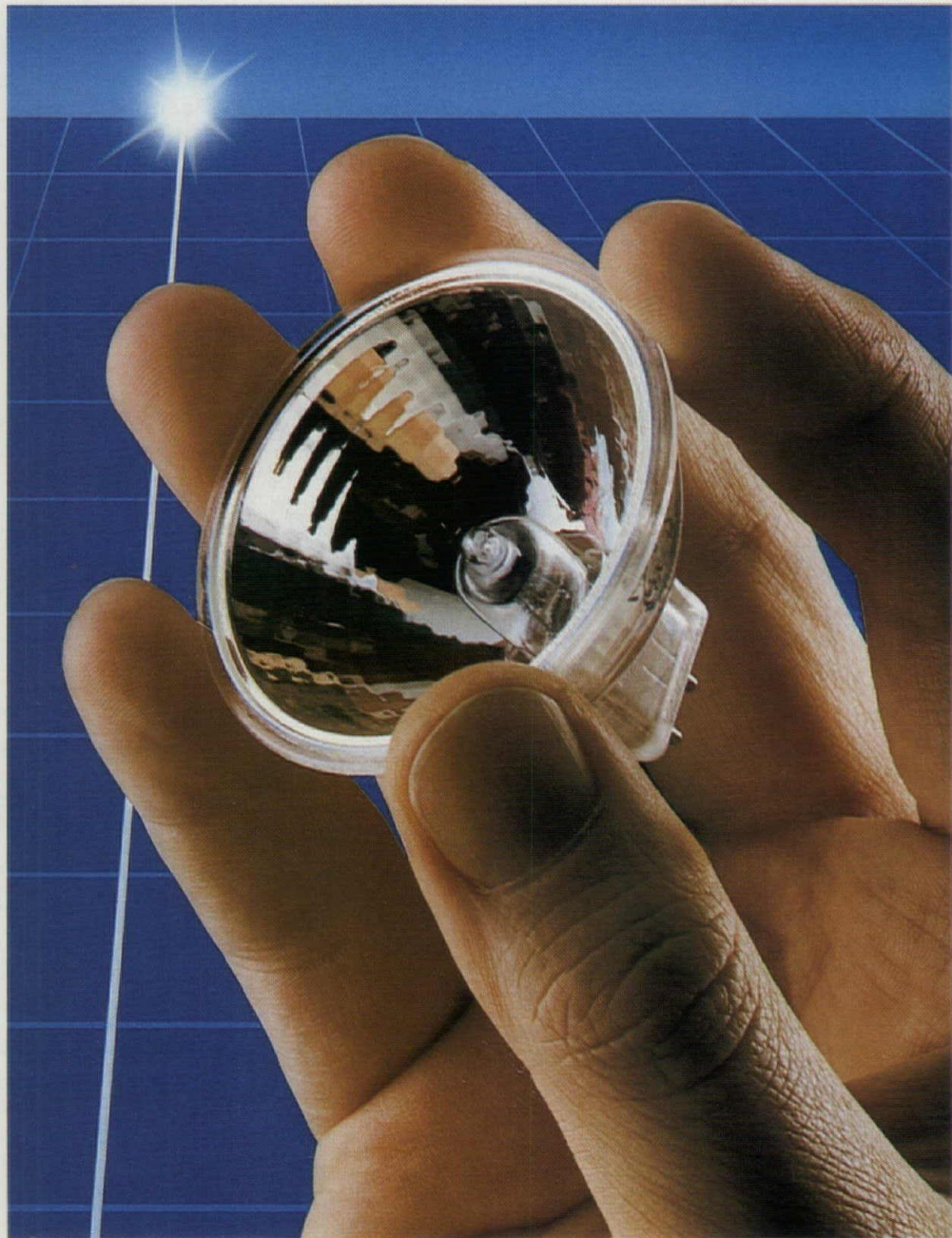


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The gardens are to be restored to their original parterres à la française, culminating in a terrace that reproduces the ground plan of the demolished Tuileries palace. Simultaneously, the upper stories of the Pavillon de Marsan are being rebuilt by architect Daniel Kahane to house the new Musée National des Arts de la Mode.

Aside from the grand projects—the Bastille opera house (P/A, March 1984, p. 20) La Défense (P/A, July 1983, p. 21), and the Parc de la Villette (P/A, May 1983, p. 26)—that have remained in the forefront of public attention, the Ministry has initiated over the last three years a host of smaller projects, the coherence of which emerges for the first time in this exhibition. Ranging from a building for the National Archives in Paris, which will centralize its reception of researchers and the public, to the Théâtre de l'Est Parisien, which will give a prestigious, government-sponsored house to a troupe whose origins are populist, these smaller projects have opened the doors of public commissions to younger architects. Eclecticism is in fact official policy, according to Cultural Minister Jack Lang, who insisted in his opening address that the mosaic of methods—competitions, consultations, and direct appointments—used by his ministry to

select architects was carefully calculated both to support untried architects and to engage the public sector in the architectural debate. [Barry Bergdoll]

Barry Bergdoll is conducting research in Paris for his doctoral thesis from the Art History department at Columbia University.

### Gas energy alternatives

The Gas Research Institute recently convened a group of prominent architects, engineers, developers and others in Chicago to consider new ways in which natural gas might be used to meet the needs of commercial buildings.

GRI analysts, clearly concerned that the energy choice for many buildings is increasingly all electric, revealed an already considerable array of building-related research efforts underway, funded by federally set fees levied on all gas users. Especially notable are ongoing assessments of promising Japanese and European technologies for gas-supplied service hot water systems and large-scale cooking facilities. Participants called for flexible, low-cost internal gas distribution systems, and smaller and more efficient gas-fired heating, cooling, and modular cogeneration systems.

[Thomas Vonier]

### Sweet Sixteen

There was something for everyone at NEOCON 16 last month. Contract furnishings manufacturers reported brisk traffic through their showrooms in Chicago's Merchandise Mart, and those who braved the throngs were rewarded with an encouraging assortment of new products. Predictably, office automation was Topic A, with CAD/CAM demonstrations packing them in at various showrooms. SunarHauserman's Diffract system and Knoll's expanded Hannah Desk system offered two bright solutions to computer-age office problems. Herman Miller's Equa chair line, designed by Bill Stumpf and Don Chadwick, and Domore's Barto chair by Richard Schultz were notable among office seating. Harvey Propper introduced the snappy Soley folding chair, designed for Kusch & Co. by Valdimar Hardarson, and at Metropolitan's elegantly redesigned showroom, Brian Kane's award-winning Rubber Chair was joined by the new Rubber Table. Color was An Issue this year, with Rudd International and Brickel Associates showing seating upholstered in vibrant red, yellow, and blue-green, which made the ubiquitous grayed pastels look positively anemic by comparison.

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A lot of architects have strong feelings about rubber studded flooring. And who can blame them? They've been victimized by inferior products that failed to stand the test of time.

They poured sulfuric acid on it. Lysol and table salt. Hydrogen peroxide and soda pop. Twenty-four hours later, Endura showed no visual or physical changes. Damp mopping made it glow.

When it comes to rubber studded flooring, be specific.

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For more information, call the Sweets Buyline at 800-447-1982. In Illinois, phone 800-322-4410.

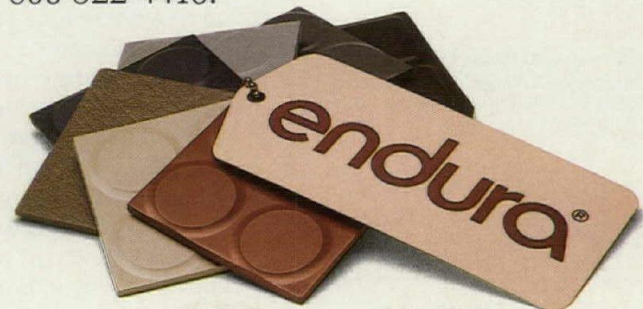
Endura® rubber studded flooring is different, however. It does precisely what it says it does—it *endures*.

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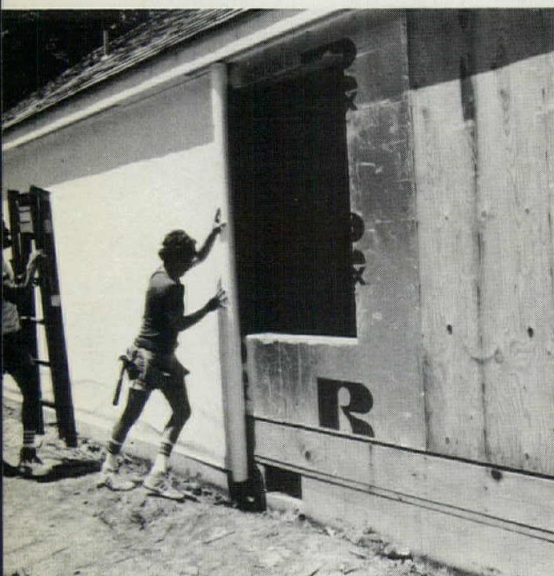
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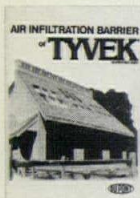
- TYVEK\* stops cold air infiltration—cuts heat loss through walls 33%. Independent tests prove it:\*\* BOCA Report 79-34 confirms it.
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\*Du Pont registered trademark.

\*\*Independent laboratory tests using 2x4 frame wall with 3 1/2" R-11 insulation in 15 mph wind.



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Architect-designed furniture also abounded, with the Venturi Collection at Knoll, tables and chairs by Steven Holl and David Estreich at Pace, and Voor-sanger & Mills's Morgan Collection at Vladimir Kagan. Shaw-Walker's display of Saarinen family furnishings from Cranbrook offered a welcome respite from the style wars of the moment, and Hammond Beeby and Babka's Color-core rendition of the loggia of a Greek villa was more than just wonderful: the architects even provided a pattern book with color and detailing how-to's. For those who preferred talking to walking, architects Burgee, Graves, Jahn, Kleihues, Larsen, Ott, Portzamparc, Takeyama, and Venturi, among others, had plenty to say. [PV]

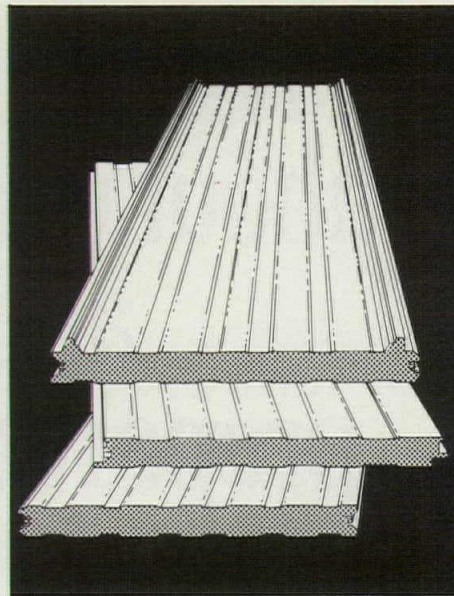
## Kevin Lynch: 1918–1984

Kevin Andrew Lynch, a pioneer in the field of urban design, died suddenly at his home on Martha's Vineyard, on April 25. Born in Chicago in 1918, Lynch studied at Yale, RPI, Taliesin, and MIT, where he received his Bachelor of City Planning in 1947. Returning to MIT in 1949 to teach, he remained for 35 years, sharing his expanding view of urban design with thousands of students. As a student there in the 1950s, I learned first from Professor Lynch that planning could go beyond dry maps and statistics.

Fortunately, Kevin Lynch left us his ideas in several eminently clear books. *The Image of the City* (1960), the result of a study with Gyorgy Kepes on how people perceive urban environments, gave us the concept of imageability. It was followed by the basic text, *Site Planning*, written with Gary Hack, and *The View from the Road*, with John Myer and the late Donald Appleyard. The recent *Theory of Good City Form* summed up the body of his ideas.

Along the way, Lynch worked on numerous influential urban design studies, from the original concept for Boston's Government Center and waterfront to the Arts District plan for Dallas (P/A, April 1984, p. 127). From 1977 on, he worked in partnership with Stephen Carr, with whom he established Carr, Lynch Associates.

We have come to understand—if not to apply—what Lynch wrote in 1960 in *The Image of the City*: "It is clear that the form of a city or of a metropolis will not exhibit some gigantic, stratified order. It will be a complicated pattern, continuous and whole, yet intricate and mobile. It must be plastic to the perceptual habits of thousands of citizens, open-ended to change of function and meaning, receptive to the formation of new imagery. It must invite its viewers to explore the world." [JMD]



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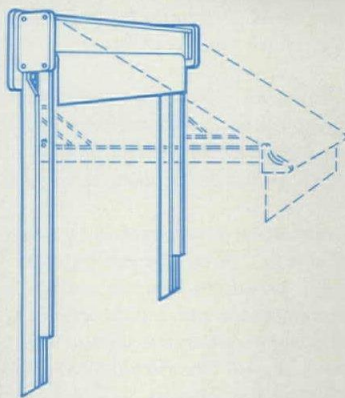


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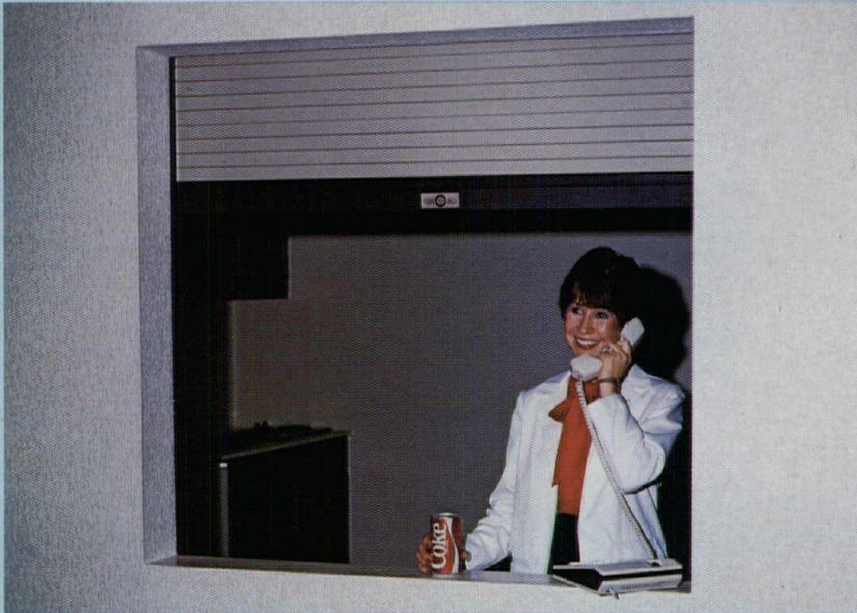
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exhibition in 1953 by Frank Lloyd Wright for the Guggenheim Museum site, had been stored in a basement for 30 years.

- Tom Monaghan, owner of the Detroit Tigers and a self-styled architecture buff who also owns Wright's Snowflake house in Plymouth, Mich., bid \$117,500 for the pieces in the fund-raising auction for New York's PBS station.

**English architects** are in a tizzy over anti-Modern remarks made by Prince Charles at a banquet honoring RIBA Gold Medalist Charles Correa.

- Charles (the Prince, not the architect) saved his sharpest criticism for a 1969 Mies van der Rohe tower, which developer Peter Palumbo now proposes to build (P/A, Dec. 1983, p. 42), and for a high-tech extension to the National Gallery designed by Ahrends Burton & Koralek.

**The RIBA's 150th birthday**, celebrated at that same banquet, triggered a full-scale Festival of Architecture in Britain; now Scotland plans a parallel bash. The survey "Scotstyle" will tour the country accompanied by regional shows, publications, tours, and assorted social events.

- For schedules, contact RIAS, 15 Rutland Sq., Edinburgh EH1 2BE.

**Ralph Lerner and Richard Reid** have won a major competition for middle-income housing sponsored by the London Docklands Development Corporation.

- Their scheme for 250 housing units to be built by British developer Lovell Farrow will occupy a seven-acre site on the South Bank just down from the Tower Bridge.

**A/E eye** has died. The weekly news/gossip roundup for architects and engineers, which debuted in early 1984, ceased publication last month.

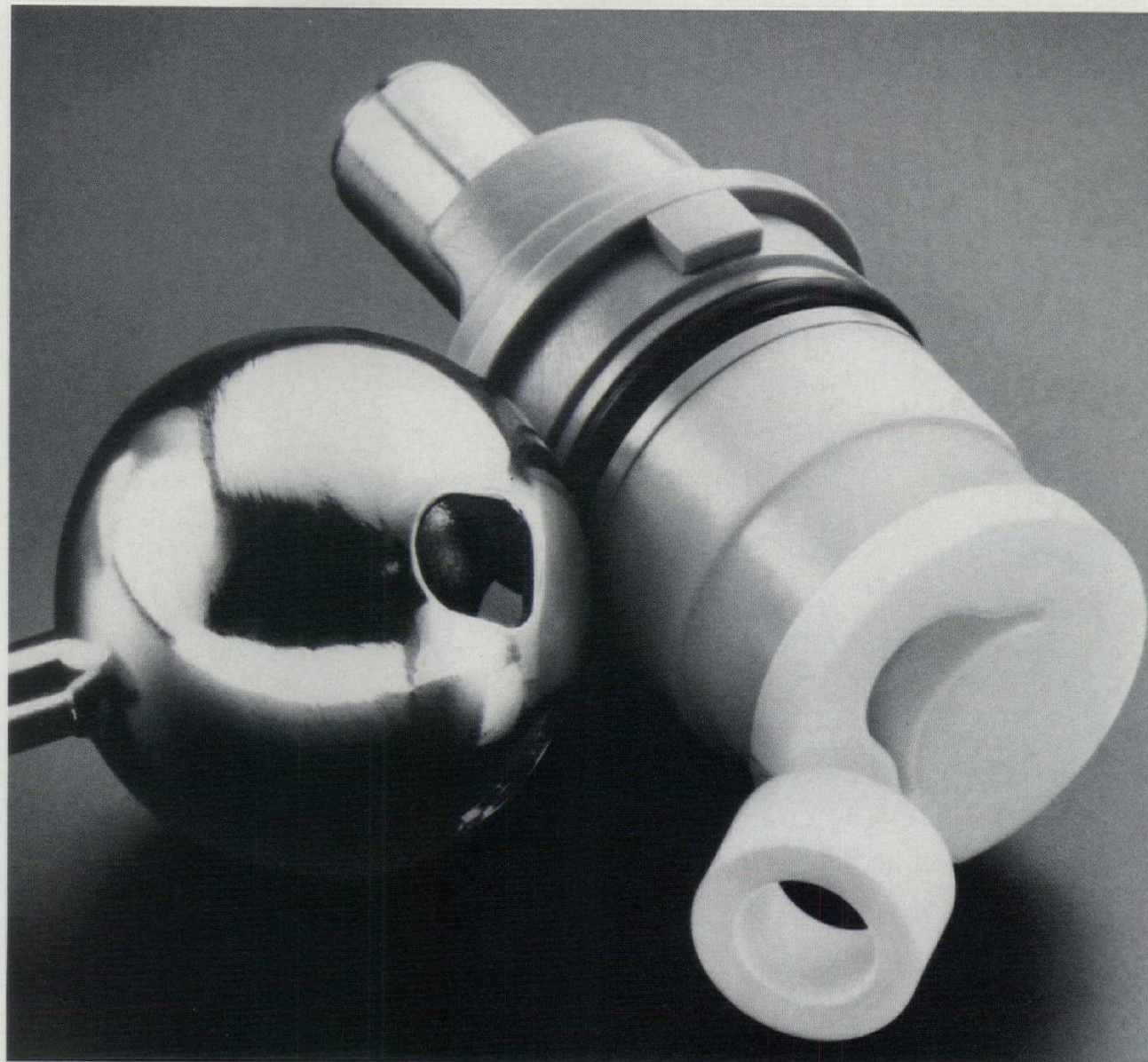
**Architectural research** in the areas of energy, lifesafety, building redesign, specialized facilities, and environmental trends will be the subject of a major conference sponsored by the AIA with Otis Elevator, March 1985 in Los Angeles.

- Abstracts and exhibit proposals must be submitted by July 23.
- Contact Kim Leiker, Research & Design 85, AIA, 1735 New York Ave. N.W., Washington, D.C. 20006 for more information.

**Parsons School of Design** first annual Environmental Design Award went to George S. Kaufman, Developer of Astoria Studios in Queens, for bringing film business back to New York.



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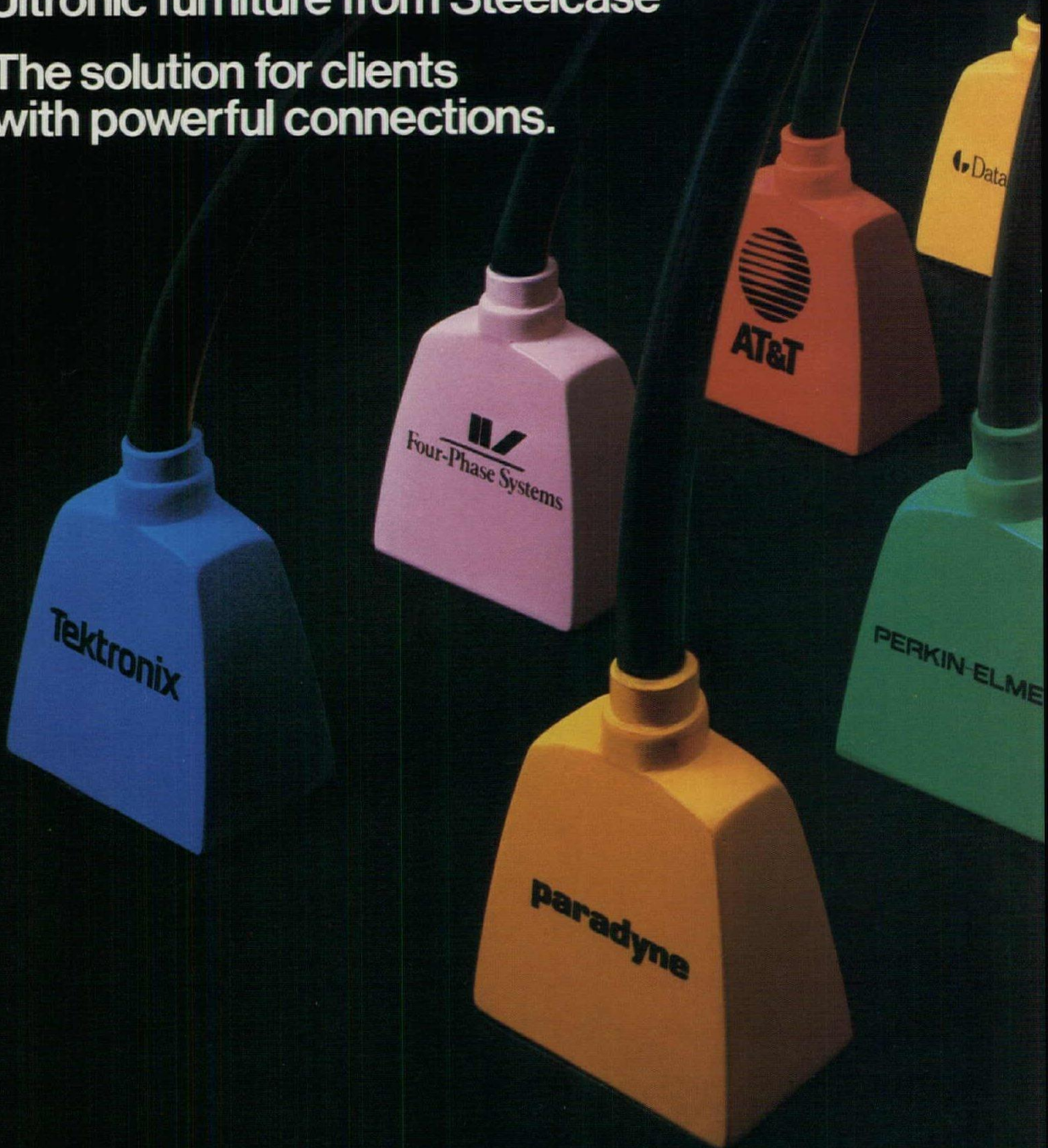
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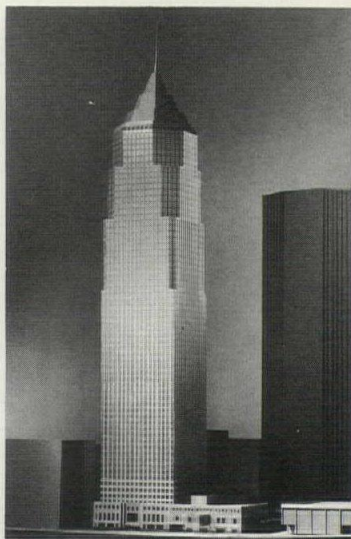
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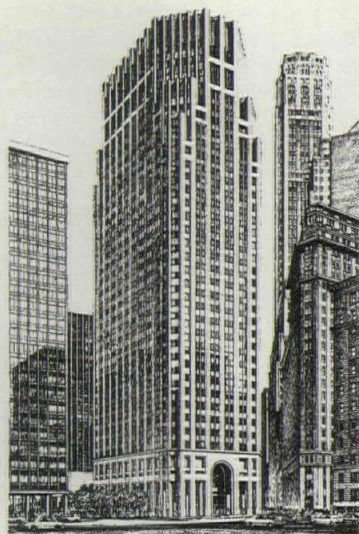


# In progress

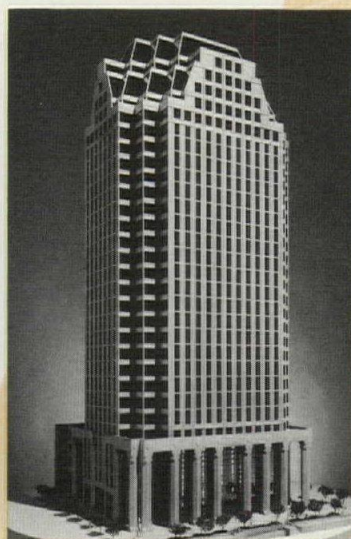
*Judging from this portfolio of 13 speculative office towers, Post-Modern is absolutely mainstream—decorated tops and arcaded bases the new clichés. Context, however, is conspicuously absent.*



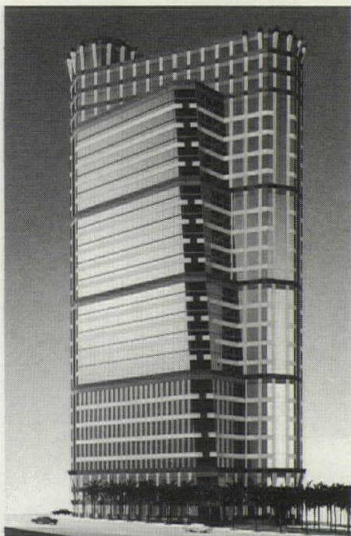
**Norwest Center, Minneapolis, Minn.** Architect: Cesar Pelli, New Haven, Conn. Developer: Westford Properties, Minneapolis, Minn. Program: 2 million sq ft offices on 66 floors, retail. Cladding: stone base, glass skin. Cost, construction: \$150 million. Occupancy: early 1987.



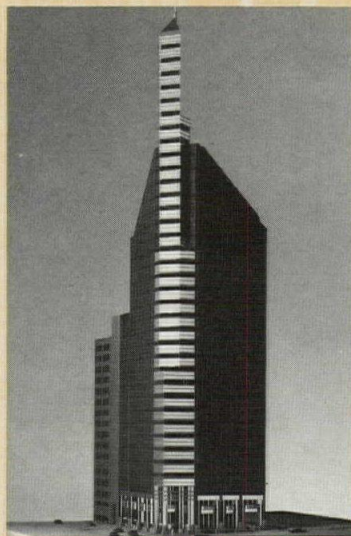
**Barclays Bank Building, New York.** Architects: Welton Becket Associates, New York. Developer: London & Leeds Corp., New York. Program: 30,700 sq ft offices in 36 stories, public plaza. Cladding: brick, bronze-tinted glass, granite base. Cost: \$200 million. Occupancy: early 1986.



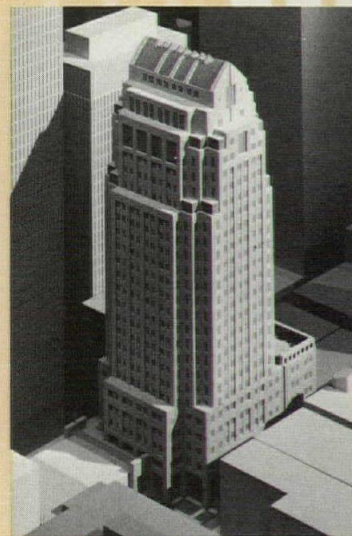
**40 West 53rd Street, New York.** Architects: Kevin Roche John Dinkeloo & Associates, New Haven, Conn. Developers: CBS Inc. and Gerald D. Hines Interests. Program: 660,000 sq ft offices in 30 stories, retail. Cladding: granite, glass. Special feature: American Craft Museum. Occupancy: mid 1986.



**Wilshire/Midvale Tower, Los Angeles, Calif.** Architect: Helmut Jahn, Chicago, Ill. Developer: Platt Development Corp., Marina del Rey, Calif. Program: 225,000 sq ft offices on 28 floors. Cladding: granite, marble, limestone, glass. Cost: \$50 million. Occupancy: mid 1985.

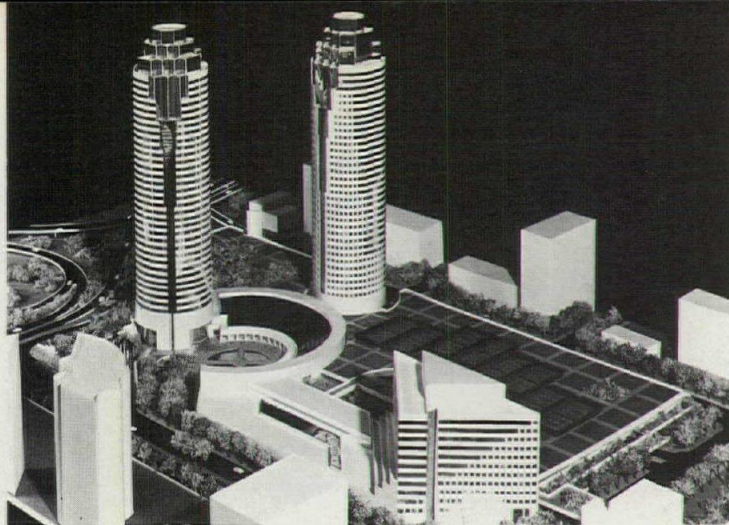


**The Merritt Tower, Baltimore, Md.** Architects: The Hillier Group, Princeton, N.J. Developer: Gerald Klein, Baltimore, Md. Program: 339,000 sq ft offices in 29 floors, retail. Cladding: metal panels, polished granite base, tinted glass. Occupancy: mid 1985.



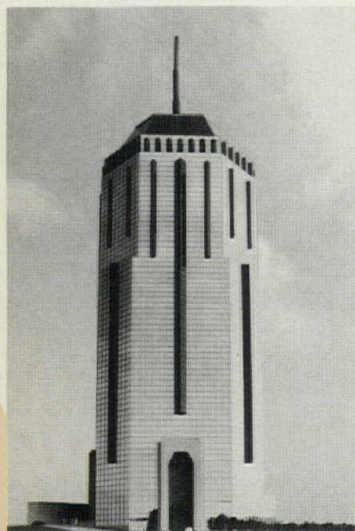
**71 Stevenson Place, San Francisco, Calif.** Architects: Kaplan/McLaughlin/Diaz, San Francisco, Calif. Developer: Tishman West Management Corp. and B.B.P. Stevenson Associates. Program: 400,000 sq ft offices in 23 stories. Cladding: precast concrete scored as stone, marble base. Occupancy: mid 1985.



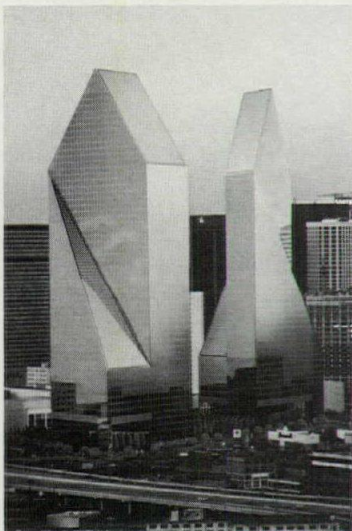


**World Trade Center, Long Beach, Calif.** Architects: *Ross Wou International/DMJM, Los Angeles, Calif.* Program: 2.1 million sq ft offices in two 38-40 story towers, 400-room hotel, retail, museum and exhibition space, health

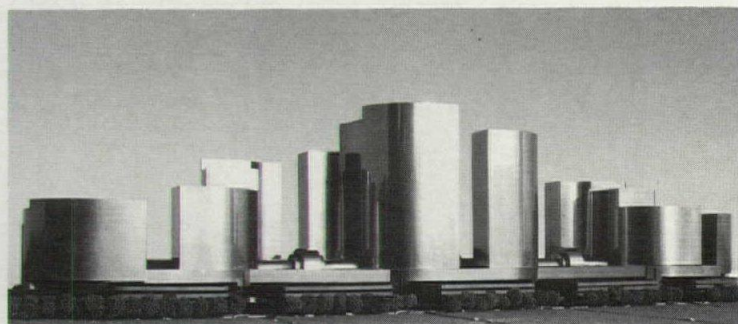
club, conference areas, maritime facilities, library, 325,000 sq ft Federal Building. Cost: \$300 million. Occupancy: phase one, 1987; remainder, 1990.



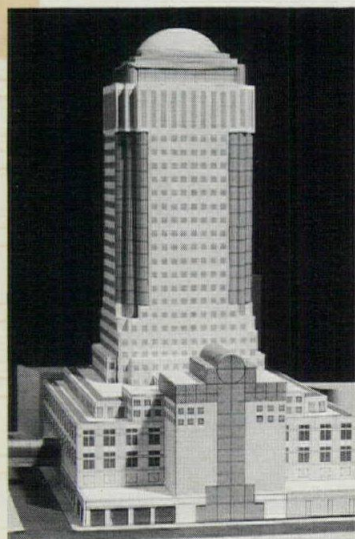
**One Nashville Place, Nashville, Tenn.** Architects: *Morris\*Aubry Architects, Houston, Texas.* Developers: RCM Interests and Edward J. De Bartolo Corp. Program: 460,000 sq ft offices in 23 stories. Cladding: reflective glass. Cost: \$50 million. Occupancy: early 1985.



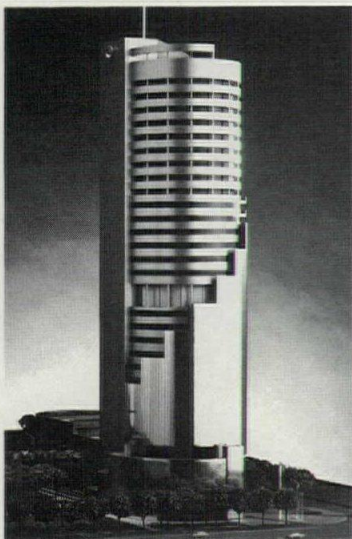
**Fountain Place, Dallas, Texas.** Architects: *I.M. Pei & Partners, New York; Harry Weese & Associates, Chicago; WZMH Group, Los Angeles.* Developer: Criswell Development Co. with Campeau Corp., Dallas, Texas. Program: 3 million sq ft offices in two 60-story towers; luxury hotel; water garden. Occupancy: mid 1986.



**The Galleria, Metairie, La.** Architects: *Harwood K. Smith & Partners, Dallas, Texas.* Developer: Woodmont Co., New Orleans, La. Program: 1.6 million sq ft offices in four towers; 400-room hotel; 156-unit apartment tower; retail. Cladding: turquoise-tinted glass. Cost: \$500 million.



**Sixth and Pine, Seattle, Wash.** Architects: *Zimmer Gunsul Frasca, Portland, Oreg.* Developer: Olympic and York. Program: 700,000 sq ft offices, retail. Cladding: stone, blue-reflective glass. Cost: \$63 million.



**Shen Zhen Development Center, Wu Free Zone, Shen Zhen City, People's Republic of China.** Architects: *CRS, Houston, Texas.* Program: offices, exhibit/conference center, 200-room hotel, health club, in 35 stories. Cost: \$180 million (H.K. dollars). Occupancy: Fall 1986.



**Commerce Bank Building, Kansas City, Mo.** Architects: *HOK, St. Louis, Mo.* Developers: Commerce Bank of Kansas City and Tower Properties. Program: 477,000 sq ft offices in 19 stories; retail; art gallery. Occupancy: early 1986.



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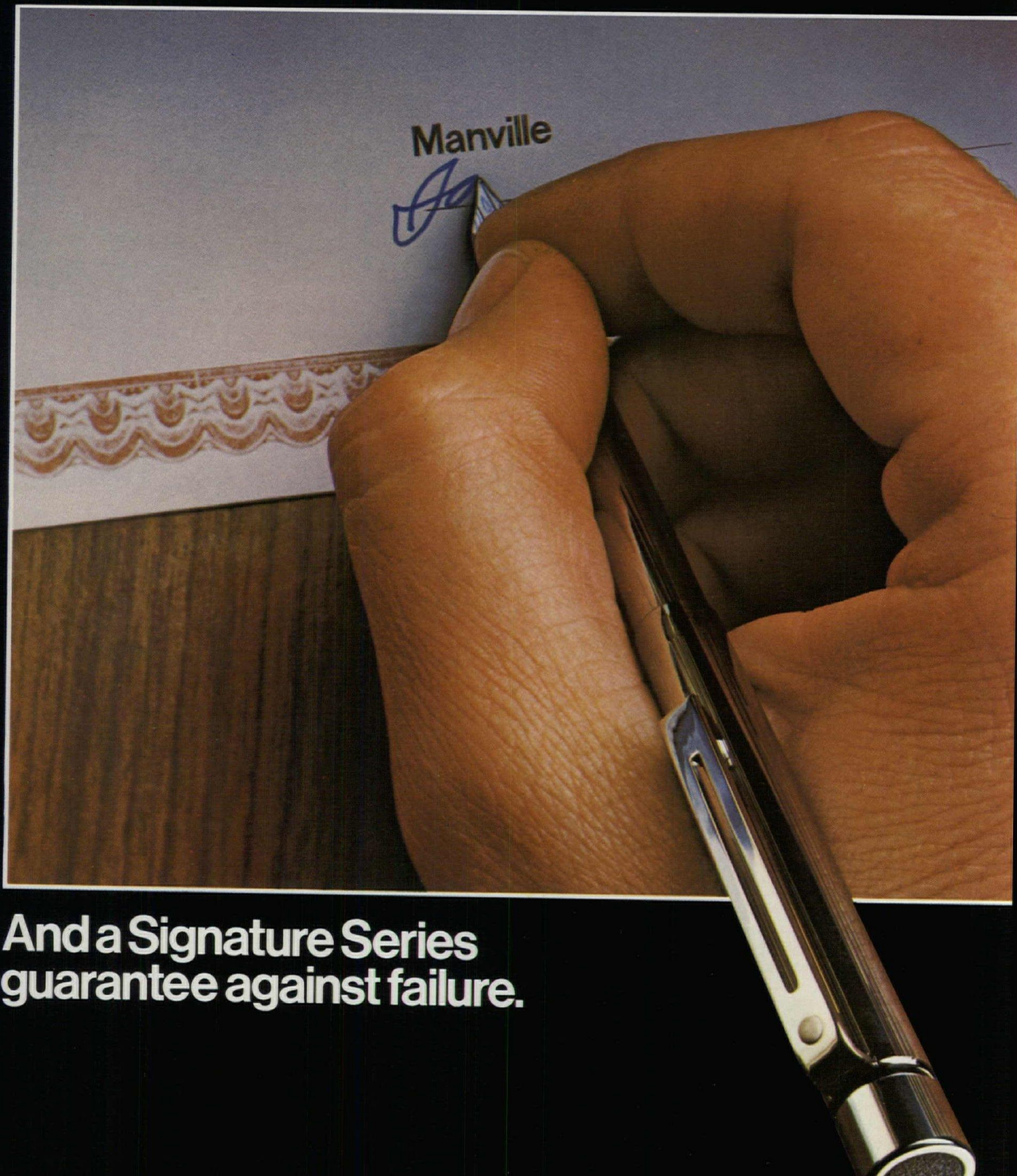
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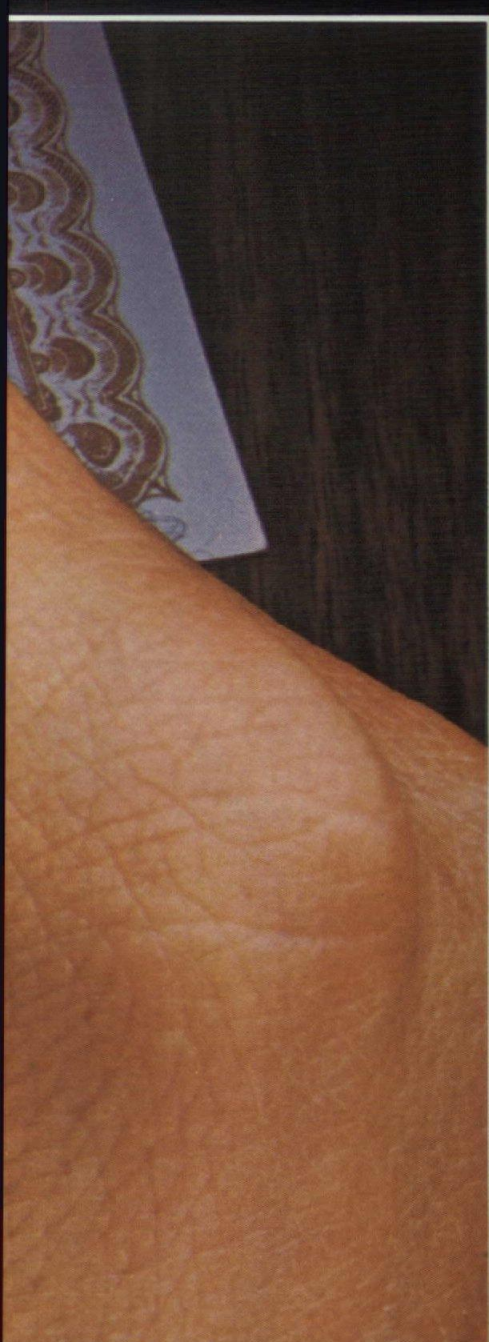


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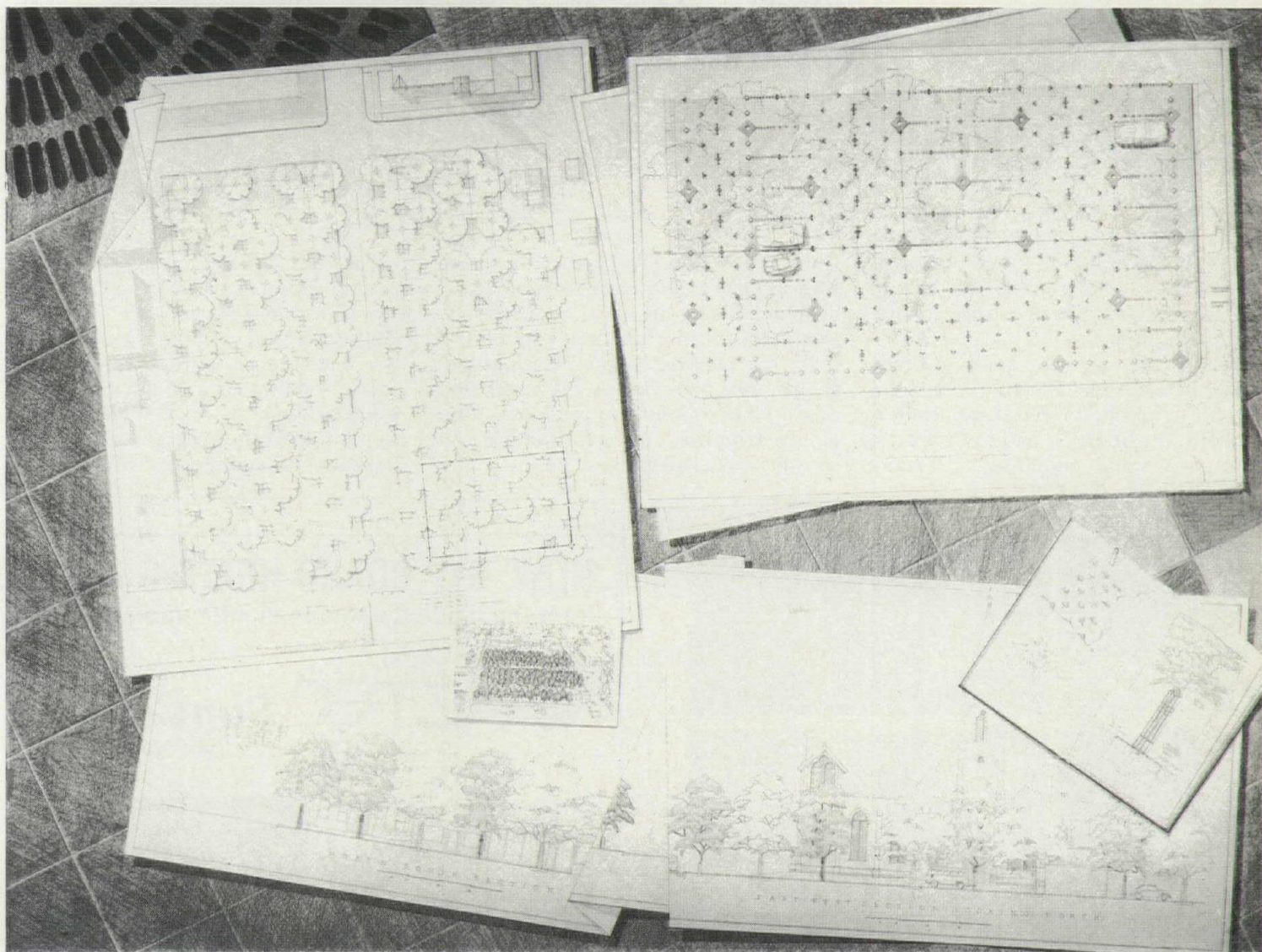
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# Competitions

*Coverage of a Columbus, Ind., competition for the design of a parking lot is followed by the redesign of Boston's Copley Square and a student competition for a preengineered metal building.*



*The presentation board by Eric Kuhne creates the illusion of plans, postcards, and a sketch book spread on the pavement.*

## *Columbus Carscape*

Issuing what Professional Advisor Theodore Liebman called "a challenge to innovate the commonplace," the City of Columbus, Indiana, and the Irwin Sweeney Miller Foundation sponsored the Columbus Carscape Competition, supported in part by the National Endowment for the Arts, Design Arts.

The program for the 300-space parking lot, while site specific, elicited generic solutions that could be transferred to other climates and locales. The winning solution by Eric R. Kuhne & Associates landscapes the "empty lot," that urban

eyesore, as a public plaza that can be used for markets, festivals, and even commencement exercises. Its canopy of pear trees is lighted by sconces built into the tree guards (no heavy lot lights here), and the actual surface is treated as a fabric or carpet design problem, patterned to indicate movement (arrows) and arrival (spaces).

The eight-member jury (including four nonvoting city representatives) headed by Hugh Hardy, awarded second prize to Odell Associates, Charlotte, N.C.; third prize to BA-BA ARC, N.Y.;

and three honorable mentions to SWA Group, Boston; Hanno Weber & Associates, Chicago; and SWA Group, Sausalito, Calif.

The specificity of the program, detailed right down to the budget per space (\$1500) and the phasing of construction (the first phase of 30-35 cars, to be built immediately, must stand on its own as a completed composition), and the clarity of the 27-page competition bulletin designed by Liebman Ellis Melting, N.Y., make the Carscape an exemplary competition. The commitment on the part of the city and the foundation to build the project, and to produce a publication



## Competitions

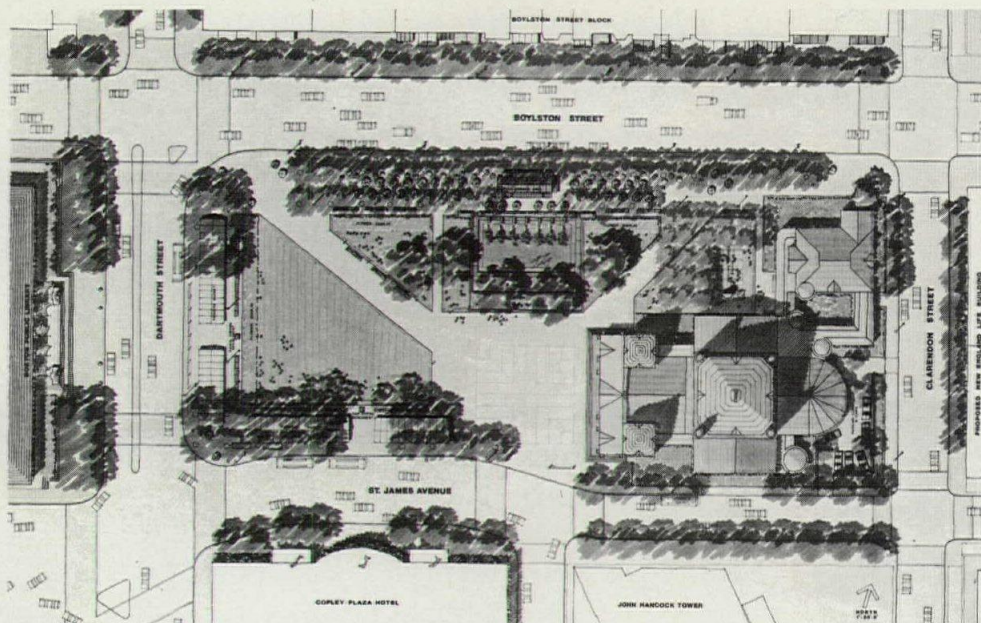
sharing results with other cities, is all the more laudatory in light of such recent competitions as that for the New Orleans Museum of Art, which have not been carried through as conceived. Future competition sponsors would do well to observe the example of this city whose commitment to good design remains unabated. [DDB]

### *Copley Square, round two*

Copley Square is America's most famous non-square. It is neither square in the geometric sense nor in the metaphorical sense of drawing Bostonians to a sociable center.

That condition, Bostonians insist, needs to be corrected. In the last year they said so, specifically, by staging a competition to redesign the 2.4-acre space. On May 2, the winning design, by Dean Abbott of Clarke & Rapuano of New York, was chosen from 309 entries and awarded the \$30,000 prize for the \$4 million project.

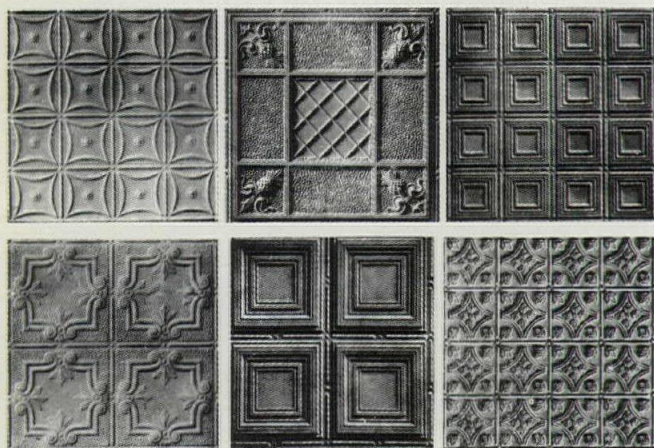
Despite its scruffy state, Copley Square remains a symbol of the city's desire for a public architectural center. With two of the city's, and the nation's, most venerable buildings, Trinity



Dean Abbott, Clarke & Rapuano, Copley Square 1984.

Church by H.H. Richardson and the Boston Public Library by McKim, Mead & White, facing off on its east and west sides, plus the mix of a lively commercial strip, the restored Copley Plaza Hotel, the rhombic new Copley Place, the Old South Church, and the infamous John Hancock highrise, it is a formidable and conspicuous challenge.

Ironically, the same concerns led to a parallel competition less than two decades ago. Sasaki Associates' first-place 1960s-style sunken design, hard-topped from end to end, satisfied few. Copley Square will now get a design that softens its forbidding masonry surface. What distinguishes the otherwise ordinary Clarke & Rapuano plan from the two



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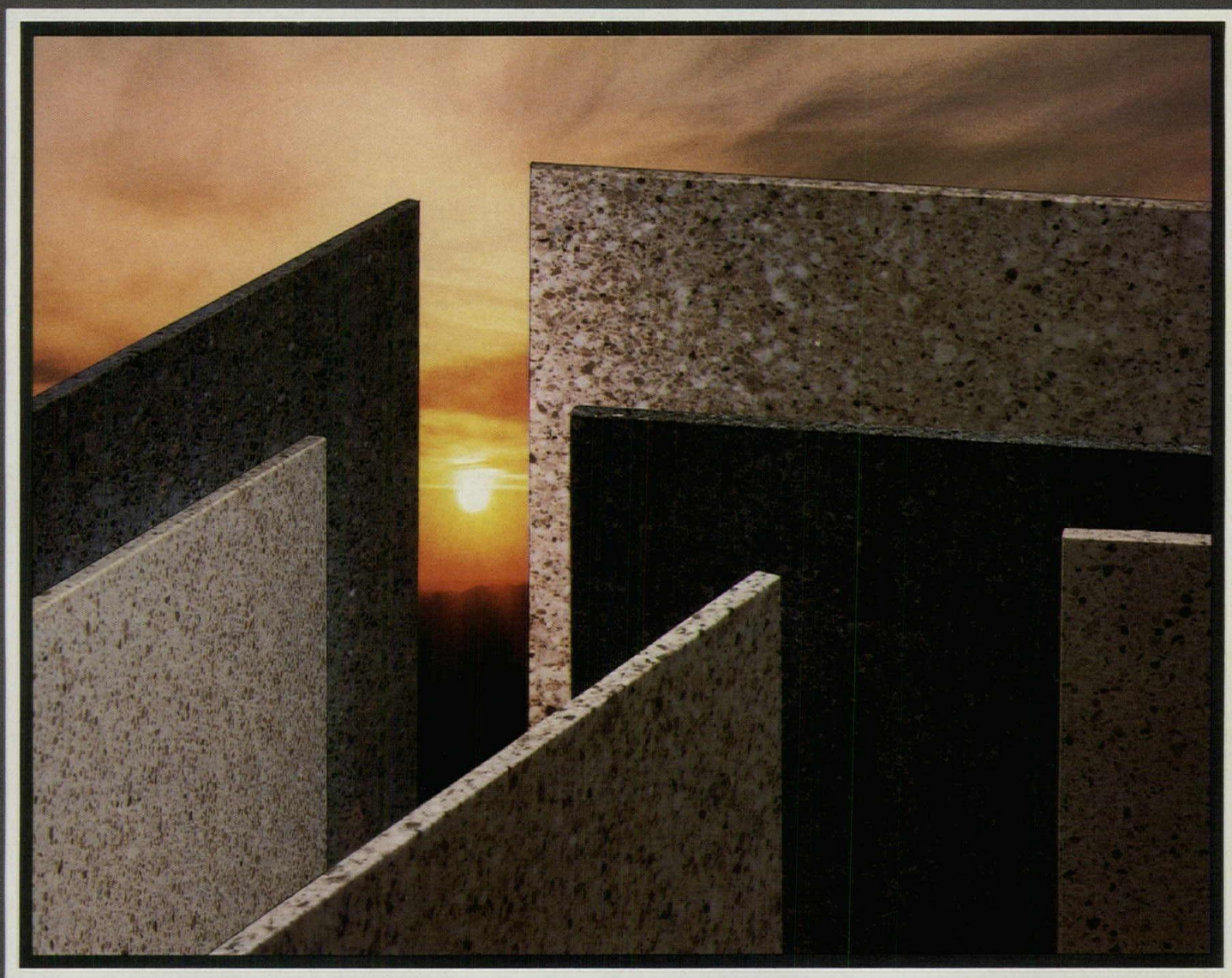
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## Competitions

nearest finalists (Cooper, Eckstut Associates and a Harvard-based quartet of Kisan Osterby-Benson, Peter Schaudt, Michael R. Van Valkenburg and John Whiteman) is its blanket of greenery. Abbott aimed, he says, for "an abstraction of the New England village green." Some 40 percent of the space is grassed over; more trees and a reworking of the old fountain ease the rest.

Much of the final design was foreordained. The Copley Square Centennial Committee, which with the Boston Redevelopment Authority and the National Endowment for the Arts financed the competition, looked to enliven the square. For the city that institutionalized "shooting the bries" in the chat-and-chew Faneuil Hall Marketplace, revitalization means foodification. Pushcarts and a farmer's market fill the active edges of the plan. The format also required that the three-foot depression that makes the present square a pit be restored to a flat plane.

For all the painstaking preliminaries, the Copley Square project comes packed with questions from execution (will city patrons come up with four million—three for design, one for maintenance?) to excellence (will a flatter, grassier, plainer place pull people?).

Certainly, the spectacle of a barely adolescent project succumbing to the bulldozer should prompt some self-examination among design professionals. Only a bosque of linden trees, two promenades of honey locusts, and the plumbing from the old fountain will recall the dreams and designs of the mid-1960s competitors. The question that remains is whether their successors can shape a new identity and humanity for this long placeless place.

[Jane Holtz Kay]

Jane Holtz Kay is architecture critic for the Christian Science Monitor and author of *Lost Boston*.

### Butler building

Robert F. Bleck of Rice University and Carlos Santiago Figueroa of the University of Puerto Rico took first and second prizes, respectively, in the first annual Butler Architectural Design Competition for schools of architecture. The students and their schools will receive cash prizes totaling over \$5000.

The program called for the design of a new town center at the edge of a river, based on the original program for the Lake Anne Village Center at Reston,

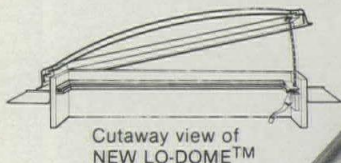


Robert F. Bleck, Rice University, Texas Town Center.

Virginia, using preengineered metal building systems and components. The winning Rice entry spanned a Texas irrigation canal and was praised by the jury for elevating the visual potential of metal building systems.

Jurors Adele Naude Santos, Joseph Esherick, and Frederic Schwartz also awarded honorable mentions to Steven Barduson (Arizona State University), Vincent Wiegman (Clemson), Channing Lan and Vassilios Valaes (IIT), John Hansen (Oklahoma State University), Barbara Grossman (University of Maryland), Shaikh Quddus (SUNY-Buffalo), and Michael Gelfand (University of Tennessee). Butler Manufacturing Company plans to sponsor the competition annually for U.S. and Canadian schools of architecture. [Thomas Vonier]

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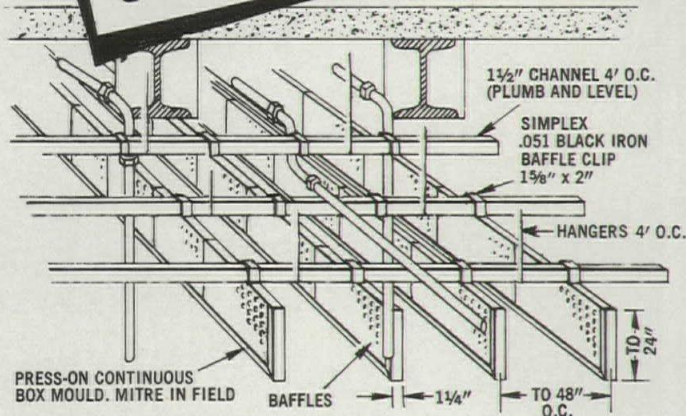
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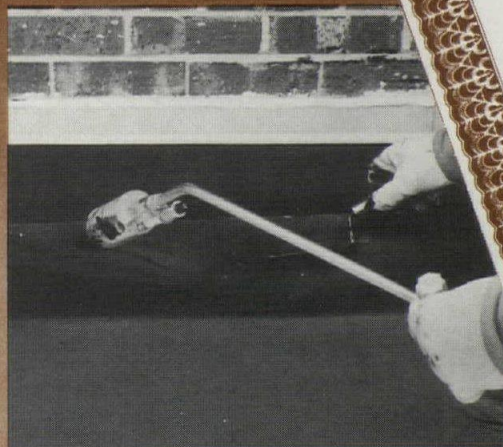
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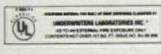
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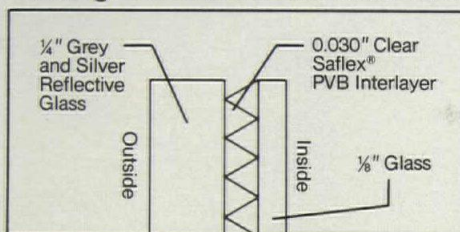
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# P/A Calendar

## Exhibits

### Through July 14

Cultural Connection and Modernity, architectural projects by Steven Holl. Facade Gallery, New York.

### Through July 14

Domus, 1928–1984: From the Sources of Modern to Neomodern Resources. Urban Center, New York.

### Through July 15

Great Drawings from the Royal Institute of British Architects Drawings Collection. The Octagon, Washington, D.C. Also,

**June 4–July 13**, American Architecture: Innovation and Tradition, AIA Building.

### Through July 29

Chicago and New York: More than a Century of Architectural Interaction. Art Institute of Chicago. Then at the New York Historical Society, **through October 27**.

### Through July 31

Furnishings by Architects. Max Protetch Gallery, New York.

### Through August 3

Ralph Walker, Architect. Joseph I. Lubin House Gallery, New York.

### Through August 11

The Artist and the Theater: Contemporary Set and Costume Design by Artists. Philippe Bonnafont Gallery, San Francisco.

### Through August 12

The 20th-Century Poster: Design of the Avant-Garde. Walker Art Center, Minneapolis.

### Through August 19

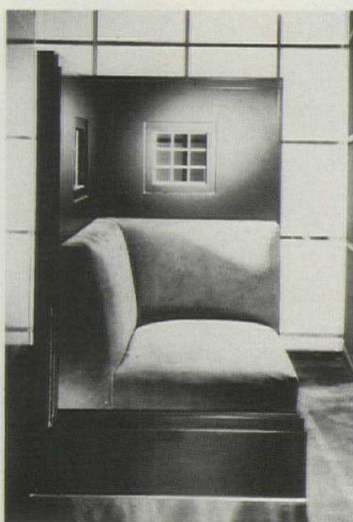
Arquitectonica—models, plans, photographs, and drawings of completed buildings and future projects. Center for the Fine Arts, Miami.

### Through August 31

Architectural Crafts. Fine Arts Center, Tempe, Ariz.

### Through August 31

Architecture of the Modern Olympiad: 1896 to the Present. School of Architecture, University of Southern California, Los Angeles.



Roger Brown, "Cosi fan Tutte," Bonnafont Gallery, through Aug. 11.

### Through September 2

William Lescaze, National Academy of Design, New York.

### Through September 3

The Folding Image: Screens by Western Artists of the 19th and 20th Centuries. National Gallery of Art, Washington, D.C.

### Through September 23

Manhattan Skyline: New York Skyscrapers Between the Wars. Cooper-Hewitt Museum, New York.

### July 21–January 6

Automobile and Culture. The Museum of Contemporary Art, Los Angeles.

## Competitions

### July 16

Entry deadline, 1985 Calendar Design Competition, sponsored by IBD and Kimball/Artec. Contact C. Lee Cheshire (212) 753-6161.

### July 25

Registration deadline, Escondido, Calif., Civic Center Urban Design Competition. Contact: William H. Liskamm, Escondido Competition, City Hall, 100 Valley Blvd., Escondido, Ca. 92025. 619-741-4631.

### July 31

Entry deadline, Third Annual Designers Circle Awards Competition for hotel interior design. Contact Lodging Hospitality, 1111 Chester Ave., Cleveland, Ohio 44114 (216) 696-7000.

### August 1

Entry deadline, 1984 Prestressed Concrete Institute Awards Program. Contact PCI, 201 N. Wells St., Chicago, Ill. 60606.

### August 4

Entry deadline, National Lighting Awards Program. Contact National Lighting Bureau, 2101 L St., N.W., Suite 300, Washington, D.C. 20037.

### August 15

Submission deadline, Friends of Terra Cotta Annual Awards for preservation and new construction. Contact A.R. Carey, Architects, 401 China Basin, San Francisco, Calif. 94105.

### August 20–September 3

Entry acceptance period, A Style for the Year 2001. Contact A Style for the Year 2001, Editorial Dept., Shinkenchi-sha Co., Ltd., 2-31-2 Yushima, Bunkyo-ku, Tokyo, 113, Japan.

### September 1

Entry deadline, 1984 Steel Bridge Awards. Contact American Institute of Steel Construction, 400 N. Michigan, Chicago, Ill. 60611 (312) 670-2400.

### September 14

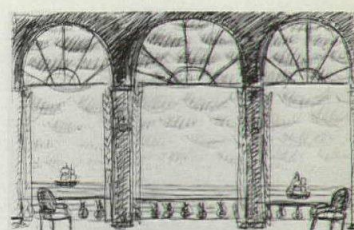
Entry deadline, 1984 Concrete Building Award. Contact Glen Simon, Portland Cement Association, 5420 Old Orchard Road, Skokie, Ill. 60077.

### September 15

Submission deadline, International Association of Lighting Designers' Awards. Contact Ms. Marion Greene, IALD, 30 West 22nd St., 4th Fl., New York, N.Y. 10010 (212) 206-1281.

### September 17

Postmark deadline, 32nd P/A Awards. See page 15 for information and entry form.



Tod Williams, Billie Tsien, Asia Society Chair, Protetch Gallery, through July 31.

## Conferences, seminars, workshops

### July 21–28

Eighth World Conference on Earthquake Engineering, San Francisco. Contact EERI-8WCEE, 2620 Telegraph Ave., Berkeley, Calif. 94704.

### July 23–27

SIGGRAPH '84, 11th Annual Conference on Computer Graphics and Interactive Techniques, Minneapolis. Contact SIGGRAPH '84, Conference Office, 111 East Wacker Dr., Chicago, Ill. 60601 (312) 644-6610.

### August 4–7

Industrial Designers Society of America 1984 National Conference, University of Washington, Seattle. Contact Celia Weinstein, IDSA, 6802 Poplar Pl., Suite 303, McLean, Va. 22101.

### August 5–10

Illuminating Engineering Society of North America annual conference, St. Louis. Contact IES, 345 E. 47th St., New York, N.Y. 10017 (212) 705-7915.

### August 6–8

Window Energy Show, Las Vegas Convention Center. Contact WES, 345 Cedar Bldg., Suite 450, St. Paul, Minn. 55101 (612) 222-2508.

### August 19–22

Ceramic Tile Distributors of America 6th Annual Convention and International Ceramic Tile Exposition, Boston. Contact CTDA, 600 Talcott Road, Park Ridge, Ill. 60068.

### August 26–28

AIA Design Conference, San Diego. Contact Ravi Waldon (202) 626-7452.



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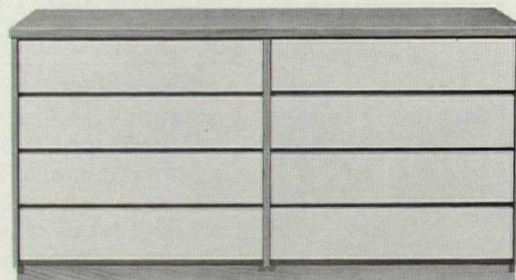
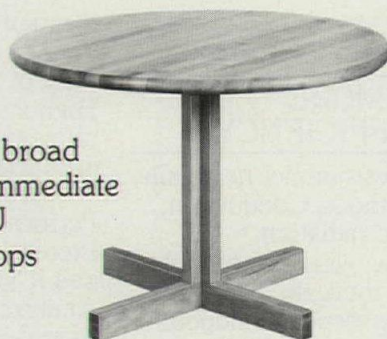
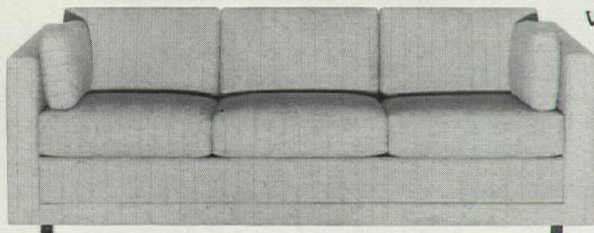
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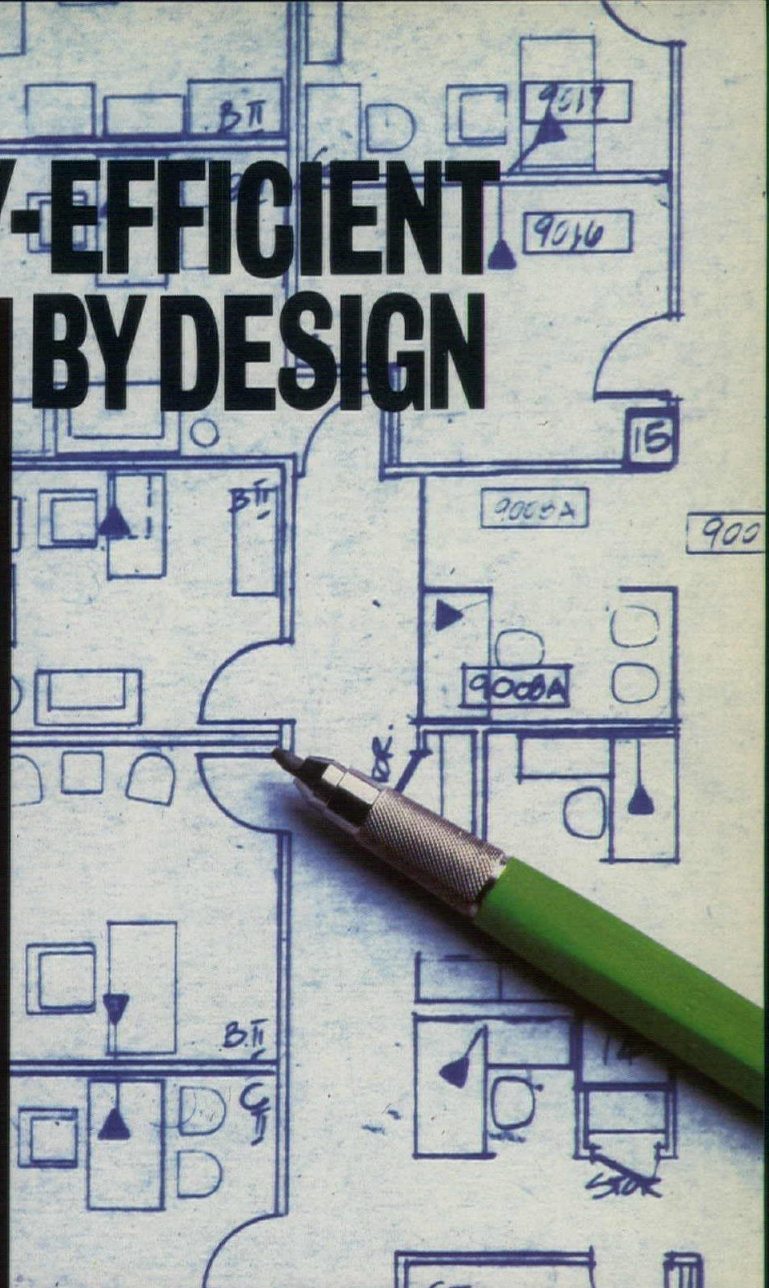
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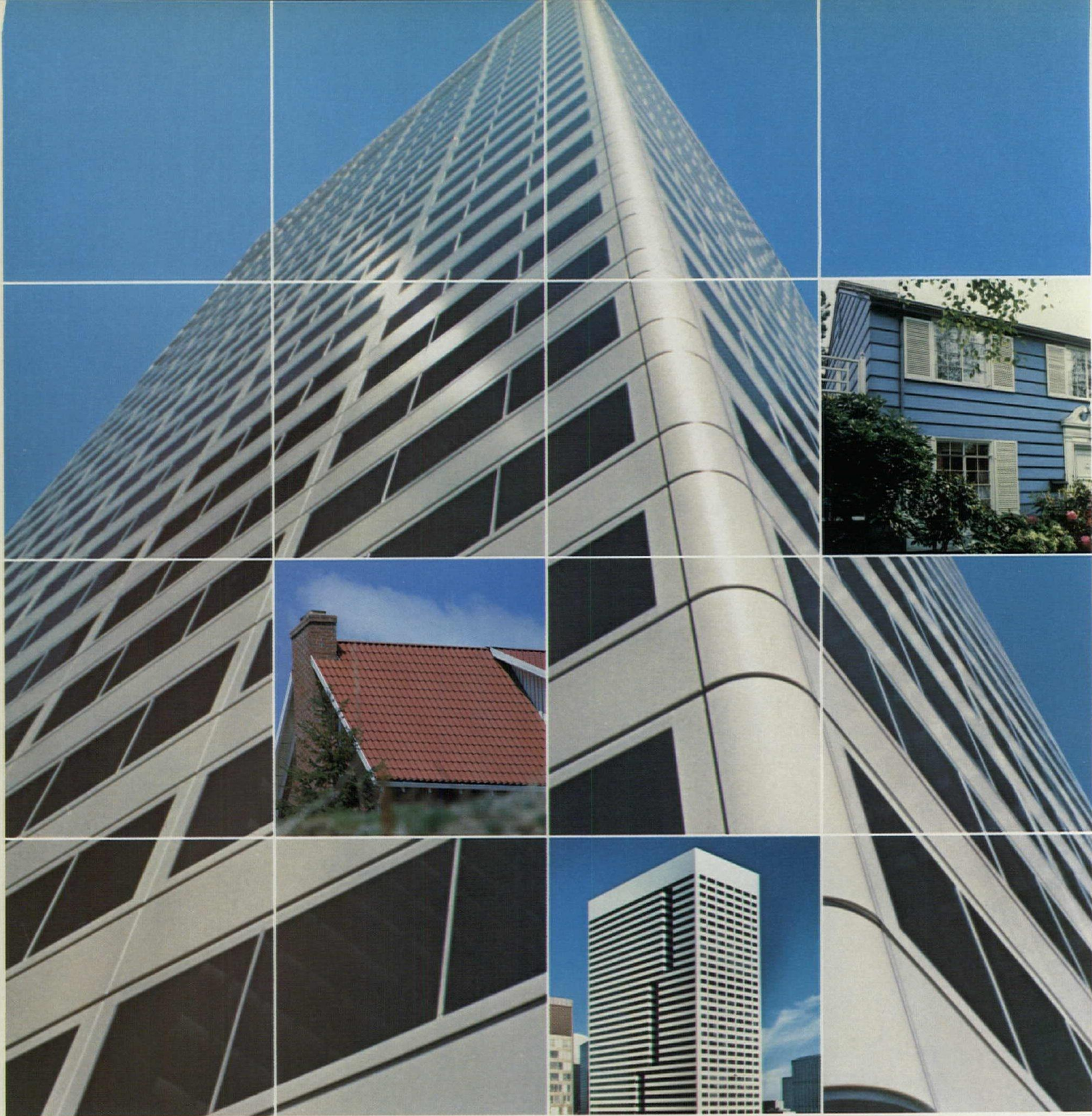


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# P/A Practice

*Weld Coxe asks, can design and the designer's ego be managed? Following that, Norman Coplan asks, when should the architect be involved in arbitration?*

## *Can design leadership be managed?*

As design has become a much higher priority among clients over the past decade, many architectural firms have begun to face the question of whether they can manage design leadership.

Historically, design has been considered a largely personal attribute by the architectural profession. With only a few exceptions, firms identify their design quality with the work of one or more individual designers—and the public and clients respond by focusing proportionate attention on the anointed stars. (There is reason to argue that as projects—and firms—get larger and more complex, a carefully managed design process involving the work of many may produce quality equal to or better than that of a single Michelangelo, but that thought is for another paper.) The reality of today's architectural profession is that firms everywhere are seeking to improve their design quality by finding or promoting individual designers who can make it happen.

As evidence of this trend, several consultants who do executive recruiting for architects report receiving in the past three years an exceptional number of assignments to recruit strong designers into established architectural firms. These jobs are being advertised at salaries ranging from \$75,000 to \$125,000, higher than designers have ever been offered before.

Clearly, many architectural firms are convinced that design is more marketable and has higher value than ever. Those who don't think their design is up to snuff are making an organized effort to improve it. For perhaps the first time in modern history the question before the profession is: Can design leadership be managed?

As search consultants and objective managers look at the field of candidates available to fulfill the desire for more marketable design quality, it appears that outstanding designers (as judged by their peers) come in two principal varieties: those who can truly lead their



Gary Cooper as architect Howard Roark in Warner Brothers' "The Fountain Head."

clients to credible results; and those who command (or demand) sufficient respect (awe) so the client will accept what the architect gives them.

There are a large number of designers applying for these positions who can submit portfolios of work that qualifies for judgment as marketable, but there is a lot of confusion between the types. The fundamental difference in the two varieties of topnotch designers is not in what they produce, but in how they achieve it. Yet when firms evaluate designers, they tend to look at portfolios and judge by whether they like the work. Very little attention is paid to *how* the work was achieved.

Those designers in the first category, who do work considered outstanding by their peers while also demonstrating the ability to lead clients successfully through the design process, are a breed apart. Very few of these architects are

turning up in head-hunting searches, and the reason is simple: designers who can truly lead are almost all in practice on their own, or headed for it. Designers in this group are doing so well today that they have little interest in being hired to solve others' management problems.

The second category of top designers are those who are often noted for their strong egos and who ask clients to accept the designs they are given on the basis that the architect knows what is best. The problem is that the number of designers who can pull this off is very small. For every ego-based designer who has achieved legitimate "star" status, there

Photo courtesy of the Modern Museum of Art

707-22



are 20 more who are trying to function in the image of these masters and not making it. It is this egocentric group of architects that leads many clients to be wary of strong designers out of fear that they will produce projects that are more monuments to themselves than services to the client. As ego-based designers are recruited into firms to fill the need for more marketable design, the majority are failing to achieve the goal.

All of which leads to a fundamental question: How important is leadership in the ability to achieve quality design results? We do not know the answer, but it is time to ask it. It is time for the architectural profession to focus some atten-

tion on the leadership side of practice and see how that quality affects the ability of architects, and especially design architects, to achieve their goals.

In order to open a dialogue on the subject it is worth considering some provocative observations of behavioral scientists who have recently been active in the architectural profession. The first point they note is that architects have, until very recently, come from the lower risk taking profiles of human behavior. They prefer to be "discovered" rather than asserting their competence and risking failure. The other observation of the behaviorists is that architects as a class tend to have lower self-esteem than

other professionals, such as lawyers or doctors. There is no ready explanation for this, but recently the attention of some observers has focused on how architects are educated.

The studio system of architectural schools has as its fundamental hallmark design by criticism. Behaviorists tell us that this system can have a permanent impact on the self-worth of those who go through it. Some students—probably the majority—are conditioned by the studio process to be criticized for almost everything they do, and in consequence they develop low confidence, nonassertive behaviors that keep them out of trouble. In later life, unfortunately, the desire to keep out of trouble also lets them be led by their clients, rather than vice versa. In general, those who are led by their clients produce good service but don't generally produce the best design work.

Another group of students learns to compensate by developing egos that are fundamentally intolerant of criticism. They survive by trying to assume control of every situation—not only in design but in every other aspect of firm management as well. This is a good way not to hear criticism, but the difference between arrogance and genuine self-confidence is enormous. While the latter is a very valuable ingredient of leadership, the former is not compatible with it at all.

Some further symptoms that excessive criticism may be counterproductive is shown by the situation in Great Britain. There, where architects perceive their general position in society even more poorly than in the U.S., criticism begun in schools is continued throughout practice. While journals publish regular criticism of completed works, and while the social value of this may be defended as a proper force to help shape the art of architecture, much of the criticism takes on such personally devastating overtones that there is little wonder for the low self-esteem.

All of this implies that the architectural profession may be able to increase its success in the marketplace if it pays attention not just to design per se but to leadership as well. There is a body of expertise available to train individuals in leadership skills. Some of this is in the form of package programs (e.g., Dale Carnegie) and much of the best is in the form of an emerging group of "power" and "assertiveness training" programs offered by behavioral scientists who are active in management development. It is too early to give definitive advice on the merit of these programs, but it is timely to ask whether architectural firms

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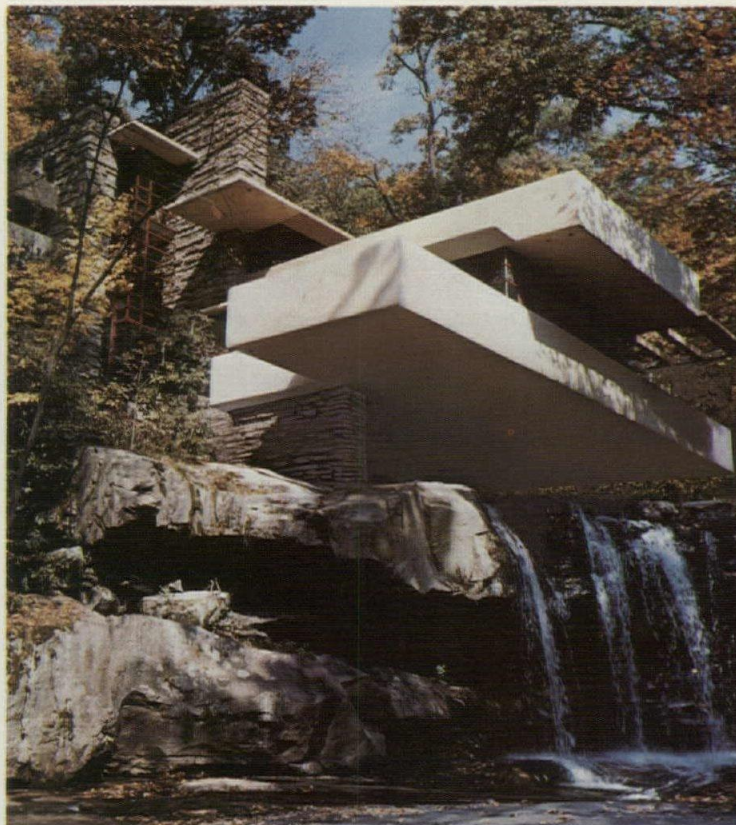
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will benefit by encouraging their key architects, especially designers, to seek leadership training.

The question remains: How important is leadership for producing excellent design? For firms struggling to improve their design reputations, and for individual designers having trouble maximizing their career potential, an experiment in leadership training may be worthwhile. For architectural educators, it may be time to consider whether some change in their approach to teaching design may produce a better generation of future design leaders.

With clients demanding more excellent design than ever before, designers

who can lead are in greater demand. It is time for the profession to consider how more leadership can be delivered. [Weld Coxe]

Weld Coxe, *Hon. AIA*, is the founding principal of *The Coxe Group*, Philadelphia, management consultants.

### *The architect as arbiter*

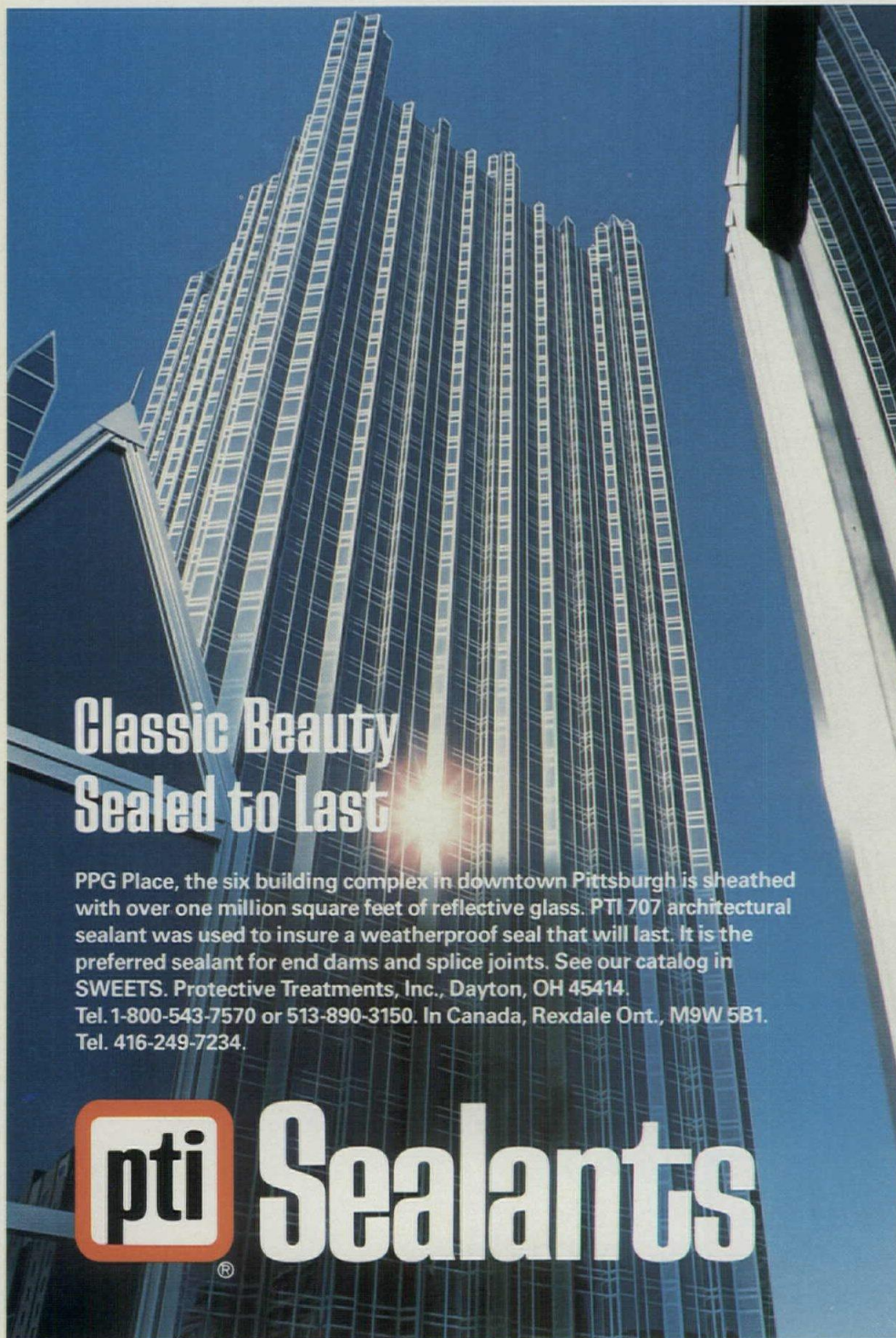
The architect is charged with a significant responsibility in disputes between owner and contractor, particularly if they relate to the execution or progress of the work or the interpretation of the Contract Documents. The "General

Conditions of the Contract for Construction" issued by the American Institute of Architects expressly provides that questions relating to the execution or progress of the work or the interpretation of the Contract Documents must be submitted to the architect for initial resolution. Other disputes between owner and contractor arising under the construction contract may proceed directly to arbitration for determination. The line of demarcation between these two types of claims or disputes is, however, often difficult to determine.

It has been held, for example, that a claim by a contractor for delay damages asserted after substantial completion of a project need not be submitted to the architect for determination under the provisions of the AIA Construction Contract Documents (see "It's The Law," P/A, Nov. 1983). The premise of such ruling was that the architect plays an arbiter's role only as the work is in progress and in relation to the performance of the contractor. Consequently, a claim for damages resulting from delays of the owner, asserted after substantial completion of the project, falls outside of the province of the architect. On the other hand, courts may differ when the facts before them (although to a degree similar to the case referred to above) vary in one or more significant aspects. The recent case of *Liebhafsky v. Comstruct Associates, Inc.*, NYLJ Vol. 191, No. 68, p. 7, illustrates this uncertainty.

In this case the owner had contracted with a general contractor for the renovation of a Manhattan townhouse for a price of \$221,600. During the progress of the work, the contractor unilaterally issued approximately 20 change orders, which resulted in a claimed substantial increase in the cost of construction. The owner in turn complained that the contractor had permitted certain hazardous conditions to exist, including an unsafe condition involving the placing of a staircase and permitting oil-soaked cloths and thinners to be stored near a hot-water heater. Complaint was further made that the contractor had failed to supervise the work adequately, had allowed completed work to be left unprotected, had employed persons without requisite skills for the tasks assigned, had failed to correct deficiencies, had permitted the roof to leak, and had failed to provide essential contract documentation. The owner, after receiving certification from the architect that sufficient cause existed, terminated the contract.

Some months after the termination, the contractor demanded arbitration against the owner, seeking over \$150,000 allegedly due under the change orders that the contractor had unilaterally issued. The owner took the



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position that the dispute involved the execution and progress of the work and that consequently the contractor was required to submit the dispute to the architect for determination as required by the "General Conditions." A majority of the court ruled that, although the claim had been asserted before substantial completion of the project, the termination of the contract by the owner removed the dispute from the scope of the architect's jurisdiction, since the architect's authority was limited to the "operational phases of the construction." It was the majority's conclusion that the contractor's claims for money due on the contract did not relate to the execution or progress

of the work or to the interpretation of the Contract Documents, and thus there was no requirement that the dispute be submitted to the architect for resolution.

A minority of the court, however, came to the opposite conclusion, stating:

*"In our case the dispute centers upon 'the operational phase of the construction' and quite clearly relates to both 'the execution or progress of the Work' and 'the interpretation of the Contract Documents.' The claim here pertains to the propriety of change orders issued by the contractor during the course of construction, which petitioners claim had been improperly issued in violation of explicit requirements in the contract. To a large extent,*

*petitioners challenge the sufficiency of the work performed by the contractor, contending that respondent's performance was substandard and palpably improper, creating dangerous and hazardous conditions. Thus, the dispute relates to the contractor's performance on the job, within the scope of Sec. 2.2.9, and clearly a different type of dispute than (a claim for) delay damages. In addition, the very nature of the dispute at issue here, involving the contractor's compliance with the Contract Documents and the performance of construction in accordance with accepted safety practices, clearly involves matters 'to which the architect might be expected to have a special competence.'"*

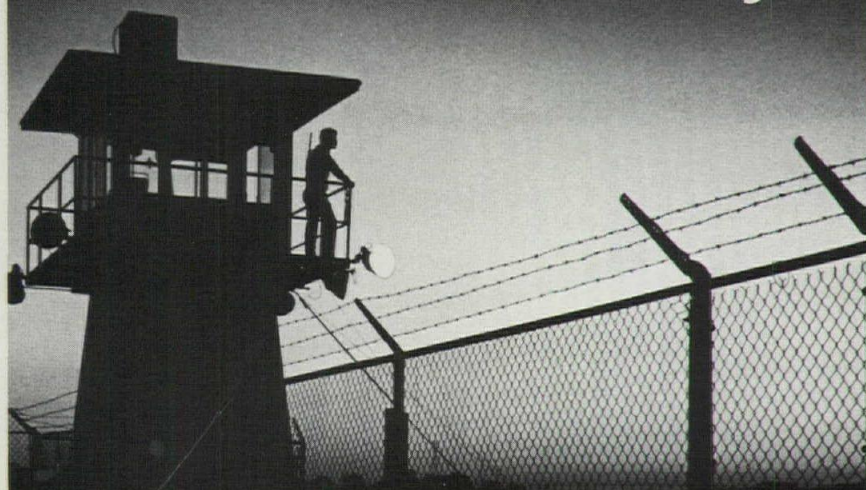
The minority further pointed out that since the construction contract provided for certification by the architect to support termination of the contract and for determining the amount payable to the contractor, the architect must of necessity judge the quality of the contractor's performance. In order to harmonize all provisions of the contract, it would follow that any dispute involving the contractor's performance should be submitted to the architect for determination.

Given the opposite conclusions reached by the justices in the case discussed above, as well as the differences in court decisions on this subject, it would appear that clarification of the Construction Contract Documents issued by the American Institute of Architects would be desirable.

[Norman Coplan]

Norman Coplan, Hon. AIA, is a member of the law firm Bernstein, Weiss, Coplan, Weinstein & Lake, New York.

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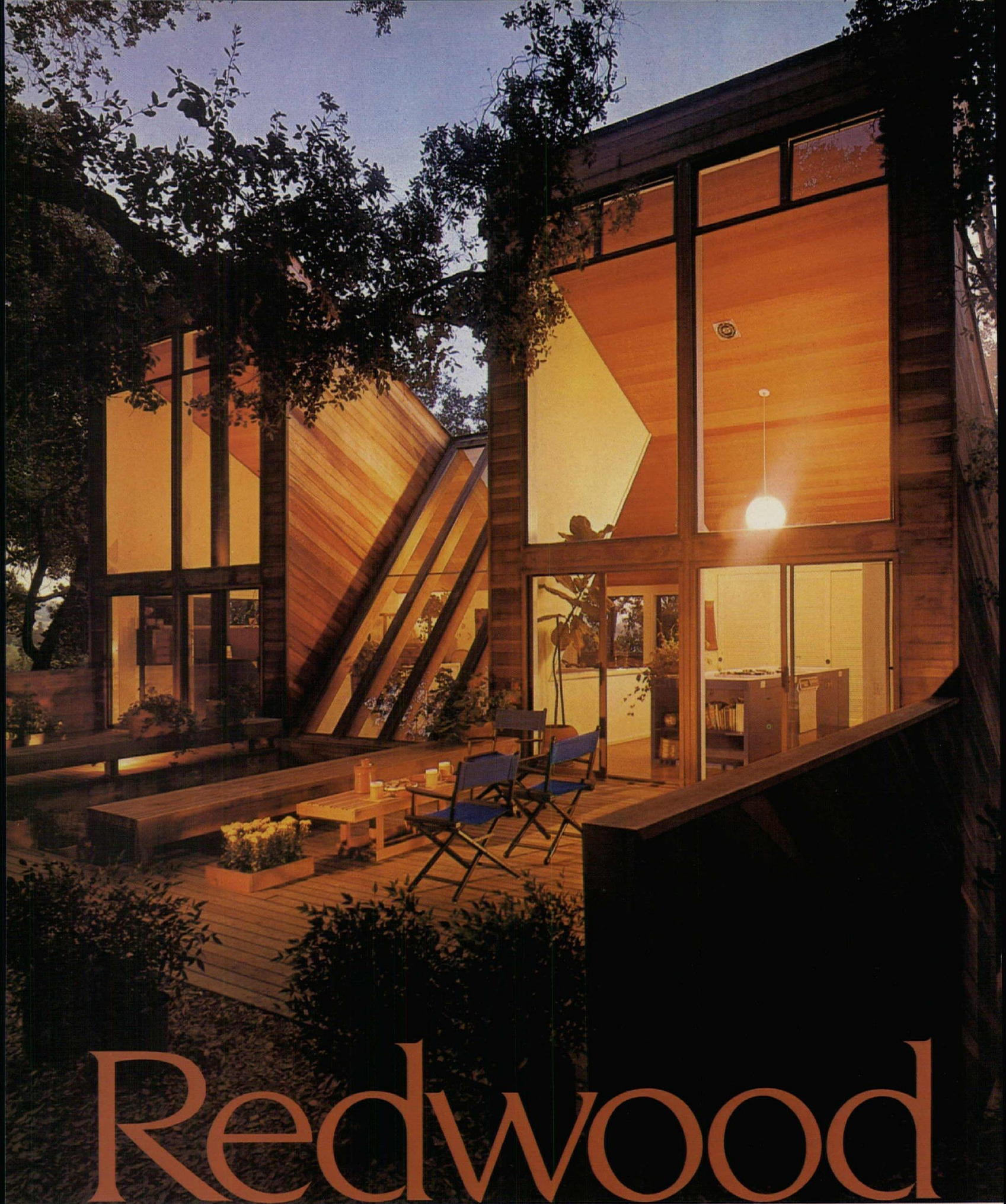
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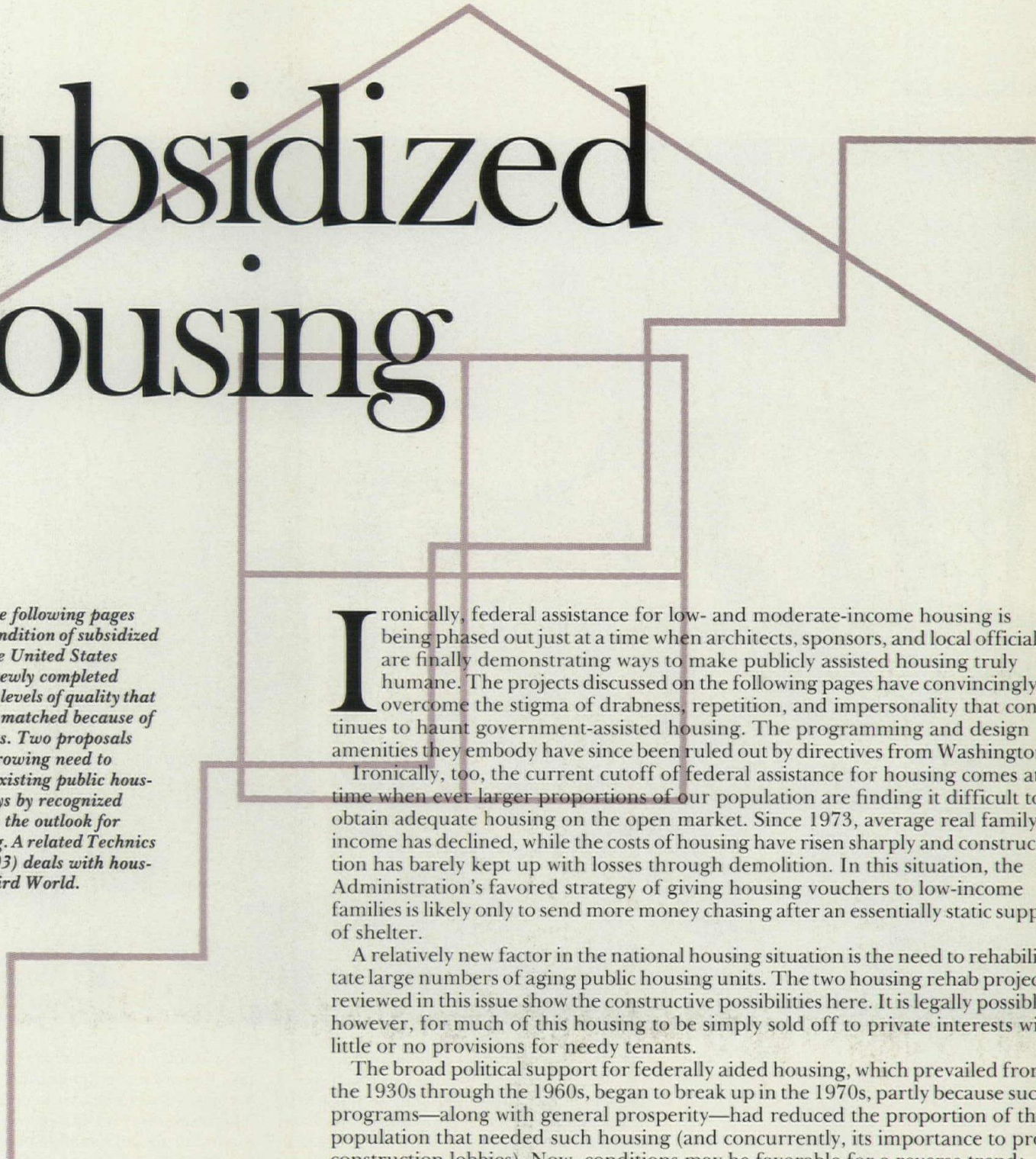
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# Subsidized housing



*Articles on the following pages explore the condition of subsidized housing in the United States today. Four newly completed projects show levels of quality that may never be matched because of policy changes. Two proposals take up the growing need to rehabilitate existing public housing. Ten essays by recognized experts assess the outlook for social housing. A related Technics feature (p. 103) deals with housing in the Third World.*

**I**ronically, federal assistance for low- and moderate-income housing is being phased out just at a time when architects, sponsors, and local officials are finally demonstrating ways to make publicly assisted housing truly humane. The projects discussed on the following pages have convincingly overcome the stigma of drabness, repetition, and impersonality that continues to haunt government-assisted housing. The programming and design amenities they embody have since been ruled out by directives from Washington.

Ironically, too, the current cutoff of federal assistance for housing comes at a time when ever larger proportions of our population are finding it difficult to obtain adequate housing on the open market. Since 1973, average real family income has declined, while the costs of housing have risen sharply and construction has barely kept up with losses through demolition. In this situation, the Administration's favored strategy of giving housing vouchers to low-income families is likely only to send more money chasing after an essentially static supply of shelter.

A relatively new factor in the national housing situation is the need to rehabilitate large numbers of aging public housing units. The two housing rehab projects reviewed in this issue show the constructive possibilities here. It is legally possible, however, for much of this housing to be simply sold off to private interests with little or no provisions for needy tenants.

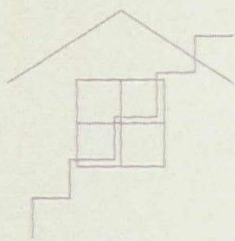
The broad political support for federally aided housing, which prevailed from the 1930s through the 1960s, began to break up in the 1970s, partly because such programs—along with general prosperity—had reduced the proportion of the population that needed such housing (and concurrently, its importance to pro-construction lobbies). Now, conditions may be favorable for a reverse trend: serious problems in obtaining affordable housing, which reach well up into the middle class and particularly affect the elderly, may soon revive political support for federally assisted housing programs.

If federal support is not revived, the demand now developing is likely to be addressed in other ways—with state or local support or through devices that break through economic obstacles for private and nonprofit developers. Whatever happens, the design and policy ideas presented on the following pages will have a real applicability in years to come.

Writing about social housing in America today may involve a certain poignancy, but it is not an exercise in futility. It is an expression of hope.

[John Morris Dixon]





# Living with the sun

Kelbaugh & Lee



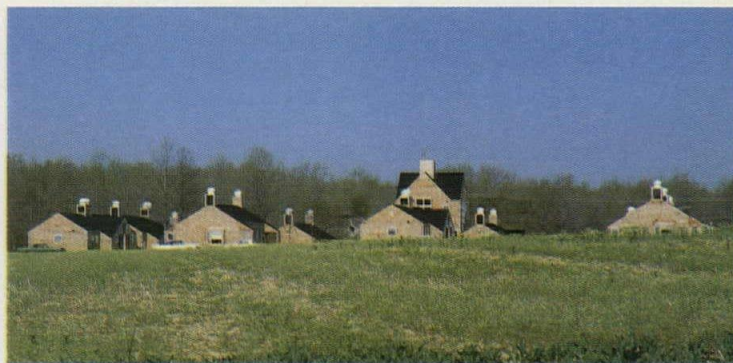
**I**t takes a cooperative client and a committed architect to wring architecture out of the Farmer's Home Administration. The Roosevelt Senior Citizen Housing Corporation and architects Kelbaugh & Lee both have what it takes, for they've created, in Roosevelt, N.J., solar housing for the elderly, reminiscent of an English country town, for \$50 a square foot.

That facility with Federal funds is not out of character for the people of Roosevelt. In the midst of the Depression, the Federal government built their entire greenbelt town, with its architect-designed, concrete-block houses. When it came time for the town's senior citizens to choose an architect for their new housing, they once again went for the unconventional: a firm noted for

passive solar design, Kelbaugh & Lee. The task Roosevelt's senior citizens set for the architects had its share of contradictions. The residents, for example, wanted to remain close to and visually a part of the town, but they wanted housing that looked completely different from the flat-roofed Moderne they had lived with for so many years.

Doug Kelbaugh resolved those dilemmas with skill and a decided wit. The housing's aesthetic leans toward the English Arts and Crafts with its shingled walls, long gabled roofs, and lattice fencing and grilles—not an inappropriate choice in an American version of Ebenezer Howard's Garden Cities. Where the Arts and Crafts meets the solar, wit also





*Lattice fences and gates mark the entrances to this 21-unit, two-acre complex. The north elevations have few windows, except for the community building's many stepped windows (opposite). The south elevations (left) are enlivened with bright yellow awnings shading the Trombe walls and outdoor terraces in summer. From the adjacent fields (above), the solar vent stacks and rotary ventilators have a playful quality. The passive solar features of the units (overleaf) include attached sun spaces, mass walls and floors, Trombe walls, a solar powered vent stack, and "Big Fin" preheater. The site has parallel rows of one- and two-bedroom units facing south, with service areas along the north elevations.*

comes into play. The solar vent stacks sport a disguise as chimneys; the rotary ventilators spin like whirligigs, the sun spaces double as enclosed porches, and the shading devices serve as bright yellow awnings, while the Trombe walls mimic the picture windows so common in Roosevelt.

Inside, the apartment units seem almost too big for the residents' furnishings, a quality rarely found in any subsidized housing. It comes from the passive solar features: high ceilings, concrete floors, skylights, and sun spaces. Otherwise, the units have fairly conventional, if tightly organized plans, with kitchens, closets, bathrooms, and airlock entries along the north wall, and living rooms, bedrooms, and sun spaces along the south.

Laundry facilities, a community room, and studio apartment, stacked in a three-story community building, sit near the center of the complex. Elements such as the cross gable roof and the stepped windows leading to the top floor studio visually tie that building to the surrounding housing. On the south and east elevations, though, where brick walls increase the mass, the building is much less successful as a design and as a focus for the community.

The Roosevelt project embodies what Kelbaugh sees as the form most housing will take in the future. Housing will "become smaller, longer, heavier, denser, more regional (in its response to climate), and longer lived." Those attributes seem to accord with



## Roosevelt Housing

**Project:** Roosevelt Senior Citizen Housing, Roosevelt, N.J.

**Architects:** Kelbaugh & Lee, Princeton, N.J. (Sang Lee, partner in charge; Doug Kelbaugh, Sang Lee, Tom Swartz, Ron Ellis, Leigh Olson, design team).

**Client:** Roosevelt Senior Citizen Housing Corporation (Leon Barth, president).

**Site:** two acres of gently sloping land.

**Program:** 21 units of elderly housing with community center.

**Structural system:** tilt-up, wood-frame construction.

**Major materials:** see p. 130.

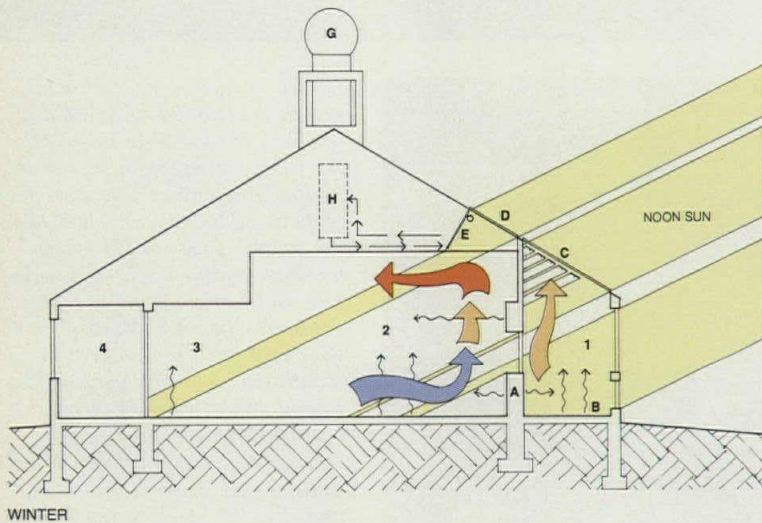
**Mechanical system:** zoned electric baseboard heat, electric domestic hot water heaters with solar preheaters, solar chimney and wind turbine.

**Engineers:** Jay Woo, structural; Robert Hubbard, mechanical; Alan Goodheart, landscape architect.

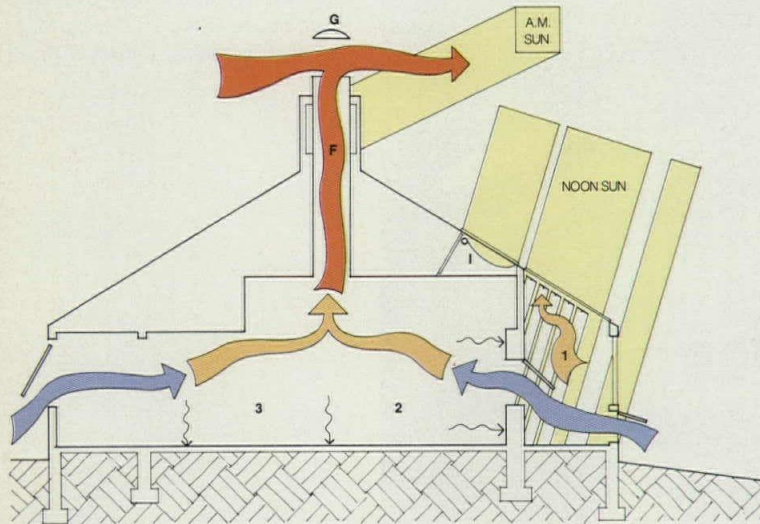
**Contractor:** Artic Corners, Inc.

**Costs:** \$900,000.

**Photography:** Otto Baitz.

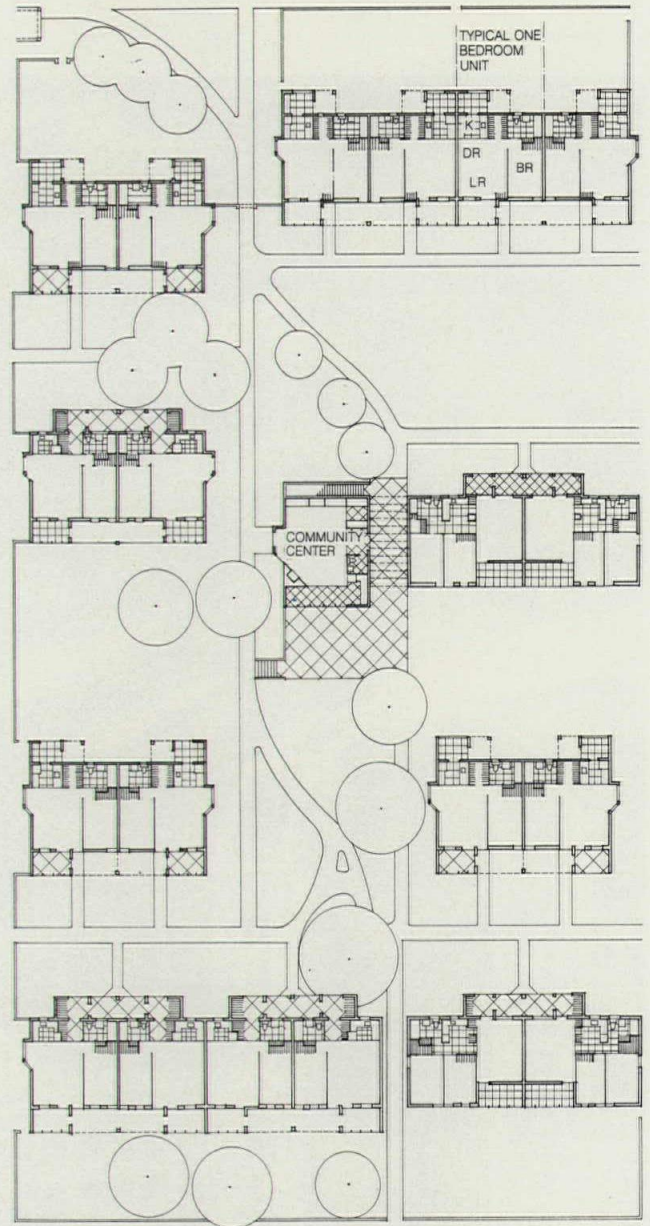


WINTER



SUMMER

- |                 |                           |                       |
|-----------------|---------------------------|-----------------------|
| A Mass wall     | F Solar rack              | 1 Solarium            |
| B Concrete slab | G Rotary ventilator       | 2 Living/dining       |
| C "Big Fin"     | H DHW heater/storage tank | 3 Kitchen             |
| D Skylight      | I Pull shade              | 4 Back porch/air lock |
| E Reflector     |                           |                       |



↑ N 20'/6m

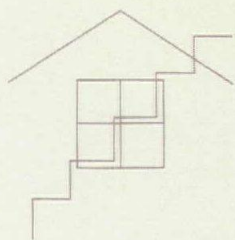
various economic and demographic predictions. They do create formal difficulties, however, that Kelbaugh bravely explores but doesn't entirely solve. For instance, while he breaks the monotony of orienting all buildings south by staggering the rows of housing and by varying the sequence of views experienced by the pedestrian, the lattice fences and gates do not adequately define the east-west edges of the common yards. The intention of creating an urban, pedestrian-oriented complex is thus diluted as the outdoor spaces visually spill into the adjacent fields. Also, the consistent treatment of elevations, with relatively blank north and wonderfully open south faces, seems to warrant a consistent entry orientation. But to minimize paths and encourage social interac-

tion, Kelbaugh has some units entered from the north and some from the south, a situation that creates not variety so much as a formal confusion.

Such matters know no simple solution. Nor do those of achieving quality construction in publicly subsidized housing. Remarkable for what human amenities and solar features it offers on so small a budget, the project nevertheless suffers from shoddy workmanship. With Federal funding agencies seemingly blind to the long-term expenses their inadequate subsidies incur, one can only wonder if the Farmer's Home Administration realizes that, at Roosevelt, it got far more than it paid for.

[Thomas Fisher]





Van der Ryn, Calthorpe  
& Matthews

## A sign of the times



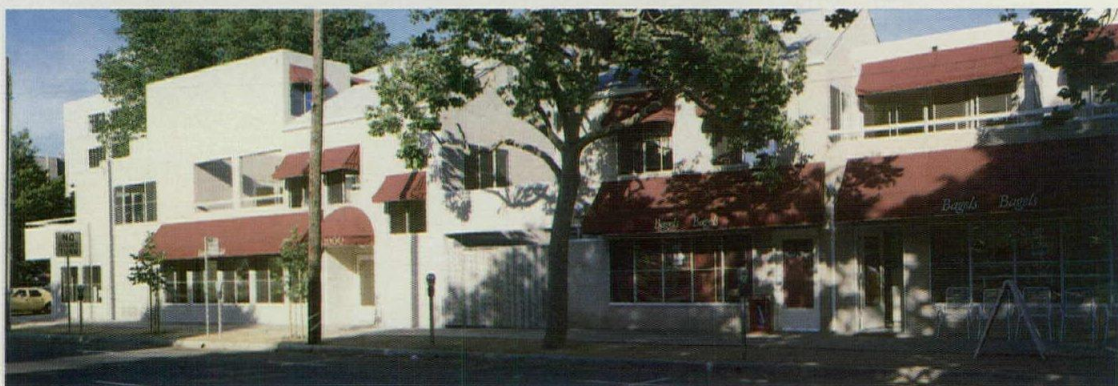
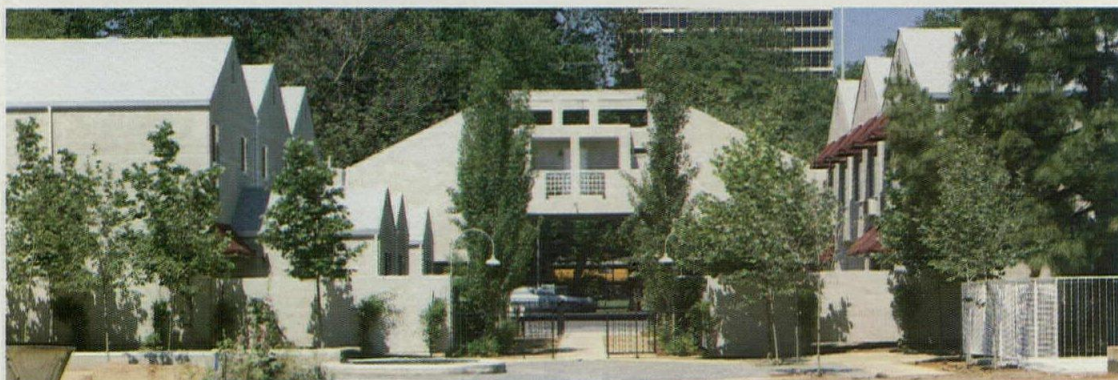
Planned to meet the goals of Sacramento's Capitol Area Plan developed during the tenure of Sim Van der Ryn as State Architect, this one-block mixed-use development is successful in responding to urban design and energy conservation considerations. But the social objectives envisioned by the architects were considerably modified when the original developer, McKeon, was bought out by a British developer, Barratt America.

Architect Peter Calthorpe, in partnership with Sim Van der Ryn and Scott Matthews, has devoted a large share of his practice to planning mixed-use projects that reflect contemporary needs for conserving energy and promoting what is usually regarded as

an urban way of life. Somerset Parkside was designed to express the interdependency and variety of vital urban neighborhoods as well as to serve those for whom new housing is generally not affordable. To meet the latter goal, McKeon applied for a state subsidy under Assembly Bill 333, which funds both cooperative and rental housing. Originally, Somerset was planned as a cooperative with the subsidized units, one-third of the total 107, scattered through the site. Upon acquiring the project just prior to construction, Barratt scuttled the cooperative in favor of a mix of condominiums and subsidized rental housing. The subsidized units were then segregated to the south side



The housing responds to its context in both its form and function. The side facing a street of detached houses (right top) takes the form of large houses with gabled roofs and projecting stairs and porches. The interior of the project (right middle) has smaller townhouses facing a mews, recalling the midblock alleys common in Sacramento. A bridge forms the ceremonial entry into the complex from an adjacent park. Facing the park (right bottom) are restaurants and shops. The side facing taller office buildings (preceding page) has apartments that are taller and more urban in character. As the site plan (opposite) indicates, most of the housing is oriented in an east-west direction to take advantage of passive solar gain. Parking is kept to the perimeter of the site or placed underneath buildings. This frees the interior of the complex for community gardens, children's play areas, and shaded areas for sitting. The retail space along the western edge of the site and in the northeast corner enlivens the streetscape and ties the project into the life of the city. Many of the apartments are "mingles" units with separate bedroom suites sharing common kitchens, living, and dining rooms.



and their construction budget cut to the bare bones. A child-care center proposed for the interior of the block, near the townhouses designed for families, was eliminated. In sum, the project is now largely market-oriented—a sign of the times.

Integration of energy conservation features and urban design elements with the form of the buildings is particularly successful. Though there are 43 units to the acre, they are disposed in three different building forms, which not only reflect those typical of Sacramento, but are also staggered in height to permit winter sun to each unit. On the north side, the three-and-a-half-story apartment buildings relate to the state office buildings on P Street. The two-story town-

house mews in the middle of the block reflects the smaller scale buildings of midblock alleys in the area. Finally, the detached apartment structures on the project's south side are compatible with the two-story detached houses across the street.

To achieve the high density and reduce the per-dwelling costs for site preparation, utility hookup, landscaping, and parking, the units are smaller than HUD's minimum property standard. One-bedroom units start at 584 square feet, two-bedroom at 684 square feet, and three-bedroom at 1116 square feet. The innovative unit is the "mingle," which offers buyers the possibility of coownership as a way of entering the housing market at less cost. The plan has two



**Project:** Somerset Parkside, Sacramento, Calif.

**Architects:** Van der Ryn, Calthorpe, & Matthews (Peter Calthorpe, project designer; Andrea Ponsi, Claudia Cleaver, Tom Pinkowski, design team).

**Client:** Capital Area Development Authority.

**Site:** flat, city block, 2.5 acres square, with no existing buildings.

**Program:** 107 units with 26 low-income subsidized 2- and 3-bedroom units and condominium townhouses and apartments. Retail space facing park.

**Structural system:** wood frame, spread footings, gang nail truss floor joists.

**Major materials:** stucco exterior finish, canvas shades, wood lattice rails, one-inch plaster interior walls.

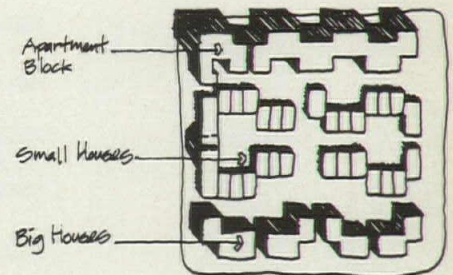
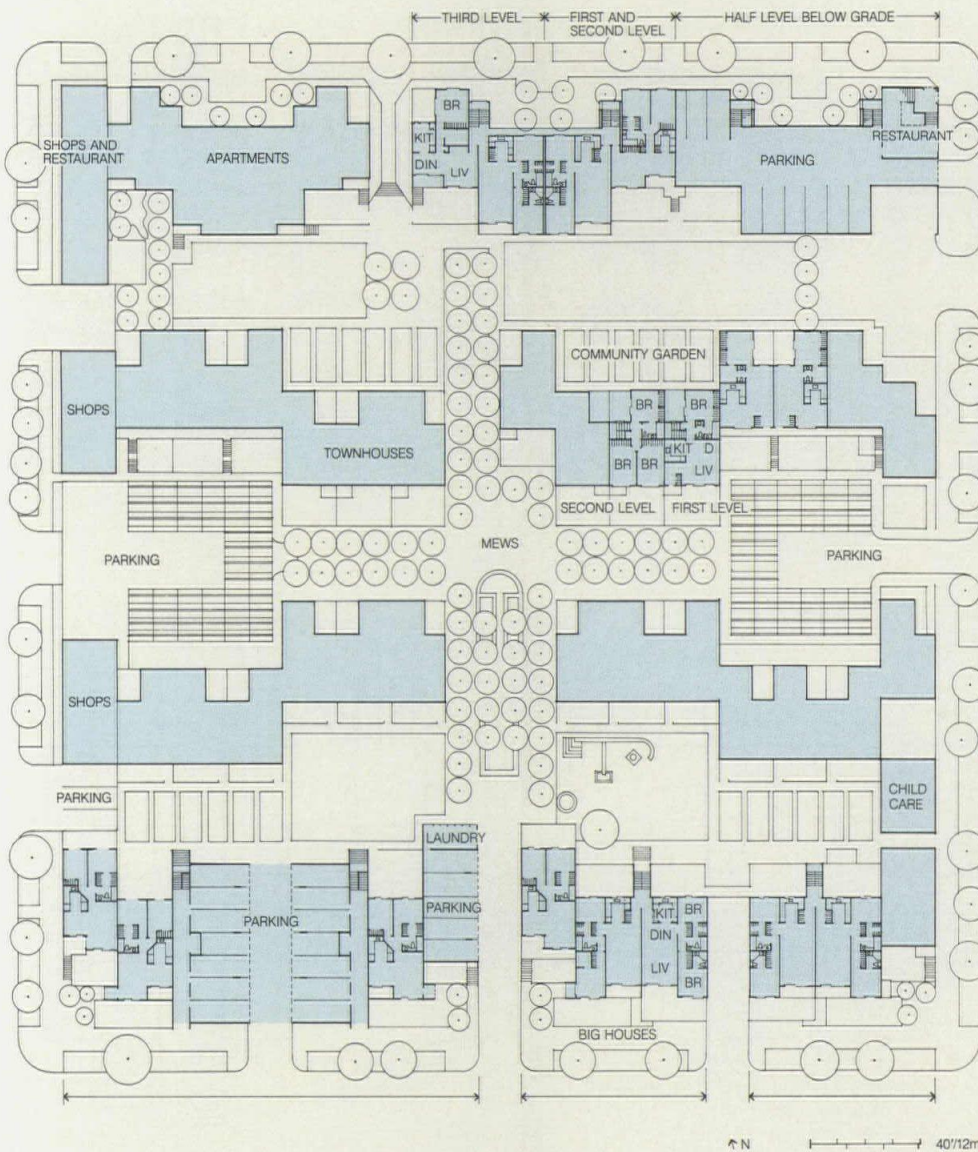
**Mechanical system:** heat pump heating, air conditioning, and hot water heaters.

**Consultants:** C.H.N.M.B., landscape; Lloyd Gossen & Company, structural; Peters Engineering, mechanical and electrical; Berkeley Solar Group, energy calculations.

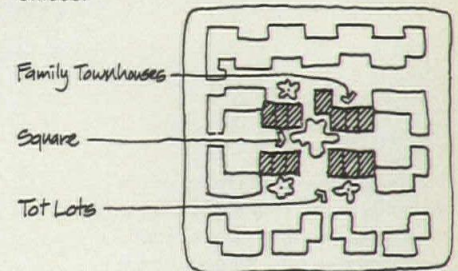
**General contractor:** Barrett Urban Housing.

**Costs:** \$1,145,988 including site work, landscaping, and interior finishes; \$54.40 per sq ft.

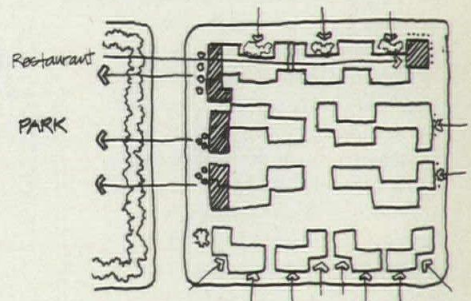
**Photography:** Henry Bowles.



Overall plan includes a variety of housing forms, types and scale, with big houses facing residential street and apartments facing offices.



Townhouse family housing is clustered at interior. Children's play area and proposed day care center are in the same location.



Shops face the park side, a restaurant occupies a corner, and front doors face the streets to create and enhance pedestrian activity.

master-bedroom suites with private baths and shared living-dining and kitchen spaces, along with a private, south-facing balcony.

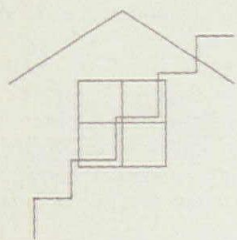
Even with the relatively high density, 51 percent of the site is still open space. A variety of landscaped areas designed for child and adult use are tied together by allees of trees, which meet in the center, defining an open space with a water element. Sheltered from street noise and traffic, the block's interior offers the kind of house-in-garden ambience much sought after by families with children.

By contrast, the nonfamily dwelling units are entered from the street where, on the west side, there is 4600 square feet of commercial space now occupied by eateries and a

laundromat. All units have private outdoor spaces. In accordance with the American image of a home for both cars and people, each unit has a numbered parking space. Surface parking lots are shaded by active solar hot water collectors.

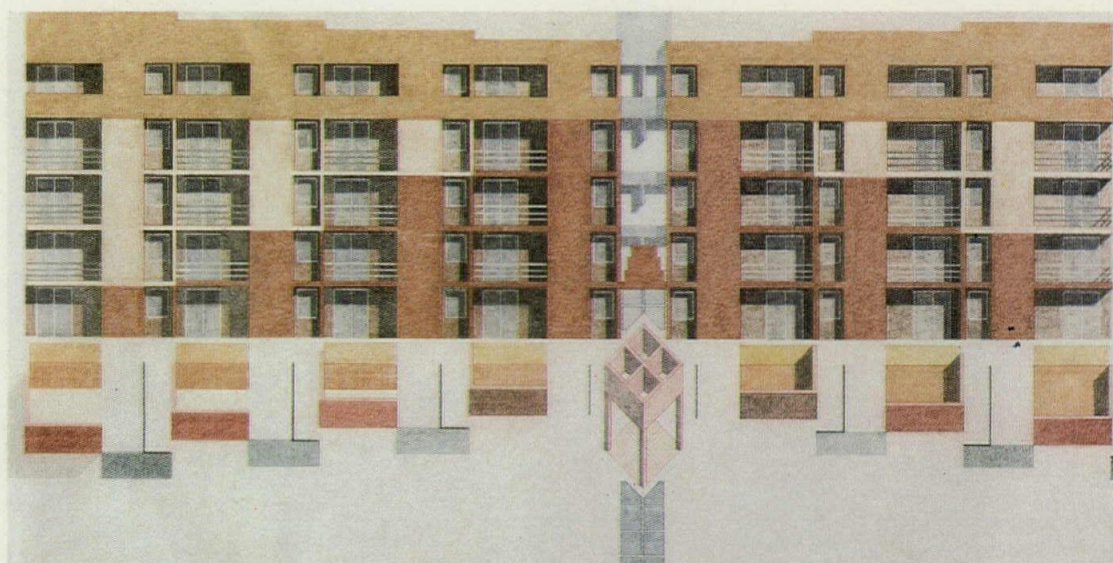
Consultant Clare Cooper-Marcus's research on housing preferences shows that people want a homelike image, privacy, community identity, and ease of child-rearing. No surprise. These are the traditional goals of American housing. But to change neighborhood character from suburban to urban, new architectural prototypes are needed. This is Somerset's main contribution. [Sally Woodbridge]



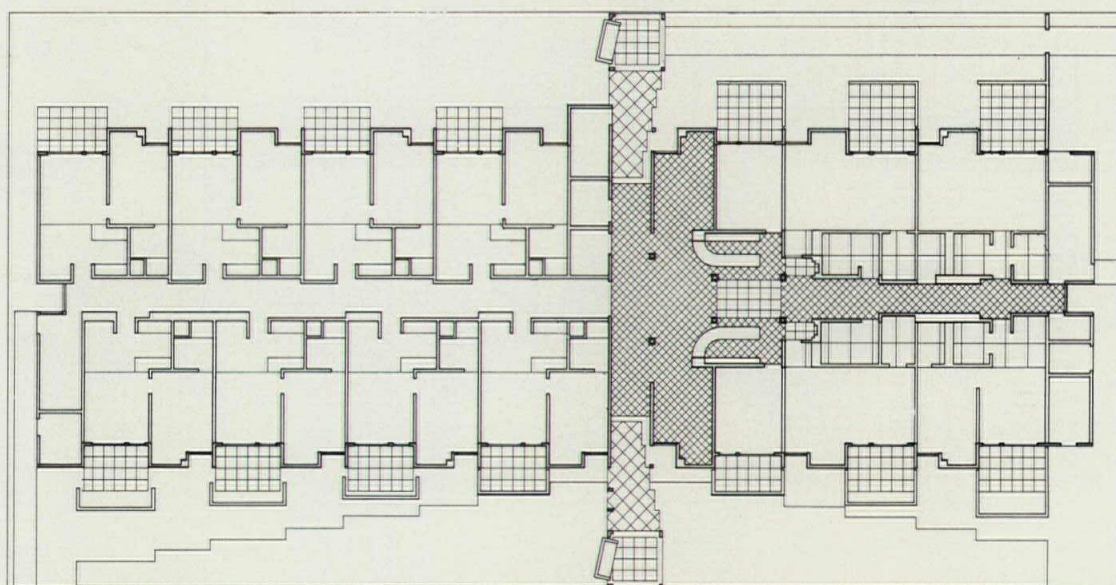


# Overcoming HUD

Mutlow Dimster Partnership



*The façade and plan (right) reveal the extent to which the architects tried to vary the building's image and configuration, all with a minimum of means such as different color stucco, simple rain shelters, and balconies. The same is true of the interior public spaces. The width of corridors is varied and the lobby is broken into smaller alcoves to reduce the scale and sense of monotony. The completed building (opposite) stands next to houses, giving further reason for stepping down the darker color stucco; it reduces the apparent size of the building. While well-intended, the detached waiting pavilion in front of the building doesn't keep people out of the rain as they exit.*



While subsidized housing projects for the elderly have multiplied in recent times (HUD's Section 202/8 program is one of the few pre-1980 programs that remain intact), few of them rise above the nondescript. We have almost come to accept this lack of architectural distinction as the logical result of working within straitened budgets while having to provide the special features and facilities that insure health and security for those with diminished physical capacities. Yet, while it is certainly a challenge to exceed the program's limits, projects such as Plymouth Place, by the Mutlow Dimster Partnership, are encouraging in this respect.

Sponsored by Stockton Congregational Homes & Retirement Housing Foundation

and subsidized by HUD, Plymouth Place is a five-story, 65-unit slab-shaped structure intended to be the companion building for an older seven-story slab that occupies the other half of the site. Since the older building had two floors of medical facilities and a large multipurpose space, the new one was planned with smaller spaces for eating and socializing on the ground floor, along with eight units specially equipped for the handicapped. A parking lot separates the two buildings.

Color is one key to the building's success in establishing a definite character for itself and its residents. A strong terra cotta is used on the building's long elevations in a pyramidal



**Project:** Plymouth Place, Stockton, Calif.

**Architects:** Mutlow Dimster Partnership, Los Angeles (John Mutlow, project designer and principal in charge; John Greed, project architect; Nora Sarkissian, John Anderson, project assistants).

**Client:** Retirement Housing Foundation (Clark Harshfield, president).

**Site:** 20,400-sq-ft corner site adjacent to existing housing.

**Program:** 65 one-bedroom apartments with lobby.

**Structural system:** concrete footings, steel framing system with lightweight concrete slabs.

**Major materials:** see p. 130.

**Mechanical system:** individual units tied to central hot and cold water piping system.

**Consultants:** Ronald Rogahn, structural.

**Contractor:** Shepherd and Green.

**Costs:** \$2,865,000.

**Photography:** Wayne Thom.



pattern, which centers on the recessed entrance bay. A beige tone balances the outer bays while the upper story and roof remain neutral, expressing a division into base, middle, and top. The use of spaced bars instead of solid panels for the balcony railing on the middle three floors is an aesthetic and a social plus. Residents can enjoy the view without having to look over a barrier while, from the street, the thin blue lines accent and lighten the elevations. The recessed balconies both shade the glazed areas and function as breathing or overflow spaces even when not actively used. The ground-floor units have small, walled patios.

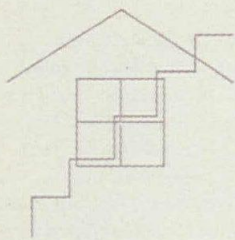
Set out from the east and west entrances are four-posted canopies, which shelter benches. Although they provide shade and

some rain protection, these structures are mainly aesthetic devices. They introduce the path or spatial sequence through the building, which interweaves ground-floor public spaces with the outside circulation. The post and canopy system continues through the lobby, where a baldachin marks the central gathering place between the mail boxes and the reception desk. By raising this pattern above a matter-of-fact level, the designers have made a special context for the public life of Plymouth Place. The mint-colored interior is also soothing, particularly in Stockton's 100+ degree summer weather.

As is true across the country, the majority of Plymouth Place's residents are women.

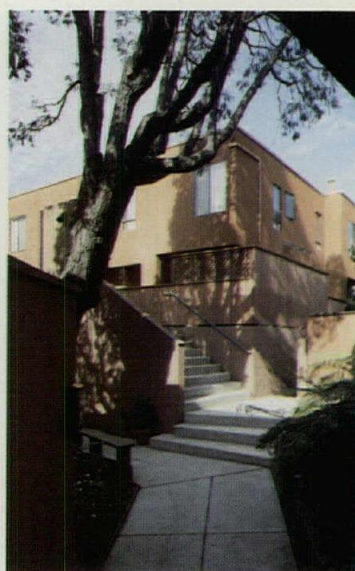
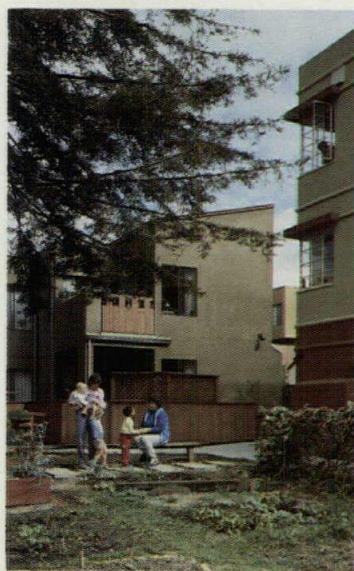
Most are from Stockton or nearby. Though they have faced the usual problems of displacement and reduction of household contents, they have succeeded in personalizing their new homes in often ingenious ways. The uniformity of the unit plans has not resulted in redundancy as might be expected. The architects have shown consideration of the fact that the elderly typically rest more than younger people by making large bedrooms with a window positioned so that someone in bed can view the outside. Such considerations, though physically modest, help to rescue Plymouth Place from the banal and cheerless world conjured up by the category of subsidized housing for low-income elderly people. [Sally Woodbridge]





Lyndon/Buchanan

# Community of differences



*New housing is interwoven among older buildings, including a rehabbed apartment structure (top left). Site features such as fine redwood and incense cedar trees (top photos) are set off in public spaces. Decentralized common spaces include a community vegetable garden (top left) and a small lawn defined by a wood bulkhead/seal (bottom left). Townhouse units are built on ground level or on top of parking garages (top right, bottom left). Similar units (bottom photos) have varied window arrangement, depending on outlook. All buildings have elements related to body size and human use: vertical windows, visible stairs and balconies for the flats, entry recesses and garden walls for the townhouses.*



Defying labels, University Avenue Cooperative Homes is best described as an aggregation of buildings from various times, reflecting a variety of aspirations and living styles. Not conveying the image of a housing project was one of the client's major requirements. The other two objectives were affordable housing, presumably made possible by government subsidy, and the creation of a limited equity cooperative, one in which tenants would not be able to make a profit by speculating with their shares.

The Consumers Cooperative of Berkeley, reputedly the oldest such organization in the

country, had gradually acquired the property adjoining one of its supermarkets on University Avenue. In the late 1970s, a separate nonprofit corporation, University Avenue Houses, Inc., was formed to develop this site, and a feasibility study was commissioned from Community Economics and Lyndon/Buchanan Associates. It was determined that about 50 dwelling units would be possible, given some adroit financing and ingenious use of the fractured site.

Gaining official approvals was an arduous process, but more perilous yet was the path to financing. Fluctuating interest rates combined with conflicting demands of funding agencies and sponsors and the vagaries of construction economics nearly sank the whole project several times. Indeed, when



*A through-block walk starts between two rehabbed bungalows on Addison Street (below), where fragments of trellis suggest a gateway, then snakes between new structures (top right, opposite) that rise in height toward the five-story apartment block on University Avenue (overleaf). The unifying visual element—aside from stucco walls on most of the old and all of the new structures—is a coherent but by no means uniform color treatment. Derived from the land-*

*mark Fox Court residential complex adjoining this project on University Avenue, which has rubble brick and tan stucco walls with terra cotta colored trim, the UACH color scheme extends the range of earth hues for the stucco walls, with colors generally deepening toward the interior of the block. Unit interiors are light and unassertive in color, to allow for tenant individuality and enhance natural light.*



the members of the University Avenue Cooperative Homes gathered on November 7, 1982 to celebrate the completion of the buildings, it seemed an altogether miraculous achievement.

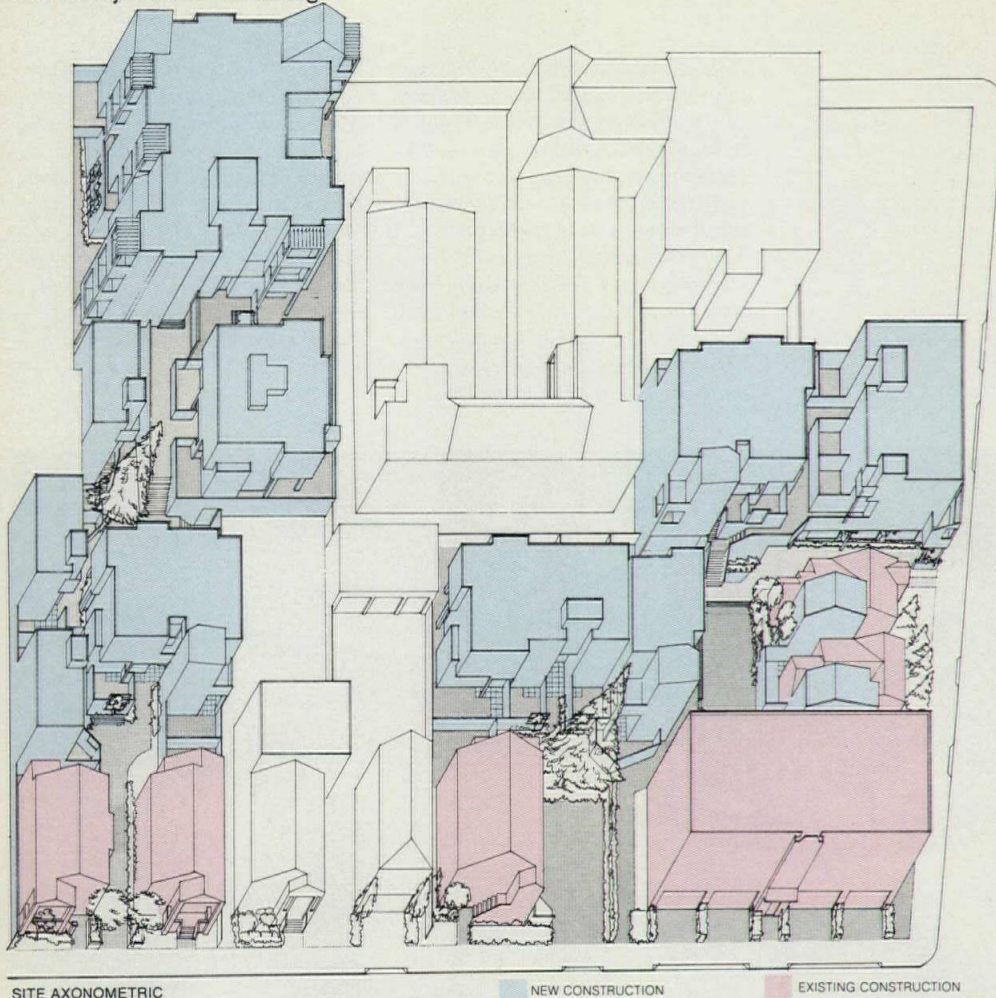
Not that the buildings are extravagant. Providing good housing for low-income residents precludes all but the most basic amenities. Still, piecemeal building inserted into a dense urban site—the result of decisions to rehabilitate existing structures—is inherently more expensive than repetitive units on open land.

According to the architects, “Each time the project went over the brink, Joel Rubenzahl

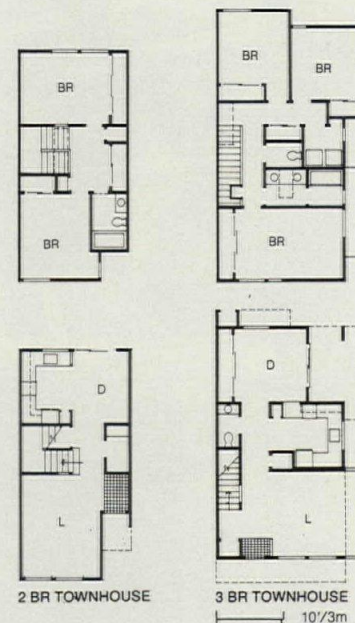
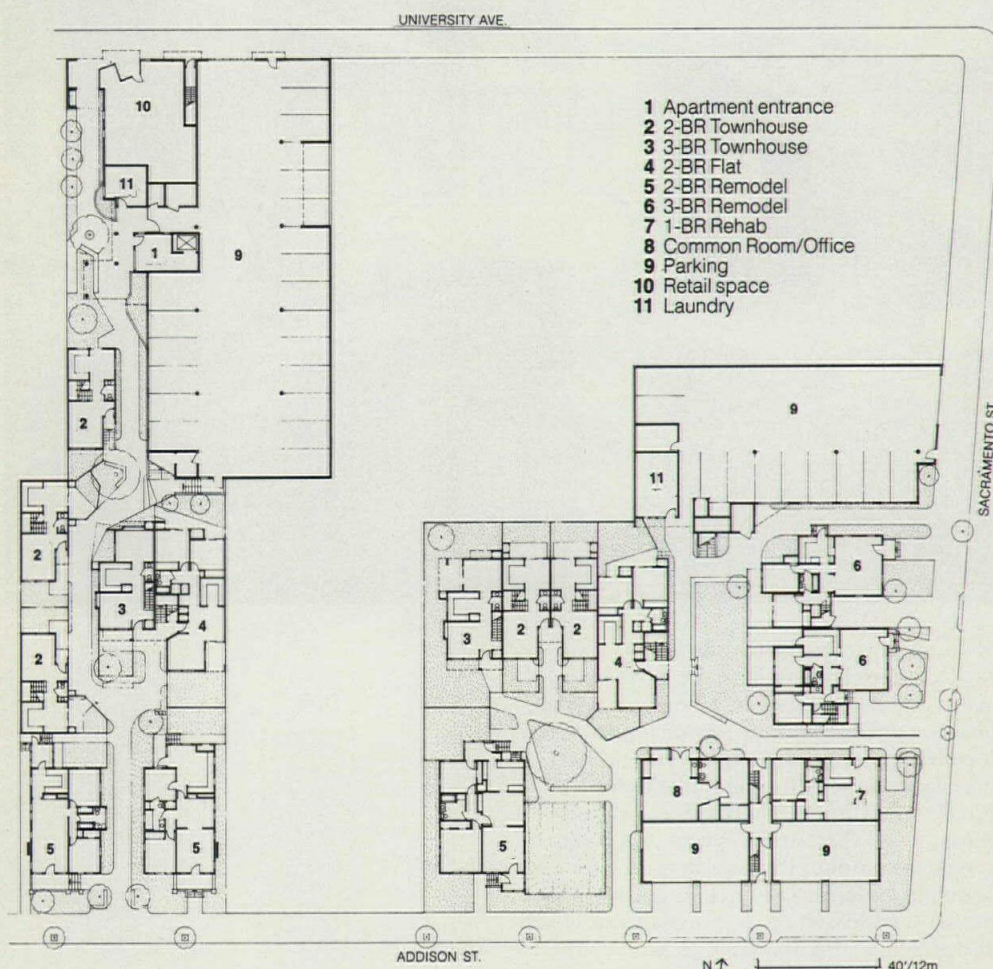
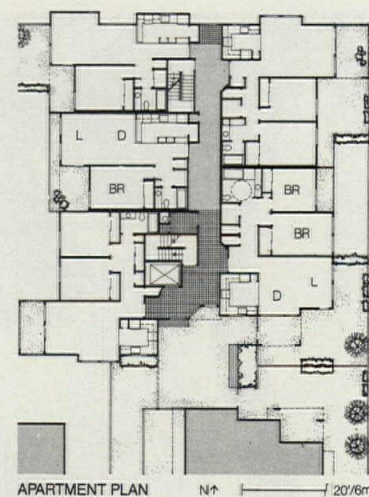
of Community Economics invented some new life line that would make us all believe again that it was possible even as we scrambled to cut costs without sacrificing fundamental amenities or compromising the dignity of those who would live there.” Finally, the City purchased the land and leased it to UAH, and a syndicated group of investors committed capital in return for tax benefits on depreciation. The Cooperative, in turn, has leased the buildings from UAH and will have the first right to acquire the property at the end of a designated period. Having qualified by income level, each resident owns a share in the Cooperative and receives a rent subsidy through the HUD Section 8 program. Construction financing



## University Avenue Housing



The 47 units include five remodeled bungalows, two of them enlarged with two-story bedroom "towers," 12 townhouses, six low-rise flats, nine one-bedroom units in a renovated apartment building, and 15 apartments in the new structure on busy University Avenue (photo opposite). Adjoining picturesque Fox Court (left in photo) the new building is topped by a steep gable. All new units have balconies; townhouses (plans below) have skylights over stairwells.



and the permanent mortgage on the buildings were provided by the California Housing Finance Agency.

If low-income housing as a category evokes a stereotypical image, the UACH complex easily breaks the mold. Among other things, a range of ages from child to senior citizen fosters diversity of life style, and the elderly appear to mix well with growing families. Mixing appears to be invitational or casual rather than forced by spatial circumstance. In this respect, the architects have shown consummate good sense in the orchestration of private and public spaces. Instead of a site plan with a large shared space, they have created a variety of more or less private spaces partially screened by lattices and low fences. Thus personal gardens also benefit



**Project:** University Avenue Cooperative Homes, Berkeley, Calif.  
**Architects:** Lyndon/Buchanan Associates, Berkeley (Donlyn Lyndon, Marvin Buchanan, Karen Burks, Tim Craig).

**Client:** University Avenue Housing Cooperative, Berkeley.

**Site:** two 1/2-acre parcels on a city block; five existing houses and a small apartment building retained.

**Program:** 47 units of one- to -three bedrooms; 33 units (38,000 sq ft) in new construction; 14 units (12,000 sq ft) in remodeled buildings; parking (11,000 sq ft).

**Structural system:** concrete slabs on grade, parking decks; wood frame.

**Major materials:** stucco exterior walls; aluminum windows; gypsum board interior walls (see Building materials list, p. 130).

**Mechanical system:** gas forced air, individual units.

**Consultants:** Mai K. Arbogast, landscape; Leong/Razzano Associates, structural; C.F. Ng, mechanical; Stanley H. Anderson, electrical; John Hollenbeck Associates, irrigation; James Kehlor, civil.

**General contractor:** W.E. Lyons Construction Co.

**Costs:** \$2,655,558 (actual, 1982), \$55 per sq ft, includes site work and landscaping.

**Photography:** Jane Lidz.



the whole community. The decision to insert different combinations of new dwelling units among rehabilitated existing buildings of several types turned potential limitations to advantage, endowing the place with the character of an ongoing community.

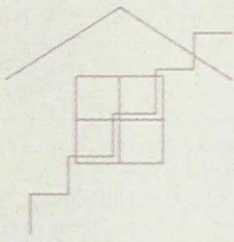
To make a seamless fit with the neighborhood meant that the buildings had to change character from residential on Addison Street to mixed-use on University Avenue. The rehabilitated buildings include three bungalows and a corner apartment building on Addison Street, and two picturesque cottages on Sacramento Street. Three rental cottages and two garages were removed from the interior and replaced with higher density

dwelling units. On University Ave., a parking lot became the garage under a new apartment building which defined a more appropriate scale for this important street leading to the U.C. campus.

The social coherence of UACH is as remarkable as the architectural. Buildings were completed in phases so that some could be occupied before completion of the whole project, thus helping with the financing and assisting the formation of the social side of the cooperative. Despite the usual difficulties of ongoing construction, the first residents became the core group that introduced the newcomers to the project. Though the life of the co-op has just begun, integration of all elements is well advanced.

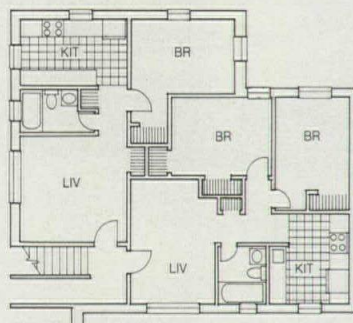
[Sally Woodbridge]



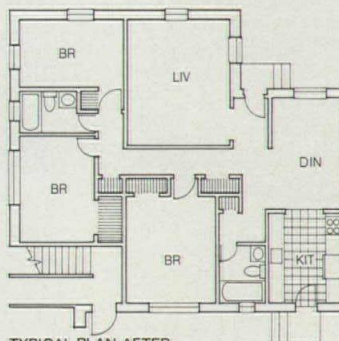


Lane/Frenchman; Goody, Clancy  
Peterson, Littenberg

# Beyond cosmetics



TYPICAL PLAN BEFORE



TYPICAL PLAN AFTER

**T**he partial demolition of Pruitt-Igoe dramatized the physical and social problems of public housing in this country, but as a solution applicable to similar projects, it had little relevance. Most cities have not nearly enough new public housing to justify demolishing what they have. And as all types of rental housing become more scarce, cities have begun to see their public housing, however deteriorated, as a valuable commodity, often conveniently located and structurally sound. Rehabilitation, rather than demolition, has become the course cities now follow.

Unfortunately, because of inadequate funding, most of the rehabilitation that has occurred has focused on cosmetic improvements such as painting or recladding build-

ings rather than on substantial improvements to the layout of the buildings and grounds or to job opportunities and social services for the residents. What distinguishes the following projects is how far they go beyond cosmetics.

## West Broadway

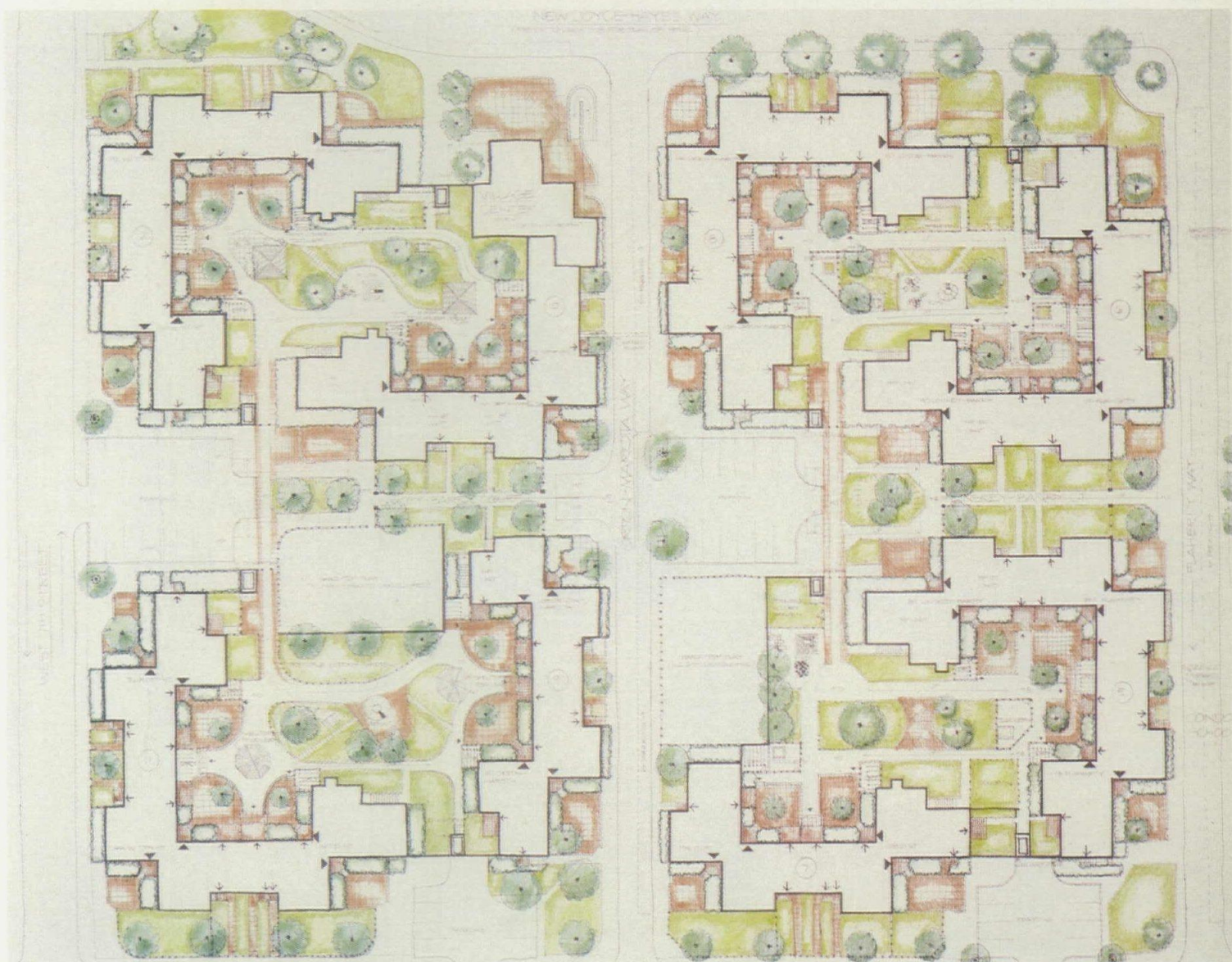
The rehabilitation of the West Broadway public housing in Boston by Lane/Frenchman and Goody, Clancy & Associates alters not just the appearance, but the organization and management of the project.

With almost 300 empty units in the project, the architects increased the size of the apart-



The rendering (opposite top) shows the gable roofs, bay windows, entry hoods, and painted and stucco finishes added to the existing, flat-roof, brick buildings to give them more identity. New through streets allow more curb-side parking and a better integration of the project with the surrounding neighborhood. The typical unit plans (opposite bottom) indicate how the existing plans will be combined to create units more in keeping with current space stand-

ards. Many first-floor units will have their own front and back doors. Each pair of buildings (below) forms a "village." Residents in each village participated in the design and programming of the semiprivate courtyards, so that no two are alike. The courtyards will contain drying yards, playgrounds, raised terraces, and shaded seating areas.



ments (without displacing people) by connecting some flats horizontally and others vertically. Large family units have their own front and back entries. The courtyards, through the construction of walls, fences, and raised terraces, become semiprivate backyards for the apartments in each pair of buildings or "village," making the space more secure and easily maintained. New through streets allow curbside parking while a new "main street" provides a focus for the project, containing community facilities such as the management offices and the teen and elderly centers.

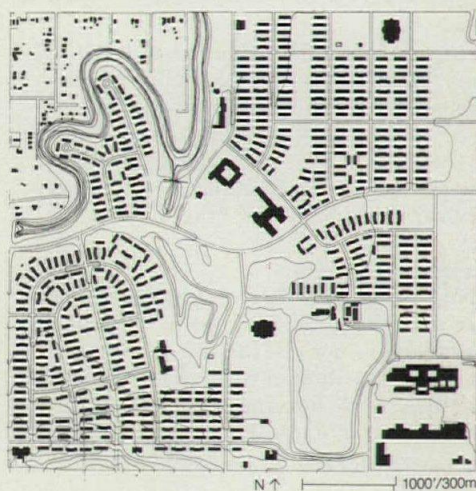
To break up the project's scale and to lend identity to each village, the architects added such elements as hip roofs, bay windows, and entry hoods to the buildings and varied the

colors and materials. Courtyard designs also vary, based upon the suggestions of residents. The breaking down of the project's physical scale is echoed in its decentralized management, with each village having its own manager as well as management positions for people living in the project.

#### Lake West

What makes Lake West, a proposed rehabilitation of the public housing in West Dallas, significant is not just the size of the project (its 3500 townhouses made it the largest low-rise public housing project in the country), but its ambition. The scheme, developed by Peterson, Littenberg, Architects, with

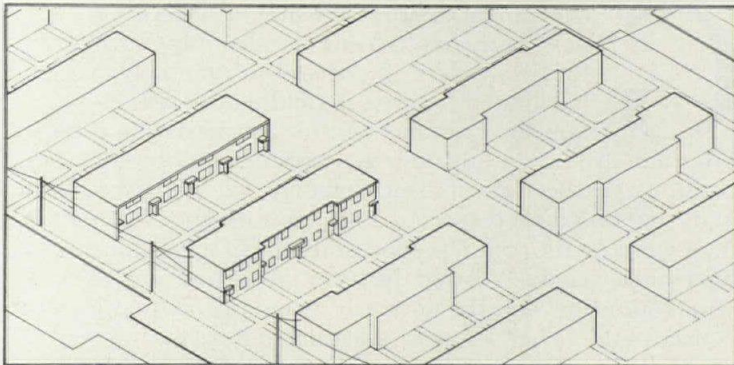




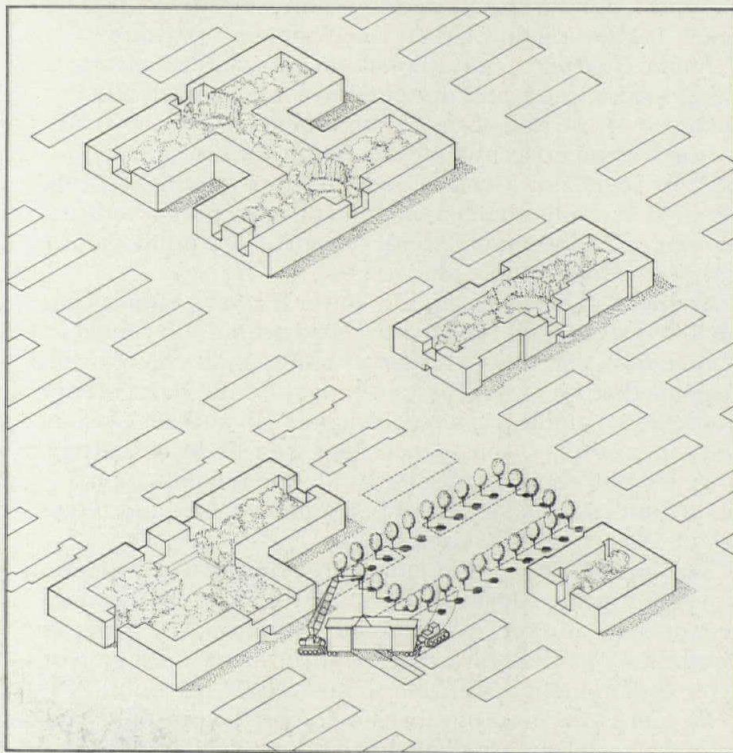
associated architects Selzer-Volk-Borne, engineers Carter & Burgess, and Real Estate Research Corporation, has some elements in common with the Boston project. It increases the number of through streets to give each unit an address and curbside parking; creates urban blocks and squares by demolishing or rearranging the monotonous rows of buildings; provides semiprivate courtyards with walls, gates, and landscaping; and improves the residential image of the project with the addition of gabled roofs, doorway hoods, and classically inspired trim.

Where Lake West differs is in its creation of a multidimensional town, with a mix of incomes, building types, and job opportunities. The proposal calls for a sizable town

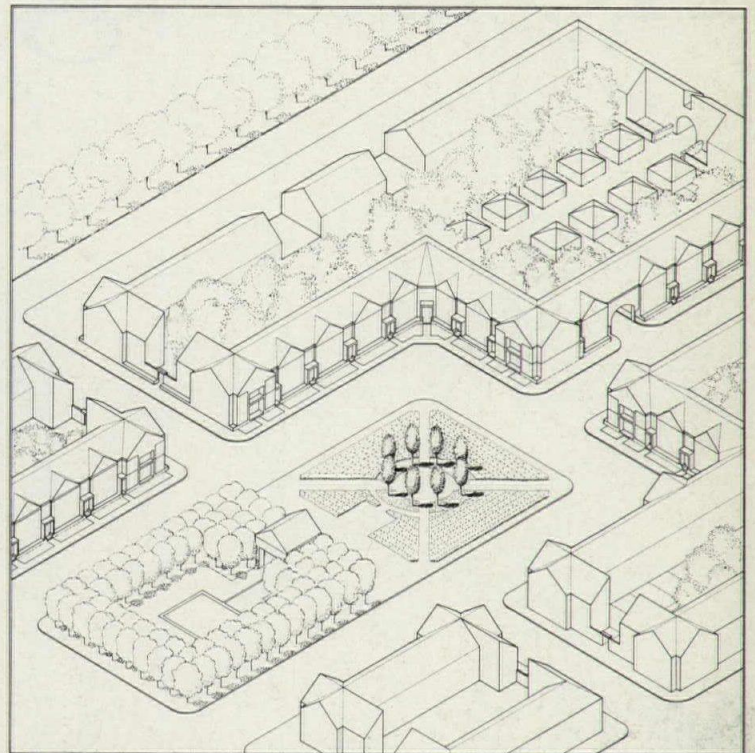




EXISTING BARS OF HOUSING



HOUSING MOVED OR DEMOLISHED TO MAKE BLOCKS



RESULTING HOUSING BLOCKS DEFINING SPACE

*The existing and proposed site plans (opposite) show the conversion of the parallel bars of buildings into blocks that enclose private courts and define public squares. The extent of conversion is apparent in the axonometrics (left and below). The rectangular blocks will enclose private yards and pedestrian walks; the L- and H-shaped blocks also will have parking garages. The buildings themselves will receive gable roofs, porches, gateways, and added trim.*

center containing retail space, multifamily housing, a community campus, elderly units in twin towers, and extensive landscaping forming an amphitheater, canal, lagoon, and town green. Even more daring than these grand public spaces, though, are efforts to make the project function as a town. Offices and warehouses at the southern edge of the site provide jobs and job training, market rate as well as moderate rate and subsidized rental units attract a greater diversity of people and incomes, and condominiums (with private yards and garages) and detached houses (some moved from adjacent neighborhoods) encourage home ownership—something that many tenants indicated that they wanted and, with a subsidized mortgage program, could afford.

Both the Boston and Dallas projects apply—brilliantly—the lessons learned about public housing over the last 20 years: lessons about defensible space, residential imagery, and low-rise family housing. And both present a new vision of what public housing could be: collections of semiautonomous villages or self-sufficient towns that are socially and economically integrated and that act as their own magnets for jobs and services. What's lacking from our policy makers is an equivalent public vision and as strong a commitment to preserve what has become a valuable resource: public housing. [Thomas Fisher]



# Essays on social housing



## Introduction

**G**overnment-assisted housing in America is passing through a radical transition: Assistance for developers of new and substantially rehabilitated housing is yielding the last, diminished number of units; superseding these programs are expanding ones that assist tenants to rent existing units. At this time of critical change, we have asked some of the nation's most respected authorities on housing to share their views on the condition and potential of social housing in the United States. (We used the term "social housing" to elicit observations beyond the narrowly economic ones implied by "subsidized.") Their essays are arranged here to proceed generally from issues of policy to aspects of design. As background for these essays, we offer a brief rundown of Department of Housing and Urban Development programs.

**Public Housing.** Conventional low-rent public housing is developed, owned, and operated by local agencies and financed by the sale of tax-exempt bonds, which are paid off by the federal government. Operating costs, originally covered by rents, now demand federal support, which in 1983 reached \$1.2 billion. Rehabilitation of aging public housing is also getting substantial federal support. New public housing has been almost totally phased out.

**Section 8.** This program for "lower income" families has included a range of types: new construction, substantial rehabilitation, and now—in sharply rising numbers—existing housing that meets quality standards and "fair market rental" guidelines. Families certified as eligible can now get assistance to rent existing housing—including their present quarters. Owners may get assistance for moderate rehabilitation to make units qualify. Section 8 programs for new and remodeled units are being phased out.

**Section 202.** Low-interest loans are offered to developers of housing for the elderly or the handicapped. Low-income tenants may also receive Section 8 assistance. The program continues, but 1982 directives require "modest design" for "cost containment" estimated to save \$4000 per unit.

**Section 236.** This program combined reduction of mortgage interest for developers of qualified housing with rent support for some tenants. A major construction incentive in the 1970s, the program has been phased out, but about one half million tenants still receive 236 assistance.

**Block grant programs.** Community Development Block Grants are made to states and localities to promote community development objectives. Urban Development Action Grants go to "distressed communities" mainly for economic development, only partly for "neighborhoods." There must be local government or private funding at least 2½ times the federal contribution, usually much more.

**Housing vouchers.** Subject of a pilot program with debatable results (see essays by Downs and Sternlieb), housing vouchers are proposed by the Administration for full implementation next fiscal year. Tenants would receive the difference between "fair market rental" of appropriate units and 30 percent of their income. Recipients could choose units at rentals above or below guidelines without affecting amount of their assistance. [John Morris Dixon]





## Dealing with the affordability crisis

Chester Hartman

*Fellow,  
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That America is experiencing its greatest housing crisis since the Depression should not be doubted. It is a crisis of affordability. The 1981 Annual Housing Survey reported that 25 million households, renters, and owners, were paying more than a quarter of their incomes for shelter, of which 8 million were paying more than *half* their incomes. Between 1975 and 1981, because of escalating house prices and interest rates, the income needed to afford a 75 percent mortgage on the average-priced new single-family home rose from two percent below the nation's median family income to nearly double the nation's median family income.

The reasons for this crisis? Simply, for most people, housing costs have been rising far faster than incomes. And the inevitable profit-maximizing behavior of the major actors in the housing process—credit suppliers, land sellers, developers, materials manufacturers, owners—drives shelter costs inexorably higher.

This affordability crisis is endemic to our system of housing production and operation. It has been successfully managed over recent decades through provision and manipulation of credit—postponing currently incurred costs until incomes can catch up with current consumption patterns. But this jury-rigged system can no longer do the trick. The economy is no longer growing in ways that can sustain so heavy a reliance on credit. New mortgage instruments are shifting the burden of inflation from lenders to borrowers. Consumers' ability to pay credit costs of all sorts is being strained to the breaking point, as rising mortgage foreclosure and default rates show. The forcible displacement of 2½ million Americans each year, and the increase in the most extreme housing problem of all—homelessness—are other indices of the affordability crisis.

The history of government-supported housing in the U.S. suggests the only way we can deal with the crisis is by removing housing from the profit sector. For all its faults (exaggerated by its critics, made virtually inevitable by the program's financing defects), public housing embodies two principles essential to meeting the housing needs of lower- and moderate-income Americans: 1) capital costs are paid for just once, via a bond issue or grant, thus eliminating the mortgage structure that creates a permanent and ever larger financial burden on housing consumers; 2) the consumer's housing costs are determined by ability to pay.

We must redirect housing programs so that an ever-larger portion of the stock is developed, owned, and operated by government and private sector nonprofit agencies, financed without ongoing mortgages, and never treated as a commodity. And ability-to-pay standards, rather than being a fixed percentage of income, must be related to household size and income, which determine what households can afford for all necessities of life.

The costs of such a program will of course be vastly more than the government now allocates to housing—although long-term housing costs to the society will be markedly reduced, without the ongoing burden of repaying borrowed capital. But the nature of the housing cost/household income gap is such that we will never provide every American household with a decent, affordable home in a suitable living environment without greater government subsidies. And the cost is not so large, compared with our unproductive, hazardous "defense" expenditures, or even with the government's biggest housing program of all, the homeowner deduction, which, at \$45 billion a year, is about six times what the government spends directly for low-income housing subsidies, and which primarily aids those who need help the least, the upper middle class and the superrich.

Chester Hartman is author of *Housing and Social Policy* (Prentice Hall, 1975), *Housing Urban America* (Adline, rev. ed., 1980), and *The Transformation of San Francisco* (Rowan & Allanheld, 1984).



## The dim phoenix: U.S. social housing

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It is more than a decade since President Nixon imposed a moratorium on direct federal subsidization of low-income housing, with remarkably little in the way of protest. The rise, and brief moment in the sun, of Section 8 subsidies has largely come to an end; the pipelines of old programs have run dry with little in the way of replacement. Why?

Housing programs, with the possible exception of the conscience-stricken period of the Great Society and the urban riots, have been most fruitful for the poor when placed in the context of omnibus programs, i.e., housing that provides shelter and opportunity for a broad spectrum of the public. They suffer when focused on the needs of the poor alone. In recent years, they have faced an electorate that is more concerned with the future of middle America—and a crisis of confidence in its own capacity to sustain the good life—than it is with the issues of equity. Limited-growth societies—sadly enough, characteristic of the U.S. through most of the 1970s and early 1980s—are not societies that give great priority to the caboose on the economic train.

In social housing, the current Administration is following a path defined by its predecessor. The social compact of New Deal days, which used housing ownership accessibility as part of the glue to the social system, has largely been abrogated. Indeed, there are some members of the Reagan economic team who view an assumed pattern of overexpenditure in housing as part and parcel of the failure of America's economic mechanisms to keep pace with competition. Their basic approach to housing, therefore, revolves around loopholes in taxes, rather than explicit subsidies. Thus, the 15-year write-off now available for apartment development is attracting hordes of refugees from high-tax levels. The rise of the secondary mortgage market has provided a new liquidity for housing debt, and has lowered much of its cost, with 60–80 percent of home mortgages supported by FNMA or GNMA guarantees, with their close equivalence to government bond rates. The latter, certainly, are high enough, but the gap between 30-year government and mortgage interest rates has never been so low. When coupled with the increased use (and sometimes misuse, through buy-downs) of variable-rate mortgages, they've made housing the *wunderkind* of 1983/early 1984.

But these are programs that are neither targeted—nor particularly significant—to the provision of social housing. They facilitate the middle range without requiring a strong, broad political constituency. Indeed, they rather exclude the poor. The Administration has proposed housing vouchers, i.e., demand-side inputs, in place of the augmented supplies that were envisioned under 235–236 or Section 8 New Construction. This venture seems to have little in the way of priority attached to it, and for the moment is lost in the congressional committee system, residing in the same cavern of inattention as the Urban Enterprise Zone.

Will social housing emerge as a new priority? I would suggest that this could take place only at two potential ends of the economic spectrum: as a result of a change in administration, coupled with a severe downturn of the economy, with social housing being used as a countercyclical tool, i.e., a reversion to its classic role dating back to the 1930s; or, second, with the sudden reinvention of black political potency, as part of an omnibus new general housing bill replacing the present approach, which is flooding the government bond market. In the meantime, the field of social housing, in and of itself, has many friends—but few potent lovers.





## Why housing vouchers

Anthony Downs

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The main "housing problem" in the U.S. is caused by poverty, not by shortages of decent quality housing. Because those of poor households must spend high fractions of their incomes to occupy decent units, their other purchases are restricted, or they occupy cheaper, poor quality housing.

The best remedy would be improving the incomes of the poor through both lower unemployment and more extensive income transfer programs. Such goals should have much higher social priority than any housing support programs. However, Congress has historically refused to expand income support programs enough to eliminate poverty. It prefers in-kind assistance, presumably because the industries furnishing it benefit too. Examples are food stamps and Medicare.

If further aid to the poor is to be provided through housing-linked aid, a housing voucher entitlement program for low-income renters would be the best form. It would pay the difference between the average rent for a decent unit in each area and a certain fraction of the household income, say 30 percent. All renters with incomes below one-half of each area's median should be eligible. The Experimental Housing Allowance Program showed that only 40–50 percent of those eligible actually participate—vs. about 80 percent in a "pure" income support program. Renters must reside in "decent quality" units to receive aid, but many in substandard units do not choose to upgrade or move in order to qualify.

Although a housing voucher entitlement program would not benefit architects much, it has several advantages over new construction subsidies. It costs only about half as much per household aided, because all newly built units cost far more than the poor can afford. It makes more sense to let those of non-poor households occupy new units, and help the poor pay for older ones that have filtered down through the inventory but are still in good condition. The chance to receive housing vouchers would also motivate many landlords to renovate older units that are in poor condition.

Second, a housing voucher program does not generate local controversy about where to put subsidized housing. The recipients simply rent existing units in the market. Third, it has modest spatial integration effect. It helps some households move out of poverty areas, and some blacks move into integrated neighborhoods. Fourth, it would actually aid a much higher fraction of all eligible households than construction subsidies. The latter are so costly that Congress would never make them available to even one-half of all eligible households.

A housing voucher entitlement program has two main drawbacks. It would cost at least \$8–10 billion per year. However, we could pay that without increasing the federal deficit by reducing homeownership tax benefits, which now go mainly to affluent households, by about 25 percent. Also, though a housing voucher program would stimulate renovation, it would not stimulate much new housing construction.

Even so, I believe government aid for the poor should aim mainly at their poverty rather than their housing. A housing voucher entitlement program financed by reducing homeownership tax benefits would do just that. Most of the funds would be used as direct income supplements. This would both increase the justice of the overall distribution of housing assistance among U.S. households, and effectively attack the nation's severest housing problem.

\* The views expressed in this article are solely the author's, not necessarily those of the Brookings Institution, its Trustees, or its other staff members.



## Integrating housing with other efforts

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We can no longer afford to solve social, economic, and environmental problems separately. Housing, transportation, land use, pollution, energy, and ecological issues can no longer be compartmentalized and treated with individual mitigations, subsidies, or camouflage. There is, oddly, a great hope in the frugality that is currently causing such dismay. It is that our solutions must become multifaceted, combining efficiencies and capital from sources heretofore unrelated.

Let us take, for example, transportation. A study of the Washington, D.C., Metro showed that the complete system could have been paid for by capturing the increased land value around the terminals. Seen inversely, a transit system has the capacity to generate a massive subsidy for housing projects if the two are considered simultaneously. Instead, affordable housing is currently driven to the extremities of our metropolitan areas to find cheap land. This pattern puts further stresses on the transit system and places the cost and time burden of commuting on those least able to afford it, the working poor.

In 1879 Henry George, a San Francisco journalist, published *Progress and Poverty*, a radical economic thesis based on land distribution. He had recognized that the great U.S. transcontinental railroad's completion had obviously increased land values around the Bay Area tremendously, and he questioned who truly had a right to that margin of value. Ebenezer Howard was profoundly influenced by George's theories and, in modified terms, used them as the basis for his Garden Cities. In his *New Towns*, he proposed that "The change in land values created by the community should be enjoyed by the community." In this case, the existence of a working population rather than a new transportation system was creating value. But the concept is the same. Increasing land value that results from a public act should be captured for the common good.

There are several contemporary ways of employing this concept. If, for instance, a light rail system is deemed feasible in an area, to be paid for by state highway funds, eminent domain is typically used to acquire the land at current market values. Additional land at the stops could be purchased, zoned for mixed use, and leased or sold to developers for a large profit. This money could be used for subsidized housing co-ops and to pay partly for the transit system itself. The beauty is that it places affordable housing where it should be, near services and transit, it reinforces the ridership of the rail line and therefore the economics of the system, and it doesn't cost the taxpayer.

In a similar manner, land zoned for office and general employment uses derives an indirect incremental value if housing, and therefore the workforce, is conveniently located. Seen inversely, office construction often creates a local housing shortage. Correcting this reestablishes the value of the commercial development and should therefore be subsidized by it. San Francisco has a program of taxing office developers to fund housing subsidies.

Energy conservation provides another example of solving simultaneously previously unconnected problems. Life-cycle costs indicate that efficient homes can stand larger mortgages and, more important, reduce peak demands on the utility companies, thus avoiding new power plant construction, another potential subsidy.

These are just a few of the many opportunities to show that the sum of two problems is perhaps none. If we can no longer afford to subsidize each of our problems individually, perhaps we may be forced to learn the lessons of whole systems design.

Peter Calthorpe is coauthor, with Sim Van der Ryn, of *Sustainable Communities* (in process).





## Needed: A new housing movement

C. Richard Hatch

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of Technology.*

If we are to resolve the linked problems of housing affordability, production, quality, and control, America will need a new housing coalition. The traditional political bloc has collapsed. Developers have gone either "up scale" or out of business with the escalation of interest rates. Bankers have found balance sheet bliss far afield from housing construction. Only lumber companies, scattered trade unionists, and the occasional community coalition remain to watch over the dissolution of the federal housing empire.

Washington is concerned more with the housing of missiles than people. A mean-spirited administration suggests it is unmanly to care about those who have not won big in life's race. However, the situation is serious: only ten percent of families can afford new housing; production is far too low to accommodate new households, much less permit replacement of the obsolescent stock. Perhaps an effective coalition can be built around local needs and local action. We will need an institutional structure that encourages broad participation, a model that reflects the diversity of people and places, a program that avoids both "giveaways" to avaricious developers and the inflationary potential of income supplements such as housing vouchers.

The Mutual Housing Association is such a concept. Familiar in Europe—where MHAs operate huge quantities of housing—as an outgrowth of the labor movement, and tried by unions here in the past, it is an idea whose time has come again. MHAs are nonprofit, membership organizations. Some have been formed to deal with the housing needs of particular neighborhoods, others with those of particular groups—workers, artists, the handicapped. An MHA is a professionally staffed development vehicle that utilizes members' dues and savings (many function as thrift institutions) and management fees from completed projects to leverage new ones.

Recent American efforts to adapt the MHA model have gotten off the ground by rehabbing foreclosed buildings, using a combination of CDBG loans, sweat equity, and bank financing. In contrast, European MHAs rely on an unusual and cost-effective form of subsidy. After approving quality and costs, governments there provide variable development grants. The one-time grant concept encourages housing production, but at a lower cost to the taxpayer than the long-term subsidies of Section 8 and similar programs. MHAs couple these grants with conventional mortgages to build housing. The grants are calculated to reduce carrying costs to levels within the reach of intended residents—those at the top of the MHA's waiting list.

Completed MHA housing may be offered as rentals or limited equity cooperatives. A permanent "mother-daughter" relationship between projects and the MHA guarantees professional operation and maintenance. Residents participate in management decisions and, as MHA members, elect representatives to the MHA Board. Membership recruitment leads to increased popular involvement in housing issues. Commitment to ownership and management puts emphasis on quality construction. Local control and popular participation offers support for innovative design. (Much of the highly regarded 20th-Century housing in Holland and Germany is MHA-sponsored.)

Architects can contribute to the housing movement as facilitators as well as designers. Knowledgeable about development procedures as well as local needs and opportunities, we can educate ourselves and take the lead in building a national network of MHAs. Working together we can focus attention on the housing problem, propose architectural solutions that win popular support, and generate demand for responsible and compassionate government.

C. Richard Hatch is Editor of *The Scope of Social Architecture* (Van Nostrand Reinhold, 1984).



## Redesigning the American dream

Dolores Hayden

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Americans cannot solve their current housing problems without reexamining the ideal of the single-family house—its history, and the ideals of family, gender, and society it embodies, as well as its design and financing, because this is what government has supported most heavily through private mortgage deductions and public road building.

Out of 80.4 million occupied housing units counted in the 1980 census, nearly two thirds, or 53.9 million housing units, are single-family detached homes. Owner-occupied units have been getting larger and larger in each decade since World War II: 84 percent consisted of five or more rooms in 1976. Yet households have been getting smaller, until nearly a quarter of all households in 1980 consisted of one person living alone, and close to a third consisted of two persons. The post-World War II veteran's family—father as breadwinner, mother as unpaid housewife—is no longer the dominant family type, yet most of our housing, including public housing, has been programmed and designed with this kind of household as the ideal to be supported or simulated.

The United States has a housing problem of disturbing complexity, a problem that, in different ways, affects rich and poor, male and female, young and old, white and minority Americans. We have not merely a housing shortage, but a broader set of unmet needs caused by the efforts of the entire society to fit itself into a housing pattern that reflects the dreams of the mid-19th Century better than the realities of the late 20th Century. Single-family suburban homes have become inseparable from the American dream of economic success and upward mobility. Their presence pervades every aspect of economic, social, and political life in the United States, despite the fact that households are different today and women are now earners as well as nurturers.

A program broad enough to transform housework, housing design, and the economics of residential neighborhoods must, first, support women's and men's participation in the unpaid labor associated with housekeeping and child care on an equal basis; second, support women's and men's participation in the paid-labor force on an equal basis; third, reduce residential segregation by income, race, and age; fourth, minimize wasteful energy consumption; fifth, maximize real choices about recreation and sociability; and sixth, retain privacy in housing while adding new dwellings and new service options. While there are many partial reforms that can support these goals, a piecemeal strategy alone cannot achieve them because of the split between private and public life, which is at the heart of the problem. The reorganization of the built environment involves both the economic restructuring of a local community economic development program and the architectural restructuring of neighborhood space. Day care and jobs must become part of the previously private sphere of housing; at the same time, domestic values can enhance the public sphere.

Most employed women in the United States are not interested in having new bureaucracies run family life. They desire more sophisticated community services to support the private household, rather than an end to private life altogether. They also desire solutions that reinforce women's economic independence and safety, and enhance personal choices about child rearing and sociability. And they want home ownership, as an American tradition, albeit one that can be improved by moving away from the model of the owner as speculator and toward the limited equity cooperative.

Dolores Hayden is author of *The Grand Domestic Revolution* (MIT, 1981) and *Redesigning the American Dream: The Future of Housing, Work, and Family Life* (W.W. Norton, 1984), from which this essay is excerpted.





## Expanding the architect's design concerns

Oscar Newman

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and director of the  
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Architects can play a significant role in improving the lives of millions of low- and moderate-income Americans—the one substantial group in America whose housing we design. Single-family houses, for all but wealthiest, are designed by home builders; the design of dense, multifamily dwellings, however, requires the services of an architect. To this task architects bring a unique combination of skills: our knowledge of the techniques of construction; our artistic talents; our sensitivity to the psychological effects of space; and our ability to project a variety of spatial solutions to a single problem. We may take these multiple skills for granted, but who else possesses them? Certainly not housing bureaucrats, developers, or social scientists.

Architects can make the individual family home both more inviting and useful; they can facilitate the positive interaction of neighbors; they can enhance the image residents have of themselves in their community; and finally, they can reduce residents' vulnerability to antisocial behavior—not an inconsiderable problem in low-income neighborhoods.

Our institute's research these past 15 years has demonstrated that many of the above psychological factors are indeed controllable through the layout of individual dwellings, their grouping around collective areas, their positioning relative to streets, and the symbolic meaning of a dwelling's external form.

But—and there is always a but—to take on this crucial assignment and to discharge our social obligations well requires us to sublimate our visual predispositions and place the needs and tastes of our clients uppermost. To give an example: For most architects, Habitat '67 represents an ideal solution to the problem of high-density housing. Yet for all its height and mass, Habitat achieves only the density of row housing, and it does this at *eleven* times the cost. Furthermore, its units are small, its buildings have tremendous upkeep costs, and few families have direct access to the grounds. In total, Habitat '67 is little more than a spectacular solution to the visual boredom of row housing.

Given that the client we deal with in subsidized housing is the housing agency and rarely the tenant user, the restraints traditionally put on the architect are not in place here. It is, therefore, all the more essential that we give primary consideration to the needs of our client users and only secondary concern to the accolades of our peers.

In our institute's most recent work, we have been exploring programs to expand the role of the housing architect even further. We feel that in the early stages of project programming, architects have much to contribute by using their knowledge of the relationship between building type and family type to enable developers to achieve an overall high density while still ensuring that every life-style group is housed in the form of dwelling that most befits it. Similarly, much of the success of subsidized projects has been shown to be the consequence of the controlled mix of income and racial groups, and we feel that architects can play an important role here by using their experience to help determine policy. Finally, the success of the management and maintenance organization that is put in place once a building is occupied is far more related to the original design of a building than most recognize; architects, therefore, should be planning for management even as they begin the design of their buildings.

Oscar Newman is author of *Defensible Space* (New York, Macmillan, 1972) and *Community of Interest* (New York, Doubleday, 1980).



## Elderly housing: Warping the design process

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Federal Government regulation constrains and insults quality design. Where this has recently become most evident is in the creation of subsidized environments for elderly and disabled. The Section 202 Program, from the late 1970s to 1981, was beginning to stimulate quite varied and innovative building. Architects seemed to be competing in terms of quality as well as cost. In one Boston development alone, the improvement from 1972–1980 (in four successive buildings under the same sponsorship) stands as witness to the creative space and design innovation possible by an increasingly informed, evolving regulatory umbrella.

Using the euphemism “modest” to describe new design regulations, HUD now admonishes regional review authorities to extend the limitations on unit types, size, and amenities in 202 housing (HUD Notices H81-65; H83-9; H83-21). The precise ways in which these regressive and insensitive directives functionally and aesthetically affect the built environment are discernible. The architect and/or sponsor must “prove,” through costly review procedures, that any deviation from a shoe box will not exceed published Fair Market Rents (FMR). Varied roof lines, building articulations that reduce corridor length and allow natural light penetration, and contextually appropriate finishes are out.

Where, in earlier elderly settings, unit and building variations plus quality detailing were making notable contributions to the architectural landscape, the new directives virtually mandate a return to the traditional Public Housing image.

From the standpoint of interior specifications, the new “cost-containing” requirements are antithetical to comfort and habitability. For example, the recommendation to use larger rather than smaller windows creates difficulties for elderly in operating, cleaning, and draping, according to research I've done cross country. The recommendation for “full width, metal bifold closet doors” is directly in opposition to user experiences with them that we have encountered, and the reduced space allotments for one-bedroom units virtually trap the elderly couple in “tight spaces.”

In response to requests to architects and local agencies for opinions on the impact of current HUD regulations on design of 202 housing, I share the following:

“HUD's cost containment goals could certainly be achieved without forcing the architect to adopt simplistic design solutions.”

“The architect has to front-end all costs to closing. Given the new regulations, no one can afford design innovation.”

Government programs will continue to be critical for the *production* of housing, especially for the suburban elderly in the United States. There is increasing evidence that older people, particularly in the rental market, are seriously disadvantaged in their search for comfortable and supportive accommodations; thus income supplements alone are inappropriate to this constituency. While private developers and national franchises appear to be vigorously exploring the new market of old people, it is my belief that they, too, are going to require government incentives and, most certainly, guidance from a sophisticated group of now-knowledgeable architects. Massachusetts has taken a leading role in commitment to produce small-scaled congregate settings as a result of effective teamwork between citizen groups, architects, and researchers.

A penurious Federal Administration, in its short-run goal of trimming deficit, appears to be disinheriting environmental quality as well as the professional group that society has appointed producers of that quality.





## Particulars of housing design

Donlyn Lyndon

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**T**he problem for architects is not how to design good government-supported housing, but how to make places that people can call home. How resources can be allocated to make such places affordable (by subsidy, tax mechanisms, income redistribution, etc.) is a separate, albeit urgent, problem. The design of housing frequently becomes so beset by the demands of production (cheap construction, tight fees [paid late], insistent scheduling demands, and indolent bureaucratic procedures) that the problem is almost entirely transformed into a struggle between regulations and expediency. What it takes, nevertheless, to make places that people can call home is pretty straightforward: light, outlook, ease of movement, a chance to claim things as their own (to make choices), and connection to a community.

*Light* is important because it makes everything else in a place come alive. Shifting patterns and tonalities that well-placed light can give to a dwelling signal relationships to the immediate surroundings: light entering from only one side speaks of confinement; rooms with light from the sides or above evidently stand free.

*Outlook* is different from view. Outlook in dense housing is specific, filled with information about the collective of which it is a part, and crucial to the sense of differentiation that real places must develop. This requires the placement of openings that are specific to the dwelling and its position in the larger site. Stamped out patterns (poignant or otherwise) won't work. Looking from inside to out and from outside to in is a form of social exchange that needs subtle modulation. Privacy should be attainable, not physically enforced. Suggestively defined outdoor spaces establish territories for sociable exchange.

*Movement* contributes to the sense of underlying ease that is essential to feeling at home. The core movements in a place should be compact but gracious, not harshly channeled; this does not necessarily equate with "an efficient core."

Dignity lies in the allowance for making *choices*. Any housing community should include several forms of dwelling organization to allow for differences in living patterns and interests—even for differences in how we imagine ourselves. Good housing environments always go beyond what is simply expected. It is that extra care that counts: a craftsman's ingenuity in construction, a designed accommodation to existing features, or a tenant's investment in tulips. There must be space in which to improvise; niches and ledges and boundaries to collect the inhabitants' ongoing attention. Ideally (and most effectively), the occupants will first have a hand, or at least some voice, in creating the place, so that it becomes their own even as it is being built. But opportunities for participation must exist in the place itself, not only in the processes that produce it.

Finally, individual dwellings must have some evident relation to a larger community. To be prudent it makes more sense to fit new housing in among existing community and weave a common place than to isolate and segregate new construction from old, subsidized or not. The constraints of a specific site become assets in the creation of identity.

What it takes is to do more. The incentives are to do less. Individual attention is precisely what most government subsidy programs have discouraged. By combining an arduous, usually rigid review process with funding mechanisms that provide no money for design fees until the project is "closed" with an executed construction contract, the federal programs have created incentives for the mindless replication of approved patterns. This stamps projects with the marks of production simplicities to an extent that makes it hard for a building ever to belong in even the most ephemeral manner to its inhabitants.

Donlyn Lyndon is author of *The City Observed: Boston*, and coeditor of the periodical *Places* (MIT Press).



## Need for variety and personalization

Joan Goody and John Clancy

*Principals,  
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**A**s architects for a considerable amount of government-supported housing, from new projects for the elderly to the rehabilitation of large, distressed housing projects for families, we have some strong ideas about what makes a good place for living—and what leads to the dreary and abused places called "projects." A good place to live in is indeed a *living* place: it has and it remembers its past, it is responsive to the needs of its present occupants, and it suggests that there will be future changes to come. Unlike the identical, sterile, "faceless blocks" of the housing project (where the only changes are through defacement and graffiti), a good place to live in has variety and invites personalization. It may have a subtle variety (of differently shaped windows or roofs, of color for trim or doors, of garden fences or plantings). Ideally these variations and changes will have occurred over a long period of time, with each generation making its additions and alterations, enriching the whole.

When we build or renovate 100 or 1000 units of housing at once for a Public Housing Authority, it is difficult to create those differences and make them convincing. But it is possible to make a start by having variations within the limited palette usually allowed by tight budget and maintenance constraints. There must be more than one acceptable shade of brick or of wood stain. The same number of apartments can be accommodated in a group of buildings that vary from two to four stories as in all three-story blocks. And there must be ways to allow tenants to distinguish and personalize their own units with limited means: small garden areas, a place for a window box, or a front door embellishment.

This extension of the privately controlled domain of the tenants to their doorstep, window sill, or small yard gives increased opportunities for personalization and reduces the vast unclaimed territory that characterized the traditional "project." It can help create pride in one's home and can be extended to a sense of belonging and community.

Architects cannot do this alone—management must be a willing partner. And most important, the tenants must be involved in making group choices (from several reasonable alternates) of kitchen cabinet styles and flooring patterns, or play equipment and trim color. They bring a perspective and knowledge no outside expert can have, and when they know and understand the process of choice, the results are theirs—and more likely to be maintained and respected.

Alas, recent HUD regulations have all but eliminated any opportunities for these variations; only the plainest box is now allowed. All else is considered "frill." How shortsighted: It is just these small changes (adding truly little to the cost) that can make the difference between a living place and a dead project.

### Further reading

Basic housing statistics and Administration policies are spelled out in annual reports by the Secretary of Housing and Urban Development. Excellent policy discussion is found in *Housing America*, Annals of the American Academy of Political and Social Science, January 1983 (Sage Publications, Beverly Hills, Calif.)



## With Ma in mind

*No mixed metaphors mar this spare boutique, designed by Rei Kawakubo for her own line of clothing.*

Tokyo-based fashion designer Rei Kawakubo is hot. Her Comme des Garçons label epitomizes that peculiar savage grandeur that has made Japanese design a Western obsession, and the new shop for her collection in SoHo perfectly conveys the unyielding aesthetic. This is a design ethic that leaves nothing to chance, but relentlessly pursues the goal of total unity or "Ma." The clothes, the space and its fittings, even the music are rigorously coordinated, and Kawakubo controls it all, from the design of the clothes to their display in Tokyo, Paris, and now New York.

Fashion maven Dianne Benson, whose shop Dianne B. has become something of a SoHo landmark, is responsible for bringing Kawakubo's fashions to New York. It is Benson who found the space in the ground floor and basement of a designated landmark on Wooster St. Kawakubo saw the unrenovated space only once; her design concept, which was drawn up by Takao Kawasaki in Tokyo, was executed by Dianne Benson and Howard Reitzes of New York.

The SoHo shop is the first to carry the entire collection, with women's clothes on the ground floor and men's one flight below. (Each line is carried by a separate boutique in Tokyo.) Given Kawakubo's desire that the entire space be given over to the display of clothes, there is little or no conventional office/storage space, and much of the backstage business is actually carried out a block away

at Dianne B.'s. Significantly, the first major change proposed by Kawakubo was the removal of a skylight—the one conventional "perk" of the original space—across the rear of the ground floor.

Everything in the space conforms to the overriding aesthetic; container and contained are all of one piece. No price tags dangle from the merchandise, no loose sales slips clutter the discreet sales desks. Yet the space is *not* a cold one: its severe lines are modified by dramatic lighting, its austere shell tempered by irregular hand-smoothed plaster surfaces and rough wood display boards.

The shop's least successful feature is its rather heavy aluminum storefront. Kawakubo's proposed floor-to-ceiling glass storefront was not accepted by the landmarks review committee, but Benson expects eventually to replace the bright aluminum with a wood frame painted charcoal black more in keeping with the interior.

A second Comme des Garçons, scheduled to open in San Francisco the first week of September, is if anything more minimal than the first. The basement space off Union Square is to be entered by a bridge, which appears from the street to terminate in a blank, concrete wall. If Kawakubo has her way, no clothes will be visible from the street; only a discreetly lettered Comme des Garçons label will clue in the cognoscenti.

[Daralice D. Boles]

*The shop's organization on two floors (women's clothing on the first, men's below) is evident from the entrance (right). Much of the impact of the space is achieved through the contrast of materials and finishes, sharpened by dramatic spotlighting (facing page).*

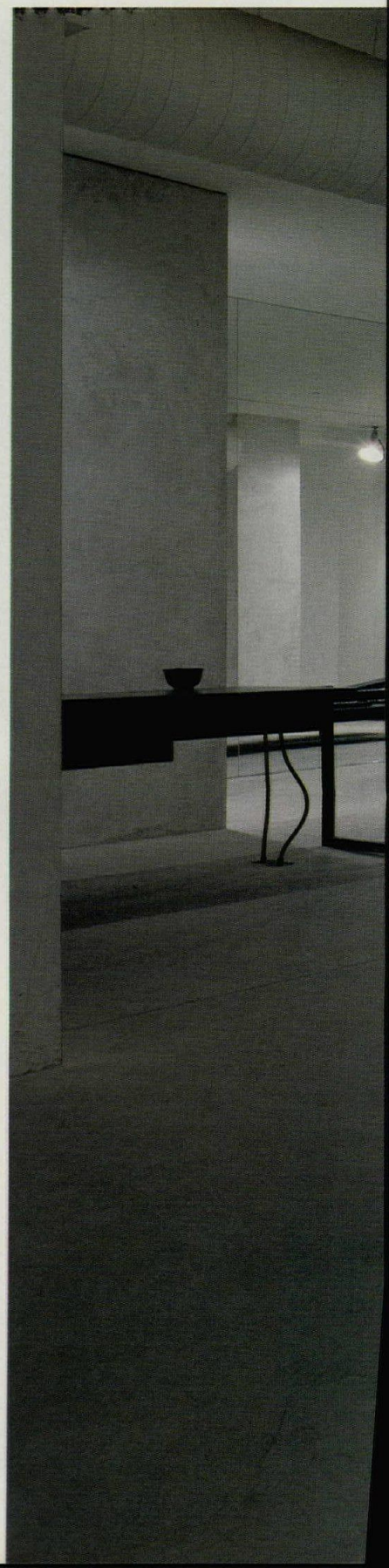








*On the ground floor, clothes are displayed on wall-mounted racks (below left) or freestanding sculptural display boards (facing page). Rubber curtains conceal the changing booths (below right), which are situated behind the cashier's counter (bottom left). Downstairs, wall-mounted display shelves and chrome-finished pipe racks line the space with a glass-topped cashier's counter at the rear (bottom right).*





**Project:** Comme des Garçons, New York.

**Design:** concept, Rei Kawakubo; executed by Takao Kawasaki, Tokyo; Howard Reitzes, architectural consultant, New York.

**Client:** Dianne Schools Benson.

**Program:** conversion of two floors of a designated historic landmark in SoHo to 6000 sq ft of retail.

**Structural system:** existing concrete foundation; brick bearing walls; wood floor; cast iron columns.

**Major materials:** concrete plaster walls, floors, shelves, and benches; clothing racks constructed of 4" diameter black pipe with chrome finish; display tables of 3" x 8" wood joists with black painted finish; cashier counter, ground level, of 2" x 2" angle iron with oak plywood top and black painted finish; rectangular tube railing (see Building materials, p. 130).

**Mechanical system:** oil-fired baseboard heating and central forced air; electric heating coils, lower level.

**Consultants:** James S. Kuncze, lighting and electrical contractor; Alatis Painting; Castel Iron Work, structural and decorative steel work; Parallel Fabricators & Construction, millwork; Silmac Glass & Storefront Corp., storefront; Palone Bros., air conditioning.

**Contractor:** Howard Reitzes, Parallel Fabricators & Construction.

**Photography:** Paul Warchol.





# Cheese biz

*A new headquarters for Parmesan cheese makers by Guido Canali includes offices, laboratories, and an experimental cheese dairy.*

"When we look at how other people make cheese, we don't look to Holland or Scandinavia, which are so famous for their cheese. This surprises many people," explained Italian dairy chemist Leo Bertozzi, at the Parmesan cheese consortium in Reggio-Emilia. "We look instead to France," he said, "because they still make it the same way we do: by the small, individual dairy farmer, rather than in large factories."

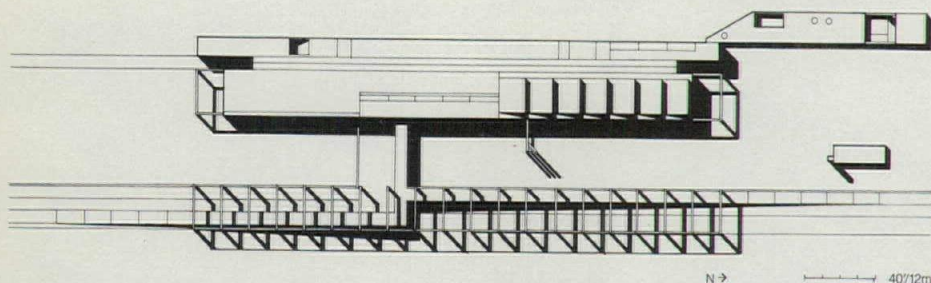
One advantage of the large factory, however, is that it can implement and maintain strict standards of quality control and other regulations. But with many small farmers making only one type of cheese, standards are much more difficult to maintain. Such is the case in the Po River Valley of Northern Italy where Parmesan cheese, which is correctly called Parmigiano-Reggiano, is made. There, around the five cities of Parma, Reggio-Emilia, Modena, Mantua, and Bologna, 1200 small dairy farmers still make Parmesan cheese today the way it is known, by written records, to have been made at least 700 years ago, and probably even longer.

One of the most recent developments in this long history of cheese making has been the establishment, in Reggio-Emilia, of one

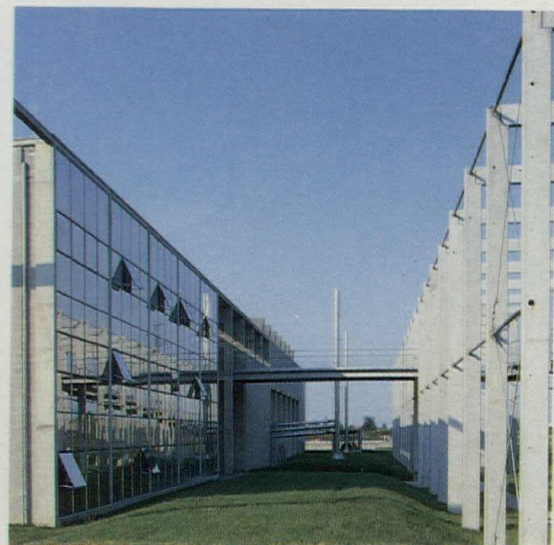
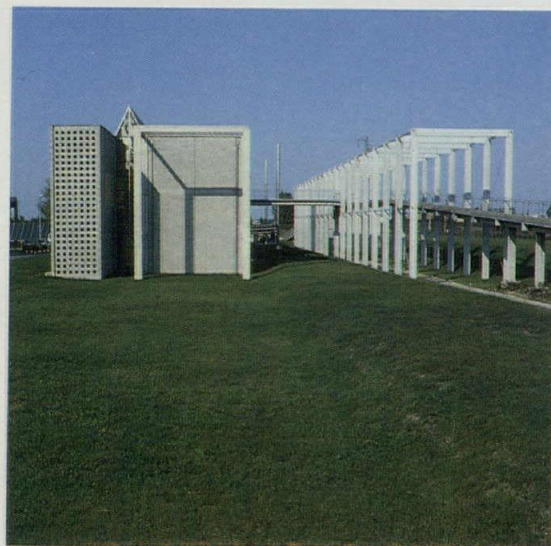
official organization for all of the cheese makers. Although regional headquarters still exist, such activities as gaining legal recognition of standards, of providing absolute guarantees of authenticity, of protecting the use of the brandname, and of experimentation will now mostly be centralized in one building. For these functions, the new building for the Consorzio del formaggio Parmigiano-Reggiano has been organized around an administrative/reception center, from which extend offices, meeting and conference rooms, an auditorium, laboratories, and even a small dairy and a caretaker's house.

The most noticeable feature of the building is the entry ramp, which takes pedestrians from the north and south ends of the site to the third level entry-reception area. Although the ramp serves a limited purpose now, since there are ground-level entrances at the east and west sides of the building, it was designed with other uses in mind. It was to be a means of circulation for the entire long and narrow site, which was originally planned for two additional linear buildings similar to the existing one. And, it was also designed originally to cross over the ring road to a housing complex at the north of the site, and to cross another road at the south of the site to join a public park. At that end, it was to pass through an antique cheese dairy which subsequently had to be removed.

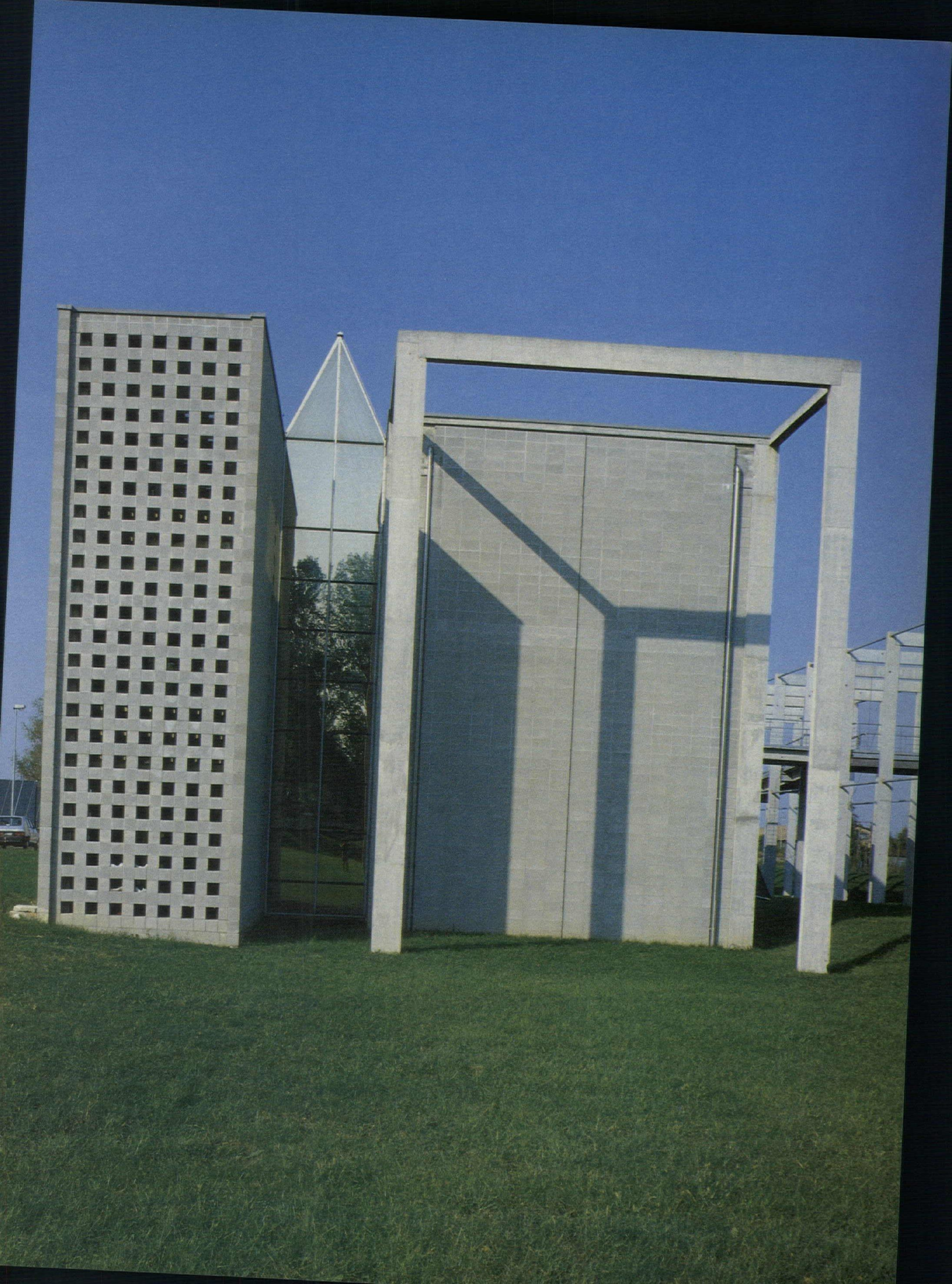
The main body of the building, which houses the offices, auditorium, meeting rooms, laboratories, and cheese dairy, is framed in the same reinforced concrete elements that support the suspended entry



*The cheese consortium is composed of four zones, shown in the site plan (above) including, from the east, site circulation, functional areas, interior circulation, and services. A caretaker's house is at the northwest corner of the building. The south side (right and facing page) faces the main street, but entries are at the east and west sides. The circulation ramp was to bridge streets at the ends of the long, narrow site, but does not serve that function as built.*

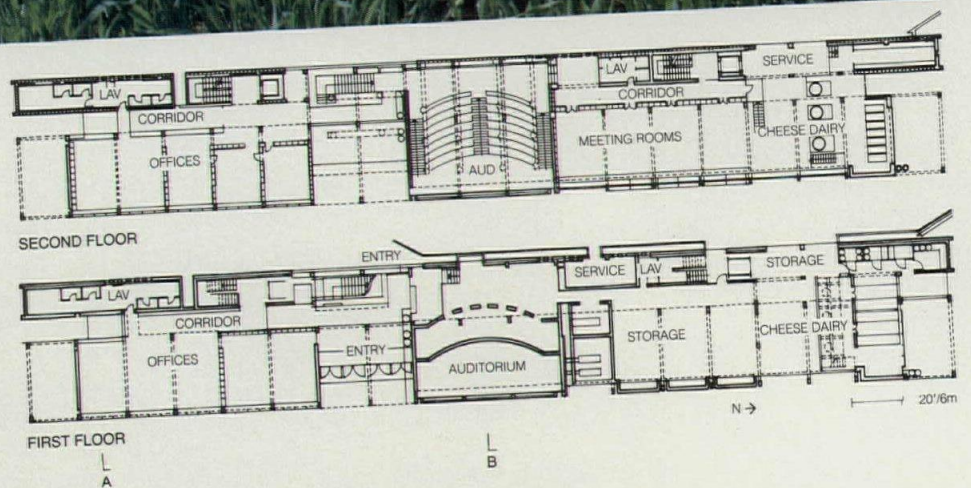
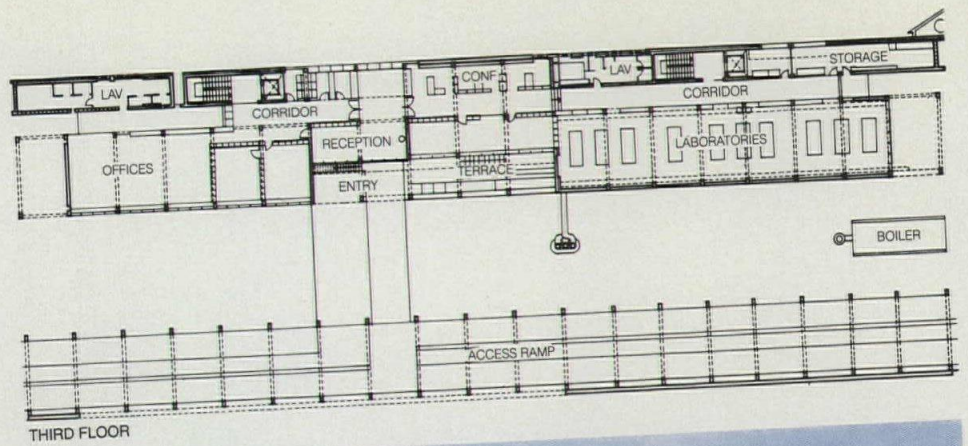








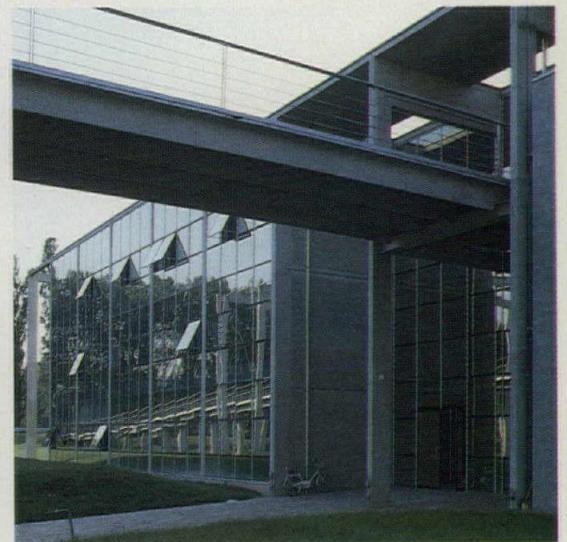
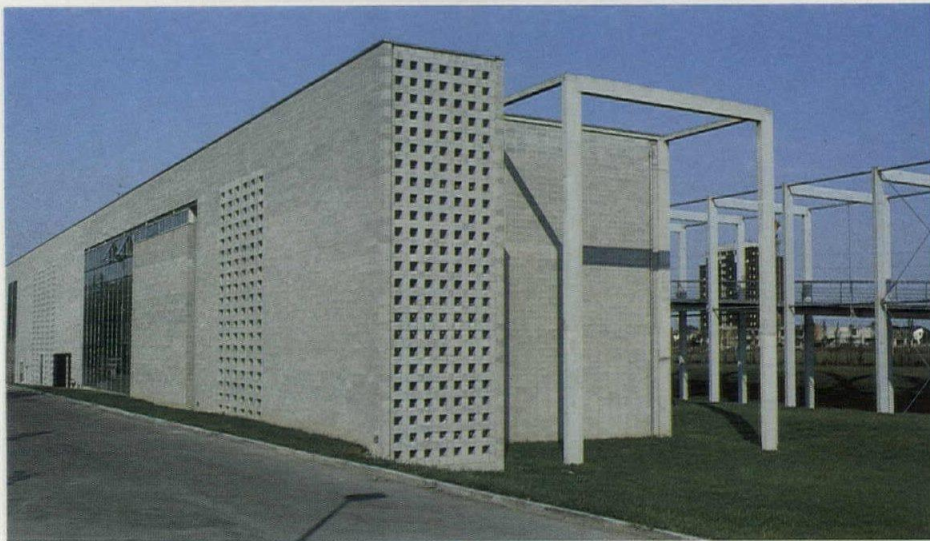
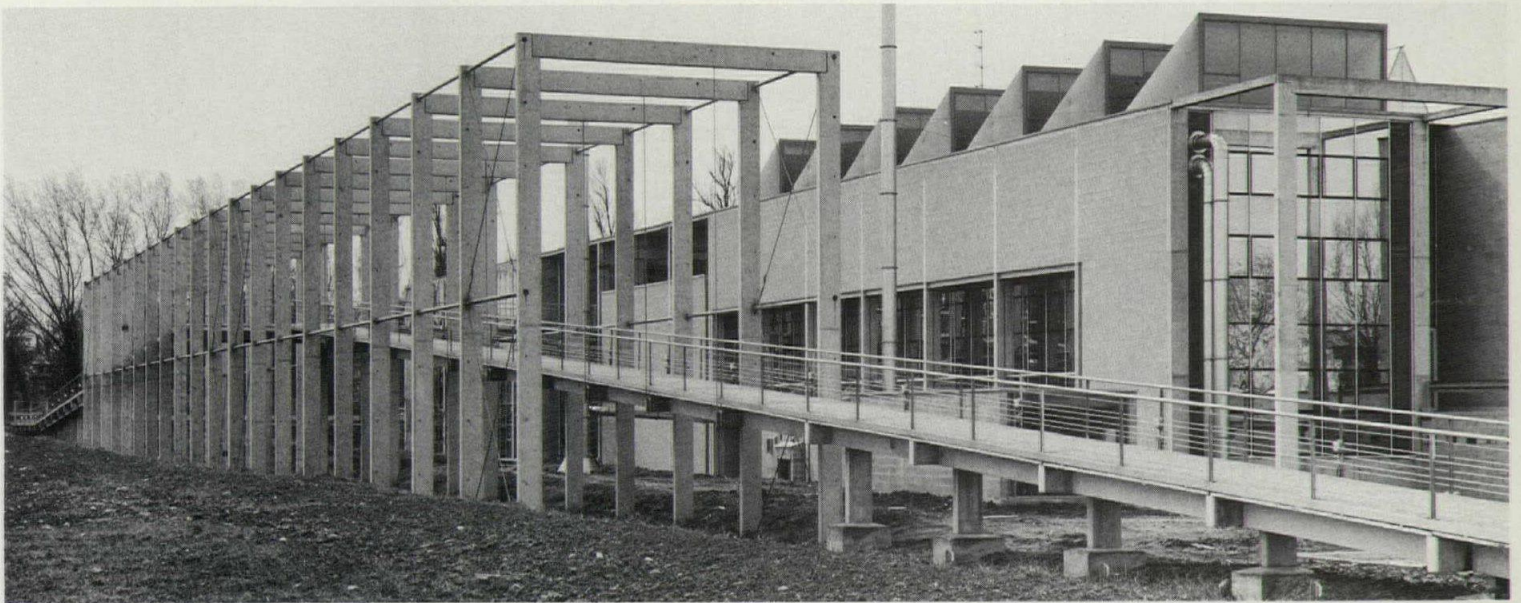
# Cheese consortium





*The exterior circulation ramp (below and facing page) is made of the same reinforced concrete frames that form the rest of the building; bays at the north (below) and south (bottom left) ends are void to clarify the structural relationship between the two parts of the building. Small square voids in the concrete block walls of the service area (bottom left) appear to be ventilation ports but are not; they are*

*glass-filled. The formal entry to the building is at the third level on the east side (bottom right). A naturally ventilated experimental cheese dairy occupies the north end of the building (below), while skylighted laboratories are behind it on the top level.*



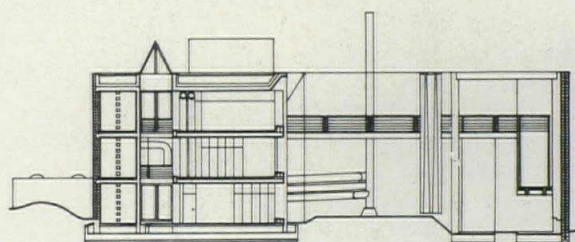




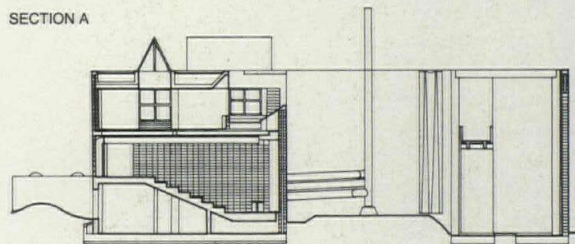


Inside, a three-story-high circulation area is placed between the functional and service areas (below and facing page). Stairs and some corridor floors (bottom left) in this area are of metal grille to allow light to filter to the bottom of the planted, atriumlike space. The long corridor with its glass gable roof runs the entire length of the building, from north to south, and is only interrupted at the building's midpoint, where the

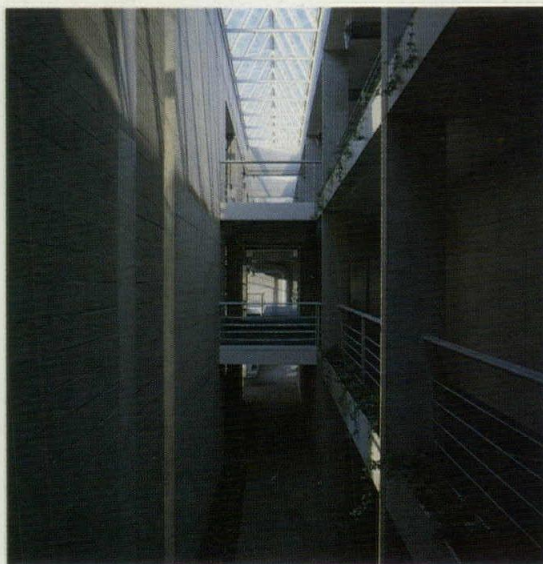
auditorium occurs (see section B, below left). Near the entry from the auto court on the west side, a night view (below left) looks through the three-story-high circulation area.



SECTION A



SECTION B





**Project:** Headquarters for Parmesan cheese cooperative (La sede centrale del Consorzio del formaggio Parmigiano-Reggiano), Reggio-Emilia, Italy.

**Architect:** Guido Canali, Studio Architettura Urbanistica, Parma.

**Client:** Consorzio del formaggio Parmigiano-Reggiano.

**Site:** a flat, long and narrow plot on the outskirts of town bounded by roads, public housing and a park.

**Program:** administrative headquarters, laboratories, and an experimental cheese dairy for makers of Parmesan cheese.

**Structural system:** reinforced concrete frame, concrete block, metal deck and concrete floors.

**Major materials:** concrete block metal grill deck, curtain wall.

**Mechanical system:** air conditioned except in experimental cheese dairy.

**Photography:** Gabriele Basilico pps. 94; 95, top; 97; others David Morton.

ramp, but they are filled in with concrete block or curtain wall. At the south end of the building, the first framing element at the front of the main block has been left unfilled to clarify its structural relationship with the entry ramp.

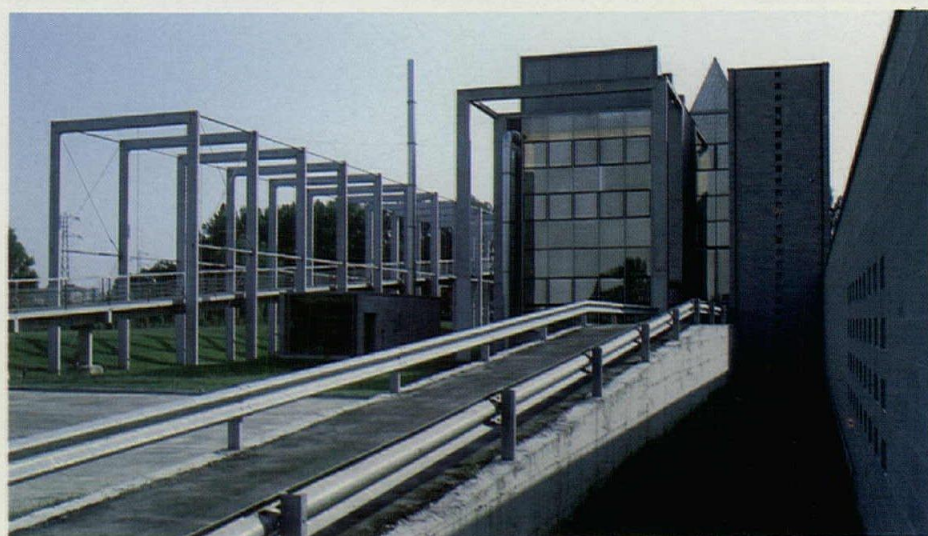
Moving laterally through the building, from east to west, the next zone is the linear three-story high circulation area. Its upper-level floors are of metal grill so that sunlight can flood the space where vines will eventually hang from the pipe railing, forming an interior greenhouse to complement the arbor that the pedestrian ramp is ultimately to become.

The fourth and last zone of the building is the service area at the west side. Here, the bathrooms, storage, vertical circulation, and mechanical areas are contained within the most solid part of the building, which has been designed for protection against late afternoon sun. This concrete block portion is also the part of the building that would most readily clue a viewer to its agricultural use, since farm buildings in Italy, including cheese dairies, are commonly constructed of various kinds of masonry units with voids left for ventilation. Here, however, the voids are glass filled, since the building is air-conditioned except for the cheese dairy. Nevertheless, all windows are operable, but only those in the dairy had to be because the cheese making process, even in an experimental condition, must be as natural as it is on the farm. As a safety precaution, the boiler and the exhaust stacks have been placed outside of the building, in the zone between the pedestrian ramp and the main block.

While there is little doubt that the site played an important part in the form that this building was ultimately to take, there were other influences that have been equally as strong. One is the neo-Rationalist movement that arose in Italy in the 1970s through the influence, primarily, of Aldo Rossi. This building, although highly Rationalist in its abstract, elementary composition, seems, however, not to look so much to Rossi's type of elementary form as it does to a more industrial aesthetic, which is more concerned with the techniques of building and construction than with typological form. In this respect, the building becomes autonomous, or self-referential, in that it concerns itself formally only with the material and constructive matters unique to architecture and building. There is no historicism, no references to anything else, no attempt at typological identification, no decoration, and no real clues to its use. In this regard, the building is closest to the earliest phase of Italian Rationalism, before the movement became burdened with meanings intended to serve baser notions than those envisioned by the early idealists. The main difference between their works and this is that materials are more clearly expressed here. But poetics no less so.

[David Morton]

At the northwest corner of the building (below) the caretaker's house can be seen (extreme right of photo). The large ramp provides vehicular access to the storage areas as well as to the experimental cheese dairy at the north end of the building.







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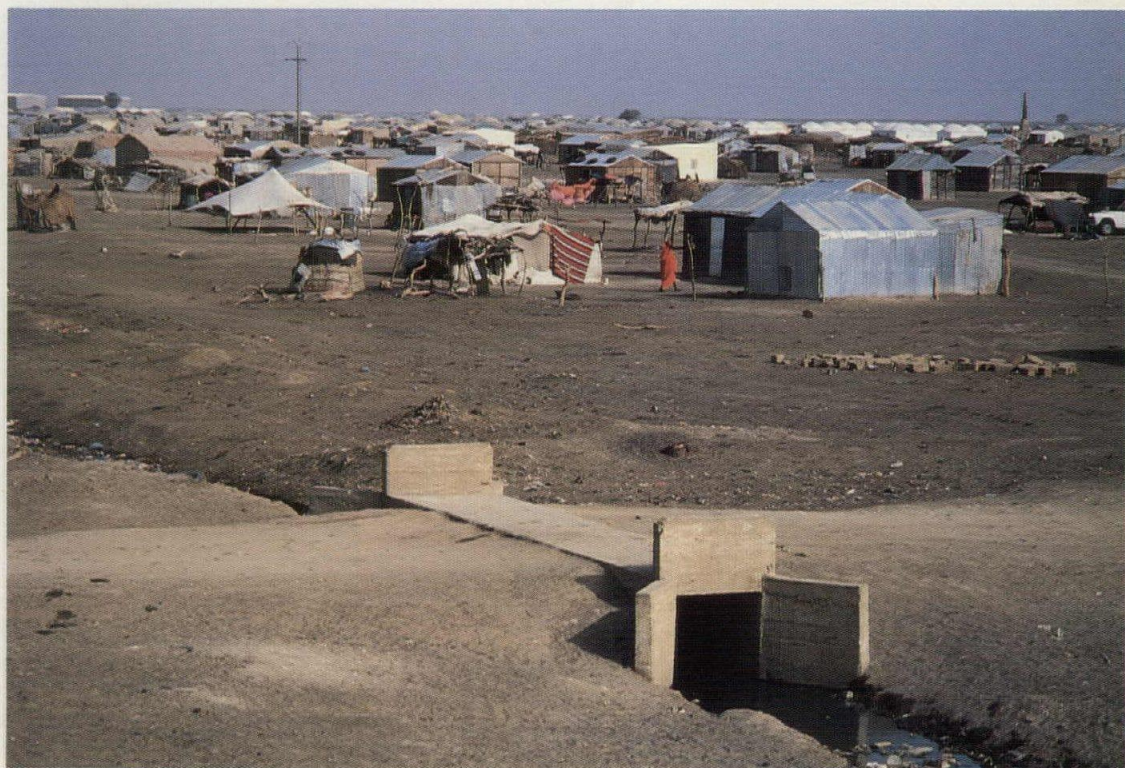
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# Instant housing

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Jean-Paul Bourdier

In Brazil, there's a saying that "When the government sleeps, the people move." That describes the actions not of criminals, but of many ordinary people in Third World countries, forced to secure their housing at night, squatting on land they don't own, in defiance of the law. The governments of those countries cannot be blamed entirely for that situation. With population rates in some countries four times that of the industrialized world, with squatter settlements built of scrap metal, canvas, and even cardboard sometimes larger than the cities they occupy, and with the number of people living at what the World Bank considers absolute poverty expected to increase by 26 percent over the next decade, government officials face almost insurmountable obstacles in providing public housing.

What public housing does get built is often high-rise, concrete slabs. That appeals to some Third World governments as a symbol of industrial development and progress, even though such housing is invariably too expensive for the poor, often ill-suited to the climate and culture, and technologically difficult for many countries. A 1972 study of government-built housing in developing countries underscored those failings. It showed that in the poorest countries, three-fourths of the total investment for housing goes into units for

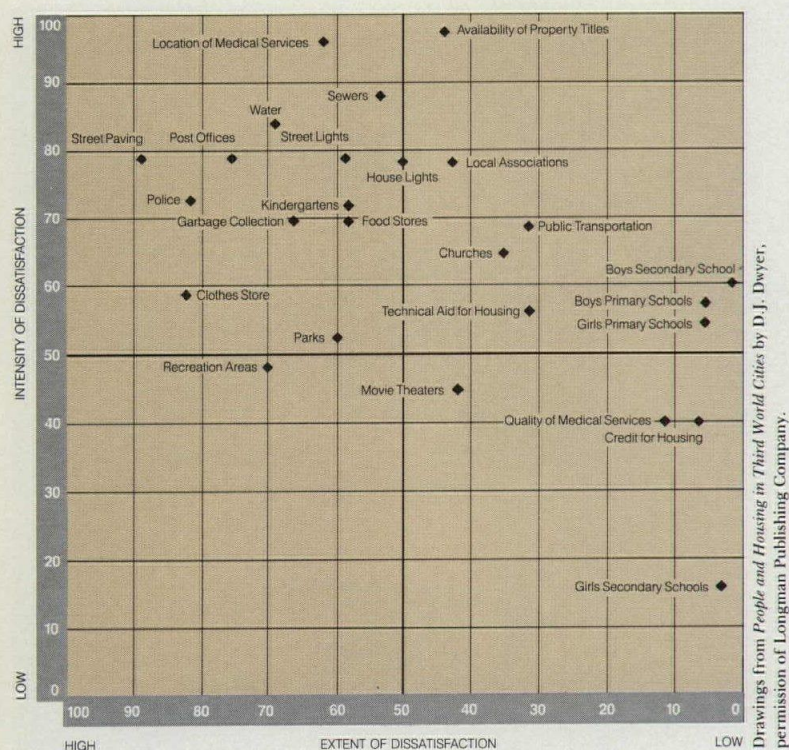
high-income families, one-fifth for middle-income families, and the remainder for the poor. A more recent Venezuelan study revealed that the poor living in one superblock had been forced by the government to move there from their squatter settlements; that despite government subsidies, most had to take in boarders to help pay rents two or three times what they could afford; and that, unaccustomed to high-rise living, the tenants had either destroyed or abandoned supposed amenities such as kitchens, toilets, and community rooms.

## Self-help

Given our experience with high-rise public housing in this country, those findings come as no surprise. Unexpected, though, has been the response of housing advocates in the Third World, asking not, as we have in the U.S., how the government might build better public housing, but whether the government should build public housing at all. The work of John F.C. Turner in the 1960s first raised

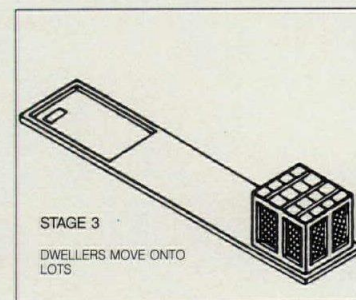
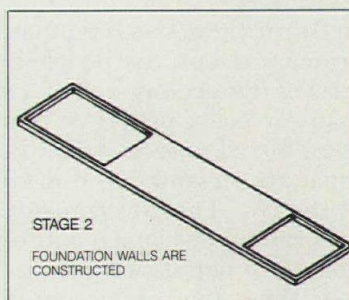
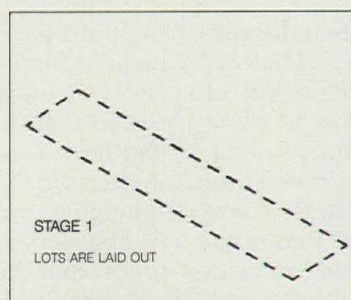


*Taken from a survey conducted by Andrews and Phillips in Lima, Peru, squatter settlements, the chart (below) reveals that a concern with land tenure and essential services such as medical clinics, sewers, street lights, and water rank as much higher priorities than aid or credit for actually building shelter. This gives credence to the idea of sites and services.*



that question. He and others that have followed him showed that the owner-built squatter settlements found in almost every Third World city, while inadequately serviced and often illegally located, met many of the housing needs of the poor: providing fairly large accommodations, easily adapted to the climate and culture, and easily altered as changes occurred in the lives of its inhabitants. As Turner put it, squatter settlements were a solution, not a problem.

In this country, prescriptive building and zoning codes present the greatest obstacles to owner-built or self-help housing. In the Third World (where performance codes too are needed), resistance to the idea of self-help housing has more of a political cast, with some governments opposed to it as a form of anarchism. In the face of that opposition, advocates of self-help housing themselves have begun to question some of its premises. For instance, while self-help initiatives enable poor people to learn construction skills in the course of building their own houses, training people in those skills has proven cumbersome and expensive. Also, not everyone wants those

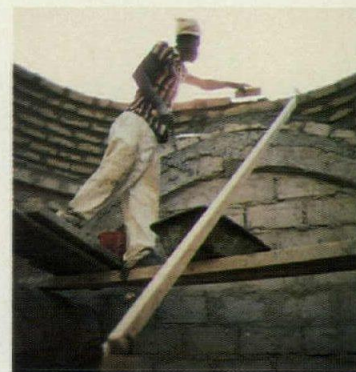


*Basic to the success of self-help housing is the allowance for incremental growth. A schematic drawing from a self-help project in Baroda, India (above), shows the typical stages of owner-built shelter, from the initial laying out of the property and squatting in temporary quarters to the completion of walls and roofs and the addition of floors.*

skills. Many Third World people, although underemployed, often have some sort of job and frequently prefer to hire contractors to handle needed construction. Perhaps, says Reinhard Goethert at MIT, "The right word is not self-help, but self-managed housing. It's a matter of teaching people not how to build, but how to deal with carpenters and masons—and government officials."

Another flaw with the idea of self-help housing is the assumption that people want to build their houses all at once. As Turner himself pointed out, not every poor family has housing as its highest priority. People will sometimes choose less desirable accommoda-



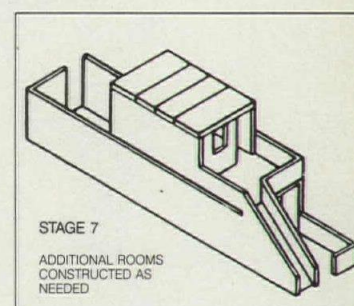
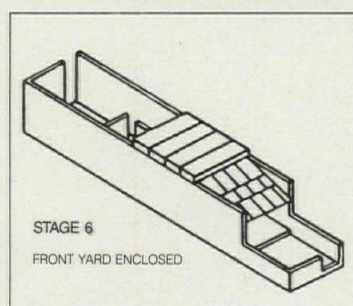
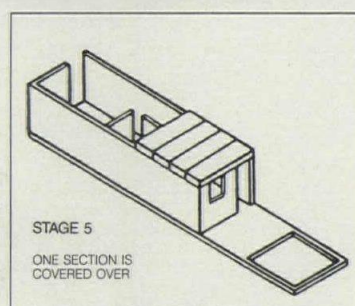
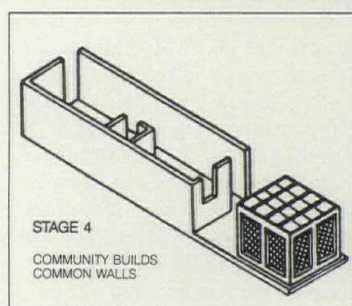


Jean-Paul Bourdier

Some traditional building techniques that have been revived in the Third World include domed and vaulted masonry (above) and rammed earth construction (left). The rammed earth works best with about a 6 percent Portland cement content.



Donald Woodman



tions in exchange for other benefits such as proximity to work, greater mobility, or lower expenses. Studies have shown that many Third World squatters add to their houses incrementally as time and money become available.

#### Sites and services

Incorporating the ideas of self-management and incremental growth is the idea of a government simply providing sites and services rather than materials and training for self-help housing. A sites and services project solves several problems. First, it gives squatters what they most want, land tenure. With that secure, even the poorest seem willing to invest in higher quality materials and construction. Second, installing utilities prior to the arrival of squatters reduces the difficulties of install-

ing services after the fact, through the narrow streets and irregular layouts of squatter settlements. Third, sites and services projects give governments a more suitable role: providing legally platted land and a coordinated infrastructure.

The sites and services approach is not without its own problems, though. For a government to grant land tenure to squatters, it often has to abrogate the rights of landowners—an exercise of eminent domain not always politically feasible. To alleviate the land problem, architects such as Jorge Andreade in Mexico have built multistory concrete shells—unenclosed support structures whose bays define individual “sites,” with their own water and sewer hookups that families can enclose and



# Low cost housing in Mauritania

Because of the drought that has affected the Sahel since 1972, the town of Rosso in Southern Mauritania steadily swells with squatters in a shantytown of tents, tin cans, and corrugated metal known as Satara. Attempting to find a solution to the problem, the Mauritanian government called upon the services of the ADAUA (Association for the Development of an African Architecture and Urbanism), an international nonprofit organization to which architect Josep Esteve belongs. Since 1977, Esteve, assisted by a small staff, has been carrying out a low-cost housing program of 1400 dwellings in Satara. Four objectives serve as guidelines for the program: first, to establish a permanent dialogue with the community, thereby encouraging the inhabitants to participate at all levels in the building of their houses, and enabling them to control or personalize their living spaces; second, to use, as much as possible, local construction materials to maintain artisan or semimechanized work, and to promote a cooperative system; third, to

The success of the project lies in its lack of repetition. Each unit differs from the other in its disposition of spaces and in the variety of lighting effects obtained from various wall colors and door and window shapes.

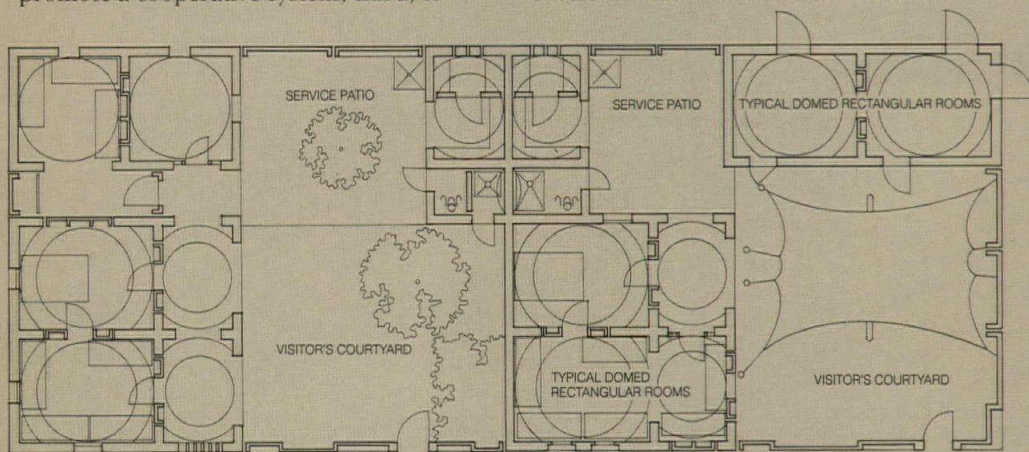
Wood and steel are both expensive, imported materials in Mauritania. To lower costs, the architects have used compacted earthen bricks. For the construction of one- or two-story dwellings in a semidesert climate, the brick's resistance to compression is less important than its deterioration from sudden outbursts of heavy rain. As a consequence, available impermeable materials such as gum arabic, shea butter, or straw were initially added to the earth and water mixture. The results proved unsatisfactory, however, and the solution of stabilizing earth with a 6 percent admixture of cement has turned out to be far more successful. The main difficulty then was to find the right proportion of water: the less water, the more compact the brick; however, if the water is insufficient, the cement will not set. An excess of water will cause the brick either to

the few months provided. Also, careful placing of buttresses is crucial to this technique to prevent collapse during construction. Domes, having most of their weight transmitted vertically through the walls, were thus found safer and simpler to build. Going a step further after the construction of a prototype, Esteve came up with an innovative concept: a lowered shallow dome over a rectangular plan. The rectangular plan accommodates more easily both small and long, narrow spaces such as the kitchen, water closet, and arcades, which also can easily be covered with separate domes.

Initially, Esteve planned to build a limited number of dwellings (10 to 15) around an open, semipublic communal court with the intent of enjoining the participation of prospective residents in the construction of their dwellings. Such collective labor could ultimately lead to the neighborhood's self-determination in housing matters. Unfortunately, no long-term program for construction apprenticeship has been planned or is foreseen. Thus, instead of developing a continuous process in which one building team would pass its learning on to the next, the dozen or so masons trained during the building of the first 13 units are now hiring themselves out to individuals who can pay them. People from all over the country are now flocking to Satara to have a domed house constructed at low cost. The situation has become so frantic that the ADAUA withdrew from the project in the summer of 1982 and left its responsibilities to the governmental administration. One must question whether the shantytown condition has been improved at all or simply delayed.

The buildings in this project may appear, to the Western observer, lacking in sophistication. Experimentation with built-in furniture or wind towers, for example, has been limited, until now, by the high cost of cement. With the gradual replacement of cement by lime, prepared from the large quantity of sea shells in Mauritania, the cost of cement may be reduced. The problem that lingers on, however, concerns the use of compacted earth or adobe in construction, for the latter is still considered by builders to be second-class material. Whatever else this project accomplished, it made clear the need for a change of attitude toward local building resources if millions of shelters are to be constructed in the years to come, in the Western as well as in the non-Western world. [Jean-Paul Bourdier]

Jean-Paul Bourdier is an Assistant Professor in the Department of Architecture at the University of California, Berkeley.



realize an architecture adapted to the population's way of living, inspired by existing vernacular habitations; and fourth, to form a local force of Mauritanian laborers and technicians who would continue the project.

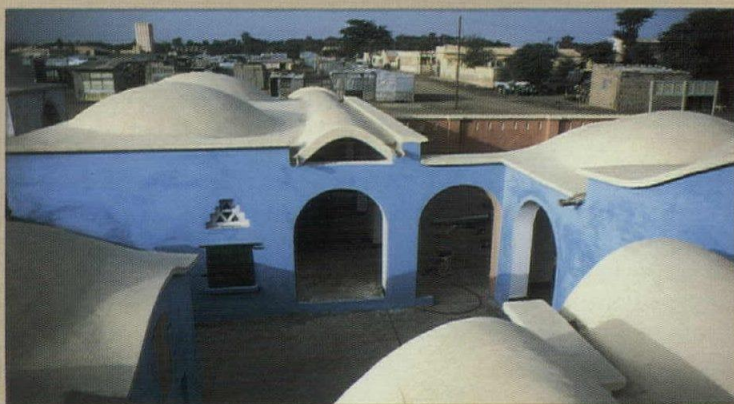
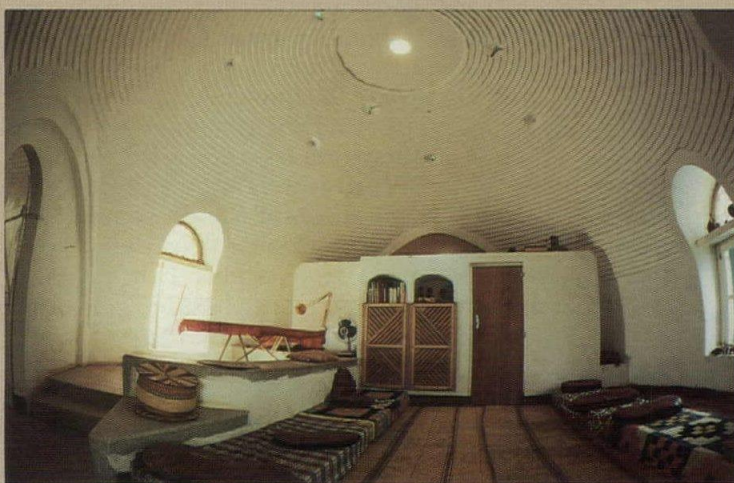
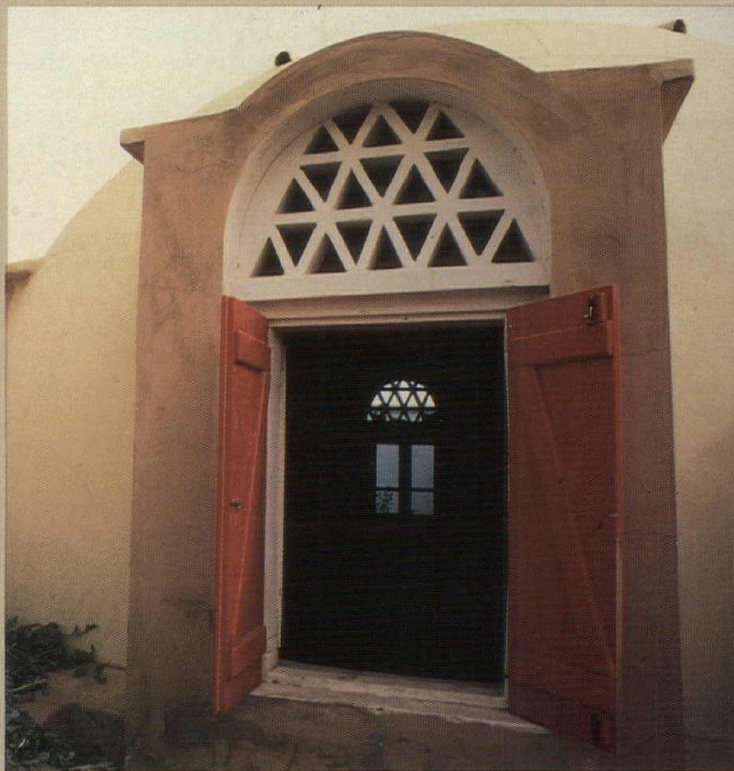
Intensive observations and continual visits to the migrants' dwellings led Esteve to the building of a prototype and the laying down of several basic principles. He designed the houses with two courtyards: a large courtyard where the traditional nomad's tent can be mounted to provide a setting for the gatherings of family and friends; and a service patio, functioning as an extension of separate sanitary and kitchen block. Rooms opening to the south and west are protected from the sun by arcades that establish transitional spaces between indoor and outdoor areas.

stick to the mold of the manual or hydraulic press or to warp while it is transported to the drying area.

It is the roof, however, and not the walls that constitutes the major factor in the lowering of housing costs. Popular corrugated metal sheets were rejected from the start because of their conduction of both heat and cold. Wood beams, because of their foreign origin, were prohibitively expensive. The solution Esteve adopted, following examples of Northern African and Middle Eastern architecture, was a system based on domes and vaults. After the first experiments, it became obvious that the experience needed for building vaults of over two-meter span required a period of practice far longer than



*These views of Josep Esteve's housing in Mauritania show how doors and windows individualize the units (top), how the domes create spacious interiors (middle), and how the units are organized around public and private courtyards (bottom).*



Photos: Jean-Paul Bourdier

improve themselves. However much land those multistory structures may save, they raise the questions of whether the typical Third World government can afford such large-scale structures and whether rural-oriented people want to live in multistory buildings, regardless of the amount of control they might have over their immediate living space. Says Nabeel Hamdi of MIT, "You can offer larger units and achieve densities as high or higher with low-rise housing—housing that's also easier to build and more familiar to people."

Another difficulty with sites and services schemes is with the services themselves. Water and sewer systems, for instance, cost too much and take too long to install for most Third World governments to keep up with the demand. Options exist, such as the incremental installation of utilities, with centrally located water and sewer connections preceding individual hookups, or the deployment of alternative technologies such as vacuum or chemical toilets or rain collection systems. Few Third World governments have pursued those options, not for lack of ideas, but for a lack of appropriate solutions.

#### **Appropriate technology**

What makes a technology appropriate? Opinions vary considerably. Some think that the only appropriate technology is one indigenous to a country—one that uses traditional construction methods, locally produced building materials, low-energy production techniques, and unskilled labor. The traditional masonry techniques employed by Hassan Fathy in Egypt, Josep Esteve in Mauritania, and Nader Khalili in Iran exemplify that approach. Their work holds great appeal in its very simplicity, be it the laying of sun-dried bricks into domes or the firing and glazing of bricks in situ. But its polemical intent is unmistakable. The rediscovery of indigenous technologies among many Third World countries represents as much a rejection of the homogenizing effect of Western culture and the wastefulness of modern technology as it does a solution to the housing problem.

The major argument against their work is whether any indigenous technology can satisfy the enormous demand for shelter in the Third World. As Jean Prouve has said,



## Technics Third World Housing

Among architect Martin Pawley's proposals for Third World housing is a tentlike structure (below) with walls of used tires supported by used metal cans and a roof of overlapping tire treads covering a net of tires. Nabeel Hamdi and Reinhard Goethart's scheme for housing in Sri Lanka (opposite below) has clusters of unimproved, roofed sites, with the residents sharing water and sewer hook-ups adjacent to a communal open space. A community building

and two-story shops face a commercial street. The housing in Trinidad (opposite top) was built by a U.S. company, Minnkota Building Systems, using glass-fiber-reinforced concrete tilt-up panels. While built at the rate of four houses a day for under \$22 a square foot, the project didn't generate much local industry.

"The population explosion is such that pseudotraditional construction, even when planned, cannot produce enough housing."

Appropriate technology, say others, is intermediate technology—one less hand-crafted than traditional technologies, yet less energy and resource intensive than most advanced Western technology. Much of the intermediate technology developed to date uses indigenous materials in ways that allow their prefabrication. Much of the research has occurred within universities. At the Asian Institute of Technology, for instance, researchers have found ways of using notched bamboo splits to reinforce concrete and bamboo pulp or wood wool combined with Portland cement as a binder to make corrugated roofing sheets.

A less common form of intermediate technology uses waste materials from developed nations rather than indigenous materials. Examples of that include the work of Iraj Majzub at Florida International University, laminating waste newsprint and other cellulose fiber to produce corrugated boards, or the work of Gernot Minke at the Gesamthochschule Kassel in West Germany, consol-

Most of the advanced technology exported to Third World countries involves the processing of essential raw materials such as cement or the production of simple building components such as corrugated metal panels. Occasionally, whole building systems are used.

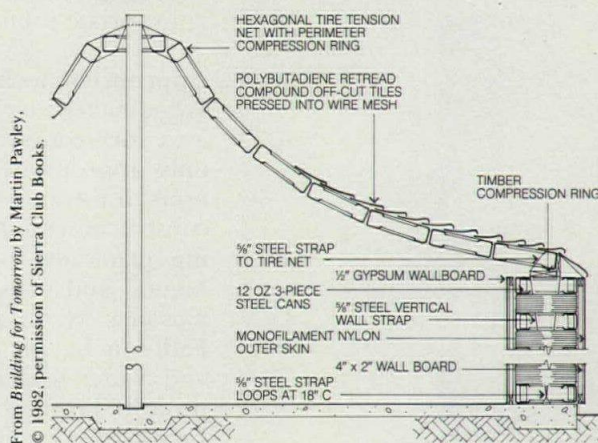
Most Third World governments, in importing building technology from the West, hope to gain not just new housing, but permanent industry and trained people. Unfortunately, advanced technology is not quickly or easily absorbed by undeveloped countries. As Jane Jacobs wrote recently, efforts among poor nations "to attract transplanted factories from elsewhere . . . (or) to build up major industrial facilities . . . work miserably. Just such industrial programs and projects, for example, are largely responsible for the vast, unpayable debts with which Brazil and Mexico (and their foreign bankers) now struggle."

### The architect's role

A certain humility colors the discussions of Third World housing today. Many of its architects now speak of appropriate technology as any technology suited to a particular need: advanced technology from the West as well as indigenous and intermediate technologies. They emphasize the implementation of existing prototypes over the development of new ones. And they seem less concerned with how people build than with how they decide what to build. In the words of Nabeel Hamdi, "We want to show people what their options are, to point out key questions that must be answered, and to establish housing guidelines that don't necessarily determine the solution."

That attitude differs from the advocacy planning of 20 years ago in, among other things, its view of the architect's role. Less involved directly in the design and construction of housing, the architect now acts as facilitator, a person who works within political and financial channels to, in the words of MIT Professor Eric Dluhosch, "get things going, to help people get into the moneyed economy and become self-sustaining."

The loan crisis facing some of the larger Third World countries has dampened the market there for architects with housing expertise. The long-range prognosis for work, however, appears strong, considering the



From *Building for Tomorrow* by Martin Pawley.  
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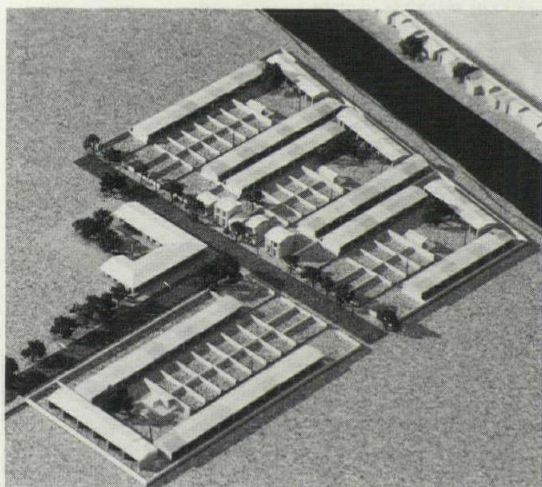
idating waste sulphur from the textile industry, in combination with slag, sawdust, and a sand/gravel aggregate, to produce low-cost building blocks. Taking that approach to its logical—and what some consider its absurd—extreme is the English architect Martin Pawley. He suggests that we export not just raw material, but actual waste products to the Third World for their housing. While the use of discarded materials is certainly common in squatter settlements, the use of imported waste has the pejorative connotation of the developed world feeding the undeveloped its scraps.



enormous demand. With an oversupply of architects in the United States, the idea of exporting that expertise (either bodily or through telecommunications) to the Third World holds an economic as well as altruistic appeal.

### Lessons for the West

What might we, in the West, learn from efforts to house the Third World's poor? It's probably a mistake to apply its methods literally to our own public housing. The idea of providing the poor in this country with a plot of land and some building materials would create only social unrest. The broader principles, however, of inviting tenant participation in the planning and management of their housing, of providing units that have a loose fit between their form and function to allow a certain amount of incremental change by tenants, and of encouraging ownership and a sense of community have much relevance to public housing in this country. Also, sorting out what is and is not an appropriate role for the government is something that needs the kind of attention in this country that it has

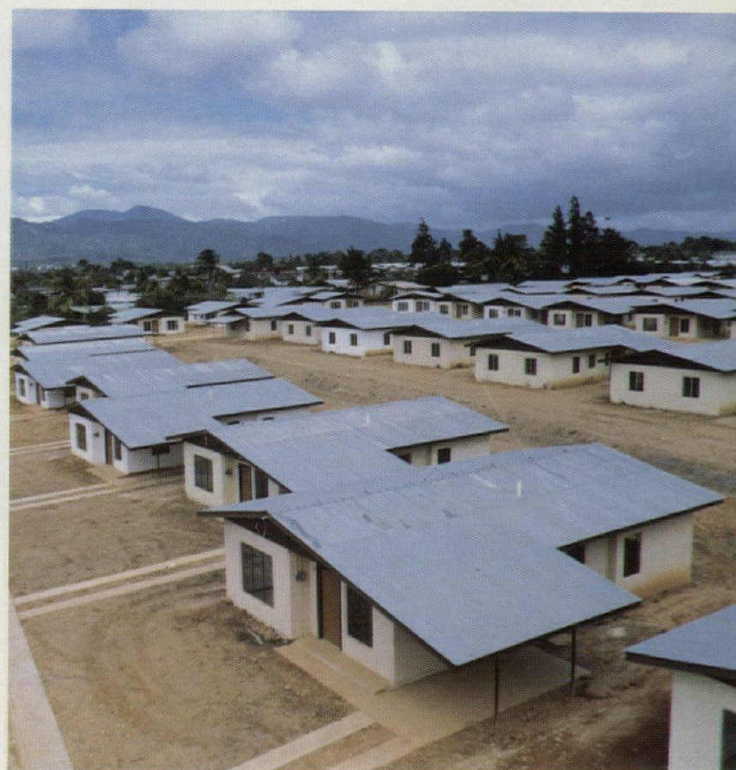


received, out of sheer economic necessity, in undeveloped countries. At a time when our government seems to want to retreat from the very idea of public housing, we should realize that public housing need not mean the provision of complete units—nor should it mean letting the poor fend for themselves. As Turner has written, "Our policies of mass housing are very costly ways of impoverishing people." What the housing efforts in the Third World show is that there are less costly ways of enriching the lives of poor people.

[Thomas Fisher]



Minnkota Building System



Minnkota Building System

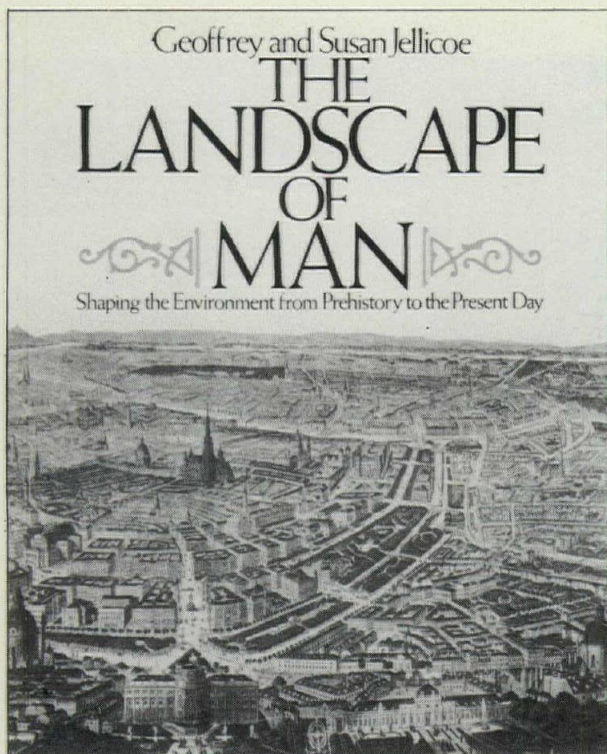
### Further reading

There is extensive literature on Third World housing. The classic on self-help housing is *Freedom To Build*, edited by John F.C. Turner and Robert Fichter (MacMillan), although the more recent *Urban Housing in the Third World* by Geoffrey Payne (Routledge & Kegan Paul) and *People and Housing in Third World Cities* by D.J. Dwyer (Longman) are also worth reading. A thorough review of building with adobe and rammed earth is *Adobe and Rammed Earth Buildings, Design and Construction* by Paul Graham McHenry, Jr. (John Wiley). The best critique of self-help housing is *Self-Help Housing, A Critique*, edited by Peter Ward (Mansell).

### Acknowledgments

We would like to thank the following people for contributing to this article: Iraj Majzub, Florida International University; Nabeel Hamdi, Reinhard Goethert, Eric Dluhosch, William Porter, Moustofa Mourad, Mona Serageldin, MIT; Fred Winker, Lee Kalzenberg, Minnkota Building Systems; Volker Hartkopf, Carnegie-Mellon; Richard Yates, Architect; Udo Kulterman, Washington University; Jean-Paul Bourdier, U.C. Berkeley.





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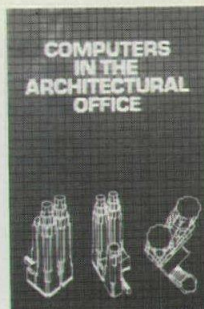
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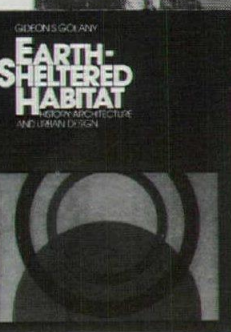
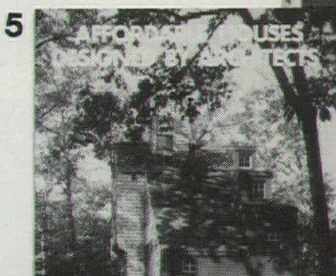
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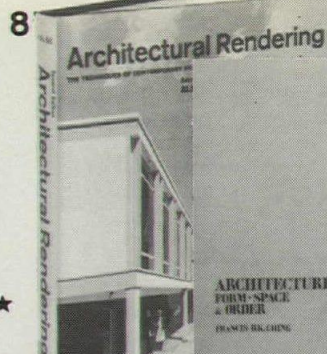
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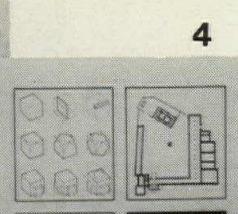
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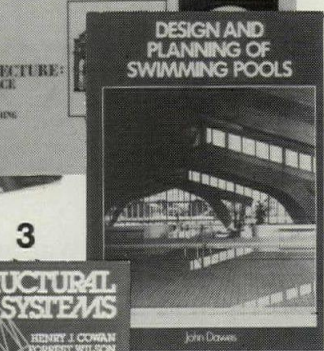
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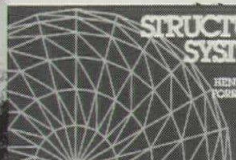
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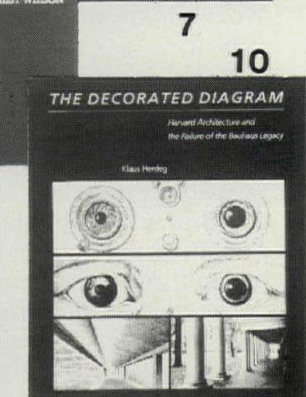
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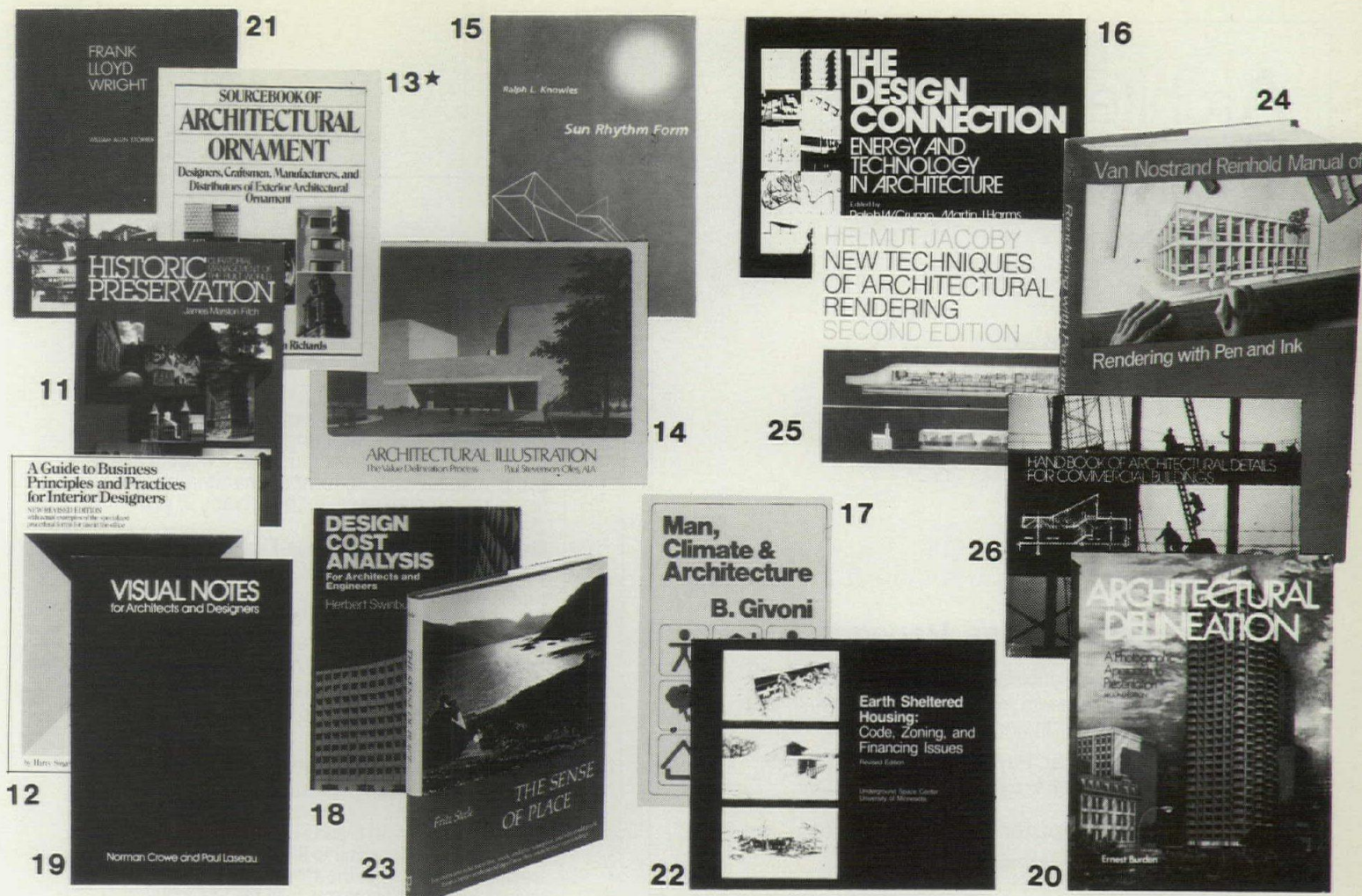
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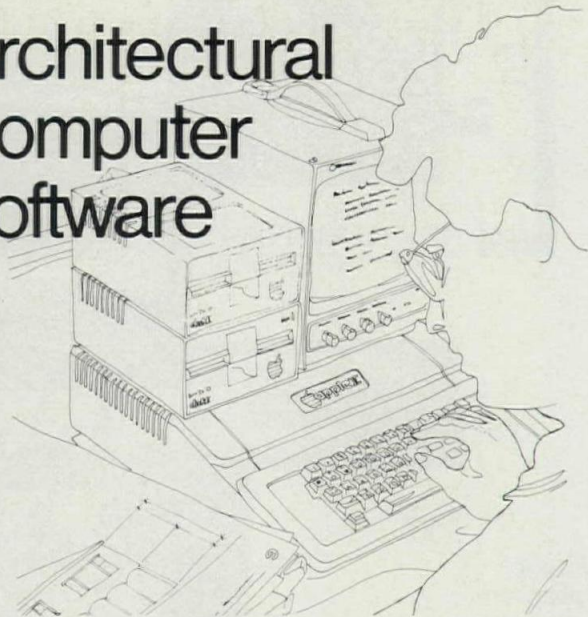
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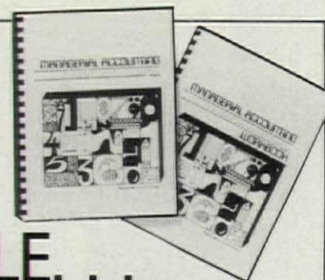
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**The Pingry School** in New Jersey, by Hardy Holzman Pfeiffer Associates carries forward the firm's well-known daring with form and materials, in a scheme that makes eminent good sense for an educational plant.

**Charleston Place**, a housing development in Florida, forms a pleasing community with simplified but evocative Classical architecture, deftly worked out by architects Andres Duany and Elizabeth Plater-Zyberk.

**Enerplex**, an office complex in Princeton, New Jersey, combines an experimental program of energy devices with superior architectural design. The team of architects includes Skidmore Owings & Merrill, New York, and Alan Chimacoff of Princeton.

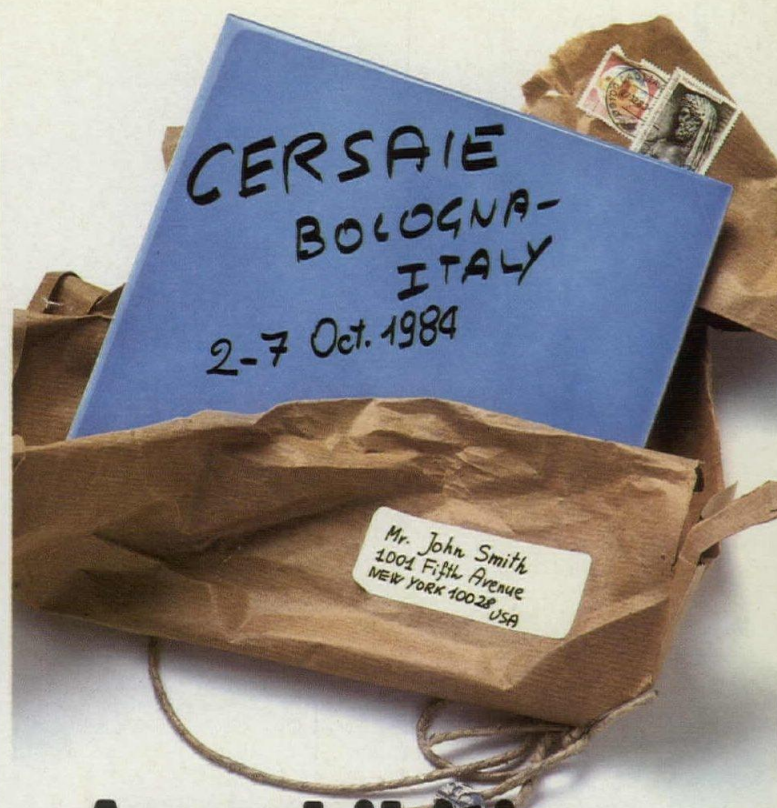
**Carver-Hawkeye Arena** at Iowa State University, by CRS of Houston, Texas, is spanned by an elegantly spare exposed steel space-frame, set over a natural depression to produce a low profile for a vast space.

**Interior Design:** An office lobby on LaSalle Street, Chicago, has been remodeled with Classical motifs in marble, by Hammond Beeby Babka, Architects.

**Technics:** Replacement windows will be the subject of an article covering the available products, installation, and design appropriateness of these crucial components of the remodeling/renovation process.

**P/A in September** will be an expanded issue to accommodate P/A's eighth annual survey of interior design. Examples from many places will shed light on the relationships between interior design and the worlds of commerce and the other arts. A related Technics feature will deal with the subject of toxic fumes in fires.

# P/A in August: Design & technics



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# Books

**The American City: From the Civil War to the New Deal** by Giorgio Ciucci, Francesco Dal Co, Mario Manieri-Elia, Manfredo Tafuri, translated by Barbara Luigia La Penta. Cambridge

and London, The MIT Press, 1983. 563 pp., illus., \$50 hardbound; \$17.50 paperback. Reviewed by Richard J. Findley.

## Italian's America

*The American City*, originally published in 1980 and recently released in paperback, is a complex, articulate, and provoking political text, which traces the ideological forces of American civic planning at the turn of the century. It is complex because, being of four parts, it identifies particular movements of often contradictory natures which, in their resolution, formed early urban America. It is articulate in being much more than a historical survey: its intentionally critical stance on the social and economic developments distinct to the new world brings to light persons and philosophies that forged the tenuous yet tenacious emerging urban culture. Most important, each of the four studies that comprise the text approach the basic subject of dialectical history from a clearly Socialist point of view.

The first study addresses the City Beautiful movement as it unfolded under the formal direction of Daniel H. Burnham of Chicago. The second acts as a countercritique in its review of progressivist landscape planning, particularly the movement to reform the city through the implantation of parks and public places. The third reinforces the Reformist movement in its critique of Frank Lloyd Wright's philosophy of individualism and the push for the demographic decentralization of cities. However, Wright's views of individualism and the subsequent movement encouraging rural colonization are viewed as utopian in comparison with the practical motives of the urban social reformer. In the final study the concentration of capital, epitomized in the high-rise building, is critiqued as an ultimate expression of corporate power. Rockefeller Center within the setting of New York is central to this last study, which, much like the first, focuses on Imperialist tendencies in planning as compared to Socialist incentives as identified in the intermediate studies.

Numerous questions arise perusing the text. Is this book partial in its review of American urbanism? Its authors are openly of a Marxist view, and critical of the capitalist speculation that was so much a part of early American planning.



Midtown Manhattan, 1960s.

To what degree are the critical method of dialectical historiography and the necessity of the "class struggle" pertinent and effective? Is this book actually about cities and urban form, or is it basically intellectual lip-service directed at the egalitarian rubric of American agrarian and democratic idealism? To extricate the multiple complexities this book entertains takes rigorous consideration, but the critical points can be addressed in summary.

The authors make clear in the introduction their intentional partiality. In writing a critical history of urban America, they state that Leon Trotsky was the first among modern critics to view the criticism of art and the criticism of the values of bourgeois culture with a class point of view. This class point of view, derived from Marxian matrix, is not simply a ready formula to pronounce the merits and the faults of bourgeois intellectual products. Instead, the authors feel the problem is to bring this point of view up to date by continually applying criticism to both complex phenomena and the values which the bourgeois culture presents and interprets. This method is contradictory as it patronizes the underprivileged and advocates the view that even humanitarian decisions to level class distinction are based on strictly elitist arguments. An example is evident in the first study by Manieri-Elia. The *muckrakers* are cited as the assailants of the plutocracy as they incessantly keep in check the capitalist tendencies of the Yankee labor leaders. They demand reform from a supposed superior stance while the *bosses* defend

the urban poor from a proletariat point of view. Unraveling these relationships makes at times most difficult reading, yet the characters who partake in these struggles are often overlooked in other histories.

To what degree the Marxist view of history is applicable to 19th-Century American planning developments is debatable. By the sheer preoccupation with ideologies, this method does successfully trace the multitude of ideals and the philosophies that characterize America as a compelling milieu of open opportunities. What is most fascinating about the book is its circumspect glance at the various *forms* unique to American ideology in its philosophic inspiration both to conquer and to tame the American wilderness. From early American fiction the fatal pursuit of the White Whale by the sailors of the Pequod exemplify to the authors a progressive and somewhat blind spirit to restructure the superiority of nature, ultimately through work. In the second essay, Dal Co feels it is not possible to speak of American progressivism in terms of a philosophical system. Instead, he sees it as an attitude, primarily intellectual and moral rather than political. He intentionally focuses on *forms* and *functions* that express this attitude, in a grave but optimistic concern about contemporary society. While the *forms* are primarily philosophic and literary, the *functioning* is clearly to subvert bourgeois society from an elitist standpoint in the name of social change through the class struggle.

As such, this book is as much about the persons and ideas that helped forge the urban place out of the wilderness as it is about the physical making of cities in America. Invariably tainted with Socialist rigor, one cannot help but respond with a great degree of circumspection as to the basic motives of these four. How their Marxian critique applies to the emergence of early America remains a question, and nowhere in this voluminous tome is the answer given.

Richard J. Findley is an assistant professor at Kansas State University, Manhattan.



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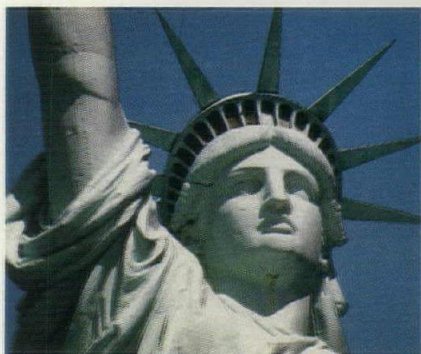


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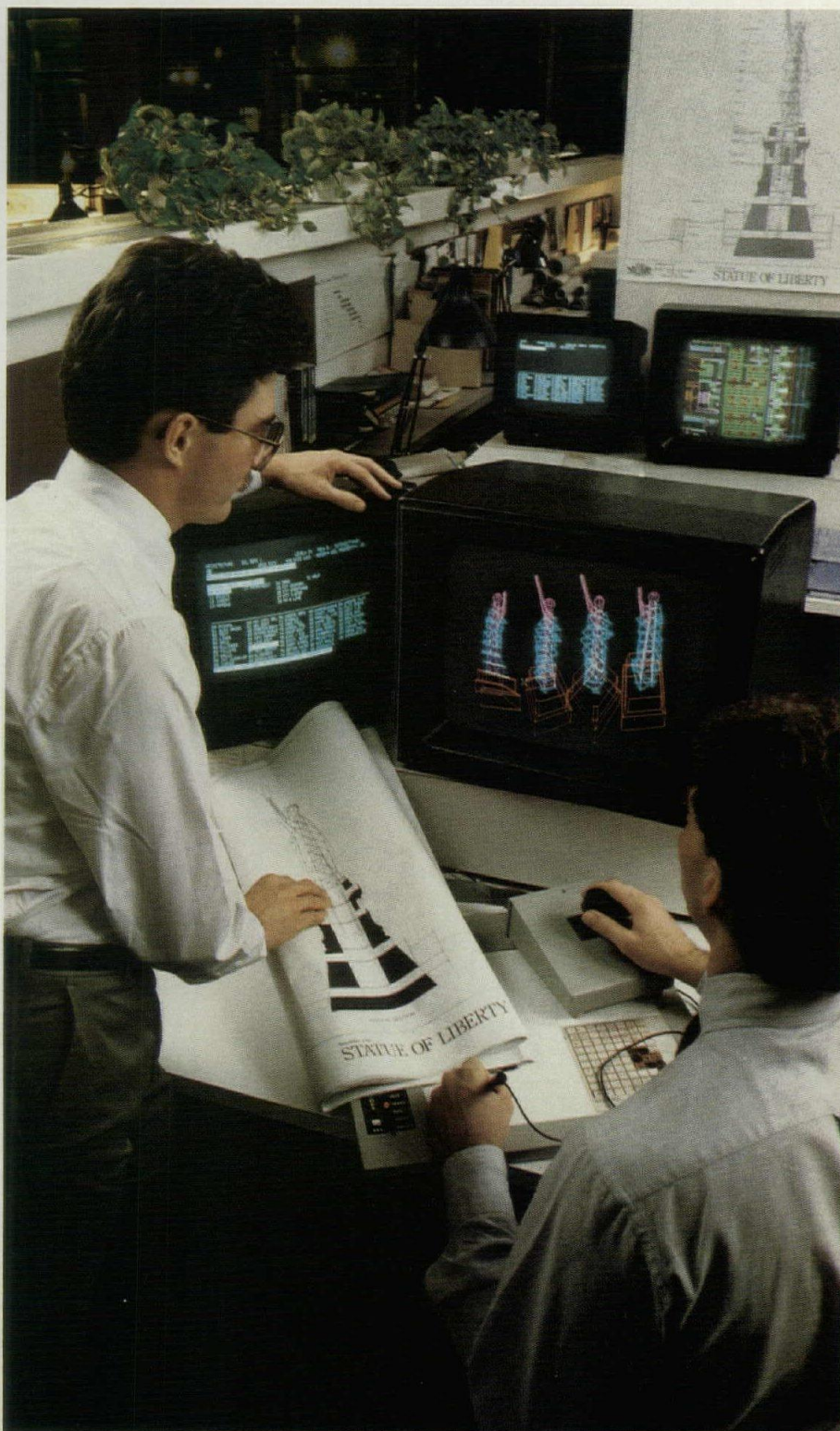
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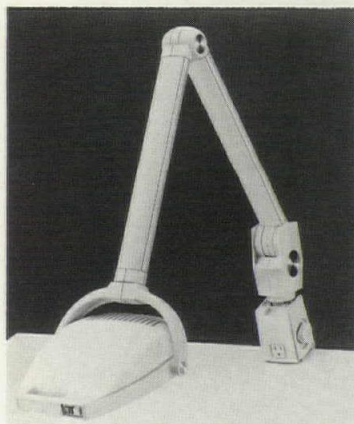
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# P/A Products and literature



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Circle 100 on reader service card

**The Float side chair** has a steel tubing frame with a chromium or powder epoxy color finish. It is upholstered in vinyl, fabric, or leather. Float stacks for convenient storage. Group Four Furniture, Inc.

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**The Soft Bathtub®** is molded with an inch of foam cushioning bonded to a fiberglass outer shell having a nonporous surface said to be as durable as porcelain. In normal use it will not crack, chip, or puncture. According to the manufacturer, the soft surface provides surer footing and cushioning reduces the possibility of injury in the event of a fall. It comes in white and most standard bath colors and weighs about a third as much as a standard tub. The tubs are also available with Whirlpool systems. The Soft Bathtub Company, Division of SBC Technologies, Inc.

Circle 102 on reader service card

**Target Tile** studded resilient rubber floor tile, stair treads, and risers are offered in two new colors, burgundy and slate. Suitable for entrances, lobbies, schools, hospitals, and commercial buildings, the flooring has a Class A flame spread rating, according to the ASTM E-84 test. Other colors available are red, brown, beige, black, blue, chocolate, and gray. The R.C.A. Rubber Company.

Circle 103 on reader service card

**The Océ 7200** is a plain paper, dry toner engineering print system. It can produce full-size or reduced-size copies from opaque or translucent originals ranging in size from 8½" x 11" to 24" x 120". Its compact size and quiet, odorless operation make it possible to locate it conveniently in the drafting room. Océ-Industries, Inc.

Circle 104 on reader service card



**Jazz Seating**, first in a new collection, consists of a chair and a love seat. The frame is lacquered bentwood that is covered with leather, held at the base and top with anodized metal dowels. The new seating is suitable for both residential and contract use. Dakota Jackson, Inc.

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**The 19 Series touch bar exit device** is usable with narrow stile aluminum, flush hollow metal, and wood doors. It is UL and ANSI rated and suits several applications from retrofitting schools and hospitals to new construction. Monarch Hardware.

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**The Seiche One water-saving toilet** uses approximately one quart of water for the operator-controlled flush. It was designed for use in areas where ground water is scarce or leaching capacity is limited. It fits any standard system, and installation is simple. The lightweight unit is made from Monsanto's Lustran 24 ABS plastic. Patrick Creek Corp.

Circle 107 on reader service card

**Using a ductless fan** for bathrooms to filter and recirculate air reduces costs by eliminating exhaust fans, ductwork, and outside venting. A high-density foam pretreats the air, which is then circulated through a filter to be cleaned and deodorized. One unit is effective in an area up to 800 cubic feet. Replaceable filters are changed in three to nine months, depending on the hours per day of use. Rush-Hampton Industries, Inc.

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**Plytube molded tubular plywood** is available in lengths to eight feet. It is nonconductive, noncorrosive, waterproof, lightweight, and easy to cut. Plytube is bonded under heat and high pressure; for special purposes, one or two wood plies can be replaced with metal, wire mesh, or synthetic laminates. Tubes can be used as molds for concrete piers, columns, and curved structures. They can be finished and used in building interiors as lally columns, exposed ducts, and similar applications. Plytube Corporation of America.

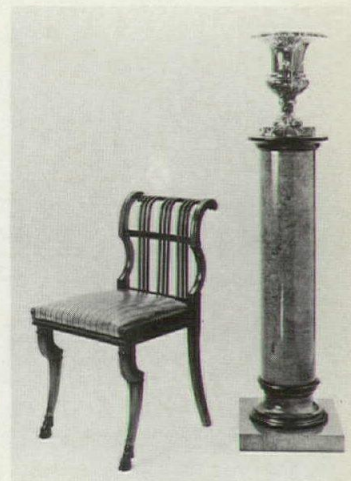
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**The Profile® ceiling grid** offers a contemporary narrow look. It gives standard lay-in panels a flush-mounted appearance. The exposed ⅞-inch-wide flange has a continuous ¼-inch center slot enabling partitions to be added with screws attached within the slot. It will accommodate standard air-handling devices and needs no special trim to mount light fixtures. United States Gypsum Co.

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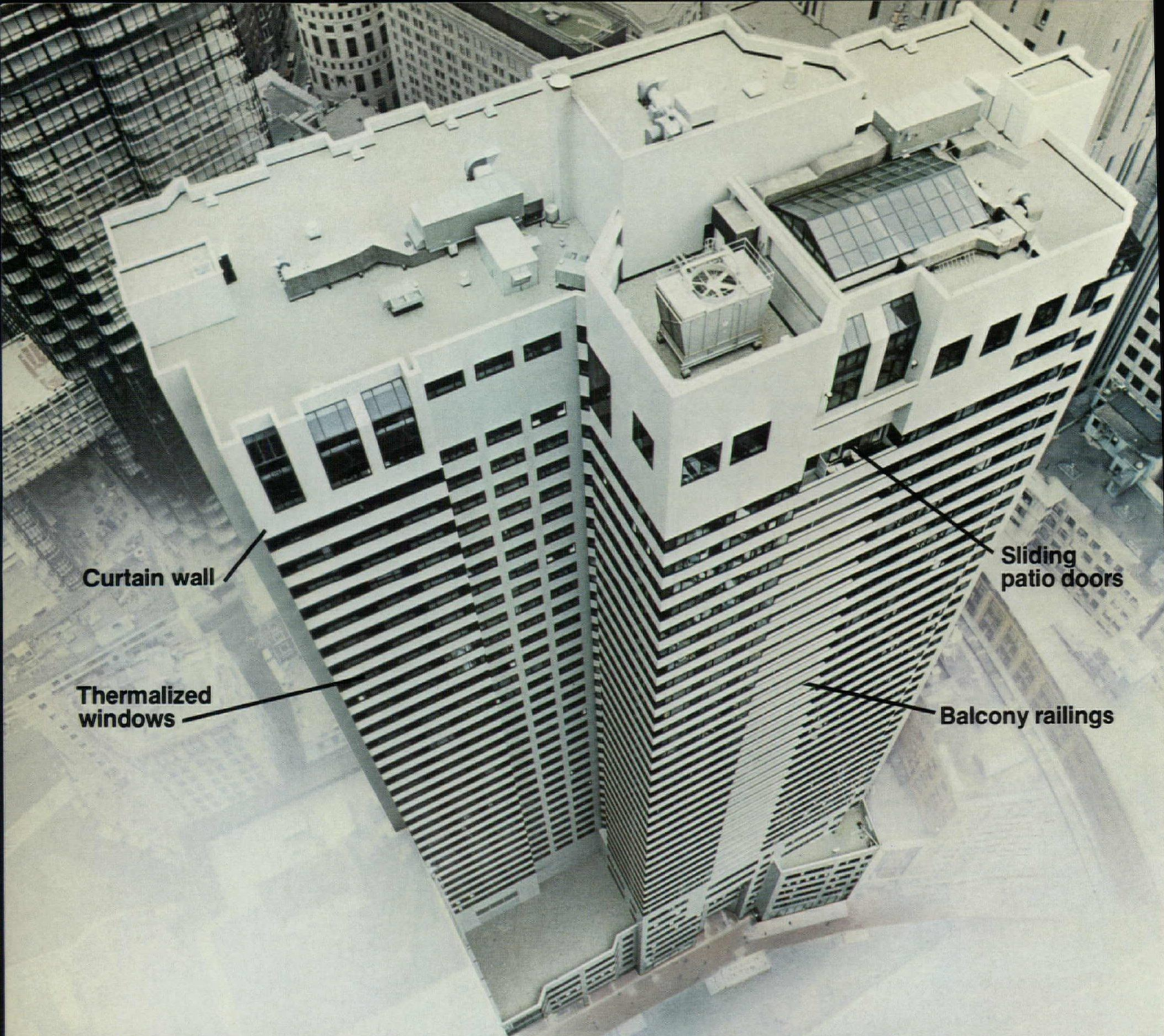
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**European furniture** in a variety of traditional styles features hard-to-find pieces in wood with hand-rubbed finishes, inlays, carving, bronze appliques, fabrics, and leather. The group includes chairs, tables, desks, secretaries, chests, and break-fronts. Among items offered are this Regency-style chair, in light mahogany and ebony with leather upholstery, and a fruitwood and black pedestal with gray marble urn. IPS, Inc.

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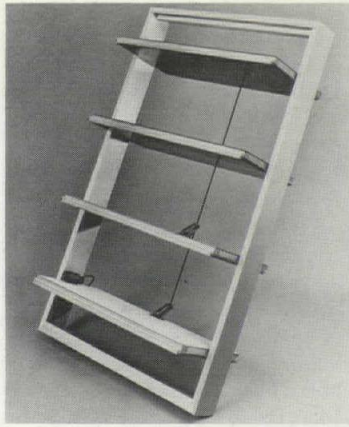
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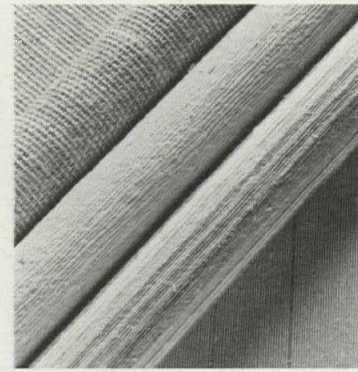
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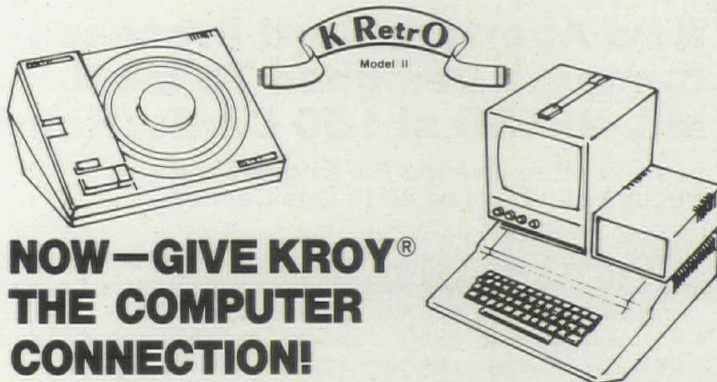
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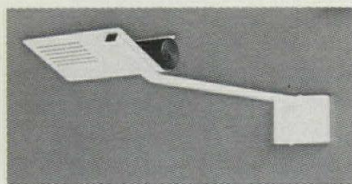
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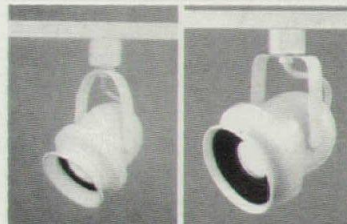
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**Commercial hardware** brochure includes door levers and knobs of solid brass with polished, dull, oil-rubbed bronze, or chromium finish; push/pull plates of brass, bronze, aluminum, stainless steel or plastic; and brass bumpers, door stops, hinges, and bolts. A lever handle featured meets dimensional and performance specifications of ANSI 117.1-1980 for accessibility by the handicapped. Baldwin Hardware Manufacturing Corp.

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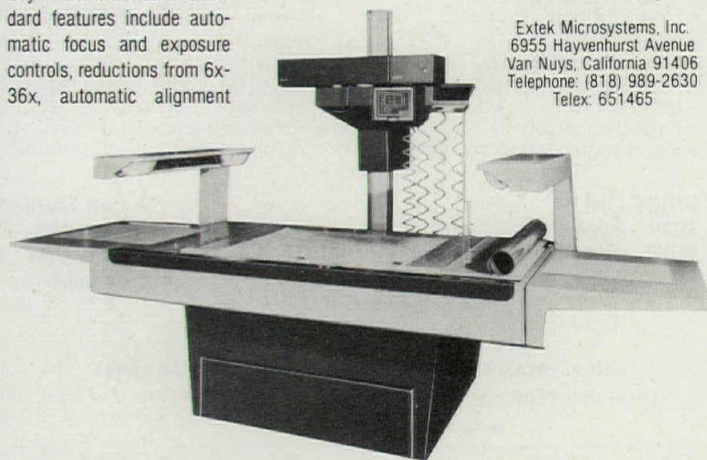
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6955 Hayvenhurst Avenue  
Van Nuys, California 91406  
Telephone: (818) 989-2630  
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# A 'Golden' Investment

Putting together an energy-savings "portfolio" can be more beneficial than stocks and bonds. A THERMACORE® door can be a definite asset to any building, old or new.

The precise combination of polyurethane foam and embossed galvanized sheet steel, using a unique patented lamination process that compresses the foam to 3.24 lbs./ft.<sup>3</sup>, results in an insulated door panel that is more than the sum of its parts. The product is a tough, durable yet lightweight insulator with an R factor of 13.00 and a U value of .077 that can be easily cut to any length with ordinary hand tools.

The lamination that is the key to that strength, longevity and insulation is so uniform and the bond between foam and steel is so strong that THERMACORE® can do what no other doormaker can do. We're so confident in our process and our meticulous quality control that we offer an unbeatable...

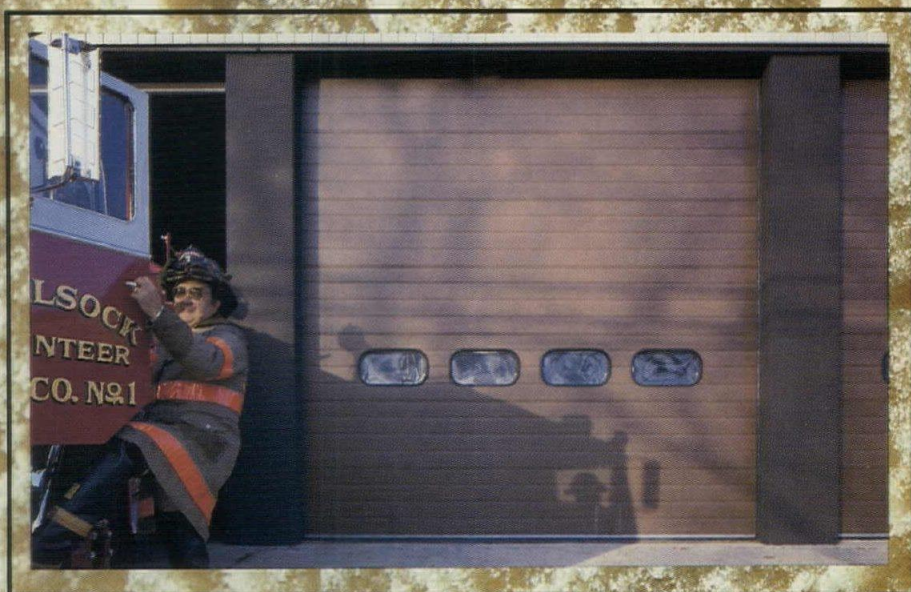
## FIVE YEAR WARRANTY

...against panel delamination.

Couple this rugged panel with our patented seal system, high quality hardware, track channel and counterbalance and you get a door that will save you enough on fuel bills to *literally pay for itself* in a matter of years\* and go on earning you dividends for many years to come.

And while your investment is paying off, you'll be a lot more comfortable — warmer in the winter, cooler in the summer and more secure from unwanted intruders.

It pays to invest in a "sure thing" — it pays to invest in...



# THERMACORE®

THE WORLD'S MOST ADVANCED INSULATED INDUSTRIAL DOOR

Manufactured by Insoport Industries, Inc., 3200 Reach Road, Williamsport, Pennsylvania 17701

\*Approximate energy savings can be calculated for your facility upon request.

Circle No. 336 on Reader Service Card



**Roofing products** brochure features Prestique laminated fiberglass shingles with the look of wood. They are 20 percent larger than conventional shingles to speed installation. Also in the brochure are Sun-Seal single-ply shingles, roll roofing products, and coatings and cement. Elk Roofing Products.

Circle 206 on reader service card



**The Ambassador Executive Collection** includes a double-pedestal desk with cantilevered top, available wrapped in black leather with chrome base and stainless steel details as well as in wood veneers and high-gloss colors in various combinations. Also in the collection are a table desk and a credenza (shown) in high-gloss green or in wood veneers and leather in various combinations. Nienkamper.

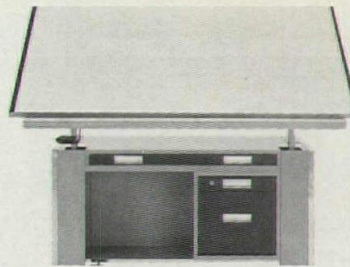
Circle 122 on reader service card

**Unifloor flooring system**, suitable for heavy-duty commercial applications, stays flexible throughout its life. Because pattern and color extend through the material, heavily trafficked areas do not show wear. It has 75 percent vinyl content and a dense surface that does not absorb soil. The flooring meets flamespread and smoke density requirements of the Life Safety Code. An eight-page brochure describes features of the several grades, such as cushioned, sport, conductive, and antistatic flooring. Specifications and a chart of properties are included. TSC Tek Stil Concepts, Inc.

Circle 207 on reader service card

**Lighting catalog** describes and illustrates a variety of lighting products. The 40 pages are divided into four sections: Linear ambient and task lighting; Chandeliers; Lighting specialties, such as grids and infinity light panels and tables; and Tungsten halogen task lighting. Information provided includes installation, dimensions, materials, and electrical data. Modu-lightor.

Circle 208 on reader service card



**'Furniture for the Creative Person'** is a 68-page catalog of drafting room furniture and equipment. It includes drafting boards, tables, flat and vertical files, desks, and seating. There is also a section covering instruments such as drafting machines, straightedges, scales, and light boxes. A copy of the catalog and a price list are available for \$2.50 from Mayline Company, Inc., 619 N. Commerce St., P.O. Box 728, Sheboygan, Wisc. 53082.

**Landscape lighting** brochure features three designs: a recessed well light that withstands total immersion in water; a shielded all-weather bullet light, suitable for wet locations, with a swivel elbow adjustment that rotates 360 degrees; and a fixture with shielded wide angle beam that illuminates trees

without creating hot spots on their trunks. Sketches illustrate the fixtures and typical settings, and drawings show details. All are UL rated. Greenlee Landscape Lighting Mfg., Inc.

Circle 209 on reader service card

**Washroom equipment** catalog for 1984 includes improved features such as a nonclogging liquid soap dispenser valve that won't leak or drip and a soap container with a large, hinged and locking filler top. Other new items are a napkin dispenser with self-closing door and three new framed mirror/shelf combinations in stainless steel. All products are shown photographed in color. Bobrick International.

Circle 210 on reader service card

**Hallemitte seamless flooring** is 100 percent solids, two-component epoxy that is troweled on. After the coating self-levels, the selected aggregate is broadcast onto the surface, followed by an epoxy topcoat for a floor free of depressions and trowel marks. The material can also be used for cove base and wainscot. The products and their application are covered in a four-page

# TWA. OUR 3 PAIR BEATS THEIR





brochure, which has a selection chart for choosing the proper material depending upon the area to be surfaced. United Materials Technology, Inc.  
*Circle 211 on reader service card*



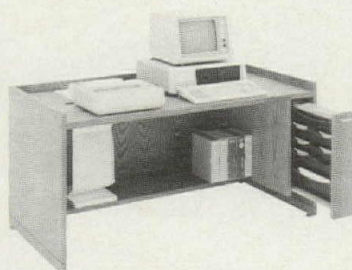
**Exterior lighting** in contemporary, traditional, and period styles is featured in a 70-page catalog. Bollards, low-level walkway lighting, and spotlights are also shown. Illustrations in color, detail drawings, and specifications are provided for the products offered. Posts in heights to 20 feet and mounting accessories are included. Hadco Div., Draftlite Inc.  
*Circle 212 on reader service card*

**Impact protection systems** for commercial, industrial, and institutional buildings include wall guards, handrails, corner guards, wall protection panels, and equipment bumpers. A full-color, 20-page selection guide illustrates the products, most of which are available in several colors, and shows details of their installation. Pawling Rubber Corp., Standard Products Div.  
*Circle 213 on reader service card*

**Terra-Lite® soilless growing media** are offered in eight different mixes for indoor or outdoor planting. The mixes, which weigh 8 to 18 pounds dry per cubic foot, come in three- or four-cubic-foot bags. Descriptions of the various media, including a list of ingredients in each, package weight, and other pertinent information is included in a six-page brochure. W.R. Grace & Co., Horticultural Products.  
*Circle 214 on reader service card*

**Volclay Panels** can be nailed in place against foundation walls to create a waterproof seal. The panels contain a mineral that swells when wet to form a gel-like barrier between the building

and the backfill. The panels are easy to handle and can be applied in almost any weather or temperature. American Colloid Co., Building Materials Div.  
*Circle 123 on reader service card*



**Computer furniture** in two lines—traditional and contemporary square edged—is available in either oak or walnut natural wood or matching grain veneers. Units are on locking casters or wood bases. A brochure for each series illustrates bases available and accessories. Nucraft Furniture Company.  
*Circle 215 on reader service card*

**'General Guidelines for Single Ply Ballasted Roofing Systems'** concerns: system design with

attention to wind velocity and roof structure; selection of ballast materials; and application. The guide is intended for contractors, architects, and design engineers and is available from Single Ply Roofing Institute, 1800 Pickwick Ave., Glenview, Ill. 60025.

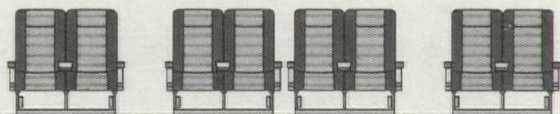
**Dock seal selector guide** aids in the selection of the right seal for semis and local delivery trucks and railroad cars. All seals are easily installed and form an airtight seal against inclement weather and loss of heat or air conditioning. AirLocke Dock Seal, Div. of O'Neal Tarpaulin Co.  
*Circle 216 on reader service card*

**Access 2000 raised floor system** is specifically designed for office buildings. Its reinforced construction offers high strength and durability and provides unlimited access to underfloor services. Panels are precisely sized and squared, with edge trim molded in. Pedestals are available for all subfloor heights. There is a wide choice of carpeted surfaces. Floating Floors, Inc.  
*Circle 124 on reader service card*

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ONLY TWA'S BUSINESS CLASS  
 GUARANTEES 6 SEATS ACROSS TO BOTH  
 EUROPE AND THE MIDDLE EAST.



MOST AIRLINES HAVE 8.

For space and comfort across the Atlantic, the smart money's on TWA. Because TWA has 6-across seating on every nonstop from the U.S. to Europe and the Middle East. Most airlines have eight. And every seat is either an aisle seat or window seat, so you'll have more room to work, and more room to relax.

And now you get comfortable 6-across seating on every widebody TWA flies overseas—our L-1011's as well as our 747's. That's because we've folded down the two middle seats and added more legroom in our L-1011's. So now, they're more comfortable than ever.

TWA's Ambassador Class®. Just six seats across on every flight to Europe and the Middle East—not eight like most airlines.

Who's your money on?

You're going to like us





ARE THERE REALLY  
ANY GOOD REASONS LEFT  
TO SIDE WITH WOOD?

There was just one: appearance. But now, Wolverine Building Products has eliminated that reason with Restoration Series Three.

This is solid vinyl siding so beautifully crafted, you can't tell it from painted wood.

So technologically superior, it comes with a lifetime warranty.\*

Its 3-inch exposure has the authentic appearance of clapboard siding. Its smooth, flat finish comes in natural colors that quietly please.

Of course, there are none of the maintenance problems of painted wood. Not ever.

See for yourself. Send for information or call Jackie at 800-521-9020 for the name of your nearby representative.

**RESTORATION**  
SERIES THREE

solid vinyl siding

**Wolverine Building Products**

\*Some restrictions may apply. See warranty for details.



A microwave oven is available for compact kitchens. It is wall-hung and includes a timer and a variable power knob for control over power settings. King Refrigerator Co.

Circle 125 on reader service card

**Clipon™ removable ceiling design elements**, described in an eight-page catalog, attach to existing T-bar grid ceilings. They are easily removed for relocation. Consisting of Baffleline™ (white), Arcaline™ (red), Deltaline™ (white), and Beamline™ (brushed brass), Clipons can add interest to ceilings and delineate office areas. Special finishes can also be ordered. Integrated Ceilings, Inc.

Circle 217 on reader service card

**Five specialty Wilsonart laminates** are described in an eight-page, full-color brochure. Chem-surf® is chemically resistant; Tufsurf II® is abrasion resistant; Fire Rated is fire resistant; Dor-surf® is impact and abrasion resistant; and Metacolor is impact, stress, and fire resistant. Charts show performance traits, colors and designs, and recommended

functional applications. Ralph Wilson Plastics Company.

Circle 218 on reader service card



**Orchidea fittings** for kitchens, baths, whirlpools, hot tubs, and bar sinks were designed by Junko Enomoto for Zazzeri of Italy. They are available in six colors plus black and white. An illustrated six-page brochure shows the various fittings and colors. Watercolors.

Circle 219 on reader service card

**Magnum Alert-700** is a compact security alarm system for apartments, condominiums, offices, and small businesses. The control panel has a keyboard for access to system functions. There are three programmable bur-

glary zones, two 24-hour zones (panic and fire), selectable exit/entry delay timer, manual and auto shunting, day zone supervision, priority arming, and auto reset. Napco Security Systems, Inc.

Circle 126 on reader service card

**Architectural interiors** fabrication capabilities are illustrated in a four-page color brochure. The company assumes responsibility for providing and installing wood, plastic laminate, marble, granite, specialty metals, glass, and fabrics. Loughman.

Circle 220 on reader service card

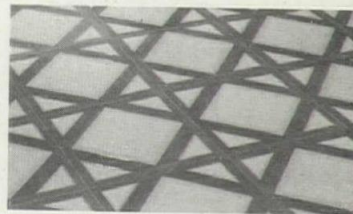
**Lucifer™ linear lighting** is described and illustrated in an eight-page brochure. Strips are available in several lengths that can be assembled in tandem or cut to specifications. The catalog includes transformers, dimmers, lamps, and housings. Photometric and other data are provided. Lucifer Lighting Company.

Circle 221 on reader service card

**Vinyl composition floor tile** for commercial use is described and illustrated in a four-color, six-page folder. Tiles include Su-

preme Vinyl Corlon, Classic Travertine, and Feature Tile/Feature Strips, as well as standard Excelon. The brochure has color charts and a table of physical data. Armstrong World Industries.

Circle 222 on reader service card



**Ceramique vinyl floor tile** is offered in two new patterns in seven colors. Fountain Plaza is an octagonal pattern in blue, almond, brown, or yellow glaze with darker tone dappling in the same color to accent the design. Provincia Grande has diamond borders of natural wood with a center design reminiscent of tooled leather. It combines gunstock with blue, terra cotta, or bisque. The asbestos-free tiles are 12" x 12" and are adhesive-backed for easy installation. Tarkett, Inc.

Circle 223 on reader service card

## Design Better Swimming Pools With **PARA-FLYTE** QUALITY DECK EQUIPMENT



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# KDI Paragon Inc.

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## Heliolux Sun/Shadow Calculator



The Heliolux simulates cast shadows for any time of year, hour of day, anyplace on earth. The system includes a 650 watt quartz iodine "sun" on adjustable stand and camera mounting equipment. Heliolux is used world-wide for overhang/sunscreen design, building and site orientation,

landscape planning, land-contour problem solving, photo documentation, and solar heat gain studies. \$3,000 Complete.

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805. 685. 2223

Circle No. 333 on Reader Service Card



## Building materials

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

### Roosevelt Senior Citizen Housing, Roosevelt, N.J. (p. 66).

*Architects: Kelbaugh & Lee, Princeton.* Windows: Caradco. Skylights: "Exolite" by Cyro. Doors: Morgan. Quarry tile: American Olean (donated by company). Asphalt shingles: IKO. Opaque stain: Olympic. Paint: MAB. Steel hinges: Stanley or Morgan. Nylon levers and pulls: HEWI. Signage: Simple Space-Rite. Exterior low pressure sodium lights: Benjamin. Interior lights: Halo, Prescolite, Sim-Kar. Bathroom fixtures: American-Standard. Rotary ventilators: Penn Ventilator. Loop pile carpet: J&J Industries. Exterior canvas awnings: Levolor. Window quilt: Appropriate Technology.

**Somerset Parkside Housing, Sacramento, Calif. (p. 69).** *Architects: Van der Ryn, Calthorpe and Matthews, San Francisco.* Sliding glass doors: Cam Industries.

Carpet: World Carpet. Fiberglass shingles: Certainteed. Waterproofing: Dexotex. Interior lighting: Edison-Price. Tubs: Universal Plastics. Water closets: Koehler. Heat pumps: Carrier. Hardware: Schlage. Plastering: Johnson Plastering.

**Plymouth Place, Stockton, Calif. (p. 72).** *Architects: Mulrow Dimster Partnership, Los Angeles.* Concrete foundation: Lone Star Cement Co. Steel frame: Inryco Inc. Lightweight concrete deck: Elastizell. Exterior stucco finish: Inryco Inc. Aluminum sliding doors and windows: Northrop Corp. Interior wood doors: Cal-Wood Doors. Interior metal frames: Timely Industries. Hollow metal doors: Ceco Corp. Quarry tile paving: American Olean. Vinyl Corlon interior floors: Armstrong. Built-up roof and batt insulation: Owens-Corning. Gypsum wallboard: Pabco. Paint: Pittsburgh. Steel hinges: McKinney. Locksets: Kwikset. Closers: Norton. Panic hardware: Von Duprin. Kitchen appliances: Sears. Apartment security system: NuTone/Scovill. Emergency call system: Fire Call. Fire alarm system: Fire Lite Alarms. Signage: Builders Brass.

Smoke detectors: Chloride Pyrotec. Elevators: Dover. Steel stairs: M&G Steel. Wood handrails: DWI Inc. Lighting: Amfac Supply. Electrical main: Sylvania. Vitreous china bathroom fixtures: Colton. Chrome fittings: Price Pfister, Delta, Sloane. Baked enamel stalls: Global. Toilet accessories: Bobrick. Water fountains: Haws. Sprinklers: All Fire Protection. Gas hot water boiler: Raypak. Hot and cold water wall units: American Air Filter. Carpets: Wellco Corp. Cabinets: Builders Cabinet. Drapery: Coral of Chicago. Drapery hardware: Kirsch Co. Emergency generator: Kohler. Rubbish chute: Wilkinson.

### University Avenue Cooperative Homes, Berkeley, Calif. (p. 74).

*Architects: Lyndon/Buchanan, Berkeley.* Concrete foundations and parking structure: Rhodes-Jamieson. Housing, wood frame. Exterior walls, stucco: California Stucco. Interior walls, gypsum board. Aluminum windows: All-weather, Pacific Industries. Aluminum storefront: Cobbledick-Kibbie. Acrylic dome skylights: O'Keefe. Wood

doors: Simpson. Hollow metal doors: Steelcraft. Garage doors: Electronic Innovations. Asphalt shingles: Flintkote. Bituthene waterproofing/sealant: W.R. Grace. Insulation, fiberglass batts. Exterior stain: Olympic. Trim and interior paint: Sherwin-Williams. Locksets: Schlage. Door closers: Reading. Thresholds and weatherstripping: Pemko. Kitchen appliances: Whirlpool. Metal signage letters: Trimco. Hydraulic elevator: Dover. Exterior lighting: Mold-cast. Interior lighting: Prescolite, Seagull. Bathroom fixtures: Colton Wartsila, Norris Industries. Plumbing fittings: Delta. Sinks: Polar. Heating units, gas forced air: General Electric. Carpets, acrylic: Walter Carpets. Sheet vinyl flooring: Armstrong. Cabinets: Laurelwood Products. Drapery: American Drapery. Drapery hardware: Kirsch.

### Comme des Garçons, New York (p. 88).

*Designer: Rei Kawakubo.* Sheetrock surfaces: U.S. Gypsum. Paint: Benjamin Moore. Lighting: main floor, Hubbell, #1600-Appleton, and Stomco. Fixtures: lower floor, Lightolier recessed. Chairs: Eileen Grey, Transat armchair, 1927 design.

## Lighting Design at Your Fingertips

### CADLight I and II

CADLight I: Daylighting by Energyworks, Inc., is an exciting breakthrough in lighting design on **micro-computers**. Using CADLight I, you can now plan and evaluate the effects of daylighting design alternatives in even the most complex interior and exterior spaces. CADLight I offers advanced lighting design features previously available only on larger computer systems ... for a fraction of the cost.

- color graphics in two and three dimensions
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Using CADLight II: Artificial Lighting enhances your ability to quickly evaluate artificial lighting design concepts. You can even integrate these results with your CADLight I daylighting design strategies.

Both programs for the IBM PC or PC/XT with 192K memory. CADLight I: (0 471-88229-1) **\$595.00**

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CADLight II: (0 471-88230-5) **\$595.00** Available Sept. 1984

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## DESIGN COMPETITION

### SILAS DEANE HIGHWAY, WETHERSFIELD, CT

A national search for a visionary concept to guide the future development and improvement of the Town's primary commercial environment.

<b>AWARDS:</b>	First Prize:	<b>\$15,000</b>
	Second Prize:	<b>\$ 8,000</b>
	Third Prize:	<b>\$ 3,000</b>
	Four Citations:	<b>\$ 1,000 each</b>
	Honorable Mentions at the discretion of the Jury	

All competition winners will be included in an exhibition and brochure which will culminate the Town's historic year-long 350th celebration of its settlement and set the stage for a commitment to the future.

**JURY:** RAYMOND GINDROZ, AIA, Principal  
Urban Design Associates, Pittsburg, PA  
STEVEN IZENOUR of  
Venturi, Rauch and Scott Brown, Philadelphia, PA  
GEORGE RANALLI, Associate Professor  
School of Architecture, Yale University  
HENRY SANOFF, AIA, Professor of Architecture  
School of Design, North Carolina State University  
MARK SIMON, AIA, of  
Moore, Grover, Harper, PC, Essex, CT

The Town of Wethersfield, Connecticut, through its Economic Development and Improvement Commission, is sponsoring a national one-stage Design Idea Competition. The competition is open to design professionals, students, and teams. Competition kits will be sent to registrants on September 10, 1984. Board submissions will be due on November 5, 1984.

To register and receive a competition kit, send a non-refundable check for \$40 U.S. funds made payable to the *Town of Wethersfield SDDC* by August 31, 1984. Send registration fee to:

JOSEPH F. PIERZ, AIA, Professional Advisor  
SILAS DEANE DESIGN COMPETITION  
c/o Pierz Associates  
115 Garden Street  
Wethersfield, Connecticut 06109



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Herculon Nouvelle is *the* contract carpet fiber that's truly qualified to perform on every floor of your corporate facility—from the lobby to the executive suite. With beautiful results.

Because carpets of Herculon Nouvelle give you the ultimate blend of beauty and on-the-floor performance. With a wide variety of new, contemporary styles and textures that are ready to accept the design challenge of any and every office space application. And with a proven record of durability in resisting the everyday spills, spots, and wear of the corporate grind. For years to come.

So before you put just anything to work on the floor of your office, take a look at our executive material. And give your business a better footing with Herculon Nouvelle.

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**Nouvelle**™  
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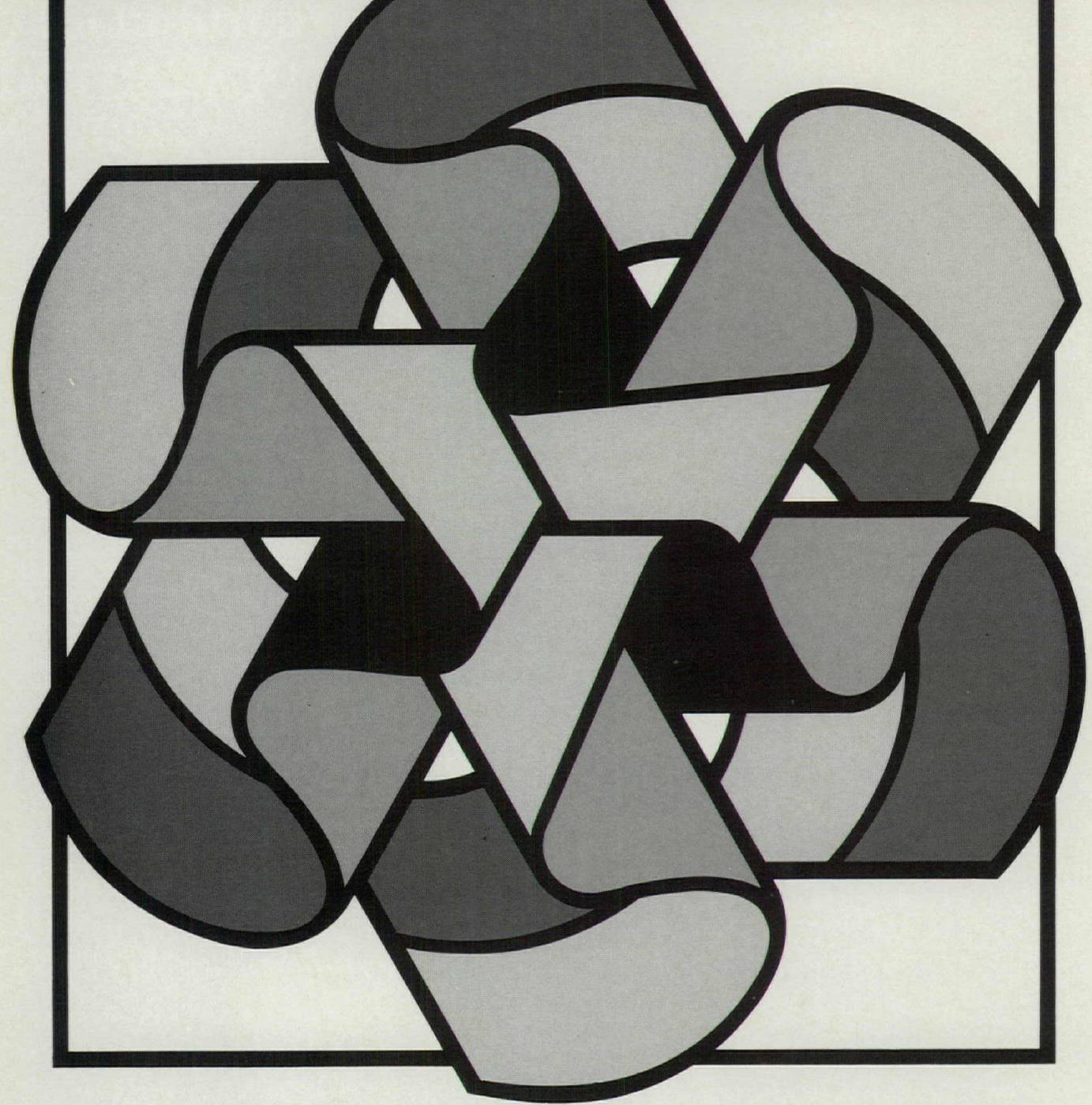
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## MID-STATE TILE COVERS 5¼ ACRES OF DOWNTOWN PHILADELPHIA.

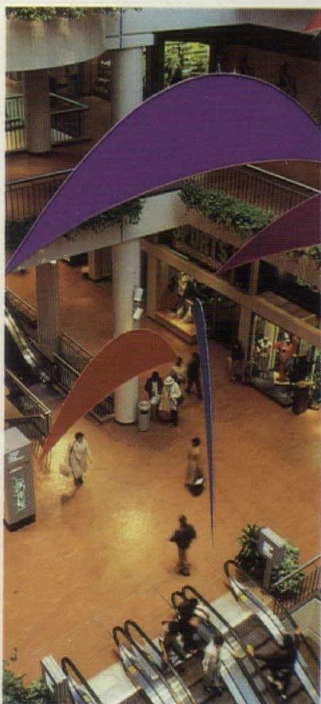
A quarter-of-a-million square feet is probably one of Philadelphia's biggest tile jobs. And we supplied it all for phase two of The Gallery, a downtown shopping center.

What's more, we custom-made the paver floor tiles to match another manufacturer's used in the first phase of construction.

We make Carolina Colony pavers in many beautiful earth tones for commercial and residential applications.

If quality is your number one priority, let us bid on your next tile job, be it small, large or Philadelphia-size. Write us at Box 1777, Lexington, NC 27292.

**MID-STATE TILE**  
A MANNING COMPANY



Natural lighting and warm earthen tile floors by Mid-State create a pleasant shopping environment. Bower, Lewis, Thrower Architects and Cope-Linder Associates designed The Gallery.



A huge inner-city mall, The Gallery's four levels and the adjacent commuter rail tunnel are tiled with Mid-State pavers. Roman Mosaic & Tile Company was the tile contractor.





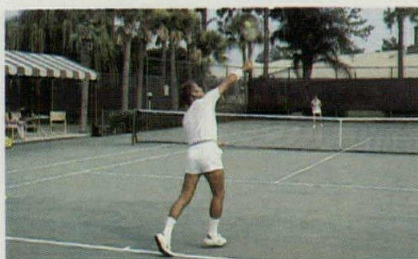
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Clustered in the midst of Florida pine and cypress, just 25 minutes north of Tampa International Airport, a complete resort has been carefully crafted with all its facilities within easy walking distance. At Saddlebrook, skillfully blended into a unique Walking Village environment are 450 lavishly decorated, privately owned suites, meeting rooms and banquet facilities, 27 championship holes of golf, 17 tennis



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courts, swimming in the meandering half-million-gallon Superpool, tropical and intimate dining, entertainment, shopping and a complete health spa.

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Saddlebrook is the recipient of the AAA's coveted Four-Diamond Award; McRand's Conference Award...

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The Best New Resort in the Country; Meetings & Conventions' 1983 Gold Key Award and the Mobil Four-Star Award.

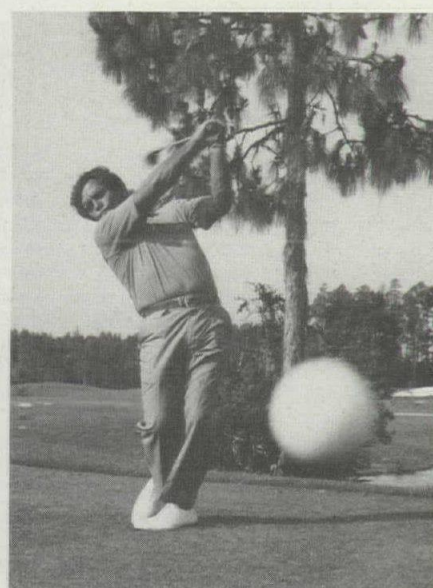
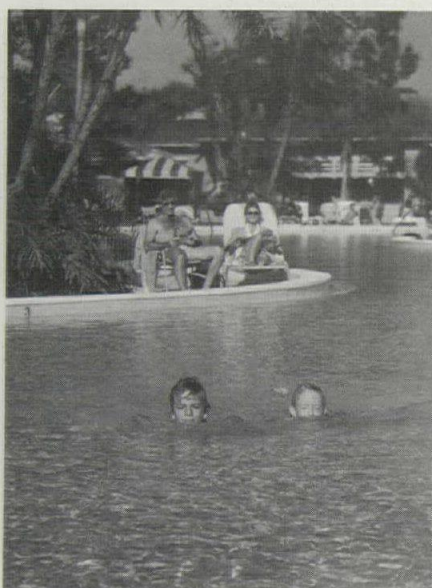
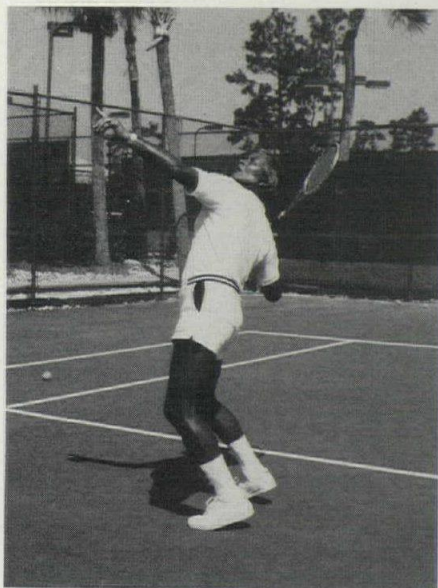


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Saddlebrook is a unique resort, thoughtfully arranged in a special Walking Village around our half-million-gallon Superpool. Enjoy intimate dining in our lush tropical setting. Saddlebrook is totally self-contained with entertainment, shopping and a complete health spa — everything you'll need for a relaxing getaway!

Saddlebrook is close to Busch Gardens (Tampa) and convenient to the Walt Disney World Magic Kingdom® and EPCOT Center.

### SUPER GOLF PACKAGE!



**\$37<sup>50</sup>** Per person/per night  
Double occupancy  
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June 15 - Sept. 14, 1984\*

#### Package includes:

- Accommodations
- Unlimited daily greens fees
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- Daily admission to Jockey Club Spa

### SUPER SUMMER PACKAGE!

**\$25<sup>75</sup>** Per person/per night  
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Based on 7 night minimum with 2 people in a 1 bedroom suite (state tax and gratuities not included)  
June 15 - Sept. 14, 1984\*

#### Package includes:

- Luxurious accommodations in a privately owned suite
- Housekeeping service once during the week
- Fully equipped kitchen in the suites
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### SUPER TENNIS HOLIDAY!



**\$40<sup>50</sup>** Per person/per night  
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June 15 - Sept. 14, 1984\*

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# P/A Job mart

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We offer a commitment to outstanding design, a challenging work environment, and an excellent benefit package. If interested, please send resume and salary requirements to:

**Paul Jorgensen, AIA**  
**HOWARD NEEDLES TAMMEN**  
**& BERGENDOFF**  
**P.O. Box 299**  
**Kansas City, Mo. 64141**

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We offer an excellent benefit package, a challenging work environment, and a commitment to outstanding design. If interested, please send resume and salary requirements to:

**Jeffrey B. Miller, AIA,**  
**Director, Interior Architecture**  
**HOWARD NEEDLES TAMMEN**  
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**P.O. Box 299**  
**Kansas City, Mo. 64141**

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