

Progressive Architecture

OCTOBER 1988

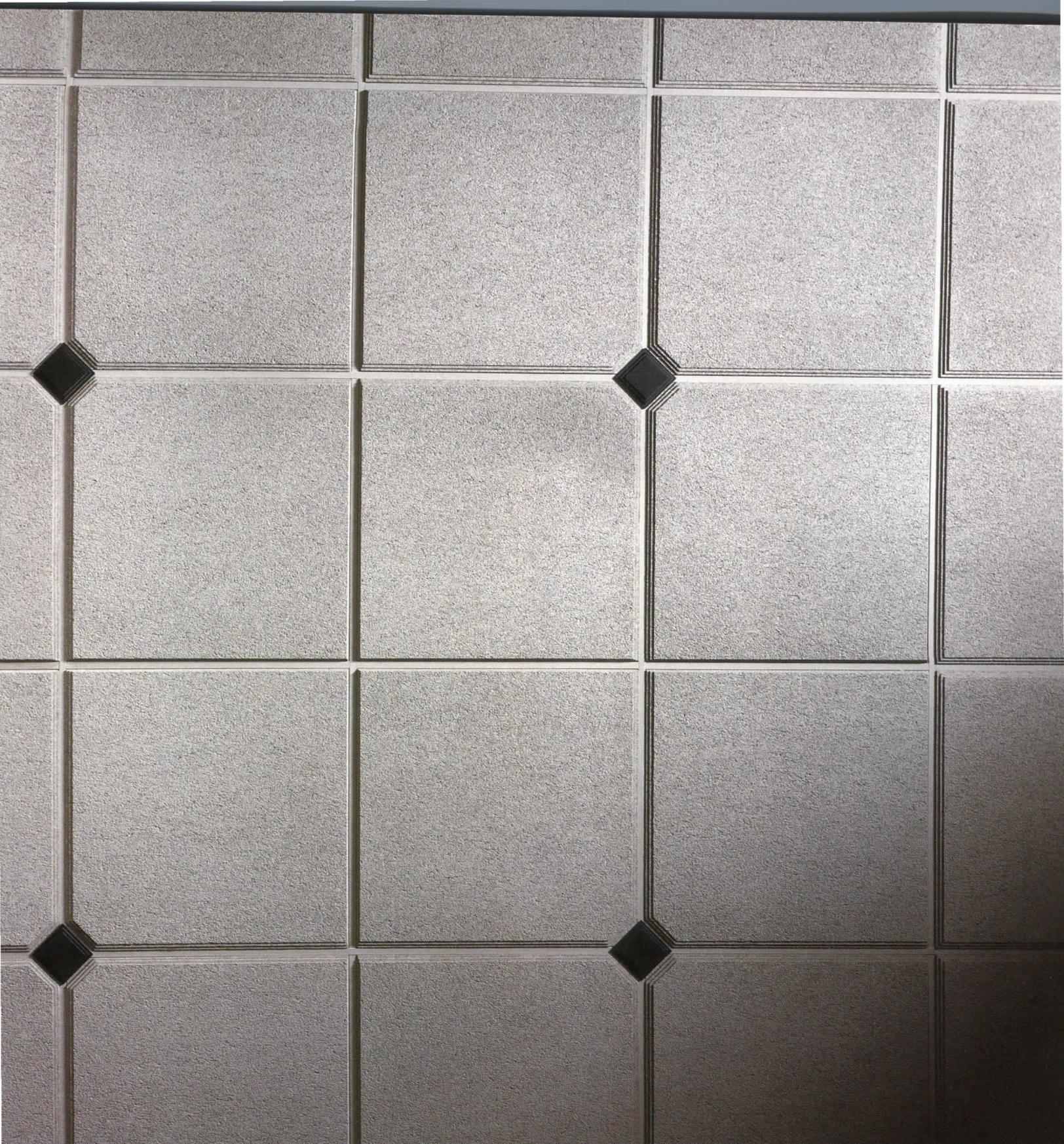


SPECIAL ISSUE: SOLVING THE HOUSING CRISIS



CEILING ACCENTS

Grid accessories for new ceiling systems.
Stepped or beveled edges complement ceiling detail.
Four colors. For our brochure, call 1 800 233-3823
and ask for Ceiling Accents.



ARMSTRONG
CONTRACT
INTERIORS

CEILINGS
CARPETS
FLOORS
WALLS



Circle No. 311

Wednesday afternoon, late.

Herb Clark, Steelcase[®] Regional Manager, gets a call from his sales manager in Kansas City: “Herb, you’re not going to believe this. The guys over at the Scott Rice dealership just got an order from US Sprint Communications Company for eight-hundred Valencia™ office system panels.”

Sunrise service.

“Great!”

“But they need them by Sunday.”

“*This* Sunday? You’re crazy!”

Herb doesn’t know if he has the nerve to phone the order in to Roger Martin, VP in charge of customer service in Grand Rapids. After Roger stops laughing, Herb explains that this is no joke: US Sprint is moving into new headquarters in Kansas City practically overnight. They’re desperate to get the furniture in by Monday.

Roger says, “It may not be possible.” He gets on the phone to the





Panel Plant in Grand Rapids:

“I know this is unreasonable but...”

Overnight, the plant confirms that it has the parts to fill the order. They call for volunteers to work around the clock assembling the panels.

The volunteers finish about noon Saturday. Two teams of drivers, hauling Valencia panels and accessories, immediately take off for Kansas City, 650 miles away.

The crew from Scott Rice arrives at 8:00 Sunday morning to install the furniture. The trucks are there, the drivers asleep in the cabs.

By 1:00 A.M. Monday, the Scott Rice crew finishes the installation. US Sprint moves in on schedule.

Herb Clark says he still can't believe it.

Roger Martin says that from time to time we like to do the impossible.

What do the US Sprint people say? “We knew you could do it.”

COLORFUSION™

Ceramic-On-Steel Melds High-Tech With High Style.

Only AllianceWall makes COLORFUSION™ a unique breed of ceramic-on-steel panels as beautiful as they are functional. By a new, proprietary process, we can fuse a limitless range of colors, patterns or graphics into the wall surface.

AllianceWall's COLORFUSION panels are virtually indestructible. They won't chip, crack, mar or fade, and they are scratch-, heat- and chemical-resistant.

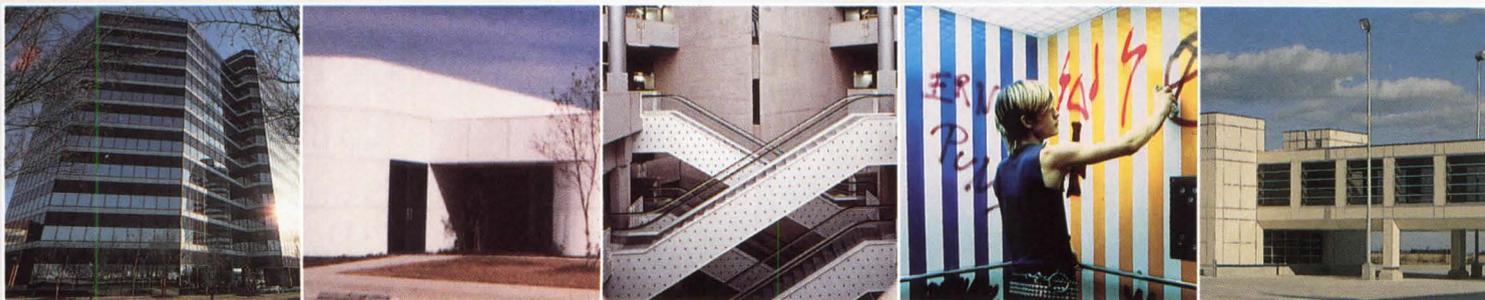
They're easier and less expensive to install than conventional wall surface materials. And they're maintenance-free.

Nice to know that ceramic-on-steel now gives you endless design possibilities. And that it will keep your design intact...a long way into the future. Write or call for more information on American-made COLORFUSION panels.

Ask about our other new metallic, matte and graphic surfaces.

AllianceWall Corporation • Box 920488 • Norcross, Georgia 30092 • (404) 447-5043 • TWX 810-766-0436 • FAX 404-446-5951

 ALLIANCEWALL®



AllianceWall's ceramic-on-steel panels, *left to right*: Exterior, Paragon Building, Houston; Exterior, CIGNA Regional Office Buildings; Interior applications and escalators, Liege Hospital, Belgium; Graffiti-resistant walls, Elevator Manufacturers Worldwide; Exterior and jetways, Cedar Rapids Airport.

Editor

John Morris Dixon, FAIA

Executive Editor

Thomas Fisher

Profession and Industry Editor

James A. Murphy, FAIA

Managing Editor

Valerie Kanter Sisca

Senior EditorsSusan Doubilet, MRAIC, *Features*Pilar Viladas, *Interior design*Daralice D. Boles, *News, Features***Associate Editor**Vernon Mays, *Technics***Copy Editor**

Virginia Chatfield

Assistant Editors

Mark Alden Branch

Jessica Elin

Editorial Assistants

Joan A. Brown

Debra Ladestro

Art Director

Richelle J. Huff

Assistant Art Directors

Lisa M. Mangano

Chee Wang Ng

Contributing Editors

Norman Coplan, Hon. AIA

William T. Lohmann, AIA, FCSI

Walter Rosenfeld, AIA, CSI

CorrespondentsEsther McCoy, *Los Angeles*Barbara Goldstein, *Los Angeles*Sally Woodbridge, *San Francisco*Peter Papademetriou, AIA, *Houston*Thomas Vonier, AIA, *Washington*Monica Pidgeon, Hon. FAIA, *London*Donatella Smetana, *Milan*Jane Holtz Kay, *Boston***Vice-President and Publisher**

Robert J. Osborn

Business Manager

Daniel H. Desimone

Administrative Assistant

Carol Zezima

Promotion Manager

Debra L. Jones

Promotion Director

Jack Rudd

Production Manager

Gerry Lynch Katz

Production Assistant

Evelyn S. Blum

Vice President—Circulation

Gloria Adams

Circulation Manager

Dan Cochran

Circulation Marketing Manager

Joanne M. Improta

Penton Publishing

Progressive Architecture (ISSN

0033-0752) is published monthly,

except semimonthly in October,

by Reinhold Publishing, A Division

of Penton Publishing, 1100

Superior Ave., Cleveland, OH

44114; Philip H. Hubbard, Jr.,

President; Robert J. Osborn,

Vice-President; Penton: Thomas

L. Dempsey, Chairman; Sal F.

Marino, President; James K.

Gillam, N.N. Goodman, Jr., Paul

Rolnick, Executive Vice-Presi-

dents. Executive and editorial

offices, 600 Summer St., P.O. Box

1361, Stamford, CT 06904

(203-348-7531).

FAX 203 348 4023

ABP  **SOLVING THE HOUSING CRISIS***Editor in charge: Daralice D. Boles*

- 65 **Introduction**
Sources at all points of the political spectrum agree that the need for housing has never been greater, involving not only more architects but clients new to the field of housing. *Daralice D. Boles*
- 70 **Low-Cost Housing**
Architects are addressing the housing crisis by doing what they do best—designing solutions to specific problems. Shown here are eleven finished projects by eight architects in the United States and Canada.
- 70 **Berkeley, 5th, and 6th Streets**, Santa Monica, by Koning Eizenberg Architecture.
- 76 **HELP I**, Brooklyn New York, by Cooper, Robertson + Partners.
- 78 **St. James Social Services and Four Sisters**, Vancouver, by Davidson/Yuen Partners.
- 80 **Third House**, Toronto, by Tsow-Pollard Partnership.
- 81 **The Baltic Inn**, San Diego, by Rob Wellington Quigley.
- 82 **The Harold Hotel**, Los Angeles, by Urban Innovations Group.
- 83 **Back of the Hill**, Boston, by William Rawn Associates.
- 84 **Tent City**, Boston, by Goody, Clancy & Associates.
- 87 **A Future for Federal Housing**
The authors of two essays, excerpted from papers prepared for the MIT Housing Policy Project, argue for the preservation of existing low-income housing.
- 87 **Assisted Private Housing: A Threatened Resource.** *Philip L. Clay and James E. Wallace*
- 88 **Preserving Public Housing.** *Michael A. Stegman*
- 89 **P/A Portfolio: Housing for the Future**
Designs ranging from squatters' huts in Atlanta to moderate-income housing in Boston and San Francisco illustrate what's ahead in housing. The portfolio includes the results of three housing design competitions in Indianapolis, Los Angeles, and Seattle.

TECHNICS

- 98 **Low Cost, High Design**
A reexamination of the Weissenhofsiedlung in Stuttgart, prompted by its restoration, shows that architects Le Corbusier, Mies van der Rohe, and others were as interested in social and technical innovations as they were in aesthetics. *Thomas Fisher*

DEPARTMENTS

- 9 **Guest Editorial**
Housing Acts and Architects
- 11 **Views**
- 15 **P/A Reader Poll**
- 33 **News Report**
- 41 **In Progress**
Three projects by Foster Associates
- 47 **Calendar**
- 51 **P/A Practice**
Using the Title Architect; Product Salesmen; 13 Myths of CAD
- 113 **Books**
Chicago Architecture, 1872–1922; In the Shadow of Mies: Ludwig Hilberseimer
- 123 **New Products and Literature**
- 126 **Building Materials**
- 131 **P/A in November**
- 132 **Job Mart**
- 135 **Selected Details**
Façade replacement, Crookham Junior School, Hampshire, England
- 136 **Advertisers' Index**
- 137 **Reader Service Card**

Cover

“Eviction: The Fitzgerald Family,” Alexandria, Virginia, October 1987. © 1987 Jim Hubbard/HOMELESS IN AMERICA: A Photographic Project.

Subscription information: Send all subscription orders, payments and changes of address to Progressive Architecture, P.O. Box 95759, Cleveland, OH 44101 (216-696-7000). When filing change of address, give former as well as new address and zip codes, and include recent address label if possible. Allow two months for change. Publisher reserves right to refuse unqualified subscriptions. Professionals include architectural and architectural-engineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields. Subscription rates for U.S. professionals are \$32 for 1 year (\$40 in Canada, \$75 for foreign); \$50 for 2 years (\$65 in Canada, \$130 for foreign); \$75 for 3 years (\$95 in Canada). U.S. student subscription for 1 year is \$30. Subscription rate for U.S. nonprofessionals is \$45 for 1 year (\$60 in Canada, \$90 for foreign). Single copies are \$7 in the U.S., \$8 in Canada, and \$9 for foreign except Information Sources issue, \$12 in U.S., \$12 in Canada, and \$20 for foreign. Permission to photocopy is granted for users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$1 per copy of the article plus \$0.50 per page is paid directly to CCC, 21 Congress St., Salem, MA 01970. Indexed in ArchiText Construction Index, Art Index, Architectural Index, Engineering Index. Second class postage paid at Cleveland, Ohio, and additional mailing offices. Volume LXIX, No. 10. Printed in U.S.A. Copyright © 1988 by Penton Publishing Inc. POSTMASTER: Send address changes to PROGRESSIVE ARCHITECTURE, 1100 Superior Avenue, Cleveland, OH 44114.



WE MAKE WINDOWS FOR IMAGINATIONS THAT HAVE NO LIMIT.

Some people are under the mistaken impression that Marvin only makes custom windows. Those incredible units seen in some of the world's finest and most-often-photographed new homes.

But while we've always prided ourselves on our ability to build a window in virtually any size and shape, we have been equally proud of our ability to provide that same quality of craftsmanship in our more economical standard sizes and shapes, now numbering over 8000.

With made-to-order Marvin windows, you'll find your projects go smoother as installation costs are reduced. (Jamb extensions and exterior finish options can be applied right at the factory.) You'll find yourself using the windows as a premiere feature of the home. And with our innovative maintenance-free



AND BUDGETS THAT DO.

energy-efficient options, you'll have provided that homeowner with an investment that will stand him in good stead for years to come.

So whether you're involved in projects that will be splashed across the pages of *House Beautiful*, or excitedly shared between friends over coffee, specify Marvin windows. Just because you have to think with your wallet sometimes, it doesn't mean your imagination has to take a back seat.

To learn more, call us toll-free at 1-800-346-5128 (in Minnesota, 1-800-552-1167, in Canada 1-800-263-6161), or write: Marvin Windows, Warroad, MN 56763.

MARVIN WINDOWS ARE MADE TO ORDER.



Circle No. 332 on Reader Service Card



Doorpulls

Cabinet Pulls

Design excellence.

Unsurpassed quality.

FORMS+SURFACES

Forms + Surfaces Box 5215 Santa Barbara, CA 93150 (805) 969-7721 Circle No. 322

Housing Acts and Architects

In this guest editorial, Jacqueline Leavitt explains proposed housing legislation and its probable impact on the profession.

ARCHITECTS are uniquely positioned to follow up on the call for a national affordable housing act issued at the last American Institute of Architects convention. Their experience in housing design gives them credibility in the sure-to-be-contentious debate over pending housing legislation. The AIA's pioneering "Search for Shelter" program (page 68) in particular demonstrates significant prototypical designs and model programs for housing and services. The AIA resolution assures the official involvement of architects in the fall debate over housing legislation. But any bill that is passed will also have physical consequences, resulting in new construction or rehabilitation.

Conventional thinking holds that housing action this fall will center on the \$3 billion National Affordable Housing Act proposed by Senators Alan Cranston and Alphonse D'Amato. Although ambitious, this bill does not go far enough to compensate for budget cuts effected in the Reagan era. (HUD's budgets were slashed from about \$34 billion in 1981 to about \$11 billion in 1988.) The Cranston/D'Amato bill also would rely too heavily on private-sector developers who must be enticed to build affordable housing. Several other housing bills give more emphasis to new players in the housing process, most notably decentralized, nonprofit corporations, which are accountable to local constituents. These religious organizations, settlement houses, labor unions, neighborhood councils, land trusts, tenant organizations, resident-controlled corporations, and mutual housing associations, as well as local and state housing authorities, are the new clients for architects in affordable housing.

They will need technical assistance from architects and other specialized professions such as engineering and law. Representative Joseph Kennedy II's Community Housing Partnership Act would provide \$500 million in organizational support grants or loans for training and assistance. It goes beyond housing to fund education, counseling and other programs for tenants. Other bills would emphasize other aspects of the problem. Representative John Conyers' Jesse Gray Housing Bill (named after the late congressman from New York City) would strengthen public housing, constructing 500,000 new units and revitalizing 100,000 existing ones each year through 1997. Representative Barney Frank's Affordable Housing Bill focuses directly on production, calling for 7.5 million units over five years. Representative Ronald Dellums' National Comprehensive Housing Act proposes an alternative form of "socially provided nonmarket housing" with first-year funding for more than 600,000 new and rehabilitated units.

The changing face of homelessness has also broadened the housing debate, expanding the definition of need beyond shelter to services such as child care, medical care, mental health, and job assistance. The Cranston/D'Amato bill will most likely call for support services for the elderly, large families with children, the mentally ill, and the disabled. The Dellums bill includes child care; Conyers would provide for job training in construction. The funding of services for these and other groups, among them homeless veterans, battered women and abused children, will determine whether architects can go beyond simple shelter to build neighborhoods that also serve their surrounding communities.

In addition to services, a comprehensive housing bill that relies on nonprofits to build a permanent stock of affordable housing should at least assure: the preservation of available publicly owned and privately assisted low-income units through preventing displacement, conversions, demolitions, evictions, and public housing sales; modernization of public housing; rental assistance coordinated with welfare reform; adequate maintenance; protection against all forms of discrimination; protection from foreclosure for "at-risk" homeowners; increased new construction; and rehabilitation of private sector housing.

In 1913, housing reformer Albion Fellows Bacon acknowledged the invaluable role of Indiana architects in supporting tenement house reform. "It is to them that we look for the development of better, more durable, more convenient, and more comfortable houses that shall be within the reach of the hitherto neglected classes. It is to them that we must look, in the absence of civic experts, for the redemption of our cities from their unnecessary ugliness." There is no absence of "civic experts" today, but architects alone can make the debate visible. They can use their experience and visual skills to show their colleagues, the public, and Congress how the content of a bill can be transformed into built form.

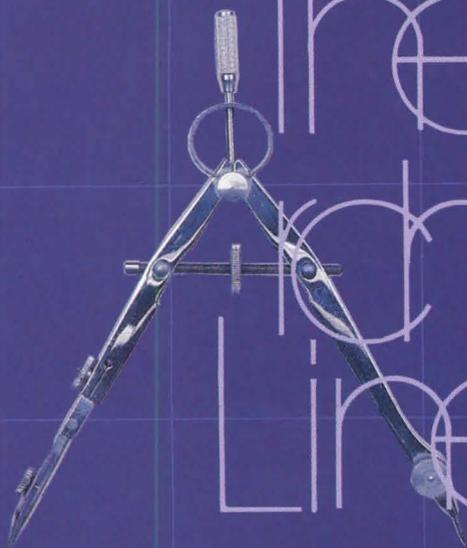
Jacqueline Leavitt

The author is Acting Associate Professor at the Graduate School of Architecture and Urban Planning at UCLA. She has written extensively on low-income housing and was co-winner of the New American House design competition in 1984. Her book, From Abandonment to Hope: Community-Households in Harlem, co-authored with Susan Saegert, will be published by Columbia University Press next year.

This guest editorial offers the perspective of a recognized expert in the field of housing design. The opinions are not necessarily those of P/A's editors or management.

Important to anyone responsible for
exit device specifications:
the American Device 6000 Series:

The Architectural Line



- **Superior Form**
Architecturally designed in *formed* brass, bronze, stainless steel or aluminum. All architectural finishes available as well as economically priced painted and anodized finishes.
- **Superior Function**
Patented design provides superior mechanical function; trouble free, long term life-cycle economy.
- **Superior Adaptability**
Exit-only device can be easily, economically converted to most standard ANSI functions.

The new standard for exit devices: the American Device 6000 Series.

U.S. Manufacturers of fine builders hardware since 1921.



**American
Device**

Manufacturing Company
P.O. Box 8
Steeleville, IL 62288
(618) 965-3491
FAX (618) 965-9022

Circle No. 308 on Reader Service Card

Australian Winner

Congratulations on your Australian Parliament House issue! (Aug. 1988) The writing and balanced assessment of the project and its circumstances are great—I'm sure this will set a new "best read" record for P/A. And, naturally, the issue is a visual delight.

Robert Douglass, FAIA
Houston

Raising the Flag

The building of the Australian Parliament House design by Mitchell/Giurgola & Thorpe should be a real encouragement to those of us who invest time and money to enter public design competitions.

About its flagpole, as a Boy Scout I was taught "flag etiquette," including that you take the flag down at sundown. Yet many public buildings leave the flag up 24 hours a day, which wears them out; our new Police Station here has wind-shredded flags flying over it. . . unnoticed.

At the Parliament House, do they take down the flag in the center? If so, how. . . with a cherry picker?

Jim Davis
Elizabeth, New Jersey

[The flag over Parliament House flies, lighted, at night. With intricate rigging, controlled from the base of the flagmast, it is possible to lower or raise the flag, and to fly it at half-staff. —Editor]

Corporate Conservatism

Such an appalling conservative attitude. I make reference to the article "Big Blue Designs" (P/A, June 1988, page 100) and Mr. Gerald McCue's observation, "There is a tendency among some people to think that they can manage great work out of ordinary designers, but it can't be done." Even the greatest designers had humble beginnings. What a loss it would be to our profession if the likes of Sullivan, Wright and Johnson were lost in idle backwaters because their fledgling corporate portfolios could not live up to the ultraconservative standards of current day corporate policy.

Certainly, it is not the objective of this, or any, publication heralding the title "Progressive" to represent and maintain such a seemingly draconian and conservative viewpoint. I am reminded of the young designer Howard Roark's struggle to overcome these same "powers that be" and achieve architectural purity without succumbing to the pressures of societal conformity. We must remain open-minded and flexible to bend with the unexpected and different.

Kevin W. Lipe
Intern Architect
Glastonbury, Conn.

MOVING?

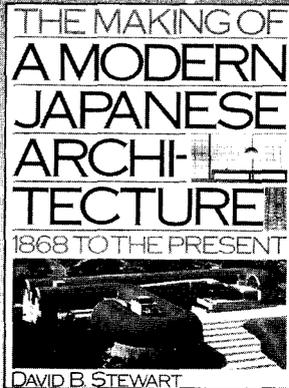
Let us know 6-8 weeks in advance so you won't miss any copies of P/A.

**Affix
Label
Here**

Mail to:
Subscription
Services
Progressive
Architecture
P.O. Box 95759
Cleveland,
OH 44101

New address:
Name
Title
Company
Address
City/State/Zip
Type of firm

JAPAN'S ARCHITECTURE WHERE IT IS TODAY...



THE MAKING OF A MODERN JAPANESE ARCHITECTURE 1868 to the Present

by David B. Stewart

In the 120 years since Japan was opened to the West, the interaction between Eastern tradition and Western innovation has effected a radical transformation in Japanese architecture. This important new book is the first in-depth, fully illustrated volume on the development of Japanese architecture during the crucial years from the mid-nineteenth century to the present.

With more than 400 illustrations, photographs, and plans, David B. Stewart gives the reader a comprehensive view of this fascinating evolution—from the first introduction of gas lighting and brick in the Meiji era, to the ensuing interval of Art Deco, and to the controversial rebuilding of the great Imperial Hotel by American Frank Lloyd Wright. Stewart then looks at the great Japanese modernists: Kenzo Tange, Kunio Maekawa, Kiyonori Kikutake, and Arata Isozaki (designer of the new interior of the Metropolitan Opera House in New York).

"... a thorough consideration of the Japanese tradition of building in the last century. . . Stewart supplies a greater historical perspective in examining the ways in which modern and traditional elements have affected changes in Japanese architecture."—BOOKLIST

No other book on Japanese building styles gives this sweep or insight. No other book accounts so insightfully Japan's powerful impact on worldwide architecture today. *The Making of a Modern Japanese Architecture* is an important addition to every professional library and necessary reading for architects wanting to understand the historical context of modern Japanese style and its growing effect on architecture in the United States and throughout the world.

DAVID B. STEWART received his Ph.D. from the Courtauld Institute of the University of London and was formerly a member of the editorial staff of *L'Architecture d'aujourd'hui* in Paris. Dr. Stewart has been a Visiting Foreign Professor at Tokyo Institute of Technology since 1975. 304 pages \$60.00

...AND WHERE IT BEGAN

WHAT IS JAPANESE ARCHITECTURE? A Survey of Traditional Japanese Architecture

By Kazuo Nishi and Kazuo Hozumi

Traditional Japanese architectural elements are increasingly familiar in the West—both in their own right and as accents within other building styles. But many architects still lack a firm grasp of the essence of traditional Japanese architecture.

With more than 300 illuminating drawings, *What is Japanese Architecture?* covers everything from the largest wooden structure on earth (the Great Buddha Hall of Todaiji Temple) to miniature shrines that fit on a shelf. From prehistory to the mid-nineteenth century, religious structures, residences, castles, and places of entertainment are examined with an emphasis not on their great diversity, but on the traits they share. In the process, the reader learns not only how each of these fields has evolved over the centuries and what distinguishes the buildings of one age from those of another, but also something of the historical conditions and the people responsible for these changes, as well.

What is Japanese Architecture? is must reading for everyone who cares about Japanese architecture and the people who create and use it. 144 pages \$19.95

TWO IMPORTANT AND BEAUTIFUL ADDITIONS TO EVERY ARCHITECT'S LIBRARY

ORDER YOUR COPIES TODAY

Call toll free
1-800-638-3030



or write to:
KODANSHA INTERNATIONAL
10 East 53rd Street, New York, NY 10022

Lighting the way to tomorrow.

Today, windows are a bigger part of architectural design than ever before. That's because design is a bigger part of windows.

Kawneer's window line includes both Thermal and Non-Thermal models. Vertically and horizontally pivoted. Inswinging and outswinging casements. Projected, top-hinged, fixed and high performance windows. Kawneer has them all. To open design opportunities. To open minds.

And Kawneer windows are not only constructed to meet AAMA performance standards, but standards much higher. Our own.

Kawneer windows. They let you look at your design in a whole different light.

 **Kawneer**
The Designer's Element

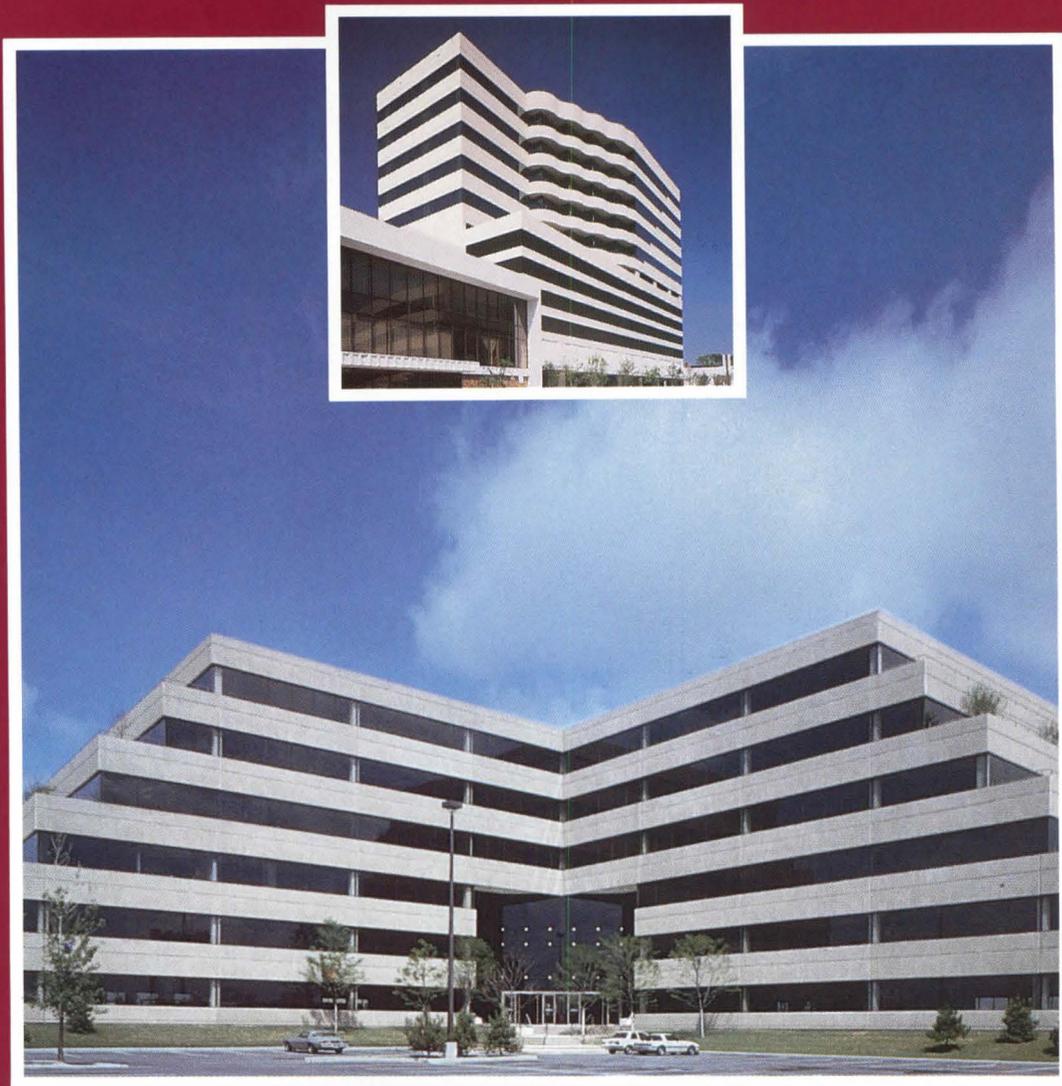




*For full technical description, tracing details and specifications,
contact your Kawneer representative or write to: Kawneer Company, Inc.,
Department C, Technology Park-Atlanta, 555 Guthridge Court, Norcross, GA 30092.*

Circle No. 328 on Reader Service Card

NEW SPACE, NEW OFFICE, ON TIME...



With Precast/Prestressed Concrete

The building must be ready. The space available and productive—on time.
With precast/prestressed concrete you can keep your space program on schedule.
Quick construction time, advantageous interim financing and on time occupancy
are only three of the precast/prestressed concrete benefits package.
The appearance of your new building is limited only by the imagination.
Energy efficiency is a given. Fire protection is a promise.
Precast/prestressed concrete is the beautiful and economical way
to complete your space program on schedule.

Your next office building... think about it in concrete terms.



Prestressed Concrete Institute, 175 W. Jackson Blvd., Chicago, IL 60604

Phone: (312) 786-0300 Fax: (312) 786-0353

PCI Plant Certification—Your guarantee of confirmed capability to produce quality precast/prestressed concrete products.

Circle No. 337 on Reader Service Card

P/A Reader Poll

Design Preferences

P/A readers reveal which design characteristics—and which architects—they admire. And they shed new light on what they now consider avant-garde and conservative.

One of the surprises of this P/A Reader Poll (at least for this writer) involves the design attitudes of people who now consider themselves “conservative” or “avant-garde.” Only a few years after so much of the profession reacted indignantly to examples of Post-Modernism, most of the self-classified conservatives among our readers now believe in historically derived ornament. Those calling themselves “avant-garde,” on the other hand, are most distinctive in their enthusiasm for “architecture involving contrasting forms in angular juxtaposition.”

Response to poll (Figure 1)

Almost 1500 P/A readers responded to this poll, indicating a high level of interest. Of these answers, 1000 were randomly selected for tabulation.

Of all tabulated responses, 70 percent were from readers working in architecture or A/E firms, the remainder working in design firms, for government or corporate clients, engineers, contractors, and so on. Almost half of the respondents (47 percent) are owners or principals of firms.

Opinions among these readers differ more by age and experience, indicated here by decade of education, than by any other classification data. Responses from those educated in the 1980s

and 1970s were much more numerous than from others.

Personal stance (Figures 2, 3)

When asked to identify their own design efforts on a scale from avant-garde to conservative, few readers chose the extremes. Those from small and medium-sized firms identified themselves in similar proportions, but the figures change distinctly for respondents from large firms (50 or more), 39 percent of whom see themselves as occupying the moderate center, 30 percent on the conservative side of center, and only 31 percent on the avant-garde side (vs. 43 percent for those in small or medium-sized firms).

The clearest differences here are related to when the readers completed their professional education. Those from the 1950s and earlier tend strongly to label themselves moderate or conservative, while half of those educated in the 1980s are on the avant-garde side of moderate.

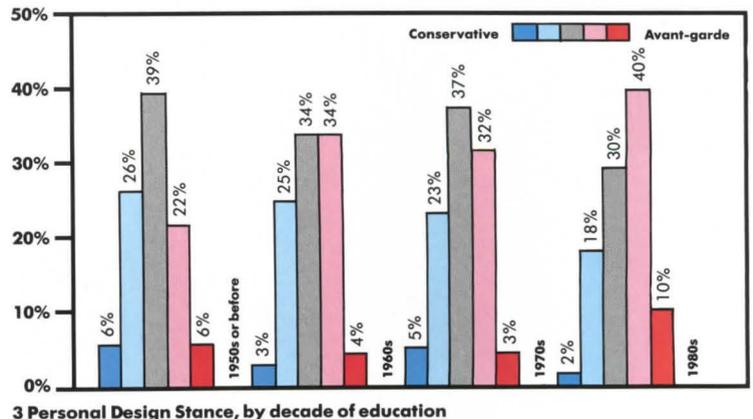
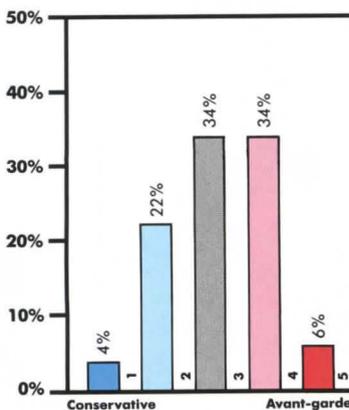
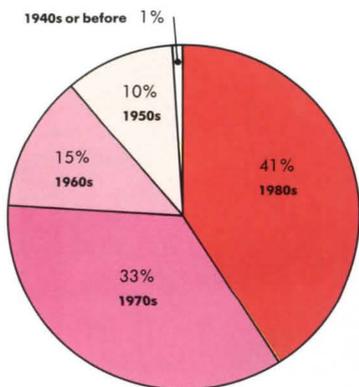
These results may have something to do with youth's equating its own work with the avant-garde (and the reverse for the older generations). The chance that younger readers are actually producing more avant-garde work than their elders is limited by the fact that only 21 percent of those educated in the 1980s have become principals of firms.

There are also geographical variations in this regard. The largest states—California, New York, Texas—along with other states such as North Carolina, Minnesota, and Massachusetts, produced the largest percentages identifying with the avant-garde; states such as Florida, Georgia, Illinois, Missouri, Arizona—and the District of Columbia—were predominantly moderate; a conservative self-image was reported by most respondents from Oregon and Washington, Wisconsin, Michigan, Pennsylvania, New Jersey, Virginia, and South Carolina.

Design issues (Figure 4)

When asked about some of the beliefs that should distinguish one design camp from another, most readers opted for the Modernist expression of structural systems, interior functions, and the nature of materials, and they reaffirmed their faith in the open plan. The Minimalist ideal of simplest possible volumes was largely rejected. Also rejected were Post-Modern preferences for symmetry and symbolic silhouettes, although the preference for following urban street lines shows widespread support.

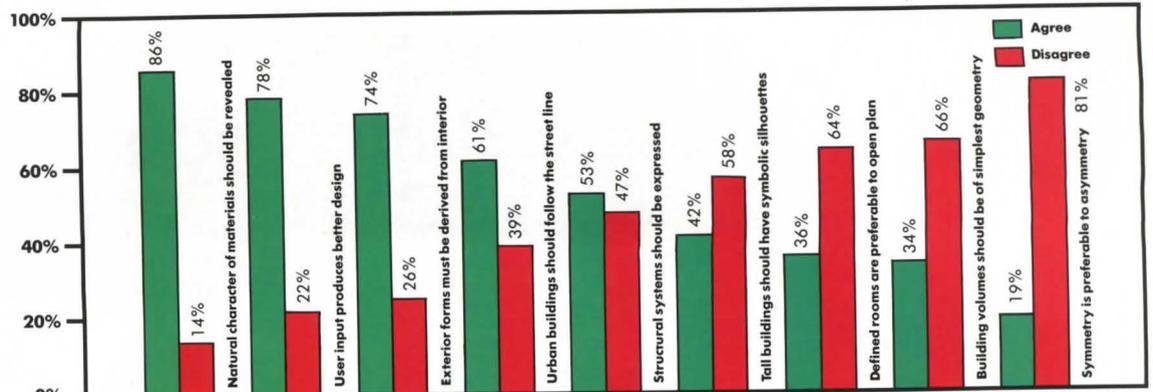
In general, however, these opinions were not very strongly held. One exception was the subject of symmetry, on which 45 percent of readers disagreed



1 Decade of education, all respondents

2 Personal Design Stance, rated from 1, Conservative, to 5, Avant-garde

3 Personal Design Stance, by decade of education



4 Agreement on design issues

completely—and 36 disagreed somewhat—with the statement that “symmetry is preferable to asymmetry wherever possible” (without those last two words, the response might have been more tempered). Older readers were more positive than younger ones on revealing the character of materials, on expressing structure, and on deriving exterior form from internal demands. Younger readers were the staunchest supporters of street line buildings in urban settings, and they were the most favorable toward defined rooms and symbolic shapes for towers. These answers were not divided strongly along conservative/avant-garde lines.

Favored adjectives (Figure 5)

When given a list of adjectives describing architectural design, those polled showed strong preferences for the virtues of old-fashioned Modernism; they like their buildings clean, rational, dynamic, and orderly. Those calling themselves conservative showed distinctly less enthusiasm for the listed words than their avant-garde colleagues, giving only four of them ratings above 4.00 (vs. seven words for the avant-garde) and ranking their least favorite term lower.

Those on the avant-garde side of center were most enthusiastic about the word dynamic, putting

it at the top of their list, and they placed provocative among their favorites, too. Those on the conservative side of center were even more positive about clean and rational than readers as a whole, but showed a particular enthusiasm for orderly, which moved up to second on their list.

Other divisions of opinion: older professionals were particularly negative toward expressionistic design; designer/drafters were most positive about provocative work; those in large firms showed the least enthusiasm for the experimental. Unassuming design was viewed more favorably by older readers, especially those schooled in the 1960s, while designer/drafters showed the least interest in it.

Design concepts (Figures 6, 7)

In general P/A readers believe overall concept should be emphasized over sequential experience in judging building design. While the differences among groups were not sharp, the strongest support for concept came from the avant-garde, the older readers, and the principals of firms. The youngest readers and the designer/drafters ran counter to the avant-garde in this case by giving more emphasis to experience.

On the question of originality vs. precedent, the avant-garde supports originality most

strongly, while conservative readers are more nearly neutral, though still slightly on the side of originality.

Contextual design (Figure 8)

While the majority of readers in all categories favor contextual design, its strongest support is among conservative respondents. It is also supported particularly strongly by those educated in the 1960s (least strongly by those from the 1950s and before).

Ornament (Figure 9)

The results here are notable not only for the general support shown for historically derived ornament, but for the way the responses illuminate current understandings of terms conservative and avant-garde. The self-identified conservatives showed the most support for historically accurate ornament, and favored this more strongly than they did freer adaptations. Avant-garde readers, on the other hand, showed some aversion to historically accurate ornament, weak support for the freely interpreted variety, and much more enthusiasm for the abstractly suggested kind.

The oldest block of readers—those educated in the 1950s or before—clearly stood apart from other readers on this issue: fewer than half of them favored histor-

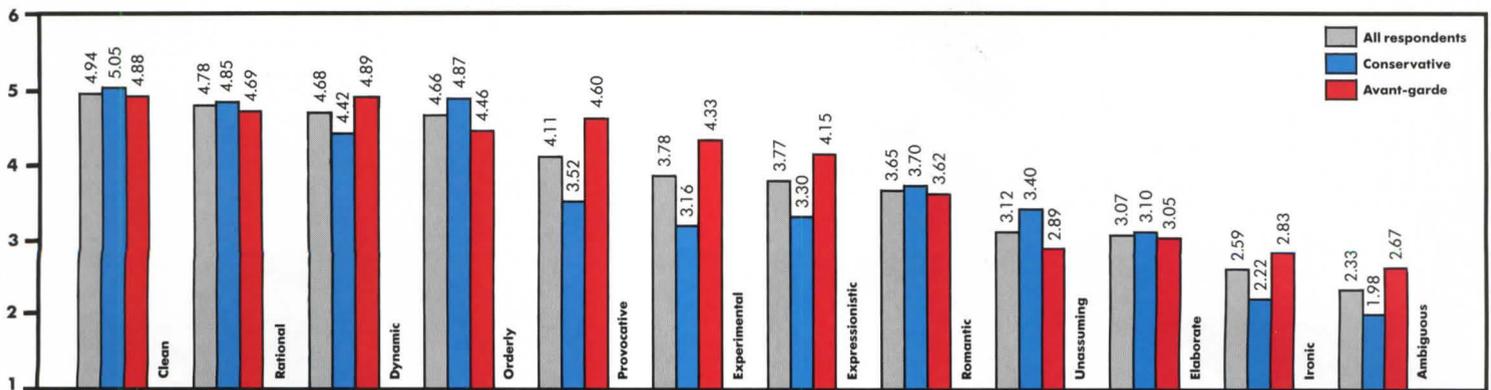
ical ornament of any variety, and 25 percent found all such ornament unacceptable.

Today’s directions (Figure 10)

When asked about three possible bases for today’s architecture, readers gave strong support to ordinary, vernacular construction as a source. “Closely following historical styles” was seen as promising by only 24 percent of the total, and much of this support came from more conservative readers. Those educated in the 1960s and 1970s showed considerable support for historical styles, while those educated in the 1950s or before gave it the least support.

Where the avant-garde sees promise today is apparently in design “involving contrasting forms in angular juxtaposition.” To us this means design like that of Gehry, Eisenman, Tschumi, and others whose work appeared—or could have—in the current Deconstructivist exhibition (P/A, August issue, p. 25). Designer/drafters were particularly positive about this direction, with 60 percent of them endorsing it.

Leaders (Figures 10, 11)
Given a list of 18 well-known architects, readers told us which four they felt “exert, through their building design, the most positive influence on



5 Preferred design characteristics, rated on a scale of 1 to 6

P/A Reader Poll

Architectural Education

Please tear out, fill in, and mail promptly. Results will be published in the February 1989 P/A.

Results of this poll will be reported and commented on in the February issue of Progressive Architecture

FOR EACH OF THE FOLLOWING PLEASE INDICATE THE DEGREE TO WHICH YOU AGREE WITH THE STATEMENT.

WRITE IN THE LETTER USING THIS KEY:

A = AGREE COMPLETELY, B = AGREE SOMEWHAT,
C = DISAGREE SOMEWHAT, D = DISAGREE COMPLETELY.

1. Architecture schools should focus on the teaching of design rather than of practice-oriented information. ___
2. There should be more of an effort made to integrate the lessons of other courses into design studio, even at the sacrifice of some design time. ___
3. Architecture schools do not adequately prepare students for practice. ___
4. Design courses should place more emphasis on collaborative student effort rather than on individual achievement. ___
5. Research should play a larger role in the education of architecture students. ___
6. Practicing professionals make the best studio critics. ___
7. Architecture schools give students unrealistic expectations of the profession. ___
8. Architecture is best taught at the graduate rather than the undergraduate level. ___
9. Coop or work study programs are a better preparation for practice than conventional degree programs. ___
10. The school from which one graduates makes a big difference in one's career. ___
11. Success in school is a good way of predicting a person's success in practice. ___
12. There are too many graduates coming out of architecture programs, leading to overcrowding of the profession. ___
13. Continuing education courses should have higher priority for architecture schools. ___
14. Architects whose education includes a liberal arts degree make better professionals. ___

FOR THE FOLLOWING QUESTION, CHECK THE ONE STATEMENT WITH WHICH YOU AGREE MOST.

15. Business and management courses should be:
 - ___ required in all architecture programs.
 - ___ electives taken at the student's discretion.
 - ___ not part of an architectural education.

CIRCLE THE NUMBER THAT BEST REPRESENTS YOUR OPINION:

16. How would you rate your own architectural education?

unsatisfactory		adequate		superior					
1	2	3	4	5	6	7	8	9	10

17. What was the emphasis of your architectural education?

design									practice/technology
1	2	3	4	5	6	7	8	9	10

18. How would you rate the architectural education of today's graduates?

unsatisfactory					adequate				superior
1	2	3	4	5	6	7	8	9	10

FOR THE FOLLOWING, CHECK ALL THAT APPLY:

19. What shortcomings, if any, did you experience in your own architectural education?
 - ___ Did not train me for working as part of a team.
 - ___ Lacked sufficient instruction in management or business practices.
 - ___ Lacked sufficient instruction in technical matters.
 - ___ Expounded design theories that were not useful in actual practice.
 - ___ Offered little opportunity to study other disciplines.
 - ___ Placed too little emphasis on communication skills.
 - ___ Made insufficient connection between design studio and other course content.
20. Do you have:
 - ___ an undergraduate architectural degree
 - ___ a graduate architectural degree
 - ___ neither
21. Are you currently:
 - ___ employed in an architectural or A/E firm
 - ___ architecture faculty member or educator
 - ___ architecture student
 - ___ none of the above

PLEASE WRITE IN YOUR RESPONSE:

22. What do you consider to be the best architecture school in the US today?
-

FOR EACH OF THE FOLLOWING, PLEASE CHECK ONE:

23. In what decade did you complete your architectural education?
 - ___ 1950's or before
 - ___ 1960's
 - ___ 1970's
 - ___ 1980's
 - ___ Still to graduate
24. In your position, is architectural design your primary responsibility?
 - ___ yes
 - ___ no

P/A Reader Poll Architectural Education



FASTEN HERE

Be sure your opinions are counted in this nationwide profile. Fill out and mail this form before November 10.

FOLD HERE



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL

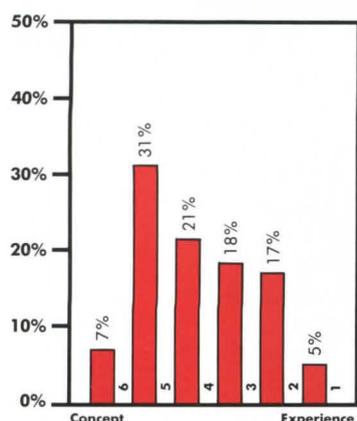
PERMIT NO. 36

CLEVELAND, OH

POSTAGE WILL BE PAID BY ADDRESSEE

Progressive Architecture
P.O. BOX 657
PROSPECT, KY 40059



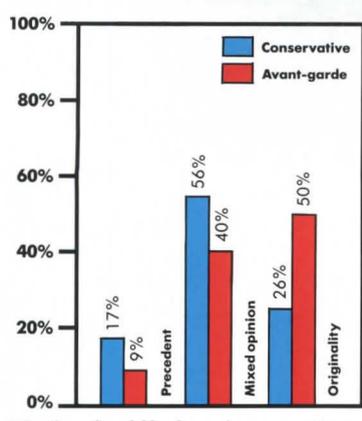


6 Overall concept vs. sequential experience of design, rated from 6 to 1

current design.” Among all respondents, I.M. Pei headed the list, and was closely followed by Richard Meier—in an apparent endorsement of mainstream Modernism. But close behind them were a number of architects who represent quite disparate approaches.

The conservative bloc favors Pei even more strongly, and puts Meier high on its list, but intersperses them with Venturi and Graves; the implication is that this bloc is made up of at least two factions—one supporting mainstream Modernism, the other supporting Post-Modernism. Fay Jones appears among the nine here, representing a special, Wrightian version of Modernism. The self-identified Avant-garde seems to rally around a younger group of Modernists, though Venturi and Graves still appear among their top nine. Pei gets more moderate support, and Rossi is recognized by a sizable minority.

When the frame of reference is shifted to decade of education, 71 percent of those educated in the 1950s and before name Pei—the only instance here where an architect is cited by a majority of respondents. The list from this group seems to correspond more to age and honors (four Pritzker prize winners and three AIA Gold Medalists in their top nine) than to any one design approach.

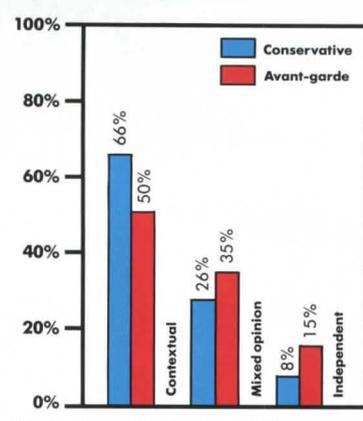


7 Design should be based on precedent vs. originality

In the results from the subsequent three decades there are some clear patterns: recognition of Pei declines, for instance, while that of Gehry and Botta rises. Isozaki is named by a fairly steady proportion of these three groups—and Meier gets comparable recognition from all four age groups. Jahn and Moore are recognized by similar percentages in the first three age groups, but for those educated in the 1980s, they do not appear among the top nine choices.

P/A's intention, in drawing up this list of 18 architects, was to present alternative design philosophies, rather than to elicit individual recognition. (It is easy to think of distinguished architects, such as Roche, Erickson, Rogers, Gwathmey, and many others, who could as well have been listed.) Because we did not intend this choice of architects to be an individual popularity poll, we have focused here on the top nine named out of the list of 18 (ten for decade of the 1970s, where there was a virtual tie for ninth).

For the sake of the historical record, we must note that three of the 18 were named by less than 20 percent of the total and of any bloc we have identified; these were Christopher Alexander, Peter Eisenman, and Norman Foster. All three were named more by the avant-garde



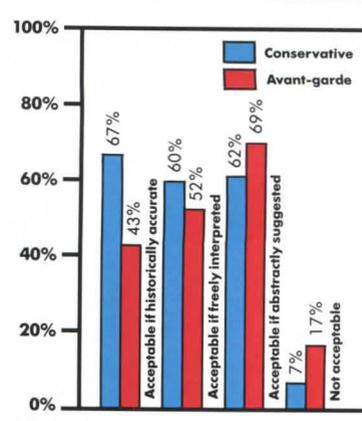
8 Extent to which design solutions should be dependent on context

and by the youngest readers than by others, so their recognition appears to be on the ascendancy. Also, we should note that the issue in which the questionnaire for this poll appeared contained a cover feature on a recent work by Botta; while there are surely strong reasons for readers to choose him, this juxtaposition may have had an effect.

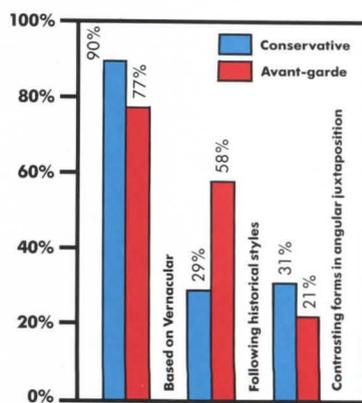
Conclusion
Many of the attitudes of Post-Modernism, particularly regarding historical ornament, are now accepted by the mainstream of the profession—including some, but not all, professed conservatives. Those who would be avant-garde, meanwhile, seem more interested in pursuing the principles of Modernism, if in current variants such as Deconstructivism.

Among all factions of our readers, Post-Modernism seems to have inspired a concern for the context—in particular a preference for street-line buildings in urban situations. But if the future is indicated by the positions of young professionals, we can expect building design to hew closely to the ideal of Modernism.

John Morris Dixon



9 Attitude toward ornament derived from historical architecture



10 Promising direction for today's architecture

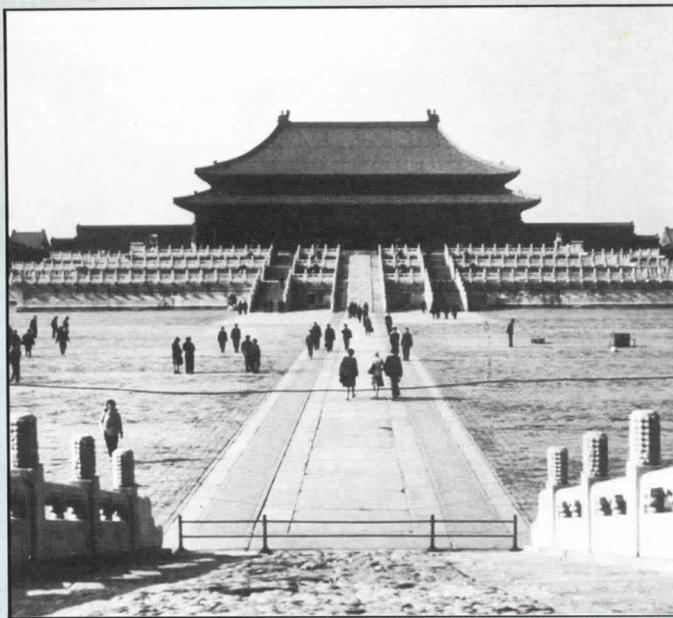
Pei	33%	S, M
Meier	32%	M, W
Botta	31%	M
Isozaki	30%	W, NE
Venturi	29%	NE, S
Gehry	26%	W, NE
Stirling	25%	NE, M
Graves	24%	M, S
Moore	22%	W, S

11 Architects exerting most positive influence on current design, all respondents, with strongest regional support noted (Northeast, South, Midwest, West)

Conservative respondents		Avant-garde respondents		Educated in 1950s or before		Educated in the 1960s		Educated in the 1970s		Educated in the 1980s	
Pei	45%	Isozaki	39%	Pei	71%	Pei	40%	Venturi	36%	Botta	39%
Venturi	34%	Gehry	34%	Fay Jones	35%	Venturi	32%	Pei	32%	Meier	35%
Meier	31%	Botta	33%	Meier	26%	Johnson	30%	Meier	32%	Gehry	34%
Graves	27%	Meier	33%	Johnson	23%	Isozaki	29%	Botta	29%	Isozaki	33%
Jahn	26%	Stirling	27%	Stirling	23%	Graves	29%	Isozaki	29%	Venturi	26%
Johnson	26%	Venturi	27%	Moore	22%	Moore	28%	Stirling	27%	Stirling	26%
Moore	25%	Pei	25%	Jahn	22%	Meier	26%	Graves	24%	Graves	25%
Fay Jones	25%	Graves	24%	Giurgola	22%	Jahn	25%	Moore	24%	Rossi	23%
Botta	24%	Rossi	20%	Isozaki	19%	Gehry	21%	Jahn	22%	Pei	22%
								Gehry	22%		

12 Architects exerting most positive influence, by personal design stance and decade of education.

ANNOUNCING Progressive Architecture's 1989 TOUR TO CHINA AND HONG KONG FEBRUARY 10-26



Join John Morris Dixon, FAIA, Editor, on Progressive Architecture's exclusive China Tour '89

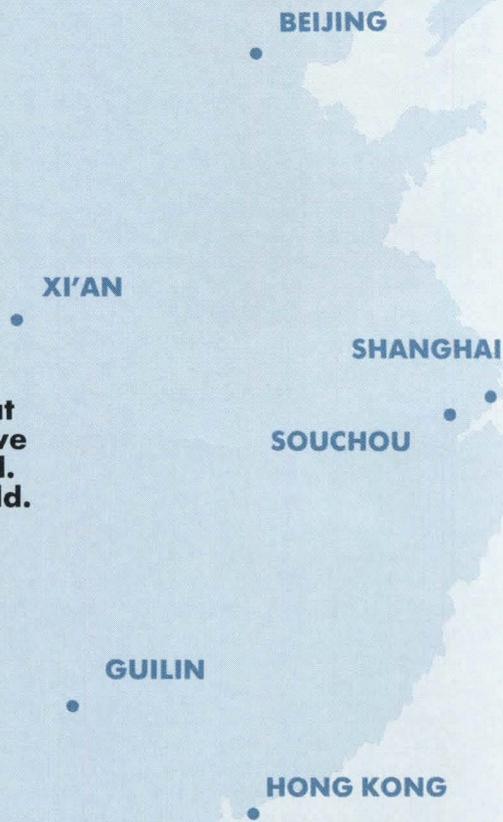
You'll spend 17 professionally fulfilling days visiting the most exciting cities of China—Shanghai, Souchou, Beijing, Xi'an, Guilin, as well as Hong Kong. You'll travel in comfort. You'll stay in deluxe hotels. You'll meet your Chinese colleagues.

You'll visit the Forbidden City...stroll the historic Great Wall...explore the Temple of Heaven...walk along the Bund. You'll have a rare opportunity to compare China's "new" architecture with the old. You'll shop for antiquities and silks available nowhere else in the world.

Every moment of "China Tour '89" has been planned with your convenience and comfort in mind. Special events are balanced with "free time" so you can relax, sightsee and explore at your leisure.

The Complete Tour Cost is \$3695 plus 10% for service and taxes from Los Angeles. Single Supplement: \$895

Deadline for booking: January 1.



Progressive Architecture CHINA TOUR '89

Name _____

Address _____

City _____ State _____ Zip _____

Telephone _____

Signature _____

_____ Single Room supplement _____ Smoking
_____ Nonsmoking

(Note: Single Accommodations are limited so they will be given on a first-come basis).

Make Checks payable to: PROTRAVEL INTERNATIONAL, LTD.,
515 Madison Avenue, New York, N.Y. 10022/(212) 755-4550.
Attention: Chuck Woodhull.

Enclosed is my check for \$ _____ representing a \$300. deposit for each member of my party. (Please include names of your party on an additional sheet). The balance will be due upon receipt of a statement eight weeks prior to departure date.

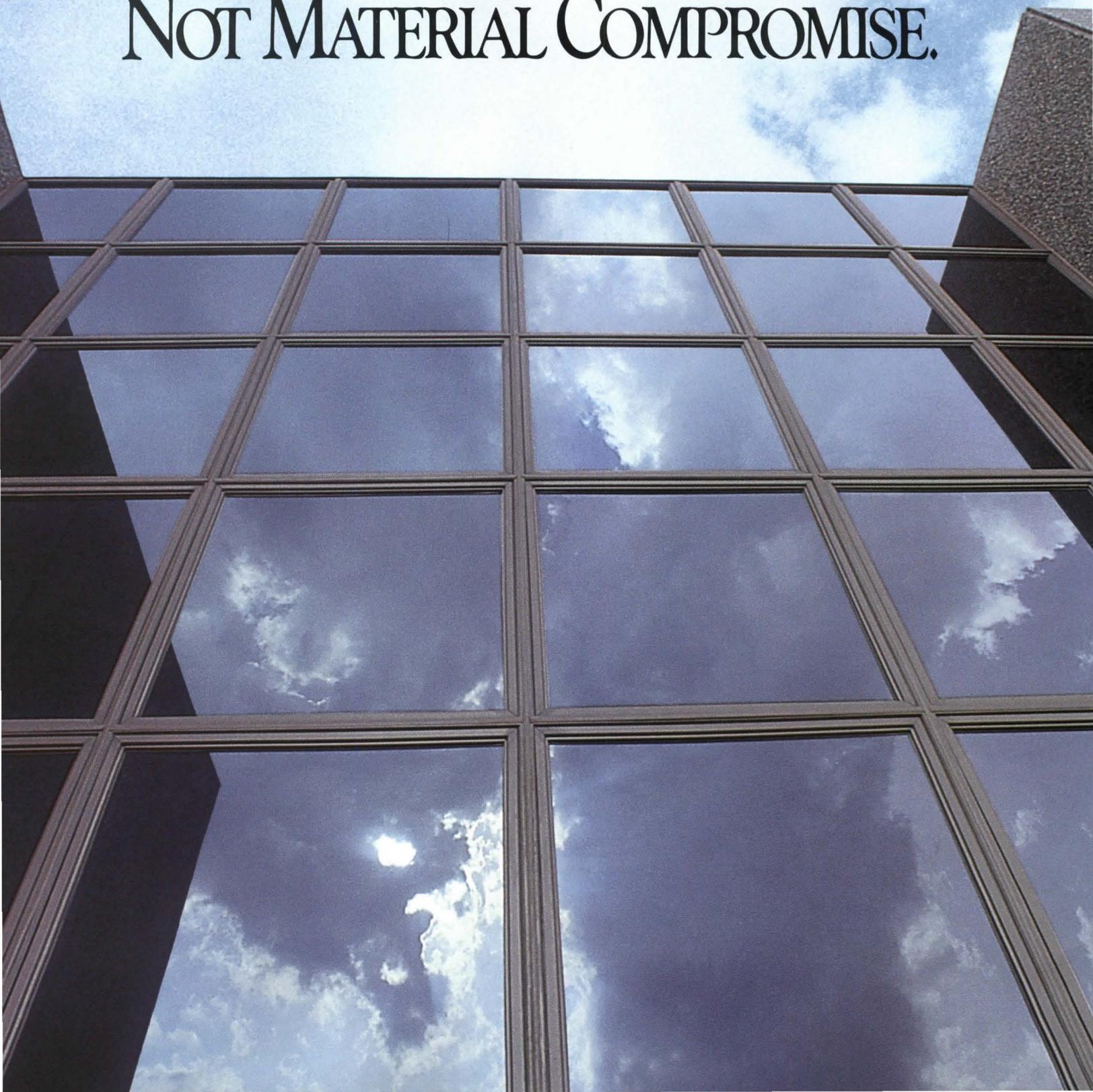
Your trip includes

- Roundtrip air via Northwest Orient Airlines jumbo jet from Los Angeles via Tokyo directly to Shanghai.
- Internal air fares within China.
- Roundtrip transfers from airport to hotel via deluxe private motorcoach.
- Accommodations in twin bedded room with private bath in deluxe hotels.
- All meals and sightseeing expenses in China.
- Deluxe hotel accommodation and breakfast in Hong Kong.
- Sightseeing by private coach with English-speaking guides: entrance fees to public monuments.
- Hotel and local service charges.
- Tour escort throughout

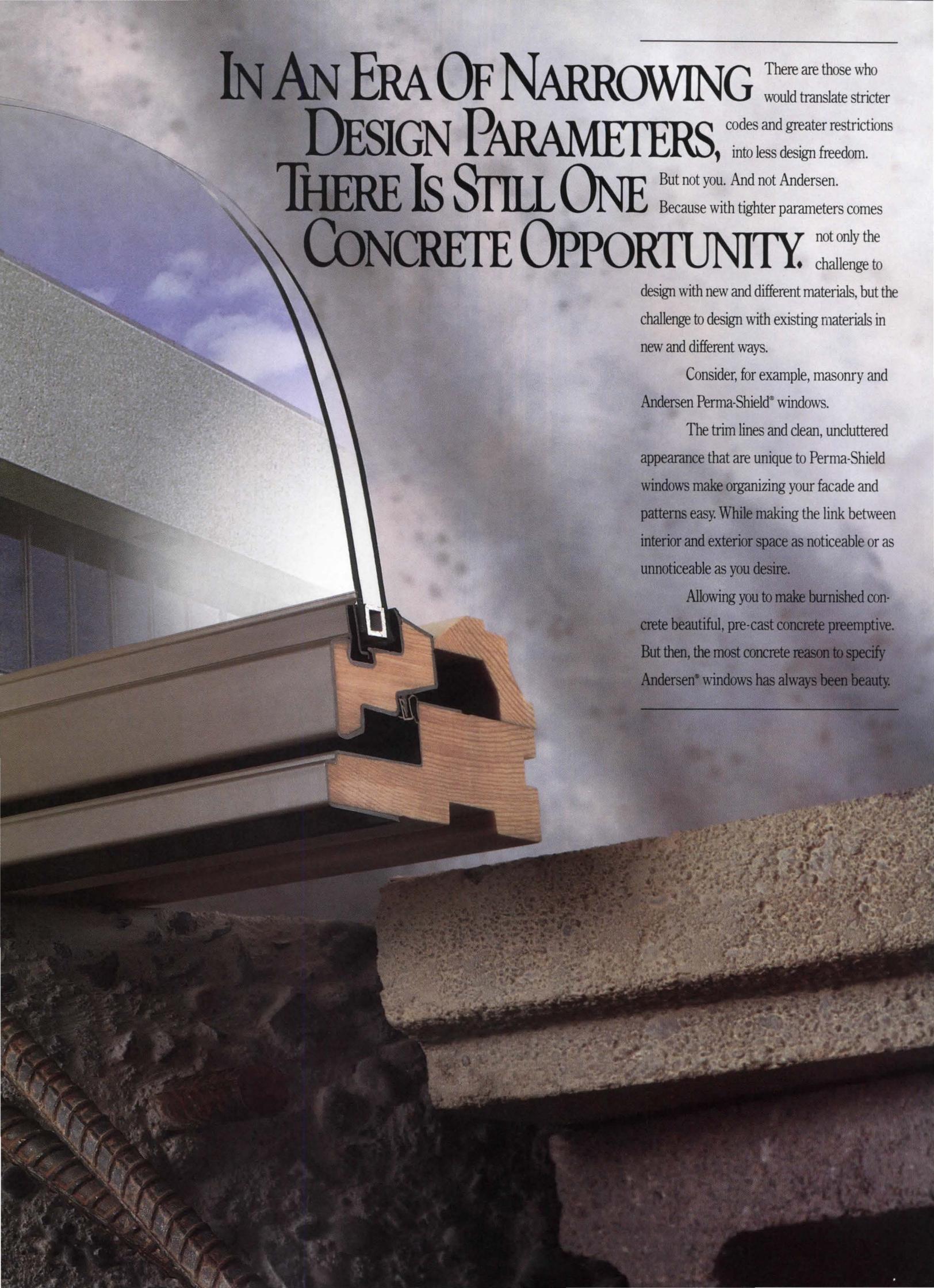
ACT SOON China Tour '89 is exclusive and the size is limited

Circle No. 339 on Reader Service Card

AT ANDERSEN, WE BELIEVE
WINDOWS SHOULD REFLECT
MATERIAL COMPATIBILITY
NOT MATERIAL COMPROMISE.







IN AN ERA OF NARROWING DESIGN PARAMETERS, THERE IS STILL ONE CONCRETE OPPORTUNITY.

There are those who would translate stricter codes and greater restrictions into less design freedom.

But not you. And not Andersen. Because with tighter parameters comes not only the challenge to

design with new and different materials, but the challenge to design with existing materials in new and different ways.

Consider, for example, masonry and Andersen Perma-Shield® windows.

The trim lines and clean, uncluttered appearance that are unique to Perma-Shield windows make organizing your facade and patterns easy. While making the link between interior and exterior space as noticeable or as unnoticeable as you desire.

Allowing you to make burnished concrete beautiful, pre-cast concrete preemptive. But then, the most concrete reason to specify Andersen® windows has always been beauty.

In building designs
calling for a steel
structural support system,
the call for windows has
typically been
to metal.

But consider now, if you
will, the atypical beauty of
Andersen Perma-Shield® windows.

Precisely, their ability to bring warmth
and character to nearly any design. To enhance,
not detract from, its integrity. Whatever the
support system, whatever the facade.

It's a beauty that comes by design.
Through smooth, simple lines; crisp, tight
corners and a clean, functional look.

So whether you specify white or our
Terratone® earthtone color, with clear, reflective
or tinted glazing, Andersen Perma-Shield
windows steal nothing from your design.

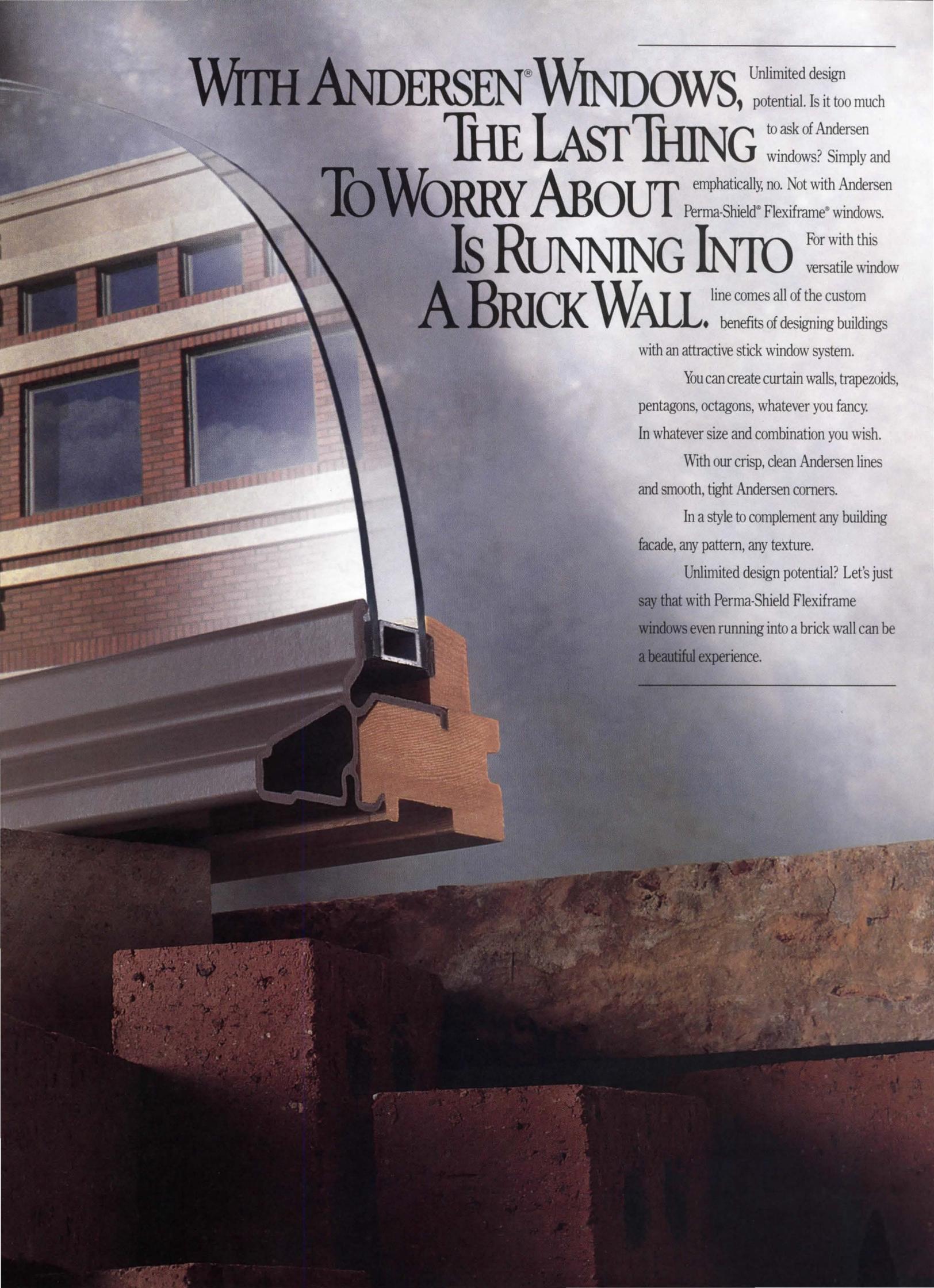
Rather, their beauty and compatibility
are yours for the taking.

WHEN YOUR STRUCTURAL SUPPORT SYSTEM IS STEEL, STEAL SOME BEAUTY FROM ANDERSEN.









WITH ANDERSEN® WINDOWS, THE LAST THING TO WORRY ABOUT IS RUNNING INTO A BRICK WALL.

Unlimited design potential. Is it too much to ask of Andersen windows? Simply and emphatically, no. Not with Andersen Perma-Shield® Flexiframe® windows. For with this versatile window line comes all of the custom benefits of designing buildings with an attractive stick window system.

You can create curtain walls, trapezoids, pentagons, octagons, whatever you fancy. In whatever size and combination you wish.

With our crisp, clean Andersen lines and smooth, tight Andersen corners.

In a style to complement any building facade, any pattern, any texture.

Unlimited design potential? Let's just say that with Perma-Shield Flexiframe windows even running into a brick wall can be a beautiful experience.

No matter how colorful your design and

no matter what your design considerations, you'll find Andersen Perma-Shield®

windows beautifully compatible. They're available

as Andersen High-Performance and High-

Performance Sun glazings. Both are designed

to detect heat and keep it where you want it,

permitting the use of large glass areas for bigger

views and maximum light.

There are other glazing options available, too. Your choice of tinted, reflective, safety, spandrel, decorative or double-pane.

In short, no matter how you color it, there's an Andersen glazing to complement any commercial design.

So if your opinion of Andersen windows until now has been otherwise, perhaps we have kept you in the dark too long.

IF WE HAVEN'T ALREADY DONE SO, PERMIT US NOW TO COLOR YOUR OPINION.



Andersen High-Performance (above) and High-Performance Sun insulated glass (below) are just two of the many optional glazings we offer.



At Andersen, we
have always viewed
windows as a design tool.

Which is precisely why
we put
so much

THE ANDERSEN COMMITMENT TO COMMERCIAL DESIGN ISN'T NEW. IT'S RENEWED.

thought, research and development, not to
mention creativity, into their design.

And to make Andersen® windows an
even more effective design tool, we formed the
Andersen Commercial Group.™

It exists solely and uniquely as a
resource for architects who use Andersen prod-
ucts in commercial building applications.

Offering specialized technical assis-
tance, ongoing workshops and other services
focused on commercial design.

So from manufacturing through testing
to product backup, you'll find Andersen a
company committed to crafting commercially
compatible windows of exceptional quality.

But then to us, that's nothing new.
It's a commitment to quality we at Andersen
have been renewing every day
for more than 80 years.



*We sponsor Distributor Architect
Representative Roundtables to
openly discuss new product and
service ideas.*

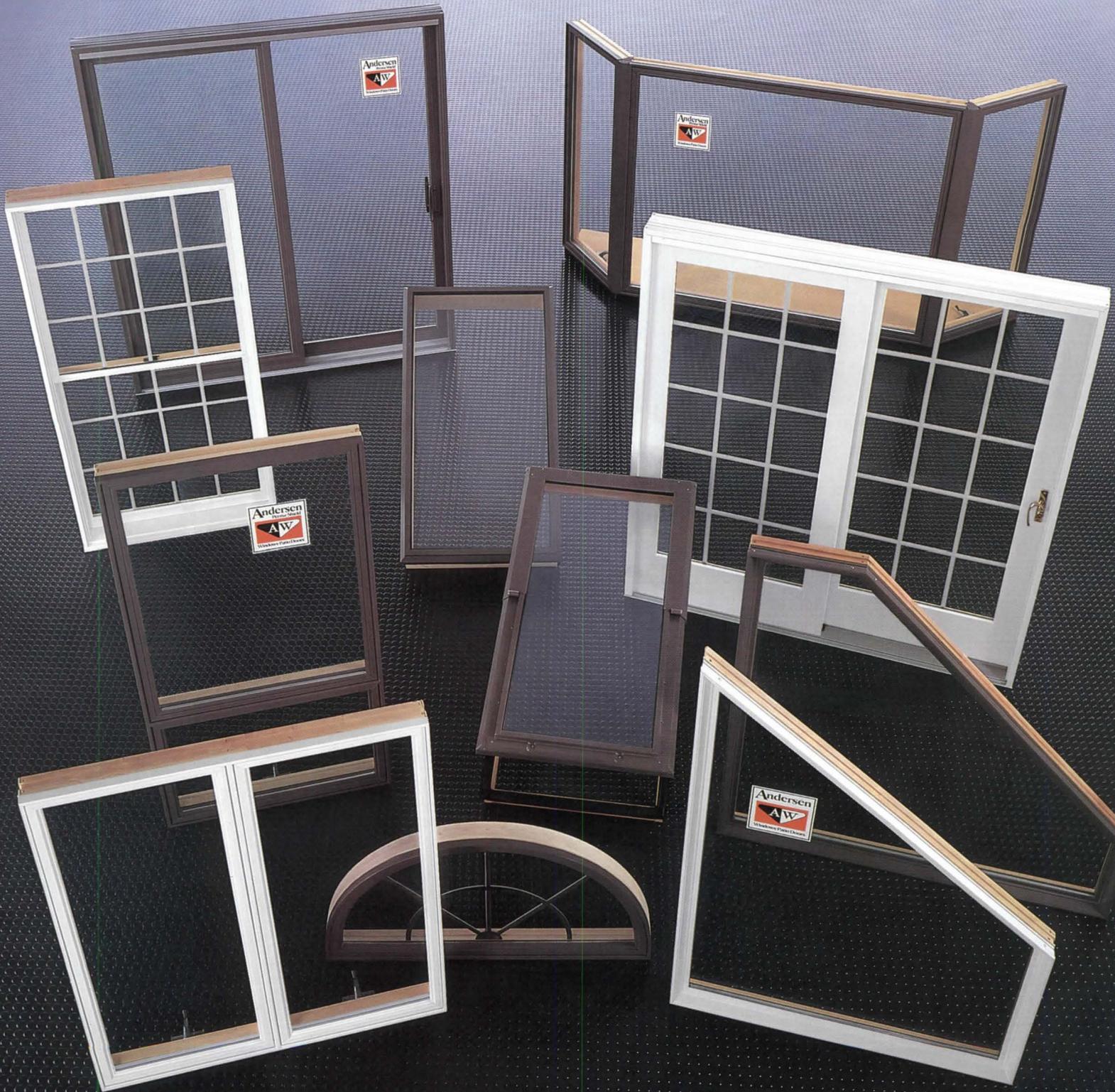


*Developed by architects for archi-
tects, the Andersen CADD-I™
Computerized Detail File draws
windows so you don't have to.*





BECAUSE BEAUTY IS IN THE
EYE OF THE BEHOLDER, WE AT ANDERSEN
LET NOTHING HOLD YOU BACK.



ANDERSEN COMMERCIAL GROUPSM

*Call 1-800-635-7500 for the name of your
local Andersen commercial representative.*



*Or write Andersen Commercial Group,
P.O. Box 12, Bayport, MN 55003.*

88101 ©1988 Andersen Corp.

Circle No. 310

Great minds don't think alike.



No. 1 in a series.
Max Pack data-entry stations designed by
Mike Tatum, The HOK Interiors Group, Dallas.

This isn't exactly what we had in mind when we created PLACES.™

But it is what Mike Tatum had in mind.

Mike thought people in 36-square-foot workstations shouldn't feel like sardines. And he wanted their computers sitting within reach. But not on their laps.

He also wanted something no one had ever seen before.

With everything from fanlights to fabrics, wood to glass, PLACES gives you the freedom to create the spaces you always wanted to.

No matter what you have in mind.

For more information call
1-800-344-2600.

HAWORTH

They're built.

Circle No. 325 on Reader Service Card

**ANNOUNCING
SYSTEM 2002...**
Tech Wall's New Dry Joint System.
Ask us about it!

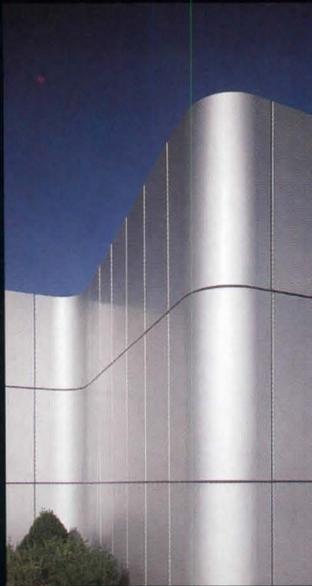
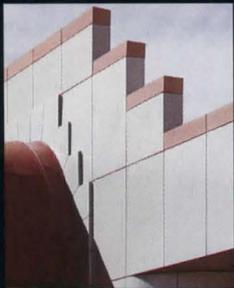
T E C H W A L L

Top Left:
Margie's
Bridal Boutique
Chicago, IL
Balsamo/Olson Group

Below Center:
R.A.B. Motors
San Rafael, CA
Esherick Homsey Dodge
and Davis Architects

Top Right:
1522 K Street
Washington, D.C.
Don A. Hawkins
Associates

Bottom:
Central Park Square
Phoenix, AZ
Clark — Van Voorhis
Architects, Inc.



Tech Wall offers architects and builders a stunning range of design possibilities — without the compromises common to other systems.

From radiused corners to intricate compound curves; from continuous coping to projected curved panels; *almost anything you can design can be realized with Tech Wall.*

And since Tech Wall is solid aluminum, *there are*



no standard sizes. Every panel is made to meet the architectural requirements of your job.

Tech Wall also offers a virtually unlimited range of tested and proven finish options.

For further information, call today.

1-800-631-7379
in New Jersey 201-272-5200

THECSGROUP

Circle No. 313 on Reader Service Card

U N C O M P R O M I S E D D E S I G N F L E X I B I L I T Y



Three projects by Foster Associates are shown on page 41, beginning with a new town in town at King's Cross (above).



Ad dialogue: "What color are the pediments?" "Pink, of course."

Phone Ads With Architects Draw Protest

If architects are chanting "I don't paint pediments pink" and "I thought they wanted a museum not a sushi bar," blame it on New England Telephone's "mini-series" advertising campaign. Launched this summer, the soap operatic ads set in an architect's office rattled some viewers and disarmed others. They also got the phone company—and the profession—mentioned in the *Boston Globe*, the *Wall Street Journal*, and *People* magazine.

Flabbergasted by the first commercial in the series, in which a fast-talking junior architect goes over the head of his senior to get a museum commission, more than a dozen callers phoned

(continued on page 34)



Lincoln Room, Blair House.

A Guest House Fit for Kings

From now on, kings, queens, sheiks, and prime ministers who sleep at Blair House, the presidential guest house in Washington, D.C., will rest as securely as jewels in a vault, thanks to a recent \$9 million renovation that beefed up security and streamlined internal service functions.

When architects Mendel, Mesick, Cohen, Waite, Hall of Albany, New York, began work on the project in 1983, Congress already had specified the number, but not the location, of bedrooms, dining rooms, and special function rooms. While the program called for preservation of the four buildings that

(continued on page 38)

"Pyramid" on PBS: "Why," not "How"

David Macaulay's fans are sure to grouse that "it's not the same" when they view the television adaptation of his book "Pyramid." Such complaints might be expected in any transition from book to screen, but television's "Pyramid," which follows Macaulay's "Castle" and "Cathedral" to the small screen, is certainly different from the book. The show's producers have largely jettisoned Macaulay's intricate pen-and-ink drawings in favor of a Saturday-morning-style color animation.

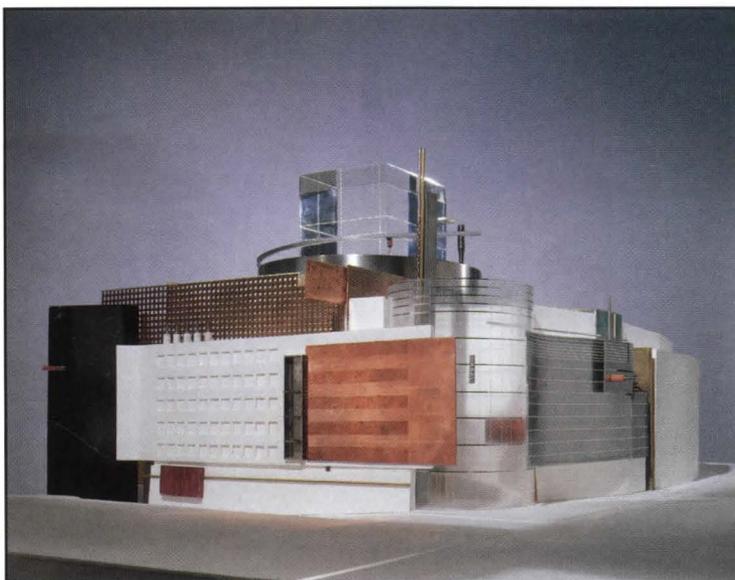
(continued on page 35)

Ellerbe Becket Wins in Oslo

First place in a recent invitational architectural competition in Oslo, Norway, was won by the newly formed American megafirm, Ellerbe Becket. Organized for Schibsted Gruppen, owner of Norway's two largest newspapers, the Ditten Project will be the new headquarters building for those publications.

One American and four Norwegian architectural firms were invited into the final round, after initial interviews. Ellerbe

(continued on page 36)



Norwegian newspaper headquarters by Pran and Zapata of Ellerbe Becket.

Pencil Points

Five students from the Southern California Institute of Architecture and SCI-ARC director Michael Rotondi will spend the month of October at the Moscow School of Architecture as part of an exchange program which is to serve as a prototype for exchanges with other U.S. schools.

Japan's Sumitomo Life Insurance Co. has agreed to pay \$300 million for the IBM Tower in Atlanta. The price is reportedly twice the cost of building the Burgee/Johnson-design (P/A, Dec. 1987, p. 23).

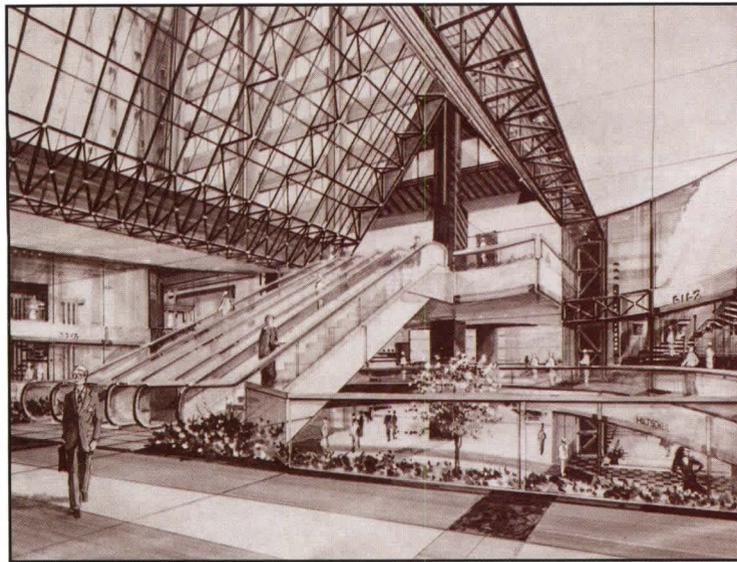
The Buell Center for the Study of American Architecture is offering two residential fellowships for scholars or practitioners in any discipline pursuing topics in architecture, urbanism, and landscape. Applications are due December 1. Contact the Buell Center at Columbia University, New York, N.Y. 10027.

Hans Hollein of Austria has received the Haas International Award, presented annually to a foreign alumnus of the University of California. Hollein earned his Master in Architecture in 1960 from UC Berkeley.

Adele Chatfield-Taylor has been named President of the American Academy in Rome. Since 1984, she has served as Director of the Design Arts Program at the National Endowment for the Arts.

Six teams have been shortlisted in a competition for the redevelopment of a 10-acre abattoir in the center of Strasbourg. They are: Adrian Fansilber and Francis Soler of Paris; Richard Rogers and YRM International of London; Arata Isozaki of Tokyo; and Hammerle, Mongiolo & Plisson of Strasbourg. The program calls for a modern art museum, offices, market, and ideas for the reuse of a prison.

The United States Information Agency is organizing a competition to design the U.S. pavilion and national exhibition at the 1992 Universal World's Fair in Seville, Spain. For more information and application form, contact John G. Busch at USIA, 202 485-6414.



John Hancock Controversy

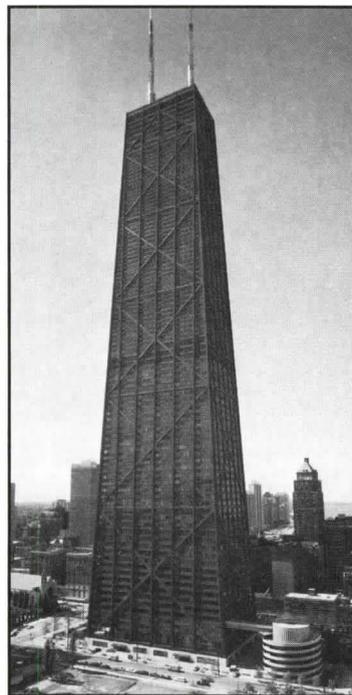
Sometimes the public declares a building a landmark without benefit of age. The Hancock Center, a 1970 architectural milestone designed by Bruce Graham of Skidmore, Owings & Merrill, is such a building, as its owners discovered recently when they unveiled a plan to alter its base and plaza.

The proposal would fill in the tower's sunken plaza and develop a three-story retail atrium around its base. The owners, Boston-based Hancock Life Insurance Co., insist they need to build the \$20 million addition in order to add 39,500 square feet of retail space and provide a more prominent entrance to the 100-story mixed-use building.

The company argues that the 18-year-old building needs to be updated, and that they need the new retail space and image to compete effectively with other retailers in the tony shopping area along North Michigan Avenue. Bloomingdale's is scheduled to open its first Chicago store up the street this fall, at the brand new 900 North Michigan. While even opponents of the scheme recognize that the present below-grade retail has not been a success, there is great resistance to tinkering with what many feel to be one of the city's architectural masterpieces.

Last June, a storm of protests greeted the scheme by architects Green Hiltcher Shapiro, Ltd. By late August, the Boston headquarters of John Hancock Life Insurance was taking a second look at the plans and had ordered the parties involved not to talk to the press.

The design unveiled earlier this summer featured a steel, glass, and travertine atrium along Michigan Avenue, defined



John Hancock Tower (above) and proposed addition (top).

by an arched entrance trimmed in green marble. That elevation has been reworked, according to a spokeswoman for the architects, but plans still involve filling the plaza with an atrium and constructing retail colonnades along the north and south sides. Construction is scheduled to begin in the spring.

The architects described the design as "an extension and enhancement of the building's image," but others differ. Various groups, from residents of the building's condominiums to affronted landmark enthusiasts, are exploring ways to legally prevent the construction of the addition.

There doesn't appear, however, to be legal recourse. "I looked at the plans early this summer with the understanding from my staff that they had looked into it and found there's

nothing we can do," said city Planning Commissioner Elizabeth Hollander. "I'm making them look again," she says, but to her knowledge the addition does not infringe on zoning rules, past or present.

At a recent meeting, the city's Landmark Commission instructed its staff to look into the possibility of declaring the building a landmark, but the commissioners are reportedly not eager to get involved in this simmering dispute. And although the Chicago commission has no age requirements for landmark buildings, the general feeling is that an 18-year-old is too young to be a landmark, regardless of her reputation. *Lisa Goff*

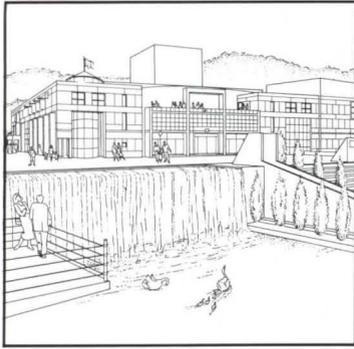
The author is associate editor of Crain's Chicago Business.

Phone Ads (continued from page 33) (pardon the expression) the Boston Society of Architects. Six of these protestors were then dispatched to see the remaining episodes of the commercial. Although riled by the depiction of sleazy office politics, most were more or less mollified by the ending. By the sixth part (to be shown in December), the belligerent young architect retrieves some respect by paying homage to his "boss's" talent; what's more (don't tell viewers) he turns out to be the elder man's son.

Perusing the film clips closely, however, architects found other flaws. "Give me something I can sell, not this post-modern pseudo-eclectic . . ." says the junior staffer. "This stuff is not pseudo-eclectic, it's honest, authentic, real eclectic," responds the senior, reaching new peaks, or valleys, of architectural jargon. The commercials are also a little "off" in their interpretation of how design competitions work.

Architects were chosen as the subjects for this minidrama, says the phone company, because they use advanced technology, such as FAX machines, and their offices look photogenic. It's true that the set is polished ("better than most architect's offices," says one BSA observer) and the narrative dramatically written and photographed (by a talented crew that was out of work because of the Hollywood writer's strike). And compared to architects of the past who were depicted either talking to a horse ("Mr. Ed") or loafing in exurbia ("The Brady Bunch"), at least these architects have some presence, albeit melodramatic.

Jane Holtz Kay



Proposed riverwalk and theater.

New Theater, Park for Chattanooga

Architects Schwartz-Kinnard and John Meder of Charlottesville have won a two-stage, national competition to design a mixed-use riverfront development for a site formerly devoted to light industrial uses across the river from downtown Chattanooga. The competition was sponsored jointly by a nonprofit community theater and a private developer who plans to build 80,000 square feet of office space, 20,000 square feet of retail, and 40 units of housing. The centerpiece of this Little Theater Riverpark District will be a new community theater, which will be built first, together with its riverwalk and an open-air amphitheater facing the water. An existing truss bridge will provide pedestrian access to the site from downtown. ■



Pyramid illustration by Macaulay, one of few in telecast.

Pyramid (continued from page 33) Unfortunately, a good deal of Macaulay's clear, methodical recounting of the specifics of pyramid construction have also been left behind.

The one-hour program does retain, and expand, Macaulay's convention of wrapping his lessons in a fictional narrative, which in this case is more of a TV docudrama; the animated story revolves around the Fourth Dynasty king Khufu, his wives, his sons, and his pyramid—the Great Pyramid of Giza.

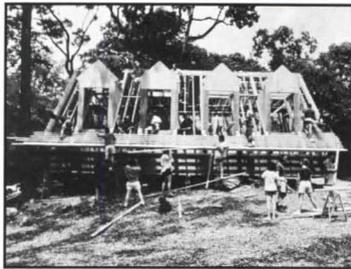
Alternating with the story is a

series of live-action spots, which feature the genial Macaulay in various tombs, temples, and museums around Egypt. In both the live and animated footage, more attention is given to the social, spiritual, and political conventions of ancient Egypt than to the actual construction of the pyramids; the program emphasizes why the monuments were built instead of how.

But, regardless of how it measures up to the book, television's "Pyramid" is fun to watch. Macaulay's live portions have splendid footage of tombs and treasures, including a rare glimpse of the mummified body of Ramses II. The cartoon portion is entertaining, too, if you don't mind the hamminess of it all (theater notables such as Derek Jacobi and John Hurt provide the often melodramatic voices).

"Pyramid" premieres nationally on PBS on November 28 at 8 P.M. EST. The program is funded in part by the National Endowment for the Humanities and by the AIA's American Architectural Foundation.

Mark Alden Branch ■



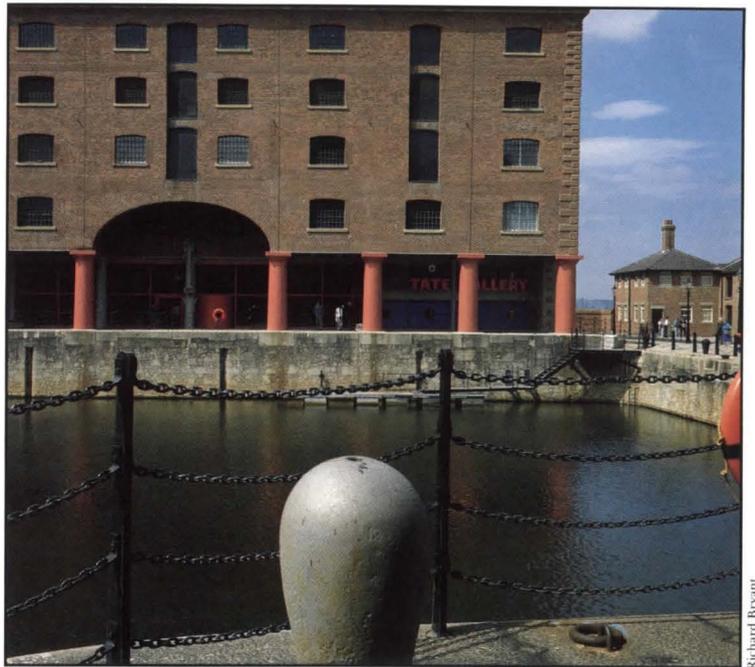
Shope house going up.

Architects Stage A Houseraising

As scheduled one summer Saturday, architect Allan Shope held a version of the old barnraising on the site of his new house in Greenwich, Connecticut. Working from 6:00 A.M. to 6:00 P.M., some 150 helpers began with footings and first-floor deck in place, and some precut pieces at the ready.

Only six or eight of the helpers were skilled carpenters, and perhaps 20 others were "home hobbyist types," according to Shope, but the rest required instructions. (A number of architects were spotted in the crowd.) Nevertheless, when 6 P.M. rolled around and it was time to party, framing and furring for shingles were in place, and the house was well on its way to its final form.

Jim Murphy ■



Quayside Tate of the North in Liverpool.

Stirling Goes Home to Liverpool

The Tate Gallery Liverpool is a modest job within James Stirling's oeuvre, in fact no more than a conversion of a dock warehouse to an art gallery. Nine tenths of it is therefore the work of Jesse Hartley, Liverpool Dock Surveyor from 1824 to 1860 and architect of some of the most historically significant docks in Britain. The manner of Stirling's return to his native city, and his notably restrained response to this context, gives occasion for some reflections on the identity of this architect who often refers to his roots in a city in which, nevertheless, he has never built since leaving its architectural school in 1951.

Despite some striking resemblances between Hartley and Stirling—in appearance, laconic expression and in tendency towards a recalcitrant, obtuse, yet eloquent plasticity in built form—no greater contrast could be imagined than in the careers of these two men: the entire lifework of one literally bound to a single place, the other's scattered across geographic and intellectual space.

The contrast would not be worth making were it not for the acknowledgment Stirling made to Liverpool. At an impromptu press conference in the new Tate, he again recalled how, as a boy, he played among the barrels, propellers, torpedoes, and gear stored in Hartley's Albert Dock during the war, when it became a convoy refit depot. His father, a ship's engineer from Glasgow, was based in the next dock. From there the interview

went on to Liverpool in general. With his lament for the loss of so much of the city's finest architecture through happenstance (bombing or design) one can hardly disagree. Yet the most famous architect Liverpool has ever produced has made not a single intervention or suggestion for his native city since the inception of his career in the early 1950s.

This isn't simply a sentimental moan about neglect of England's northern rustbowl by the architectural establishment. The point is that, unlike for instance Norman Foster, who has made little reference to his Manchester origins, and whose architecture in any case aspires to a placeless condition of scientific perfection, Stirling's architecture is demonstrably the heir of a specific regional culture, although he now declares that culture dead and claims his absence to be an effect thereof. The regrettable irony of this prodigal son, who has played so many willful tricks with rootless referents, is the incorrigible locality of his style (even his wit is a local trait), which would have made him the ideal exponent of Kenneth Frampton's "critical regionalism," had he kept his reference to Liverpool.

When this is put to him, Stirling replies that commercial decline, the notorious "north-south divide" in Britain's economy, dictated the necessity of quitting Liverpool. Yet it has to be said that, if Stirling moved south, it was less to a capital that threw commissions at his feet than to a milieu of rootless cosmopolitans. It was not another distinct re-

(continued on page 36)



Richard Bryant

Tate lobby and new mezzanine.

Stirling (continued from page 35) gional culture that Stirling joined in London, but the global metadiscourse of *déracinée* intellectuals. And for all Stirling's formal virtuosity, it is doubtful whether this academic milieu has ever supplied his proper habitat.

At the Liverpool Tate, however, Stirling has made only the most discreet of interventions in a fabric whose integrity, both aesthetic and physical, permits no casual meddling. A glass wall and bold logo face the quay; a revolving door lets in the visitor. The first floor of the warehouse has been removed to make double-height galleries, but in the foyer a mezzanine is inserted to house bookshop and café on a broad, curving balcony, its sweep echoing the arcs of the segmental brick and stone vaults and flexing iron beams and columns that constitute Hartley's system. When seen in range along the galleries (especially in the basement), the effect is extraordinarily muscular yet elegant in this organic edifice of Whitmanian eloquence whose details—such as the curving brackets that are revealed on the columns where the floor has been removed—bear clear affinity to the tropes and figures of Stirling's formal games. Only these are no game; their necessity has a Calvinistic

certitude that makes a mockery of contextual conjuring. Stirling senses this and makes minimal impact upon the articulation of the warehouse. Where new walls enclose the foyer, a specially large brick is used to match the heroic bond that Hartley deployed throughout, and the original brickwork vaults are left visible except within the galleries, where lighting demanded white.

The chief designed elements in Stirling's conversion are the service ducts, which pass through each gallery. Slung from the vaults without spoiling their contours, like hovering double cornices, these gray metallic Y-shaped bars carry air conditioning, uplighting, spot and strip lights, smoke detectors, security devices, and speakers. No other impedimenta enter the galleries. Their austerity is in tune with modern art display and the open spaces, especially on the continuous upper floors, are their principal delight. Over 4000 square meters will be made available for exhibition and performance. Lucid industrial loft spaces are comparatively rare in Southern England, and their presence here in the Northern Tate, with its views across the Hudson-like Mersey, strikes a certain Transatlantic note.

Modest as it is, Stirling's

Northern Tate differs in intention and is more satisfying than his Clore Wing at Tate South (P/A, May 1987, p. 43). There is none of the restlessness and superficiality, none of the contextual conceits, and none of the Zelig-like slippages of identity that mark the London building. Is this the "Spirit of Place"? Or just the impact upon a returning Post-Modernist prodigal of a real ambiance with real integrity, and real roots? **Brian Hatton** ■

The author writes frequently for P/A on architecture in London.

C. Ray Smith, FAIA Formerly with P/A

C. Ray Smith, a former senior editor of P/A, died of a heart attack on August 18 at the age of 59. Born in Birmingham, Alabama, Smith had lived in New York since the age of five.

A graduate of Kenyon College, with a year of post-graduate study at the Royal Academy of Dramatic Arts in London, Smith joined P/A in 1961, rising to the position of features editor before leaving the staff in 1971. His interests in architecture and theater were combined in his volunteer efforts for the United States Institute of Theater Technology, of which he was president from 1968 to 1971. He also served as editor of *Theater Crafts* magazine and *Interiors*, and for the past several years he has been editor of *Oculus*, the magazine of the New York Chapter, AIA.

His studies of evolving architectural and interior design in the period 1965–1975 culminated in the book *Superman-nerism: New Attitudes in Post-Modern Architecture*, published in 1977. The most recent of his subsequent books is the comprehensive *Interior Design in 20th-Century America: A History*, 1987. On the basis of his writings, he was elected a Fellow of the AIA.

C. Ray Smith is remembered by his former colleagues at P/A for the enthusiasm with which he explored the frontiers of design in the 1960s, bringing to the magazine pioneering articles on the work of such architects as Robert Venturi, Charles Moore, and Hardy Holzman Pfeiffer Associates. He is also recalled for the precision and sharp wit of both his writing and his speech—the latter retaining graceful traces of his years in Alabama and his drama classes in London. C. Ray's insightful observations on current architecture and design will be missed.

John Morris Dixon ■

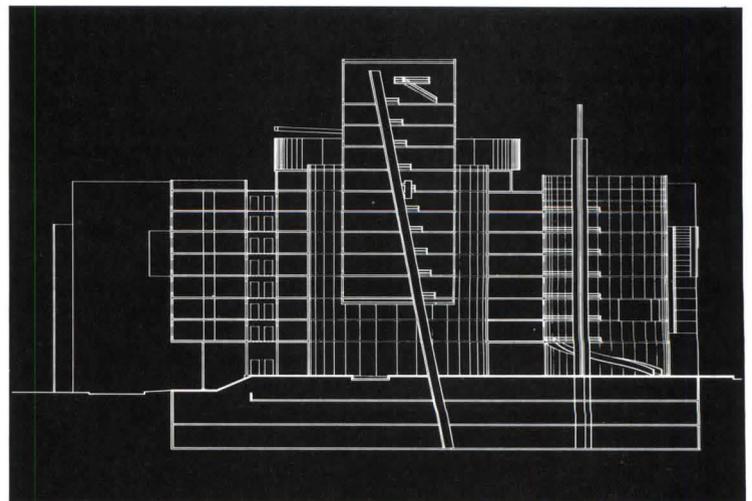
Oslo (continued from page 33)

Becket was selected, along with Norwegian firms 4B/Lill Meinich, Fosse & Aasen, BGO, and Rolf Ramm Ostgaard.

After a five-week competition period, the design team of the New York office of Ellerbe Becket, headed by principal Peter Pran and senior designer Carlos Zapata, was announced as the winner. In carrying out the \$80 million project Ellerbe Becket will associate with Platou Architects of Oslo.

Located in the heart of Oslo, the project site is adjacent to the two existing newspaper buildings. The proposed main façade facing Akersgata Street will be of steel and glass, emphasizing horizontality; the longer side street elevation will be a more complex composition of copper, glass, stone, and concrete, intended to suit the intimate character of that block. A cylindrical entry connects the two divergent sides at the corner.

It is reported that Schibsted Gruppen, one of the largest privately owned companies in Norway, is the first Norwegian client ever to have invited an American architect to design a building in their country. **Jim Murphy** ■



Section through cylindrical atrium and entry of Oslo headquarters.



While the competition is still speculating in silver,
 Canon introduces an affordable plain paper
 investment worth its weight in gold.

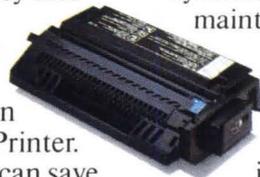
**Announcing the Canon MP 50
 Microfiche Reader/Printer.**

While some manufacturers are still asking you to put your money into silver, Canon announces another golden opportunity to make an investment in plain paper—the new Canon MP 50 Microfiche Reader/Printer.

First of all, plain paper can save you money. Costing far less than microfilm prints made on silver coated paper.

And plain paper lets you see things more clearly—providing crisp, clean prints on the same paper you write on.

What's more, the new MP 50 is compact. So it can easily fit on your desk, without taking up your whole desktop.



It's also simple to use. With easy-to-operate controls, a spring-loaded fiche carrier, and a built-in microprocessor.

And Canon's unique MP cartridge system makes the MP 50 virtually maintenance-free by putting the drum, toner and developer into one unique, replaceable unit.

So before you sink anything more into silver, consider an investment that makes sense on plain paper. The compact Canon MP 50.

Canon
MICROGRAPHICS
MICROPRINTER

Making the very best out of a small thing.

From Canon. Plainly the experts in plain paper reader/printers.

Canon U.S.A., Inc., Micrographics Division
 P.O. Box 788, Clearfield, Utah 84015-0788

- Please send me information on the full line of Canon's Micrographics equipment.
- Please have a salesperson contact me.

Name _____
 Title _____ Company _____
 Address _____
 City _____ State _____ Zip _____
 Telephone _____

PA

For more information, check the Yellow Pages for your nearest authorized Canon dealer. Or call toll-free 1-800-453-9000.



Enjoy easy extended payments with the Canon Credit Card. Ask for details at participating Canon dealers and retailers. Available only in U.S. © 1988 Canon U.S.A., Inc.

Circle No. 315 on Reader Service Card

Olympic Housing in Seoul

From any one of the many bridges hanging low over the Han River, the broad frontage of the southern portion of the City of Seoul comes into view. The wide horizon reveals a quilted pattern of evenly spaced, uniform high-rise housing slabs, wafer-thin due to their typical single-load corridor configuration.

The pattern is repeated military-style all over the city. In each case, significant apartment spaces such as living rooms always face south with less important functions like kitchens and baths on the north, adjoining exterior corridors. This ritualized arrangement reflects a complex formula combining ancient ideas of geomancy, modern concerns for the cost of winter heating, and mundane but widely held beliefs about how to make a killing in the South Korean real estate market.

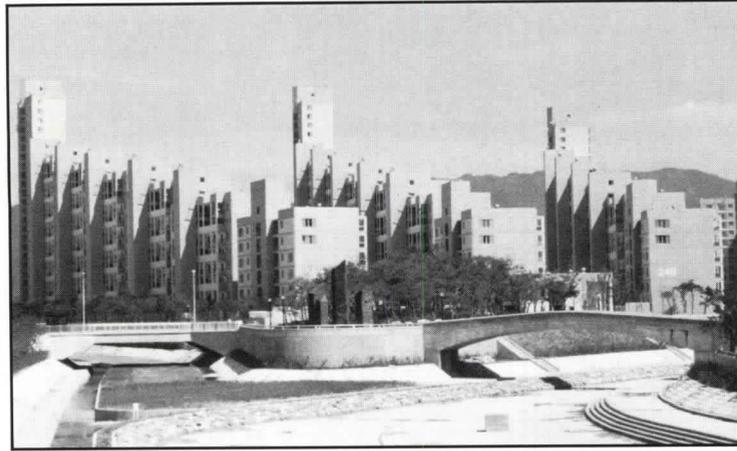
Several miles inland, on the leading front of the land boom, the innovative 5540-unit Olympic village apartment project, designed by the Cambridge firm of Woo & Williams, sits on a 143-acre site across the Boulevard from a park that contains many of the new Olympic venues.

The so-called "athletes village" (3692 apartments) is composed of stepped buildings sited to enhance views of the landscape and to relate to a major water feature. These break Seoul's orientation rules by fanning out in semicircular fashion from the massive, curved, glass-barrel-vaulted administrative building, with its plaza displaying the flags of all nations, that is the ceremonial focus of the complex. The "reporters village" (1848 units) faces south in a more traditional rectilinear arrangement.

Following the summer games, the entire project will be prepared for occupancy by individual owners selected by lottery for the right to purchase units. The dramatic J-shaped administration building will be transformed into a regional shopping center with portions reserved for neighborhood shops.

Woo & Williams obtained the commission as winners of a 1984 international competition sponsored by the Seoul Metropolitan Government and carried out the work in a joint venture with Ilkun Architects and Engineers of Seoul.

Despite the fact that Kyu Sung Woo, principal in charge, is native Korean, the abhorrence of



Athletes housing for Summer Games in Seoul.

individuality and desire for uniformity that is characteristic of the typical Seoul apartment buyer came as a surprise to him after 20 years of U.S. practice. The Woo & Williams plan originally called for 70 percent of the units to be duplexes designed with sun-capturing, two-story living rooms that recall the arrangement of courtyards with surrounding sleeping rooms found in traditional villages. Despite evidence that these units could capture as much sunlight as those facing directly south, the clients insisted the number of duplexes be cut to 20 percent. However, the architects were able to cleverly position these apartments and their distinctive balconies, so that they retain a strong impact on the village's overall image.

Design innovations do not end with the fan-shaped arrangement. Instead of the long exterior corridors common to conventional housing estates, slabs are broken into a series of smaller buildings (a total of 86 in the "athletes village" portion) that step up in height from 6 to 24 stories with only two to four units per floor sharing an intimate, semiprivate elevator landing. Extra large (three meters deep) balconies are included and sill heights reduced so that occupants seated on traditional steam-heated floors retain views out of windows.

The project stands as a major organizational achievement. Design development and construction documents were produced in less than a year, and the village was built by a team of 13 contractors in 18 months. The quality of site planning and overall design is far more evolved than anything in the region.

Questions that remain are somewhat outside the control of the architects. For example, all housing estates in the region are designed as islands of development with little attention to their

impact on the surrounding urban fabric. Has this project offered an alternative?

Moreover, the unit sizes are exceedingly large by Korean standards, varying from 1700 to 2200 square feet, and the corridor configuration is expensive, making the apartments affordable only to the upper middle class, and possibly attractive only to those customers with a distinctly Western outlook. Therefore the impact of this innovative project on the larger housing production process in Korea remains uncertain. **George Rand** ■

The author is a clinical psychologist and professor at the Graduate School of Architecture and Urban Planning at UCLA.

Kings (continued from page 33)

compose Blair House (the 1824 Blair House and the 1858 Blair-Lee House on Pennsylvania Avenue, plus two other 1858 houses on Jackson Place), preservation was not an end in itself. The bigger challenge was to convert the houses to a 23-bedroom luxury hotel with strict security, while retaining the historic character and intimate scale of the four buildings.

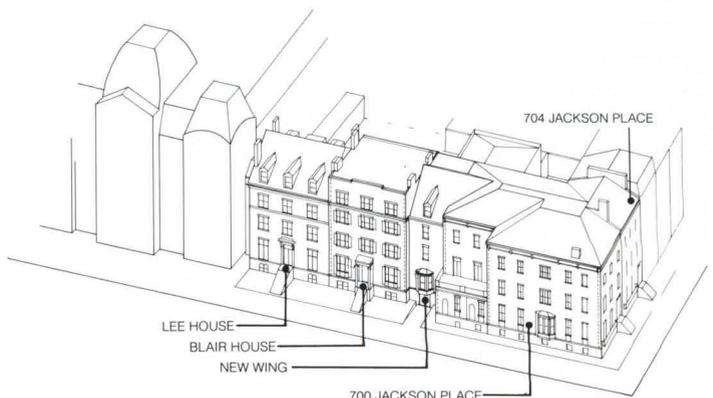
The architects solved the problem by combining the historic houses with a new, secure primary wing to their rear, uniting the parts with a common

service core. Elevators, fire stairs, kitchen, laundry, and supply rooms all open onto this core, enabling waiters, for example, to serve dinners in four dining rooms without passing through the garden or upstairs rooms. The core's placement also facilitates deliveries of items, including the racks of clothing that often accompany visiting dignitaries. The architects also replaced an unfortunate 1960s addition to the otherwise historic block with a new design in the spirit of Montgomery Blair's 1867 law office, which originally occupied the infill lot.

The primary guest suite was relocated from Blair-Lee house to the new structure built behind the Jackson Place houses overlooking a new garden courtyard. The suite features reproduction double-hung windows protected by bullet-proof glass. Beneath it, the architects created an entirely new function room using sandstone similar to, but more durable than, that of the White House. Although designed to incorporate elements found elsewhere in the building, such as cornices and triple windows, and decorated with landscape murals, this "orangerie" is purposely spare, and strikingly so, compared to the remainder of the house. Still, it converts easily to accommodate dinners, cocktail parties, or meetings that may spill into the garden courtyard.

Comfort and security standards were met by installing new electrical, security, and HVAC systems. Floors were removed and rebuilt around the new systems. Some walls required reinforcement with steel beams to accommodate transparent armor. Yet the many functional improvements are deftly, and appropriately, obscured by decorative touches sure to make visiting dignitaries feel right at home. **Leslie Freudenheim** ■

The author is a writer and preservationist living in Washington, D.C.



Axonometric shows 1988 addition to renovated Blair House.

PGL

The First Luminaire Exclusively Designed for Parking Garages.

The Kim PGL is an innovative solution to parking garage lighting. It is a multi-function luminaire providing both performance and design-conscious garage lighting. First, the PGL is a vertical-lamp cutoff luminaire which means low brightness, excellent visibility and outstanding uniformity of illumination. Second, the PGL is an indirect luminaire



providing ceiling illumination to eliminate the "cave effect", with the additional bounce-light softening shadows. Third, the PGL is a semi-direct luminaire toward the parking stalls, providing extra fill-light where it is needed for safety and security. The PGL is a design statement that says parking garages are more than just utilitarian structures.



KIM LIGHTING

16555 East Gale Avenue • Post Office Box 1275
City of Industry, Calif. 91749 • 818/968-5666
FAX 818/330-3861

Circle No. 331 on Reader Service Card

**We think our First Class Service
is the best in the business.
Too bad more people
don't take advantage of it.**



TWA's First Class Sleeper Seat.

When you stretch out in TWA's First Class Sleeper Seat, we urge you not to get too comfortable. At least not right away. We wouldn't want you to miss any of the amenities that make our First Class so opulent. And by the way, only TWA offers its luxurious sleeper seat on every domestic and international widebody flight.

TWA's First Class Service.

Before takeoff, you'll be offered complimentary cocktails. Then, on international flights, come the hors d'oeuvres. Everything from American Sturgeon Caviar to Pâté de Canard.

And on all flights you will discover gourmet entrées served to you on china. If you can, save room for dessert or an after-dinner drink.

You won't be disappointed.

TWA's Personal Service Commitment.

TWA is determined to bring you the best personal service in the airline industry. So we've assigned an In-Flight Service Manager to every flight to make sure your trip is as hassle-free and comfortable as possible.

In addition, our Chairman of the Board has put together a Quality Control Team. A group of 30 very picky people who fly TWA, assessing the service they receive, on a checklist of over 100 service items. They report directly back to him with their comments, good and bad. And if anything needs improvement, it gets improved. Fast.

Because at TWA, great service is a top priority.

**TODAY'S TWA.
FIND OUT HOW GOOD WE REALLY ARE.™**

TWA

In Progress

A number of new projects by Foster Associates show the various forms that firm's rigorous approach to technology can take.



LONDON REGENERATION CONSORTIUM / FOSTER ASSOCIATES

EUSTON ROAD ELEVATION

Elevation showing new vault between St. Pancras Station (left) and King's Cross Station (right).



LONDON REGENERATION CONSORTIUM / FOSTER ASSOCIATES

Section through vaulted space showing connection through new office buildings to oval park (far right).

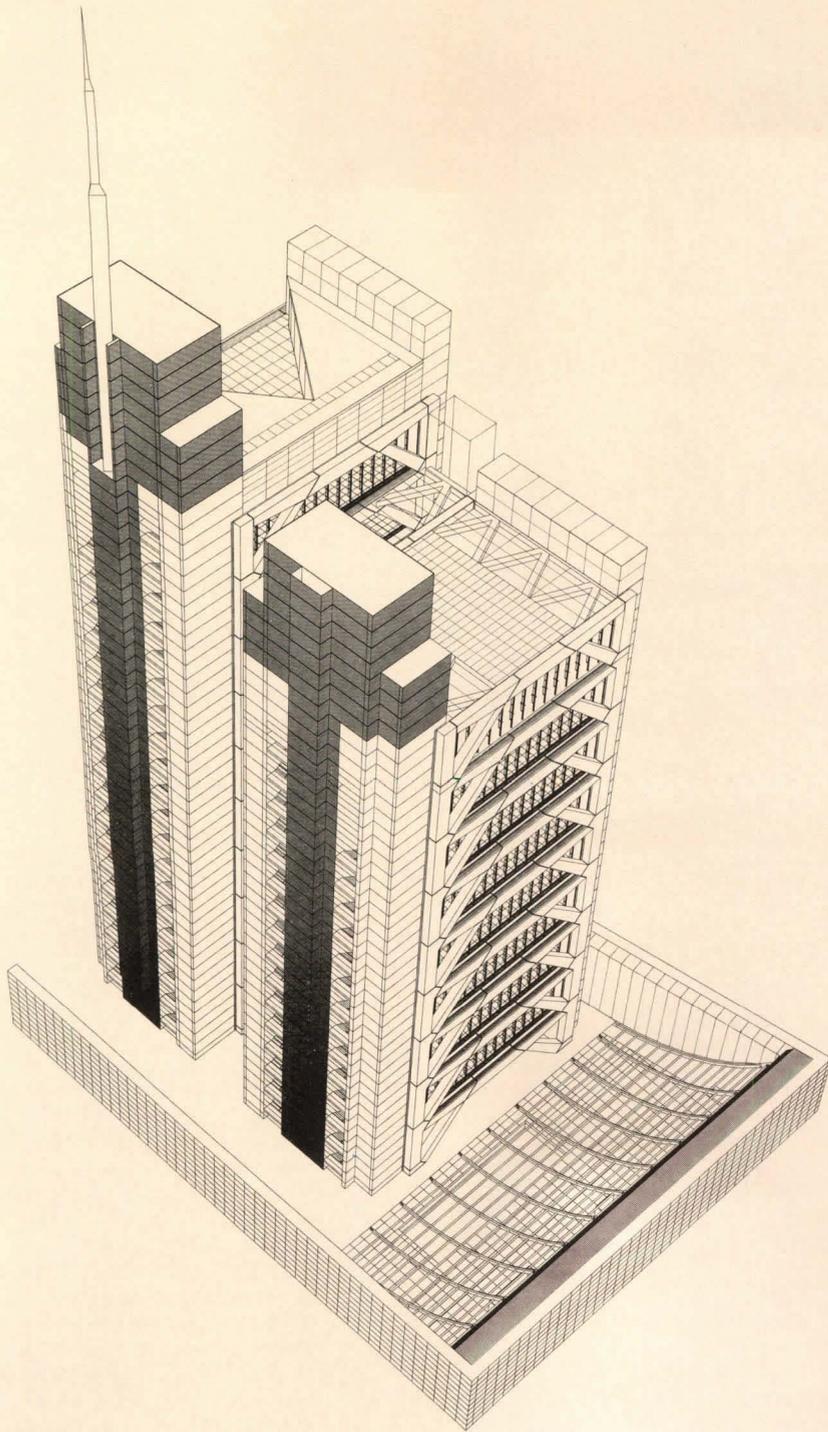


Model photo: Richard Davies

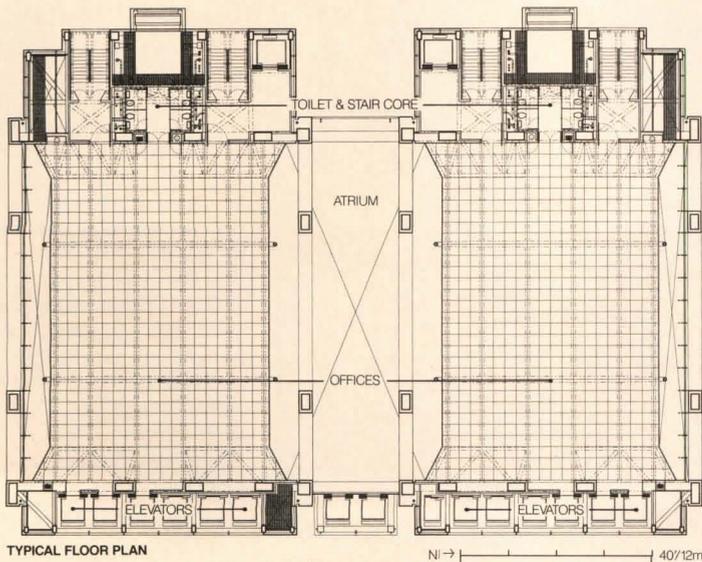
Model view showing oval park and new construction.

King's Cross Master Plan, London. Architects: Foster Associates, London. Foster Associates have designed the largest redevelopment project in Europe—a 126.2-acre industrial area north of London's King's Cross and St Pancras stations. The center of the mixed-use development consists of a large oval park from which radiate a number of streets. The oval, connected by the Regents/Grand Union canal to a number of other open spaces including Regents and Victoria Parks, will contain a playing field and amphitheater as well as rehabilitated industrial structures. A low, irregularly shaped steel-and-glass vault, spanning between the two stations, will house a vehicular roadway and queuing area, baggage handling facilities, and pedestrian circulation connecting the various rail and subway stations. Foster Associates used computers to study various circulation patterns in terms of the through traffic each would generate. The result of such a high-tech study was a fine-grained block pattern that, like the oval park, will seem very much at home in London.

(continued on page 42)

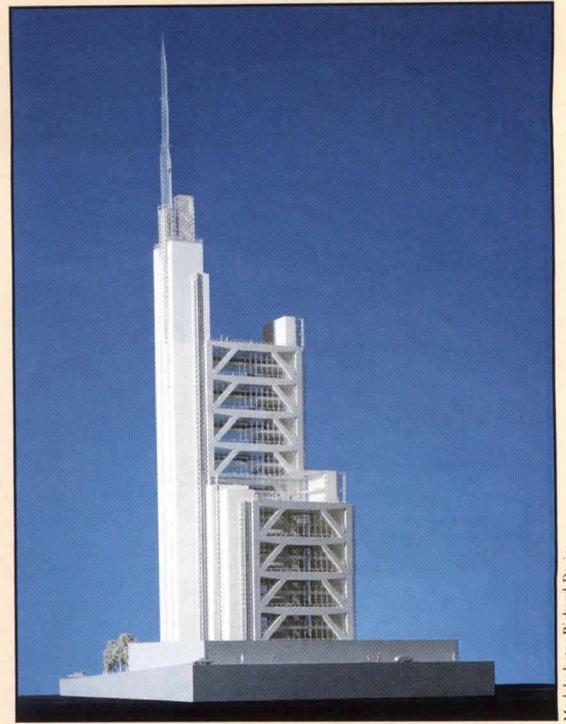


AXONOMETRIC



TYPICAL FLOOR PLAN

NI → 40/12m



Model photo: Richard Davies

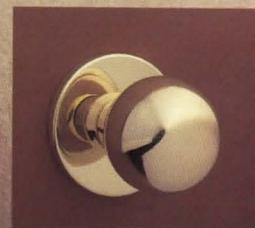
Model view showing earlier stage in the design.

In Progress (continued from page 41)
Century Tower, Tokyo. Architects: Foster Associates, London.

There is more than a passing similarity between this new tower and Foster's building for the HongkongBank (P/A, March 1986, pp. 67-109). Both buildings have perimeter cores, central lightwells, varied profiles, and exposed trusswork on their façades. The factors affecting their design, however, were quite different. Because of zoning requirements aimed at reducing shadows in the adjacent residential area, the back of the Tokyo tower had to be somewhat shorter than the front. The trusses are necessary to improve earthquake resistance and to free the interiors of columns, while the central lightwell will increase the amount of daylight in the building. A tilted, bowed glass roof will cover a health center and spa. The building owner will have an apartment, with a triangular terrace, on the top floor and a telecommunications mast that will communicate with his telecommunications center, also being designed by Foster.

(continued on page 44)

**Composition and form.
Hardware classics by Sargent.**



The eye knows it; the hand confirms it. This is form and function perfectly integrated. This is Sargent, the mortise lock of choice for generations of architects and specifiers.

Craftsmanship, service and on-time delivery. For enduring qualities in mortise and bored locks, door closers and exit devices, choose the complete Sargent line. And get classic architectural hardware.

**SARGENT
ESSEX**
INDUSTRIES, INC.

Sargent, New Haven, Connecticut 06511
Sargent of Canada Ltd.

Circle No. 344

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



USC Olympic Pool
Los Angeles



Write for Detailed Literature or See Use in Sweets 13.4b/Kd

KDI Paragon Inc.

SINCE 1956 MFRS. OF DISTINCTIVE POOL EQUIPMENT
P.O. Box 256, 12 Paulding St., Pleasantville, N.Y. 10570 ■ 914/769-6221

Circle No. 326 on Reader Service Card

**NOW - YOU CAN HAVE
LARGE BEAUTIFUL
TREES IN A PAVED AREA.**

The W.A.N.E. (Water-Air Nutrition Exchange) 3000 Tree Unit is a tree feeder and irrigator that supplies water, air and nutrition for trees surrounded by pavement.

Send for **FREE BROCHURE**

WATER
AIR

PAVEMENT

Can be installed in any paved medium to protect existing trees.

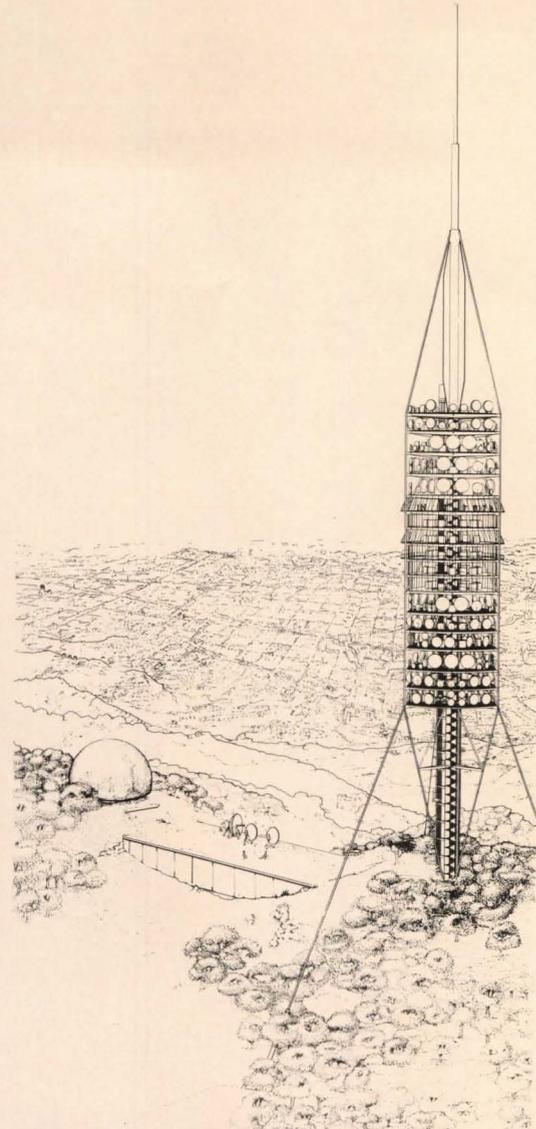
Slow-release fertilizer sends essential nutrients to the tree's root system.

WANE 3000
Handle and Fertilizer

WANE Tree Systems

15108 Lake Madelene Blvd.
Tampa, Florida 33618 • (813) 961-1060

Circle No. 350 on Reader Service Card



PERSPECTIVE SHOWING RESTAURANT DOME, MAST, AND PARTLY BURIED SUPPORT SPACES



Model photo: Richard Davies

Model view from below.

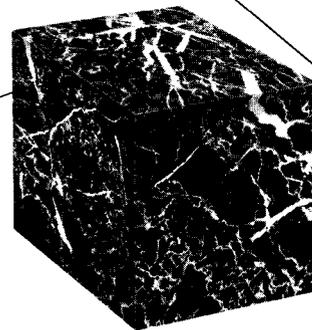
In Progress (continued from page 42) • **Telecommunications Tower, Barcelona.** Architects: Foster Associates, London. Few programs would seem as well suited to Foster's approach as a telecommunications tower. The rough, mountain-top site demanded that the tower be as light, unobtrusive, and easily erected as possible. The design calls for a single concrete mast that will be stiffened by three vertical steel trusses and braced by three diagonal, post-tensioned steel cables. The mast and trusses will support the telecommunications equipment and platforms for its servicing, as well as office and viewing floors; elevators, stairs, and cable risers will be connected to the outside of the shaft for ease of access. To prevent sabotage, bomb-resistant sleeves will protect the top and bottom of the guy cables, and closed-circuit television and motion detectors will constantly monitor the site. Two floors of equipment will be buried in the mountainside, beneath partly buried reception and meeting spaces. A separate glazed geodesic dome will house a two-story restaurant.

The Founder of **DONN** Corporation
Announces an Investment in Precious Stone

NOTICE:

Don Brown, former owner of DONN Corporation, has acquired Marble Technics, a leading supplier of decorative stone tiles and slabs. DONN became the world's largest producer of ceiling grid systems, raised flooring and wall partition systems before Mr. Brown sold DONN Corporation to UNITED STATES GYPSUM COMPANY (USG) in 1986.

Through the addition of Mr. Brown's proven management experience and financial support, the current senior management team of Marble Technics will build on their reputation for industry leadership, customer service, quality materials and technical innovation. Their objective: bringing to commercial buildings and homes the timeless beauty and elegance of granite and marble.



MARBLE TECHNICS LTD.
New York/Los Angeles/Pietrasanta, Italy
212-750-9189 (NYC)

DONN is a registered trademark of U.S. Gypsum Co.

Circle No. 334 on Reader Service Card

ANOTHER GREAT OFFER FROM
THE EMPLOYEE-OWNERS* OF AVIS, INC.

Drive An Elegant Bargain.

\$45

a day
Cadillac Sedan de Ville

The employee-owners of Avis want you to experience the elegance of a Cadillac Sedan de Ville or similar luxury-group car at a very economical rate. With SuperValue Rates and fast service, we're trying harder than ever to give you what you want in a rental car.

To get this low rate, here are some things you should know. This rate includes a free mileage allowance, but

there's an additional charge per mile thereafter. The rate is available at all participating U.S. locations, and is higher in the metro N.Y. area. It is non-discountable and may change without notice. These cars are subject to availability, and blackout periods and additional seasonal charges may apply. There is no refueling charge if you return your tank full. For renters under 25 and additional drivers, there are extra charges. The car must be returned to renting location. Taxes and optional Collision Damage Waiver (\$9.95/day, higher in certain areas), Personal Accident Insurance, Personal Effects Protection and Additional Liability Insurance are extra.

To drive this elegant bargain, call Avis at 1-800-331-1212, or call your travel consultant.



We're trying harder than ever.SM



*Employees at all corporate locations. © 1988 Wizard Co., Inc.

Avis features GM cars. Cadillac Sedan de Ville.

Circle No. 001 on Reader Service Card



First Unitarian Church from "Frank Lloyd Wright and Madison" at Elvehjem Museum through Nov. 6.

Exhibitions

Through October 23

The Direction of Architecture in Light of the Past. German Architecture Museum, Frankfurt am Main.

Through October 23

Emerging European Architects. Graduate School of Design, Harvard University. Cambridge, Mass.

Through November 5

Coop Himmelblau: Drawings and Models. Max Protetch Gallery, New York.

Through November 6

Frank Lloyd Wright and Madison: Eight Decades of Artistic and Social Interaction. Elvehjem Museum of Art, Madison, Wisc.

Through November 11

The Art of Design, including work by Arquitectonica, Ettore Sottsass, Stanley Tigerman, Eva Maddox, and others. University of Wisconsin-Milwaukee Fine Arts Gallery, Milwaukee, Wisc.

Through November 14

Progressive Taste: Decorative Arts, 1885-1985. Brooklyn Museum of Art, Brooklyn, N.Y.

Through November 17

Thom Mayne and Michael Rotondi/Morphosis. 2AES, San Francisco.

Through November 27

The Work of Bruce Goff. Los Angeles County Museum of Art, Los Angeles.

Through December 11

Michelangelo: Draftsman/Architect. National Gallery of Art, Washington, D.C.

Through January 8

Architecture on Paper: A Decade of Acquisitions. Metropolitan Museum of Art, New York.

Through January 8

Erich Mendelsohn: 1887-1953. Cooper-Hewitt Museum, New York.

October 19-January 31

Frank Lloyd Wright and the Johnson Wax Buildings. Chicago Historical Society, Chicago. (See P/A, April 1986, p. 27.)

October 19-February 6

O'Hare—Airport on the Prairie: Photographs by Robert Burley. Chicago Historical Society, Chicago.

October 19-December 1991

The Chicago Street: 1860-2000. The Chicago Historical Society, Chicago.

October 20-November 30

Arata Isozaki. Kirsten Kiser Gallery, Los Angeles.

October 30-January 8

Architecture Tomorrow: Frank Israel. Walker Art Center, Minneapolis, Minn.

Conferences

October 20-25

Orgatechnik 1988, Cologne, West Germany. Contact KolnMesse, Messe und Ausstellungen-Ges.m.b.H., Messeplatz 1, Postfach 21 07 60, D-5000 Cologne, West Germany.

October 21-22

Landscape and Architecture in the Twentieth Century, Roy and Niuta Titus Theater 2, Museum of Modern Art, New York. Contact Dept. of Architecture, MoMA, 11 W. 53rd St., New York, N.Y. 10019 (212) 708-9545.

October 23-26

Meeting the Needs of Tomorrow: International Facility Management Association Annual Conference, Westin Peachtree Plaza, Atlanta. Contact IFMA, Summit Tower, Suite 1410, 11 Greenway Plaza, Houston, TX 77046 (713) 623-4362.

October 28-29

The Future of Urban Open Space, University of California, Berkeley, Calif. Contact Department of Landscape Architecture, 202 Wurster Hall, University of California, Berkeley, Calif. 94720 or call Jane Stahlhut (415) 642-2962.

November 2-6

Fresh Perspectives and New Directions in Architecture, American Society of Registered Architects 32nd Annual Convention, Plaza of the Americas Hotel, Dallas. Contact SARA, 1245 So. Highland Ave., Lombard, Ill. 60148 (312) 932-4622.

November 4-6

20th Century American Architecture, American Institute of Architects Committee on Design, National Conference, Los Angeles. Contact AIA, 1735 New York Ave., N.W., Washington, D.C. 20006 (202) 626-7465.

November 17-18

Builders Examine the Many Faces of Homelessness. Hilton Hotel, Washington, D.C. Contact Home Builders Institute, 15 & M Streets, N.W., Washington, D.C. 20005 (202) 822-0580.

Competitions

October 31

Registration deadline, Excellence in Design, AIA Honor Awards 1989. Entries due **November 28**. Contact Awards Program, AIA, 1735 New York Ave., N.W., Washington, D.C. 20006 (202) 626-7300.

October 31

Entry deadline, Boston Visions. Contact Boston Society of Architects, 305 Newbury St., Boston, Mass. 02115 (617) 267-5175

November 15

Entry deadline, Rome Prize Fellowship. Contact Fellowships Coordinator, American Academy in Rome, 41 E. 65th St., New York, N.Y. 10021-6508 (212) 517-4200.

November 15

Entry deadline, Fairfield 2000: Affordable Housing Competition. Contact Connecticut Committee of Regional Planning Association, 500 Summer St., Stamford, Conn. 06901.

November 30

Entry deadline, Future of the Industrial City Design Competition. Contact School of Architecture and Urban Planning, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, Wisc. 53201 (414) 229-4014.

December 1

Entry deadline, Rudy Bruner Award for Excellence in Urban Design. Contact Program Coordinator, Rudy Bruner Award, 244 Fifth Ave., New York, N.Y. 10001 (212) 889-5366.

December 15

Entry deadline, Awards for Excellence. Contact Competition, National Glass Association, 8200 Greensboro Dr. #302, McLean, Va. 22102. (703) 442-4890.

December 20

Registration deadline, Celebrating a New Legacy: Design Competition for Senior Housing. Contact City of Colton, 650 No. La Cadena Dr., Colton, Calif. 92324 or call Brian Oulman (714) 370-5071.

Mies van der Rohe and his prominent colleagues made architectural history when they designed the renowned Weissenhof Colony in West Germany in 1927. Now in 1988 we honor those gifted men and their innovative achievements. (See "Low Cost High Design" in this issue of PA.)

We at STO are inspired by their commitment, enlightened by their creativity and honored that our wall systems were selected to restore buildings of such historical significance.

On the following pages we present to you **STO Wall Systems and Coatings.** Their extraordinary quality and innovation not only anticipate the building needs of the future but also restore the architectural heritage of the past.

STO INDUSTRIES, INC.

Quality Lane, Box 219
Rutland, Vermont 05701
Tel: 1-800-851-5533

A subsidiary of STO Corp.,
the Systems Technology Organization

Circle **No. 347** on Reader Service Card



*Wall
Systems,
Coatings
& Finishes*

Imagine the architectural achievements of the future: versatile, efficient, strikingly beautiful. Then imagine walls covered with systems so advanced, traditional building problems would be virtually eliminated. **STO presents wall systems of extraordinary quality that anticipate tomorrow's building needs today.** From the northern ice lands to the equator, STO Exterior Insulation Systems and Coatings have withstood cold, heat, moisture, wind and time, while still expressing widely divergent styles of architecture. Commitments to quality and problem-solving product development have resulted in materials with superior performance and international popularity.

From humble beginnings in Germany in 1935 to plants and offices around the world, STO's reputation for innovative, quality products that solve specific needs for the construction industry has grown to global proportions. The same spirit of innovation that has catapulted the company to world leadership is that which ensures the best quality products and services possible.





Recognized for its design excellence, Phase 1 of the Tegel Harbor Housing Complex was completed in 1987 for the International Building Exhibition in Berlin. Master-planned by Charles Moore, FAIA, and Moore Ruble Yudell, winners of the design competition, it represents classic Post Modernism at its best.

Tegel Harbor also exemplifies the extraordinary quality and versatility of STO materials through the project's magnitude and award-winning design. Based on STO's theories of Applied Color Use in Architecture, extensive color analysis and renderings were produced by the STO Color Studio. The final colors and forms of Tegel lend each new housing complex its exquisite appeal and accomplish its playful yet dignified integration into the surrounding environment of old Berlin.

Tegelerhafen
Berlin, West Germany
Architect: Moore Ruble Yudell,
Architecture and Planning

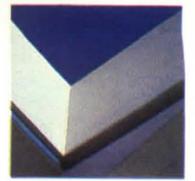
STO Systems shatter the inherent limitations of traditional building materials. Tremendously energy efficient and durable, **STO Exterior Insulation Systems & Finishes** (EIFS) perform like a protective skin that breathes and resists moisture, yet remains flexible even in extreme or changeable climate conditions.

With the insulation on the outside of the building, the system forms a shield against the elements. Thermal voids are eliminated and replaced by consistently high R-Values. Advanced features include superior weatherproofing seals, foundation insulation, and waterproofing. The result is full above and below grade protection other materials and wall systems just can't deliver.

STO Wall Systems provide unprecedented freedom of design as a protective "skin" that follows all of the curves, bends and sculptured details imaginable. Then it can be finished with textures and colors that will enhance your design. Instead of limitations, STO Exterior Insulation Systems offer inspiration.

STO technology has dissolved the limitations of EIFS itself. No longer is the industry limited to one or two general, multi-purpose systems. STO offers a range of wall systems wide enough to answer virtually every building need and problem, whatever the substrate, condition or environment. Each STO Wall System has been extensively tested and subjected to strict quality control prior to market release. The following series represents only a portion of the STO wall solutions possible.





A Renaissance Tower
Surfside Beach, South Carolina
Architect: Stevens and Wilkinson

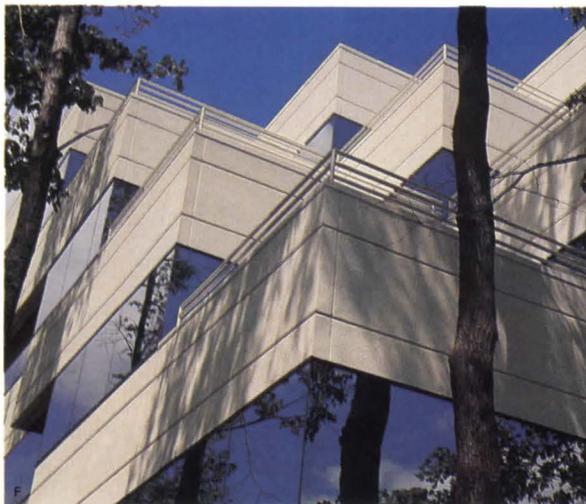
B Schwartz Residence
West Stockbridge, MA
Architect: Schwartz/Silver
Architects

C Kendall Corp. Center
Miami, Florida
Architect: Stewart Cohen

D Residence
Rutland, Vermont
Architect: Robert Carl Williams
Associates, P.C.

E 3556 on the Bay
Virginia Beach, Virginia
Architect: Lgm, Inc.

F Orchard Hill Place
Novi, Michigan
Architect: DesRosiers Architects



SYSTEM I

Opportunities for architectural excellence unfold with the new standards of technological innovation built into SYSTEM I.

The highest quality, completely 100% synthetic EIFS available, STO SYSTEM I provides unsurpassed flexibility, durability and protection. But what's truly innovative about SYSTEM I is the superiority of every individual system component. Unlike the materials in competitive systems, every STO component is 100% synthetic and utilizes the highest quality materials for optimum performance.

SYSTEM I can be utilized on all types of construction with the outstanding performance and aesthetic beauty STO systems are noted for.

SYSTEM II

Here is a perfect medium for providing the durability, protection and versatility of EIFS, together with the exceptional quality of STO Systems – all at an economical price.

SYSTEM II surpasses the competition's best because it's composed of 100% synthetic material combined with 20% cement. That translates into superior performance when compared to the industry standard composition of 50% synthetic and 50% cement.

Whenever high quality marries competitive pricing, the response is widespread popularity.

C-SYSTEM

The STO C-System is fully cementitious and the most economical STO System on the market. C-System combines the latest in cementitious technology with STO's EIFS experience in a system that's ideal for residential use. Because of its cementitious nature, C-System provides fast curing in cold temperatures. The components are packaged in a bag, ready to mix at the job site and can be stored dry, in moisture-free, unheated areas through the winter months.

The C-System can be applied to virtually any substrate, and can be detailed and applied in the same manner as Systems I and II for a high level of thermal efficiency and durability.

TOUGHWALL

The key to puncture protection lies in TOUGHWALL, the system specifically designed for the protection of structures from vandalism and high traffic abuse. Mechanical fasteners lock TOUGHWALL™ to any substrate, whether new or old.

The core of the system is composed of STYROFOAM™ brand insulation, the Blue™ rigid foam insulation made only by The Dow Chemical Company, and STO TOUGHWALL Ground Coat. As the only pre-mixed ground coat among hard coat systems, STO TOUGHWALL Ground Coat requires nothing but water added, thus assuring the highest level of quality control at the job site. The result is a complete thermal system that boasts superior water resistance, puncture resistance and compressive strength.

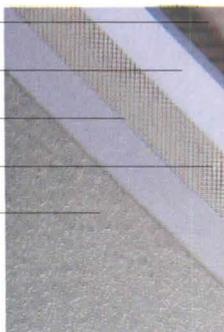
A. Attachment

B. Insulation

C. Ground Coat

D. Reinforcement

E. Finish



A. STO Dispersion Adhesive
B. STO 1# EPS Insulation Board
C. STO RFP
D. STO Reinforced Fiberglass Mesh
E. STO Finish



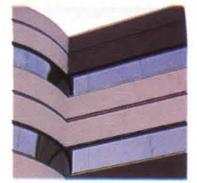
A. STO BTS-B Adhesive
B. STO 1# EPS Insulation Board
C. STO BTS-B
D. STO Reinforced Fiberglass Mesh
E. STO Finish



A. STO ADH-B
B. STO 1# EPS Insulation Board
C. STO Ground Coat-C
D. STO Mesh-C
E. STO Mineralit



A. STO Fastener Disk
B. STYROFOAM™ Brand Insulation
C. STO Toughwall Ground Coat
D. STO Mesh-C
E. STO Finish



M-SYSTEM

When faced with the renovation of walls with damaged or brittle substrates, the long-proven solution is the mechanically fastened STO M-SYSTEM. Because its rigid PVC tracks are mounted onto the substrate and hold the insulation system away from irregular surfaces, M-SYSTEM completely eliminates the need for surface preparation or removal of the substrate. The transformation from old to new is complete with the application of STO SYSTEMS I or II, resulting in attractive walls that are more durable, thermal and flexible than the original walls ever were.

PANELIZED STO SYSTEM

Time. It's one of the most important intangible measures of success in building construction. And it relates directly to the tangible one: cost.

The focus of panelized STO Systems is successful on-time application. Fabrication by skilled panelization contractors in a climate-controlled facility assures superior quality and timely delivery. On-site installation of the lightweight panels is swift – a fraction of the time required for conventional field construction.

A range of STO products and application techniques are specifically designed for panel construction. And, of course, the completed structure boasts all of the superior thermal and protective properties STO Systems are noted for. System I is ideally suited for panelization. The Noncombustible System may be utilized as well.

BELOW GRADE SYSTEM

Once a breakthrough in the industry, the STO Below-Grade System still continues to elude competitors. It remains the only completely waterproof exterior insulation system for foundation protection on the market. STO FLEXYL, as the adhesive and ground coat, is absolutely waterproof, when used according to specifications. Yet, it's as flexible as fabric, even in the coldest temperatures. STYROFOAM® brand insulation, the Blue™ extruded foam insulation manufactured only by The Dow Chemical Company, provides the excellent thermal properties.

NONCOMBUSTIBLE SYSTEM

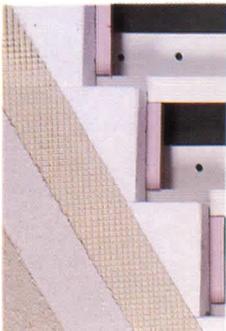
The noncombustibility of this system meets the standards set forth by the Los Angeles Dept. of Building. This is now the only exterior insulation system approved for use in L.A., one of the most code-restricted cities in the U.S. It was also approved in N.Y. City in 1984, three years before the approval of other exterior insulation systems. STO Mineral Wool Board, its key component, has been successfully utilized in Europe for over a decade. In addition to the noncombustibility of the system, it provides superior thermal properties, durability, flexibility and lasting beauty.

STO SEAL SYSTEM

As a combination of STO SEAL with one of the STO Exterior Insulation Systems, this wall system combines all of the benefits of exterior insulation with the most efficient, weather tight window and door seals possible.

A self-adhering, expanding tape, STO SEAL is quickly installed at the same time as the STO System is being applied. This important feature eliminates the extra time and cost incurred by caulking after the wall system is in place. When applied against properly prepared adjacent surfaces, STO SEAL expands to effectively seal all irregularities against air and moisture infiltration.

The STO SEAL System has long been proven effective on even the most moisture prone projects.



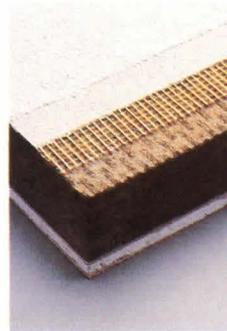
A. Mechanically Fastened STO Track System
B. STO Pre-Grooved 1# EPS Insulation Board
C. STO RFP
D. STO Reinforced Fiberglass Mesh
E. STO Finish



A. STO Dispersion Adhesive
B. STO 1# EPS Insulation Board
C. STO RFP
D. STO Reinforced Fiberglass Mesh
E. STO Finish



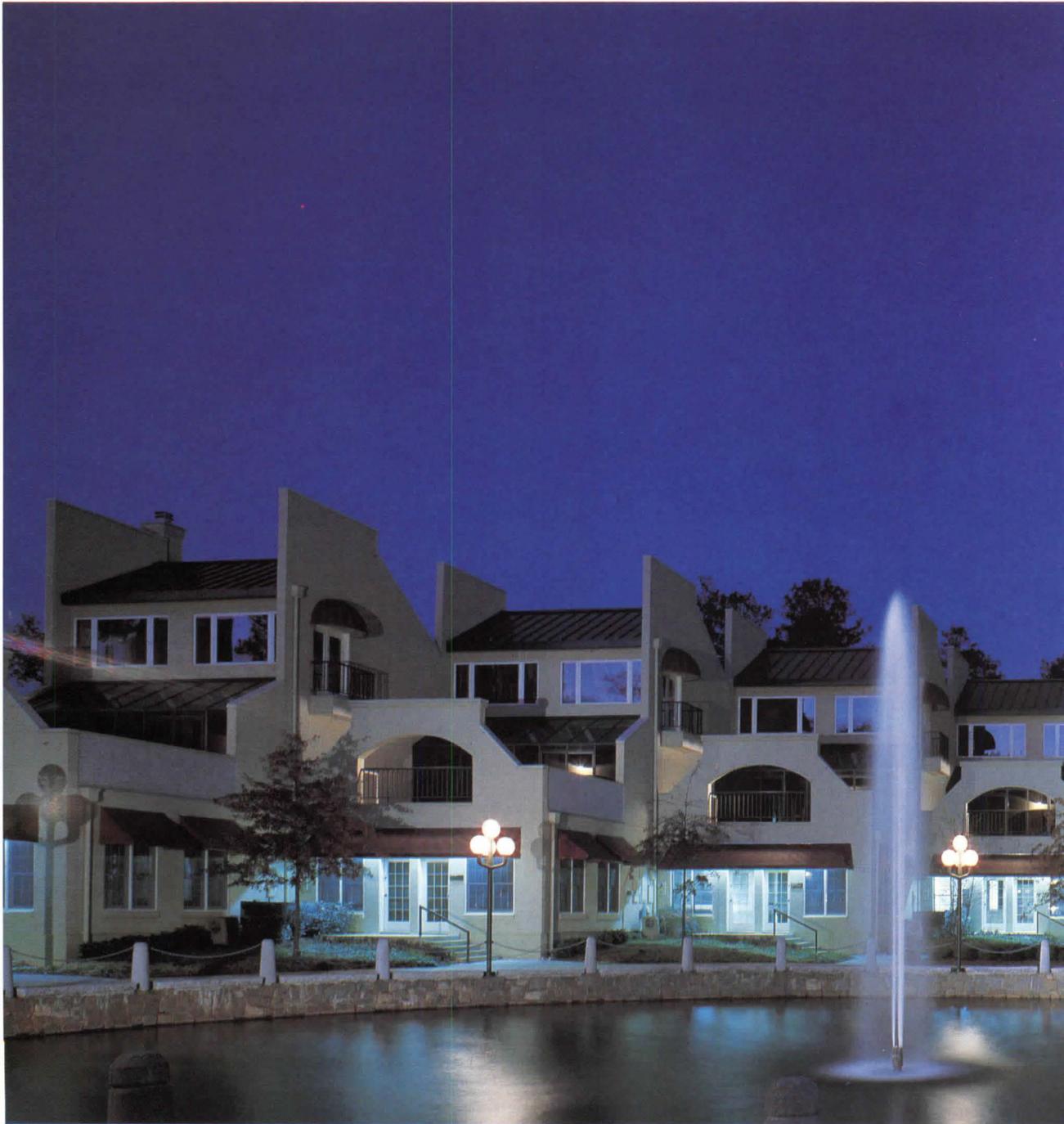
A. STO Flexyl Adhesive/Waterproof
B. STYROFOAM® Brand Insulation
C. STO Flexyl with STO Primer
D. STO Reinforced Fiberglass Mesh
E. STO Finish

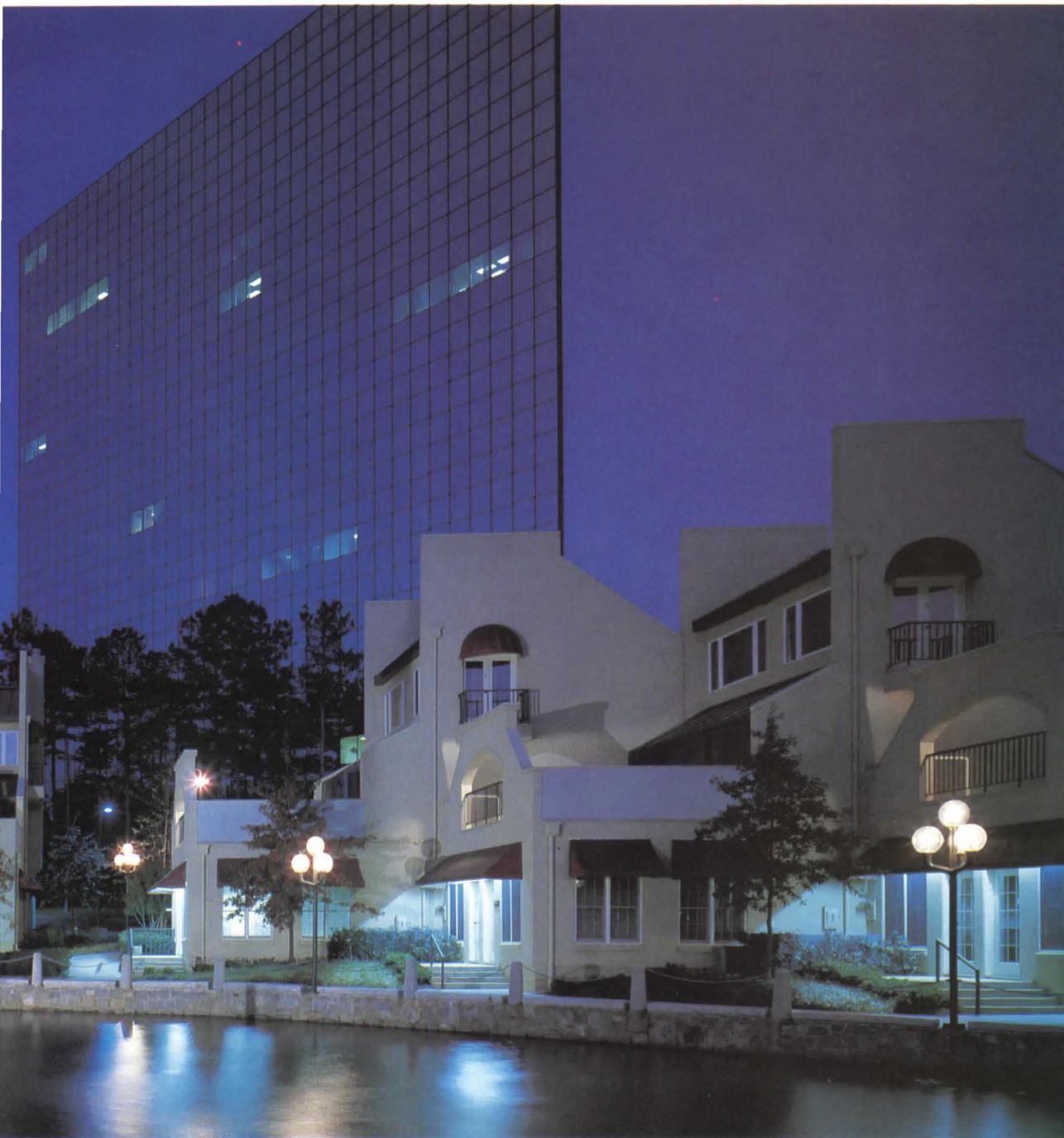


A. STO Dispersion Adhesive
B. STO Mineral Wool Board
C. STO RFP
D. STO Reinforced Fiberglass Mesh
E. STO Finish



A. STO Dispersion Adhesive
B. STO 1# EPS Insulation Board
C. STO RFP
D. STO Reinforced Fiberglass Mesh
E. STO Finish
F. STO Seal (Joint Sealant Tape)





In climates frigid and hot, locations wet and dry, elevations high and low, structures new and old, STO Exterior Insulation Systems outperform other materials – like night and day.

That's because STO wall systems envelop the outside of your building like a protective shield that insulates and resists moisture, yet remains flexible even in extreme or changeable conditions – beautifully.

Century Lakes
Atlanta, Georgia
Architect: Porter and Associates

The deteriorating walls of buildings whose glory has long passed present a formidable challenge: to find new materials that are compatible with the old.

STO offers the widest range of proven wall systems specifically designed for **Restoration and Renovation**. And they're more than compatible – STO products outperform older materials in every way. Because of their thermal efficiency, weather resistance, durability, versatility and unlimited design freedom, the results are often dramatic transformations, both aesthetically and functionally. Above all, STO Systems can minimize or completely eliminate wall preparation simply and economically. Trained STO Technicians are available to evaluate problems and assist in formulating solutions utilizing STO materials.

Europe's extensive reconstruction in the 1950's inspired STO to develop superior materials, beginning their reputation for fine restoration. Today, that reputation remains unchallenged as scores of carefully restored buildings around the world stand as testimony to STO technology.

- A **Freemason Harbor**
Norfolk, Virginia
Architect: Bucher/Myers
Architects
- B **La Guardia Marriott**
New York, New York
Architect: Russell, Gibson,
von Dohlen, Inc.
- C **Waldorf Astoria**
New York, New York
- D **New York City Hall**
New York, New York





BEFORE



AFTER

Under the leadership of Mies van der Rohe, assisted by 16 other renowned architects, the Weissenhof Colony came to represent the height of the Modern Movement. Built in 1927, it was one of the world's first significant affordable housing projects. Four decades of use and abuse necessitated extensive analysis by STO in its restoration. A specific system was designed utilizing adhesive intermediaries to prepare the concrete block substrate; a STO Exterior Insulation System for flexibility and superior protection; and a vapor-permeable, water resistant STO Coating System that provided the same appearance and texture as the original historic structure.

Weissenhofsiedlung
 Stuttgart, West Germany
 Architects:
 Mies van der Rohe
 Le Corbusier
 Walter Gropius
 Peter Behrens
 Bruno Taut
 Max Taut
 Mart Stam
 Adolf Schneck
 Hans Scharoun
 Adolf Rading
 Hans Poelzig
 J. J. P. Oud
 Ludwig Hilberseimer
 Josef Frank
 Richard Dopper
 Victor Bourgeois

Since STO introduced its revolutionary, high quality synthetic resin coatings to the European market in 1955, the performance standard for the worldwide coatings industry has been redefined.

STO 100% Synthetic Coatings and Finishes provide the most long lasting protection and durability possible for interior and exterior walls. Weather resistant, vapor permeable surfaces are created that are ecologically safe and highly resistant to air pollution.

And, with over 350 colors and 30 textures, the widest range available, as well as color matching capability, freedom of color and texture design is at your fingertips.

But the value of freedom without knowledge is minimal. After years of research, development and experience, STO presents systems of Color Theory and its application in architecture. This sophisticated STO methodology allows utilization of color as an integral design element that creates new possibilities for architectural excellence.



A Park Inn International Ocean Key Hotel
Virginia Beach, Virginia
Architect: Cox, Kiewer & Company, P.C.

B Tegelerhafen
Berlin, West Germany
Architect: Moore Ruble Yudell, Architecture and Planning

C TRC Center
Virginia Beach, Virginia
Architect: Walsh/Ashe Associates





The inspired design of this shopping center is brought to reality with STO Coating Systems. The dynamic interplay of color and form was uniquely developed through the use of sculpted polystyrene board to create walls with dimension. STOLIT 1.5, in meticulously selected colors that lend the structure its special appeal, was applied as the finish coating. It provides superior durability and long-term low maintenance, much needed properties in such a high traffic area as this.

Bakery Center
Coral Gables, Florida
Architect: Cohen, Freedman
and Associates

Given the exquisite appearance of

Interior Surfaces covered with STO Coatings,

one would assume they were used simply for

aesthetic appeal.

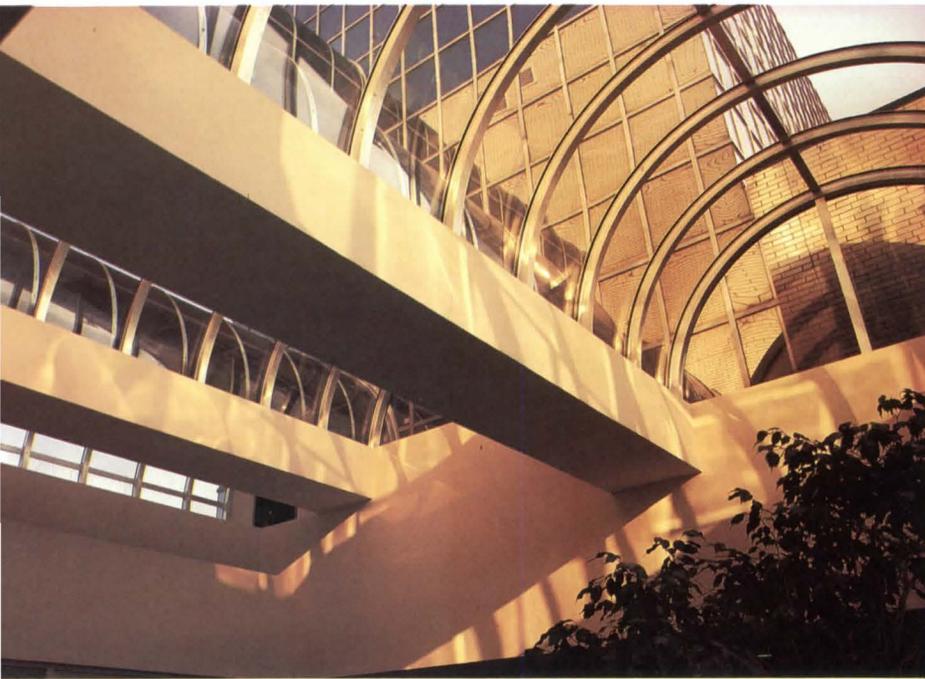
The fact is, STO 100% Synthetic Coatings and Finishes produce tough, seamless surfaces with the durability to withstand the abuse of constant high traffic flow. They're stubbornly resistant to scratches and cracks and their integral color composition minimizes any signs of wear and tear that may occur.

STO Coatings are easily and quickly applied and subsequent maintenance consists of little more than washing with ordinary detergents. They're safe, non-toxic and Class A fire rated.

With total systems for interiors that include a full range of sealers, primers, levelers and finishes, STO offers innovative solutions that effectively solve almost any interior wall problems from restoration through new construction.

- A **Tegelerhafen**
Berlin, West Germany
Architect: Moore Ruble Yudell,
Architecture and Planning
- B **Pier 66**
Ft. Lauderdale, Florida
Architect: Py Vaura, Architects &
Engineers
- C **Highlawn Pavilion**
Eagle Rock Reservation,
New Jersey
- D **Lexington State Bank**
Lexington, NC
Architect: Briggs & Matthews
- E **The Arthur M. Sackler Museum**
Cambridge, Massachusetts
Architect: James Stirling Michael
Wilford and Associates in
association with Perry, Dean,
Rogers & Partners







NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 16501 ATLANTA, GA

POSTAGE WILL BE PAID BY ADDRESSEE

STO INDUSTRIES, INC.

6175 Riverside Dr., SW
Atlanta, Georgia 30331-9807



STO Offices

USA

California
STO INDUSTRIES, INC.
Suite G-1
15520 Rockfield Blvd.
Irvine, CA 92718
Tel: (714) 472-1040

Florida
STO INDUSTRIES, INC.
Suite 1206
518 Douglas Ave.
Altamonte Springs, FL 31714
Tel: (407) 682-2828

Georgia
National Sales Office
STO INDUSTRIES, INC.
6175 Riverside Drive, SW
Atlanta, GA 30331
Tel: (404) 346-3666

Illinois
STO INDUSTRIES, INC.
Suite 131
800 W. Central Road
Mt. Prospect, IL 60056
Tel: (312) 394-1297

New Hampshire
STO INDUSTRIES, INC.
814 Perimeter Road
Manchester, NH 03103
Tel: (603) 647-8134

Texas
STO INDUSTRIES, INC.
Suite 1000
8235 Douglas Ave.
Dallas, TX 75225
Tel: (214) 739-5650

Vermont
Corporate Offices
STO INDUSTRIES, INC.
Quality Lane
Box 219
Rutland, VT 05701
Tel: (802) 775-4117

Europe

Austria
STOTMEISTER Ges.m.b.H.
Richtstrabe 47
A-9500 Villach
Tel: 0 42 42/3 31 33

France
STO-SERVIBAT S.A.R.L.
55, Rue du Marais
F-67 300 Schiltigheim
Tel: 88/62.26.64

Germany
STO AG
D-7894 Stuhlingen-Weizen
Tel: 0 77 44/57-0

STO AG
An der Bracke 1 - 3
7145 Markgroningen
Tel: 07145/4091-93

STO AG
Flexdorfer StraBe 110
8510 Furth
Tel: 0911/76931-32

STO AG
Charlottenstrabe 58-62
1000 Berlin 46
Tel: 030/7717024-26

STO AG
Weisenweg 4a
8044 Unterschleibheim-
Lohhof
Tel: 089/310 1047-48

STO AG
Alfred-Zingler-Strabe 36
4650 Gelsenkirchen
Tel: 0209/87 2071-72

STO AG
Philipp-Reiss-Strabe 27
6457 Maintal-Dornigheim
Tel: 0 61 81/4 60 93

STO AG
Winsener Strabe 187
2100 Hamburg-Harburg
Tel: 0 40/7 68 68 82

Sweden
STO SCANDINAVIA AB
Industrigatan 11
S-582 31 Linkoping
Tel: 013-129155

Switzerland
STOTMEISTER AG
Sudstrabe 14
CH-8172 Niederglatt/ZH
Tel: 01/8 50 37 65

Canada

STO INDUSTRIES CANADA INC.
Suite 3100
Shipp Centre
3300 Bloor Street, West
Toronto, Ontario M8X 2X3
Tel: (416) 236-1753

YOUR Automation EDGE

The Reason You *Must* Attend

Whether you design, engineer, manage or build, you need the right automation tools to maintain your competitive edge.



computer-aided

ment,

The AEC EXPO Show helps power your business with new technologies in graphics & marketing, business management, maintenance & operations, system integration, and more.

New For 1988...

• *Enhancement Center For AutoCAD* Users*

• *Microstation Mall Featuring Intergraph Plus 25 Developers*

It's not just CAD. It's *everything* you need to build your automation edge. Interact with the experts during three days

"**Super Sessions.**" They'll tell you how to



your automation of **Conference**

use and inte-

grate the latest AEC technologies. Get super-practical advice. Debate current trends with your peers. Discover proven-successful strategies for implementing ideas that work—right away... ideas like high-tech marketing, advanced 3-D

CAD, total business management, and networking. **Free Show Tickets & Prod-**

uct Catalog



Call for free show tickets, conference

programs, and a preview of the latest automation systems. Just a glimpse of the thousands of automation solutions you'll find when you attend the AEC EXPO.

1988

The Show & Conference for Architects & Engineers

AEC EXPO

Javits Convention Center · New York City · December 6-8, 1988

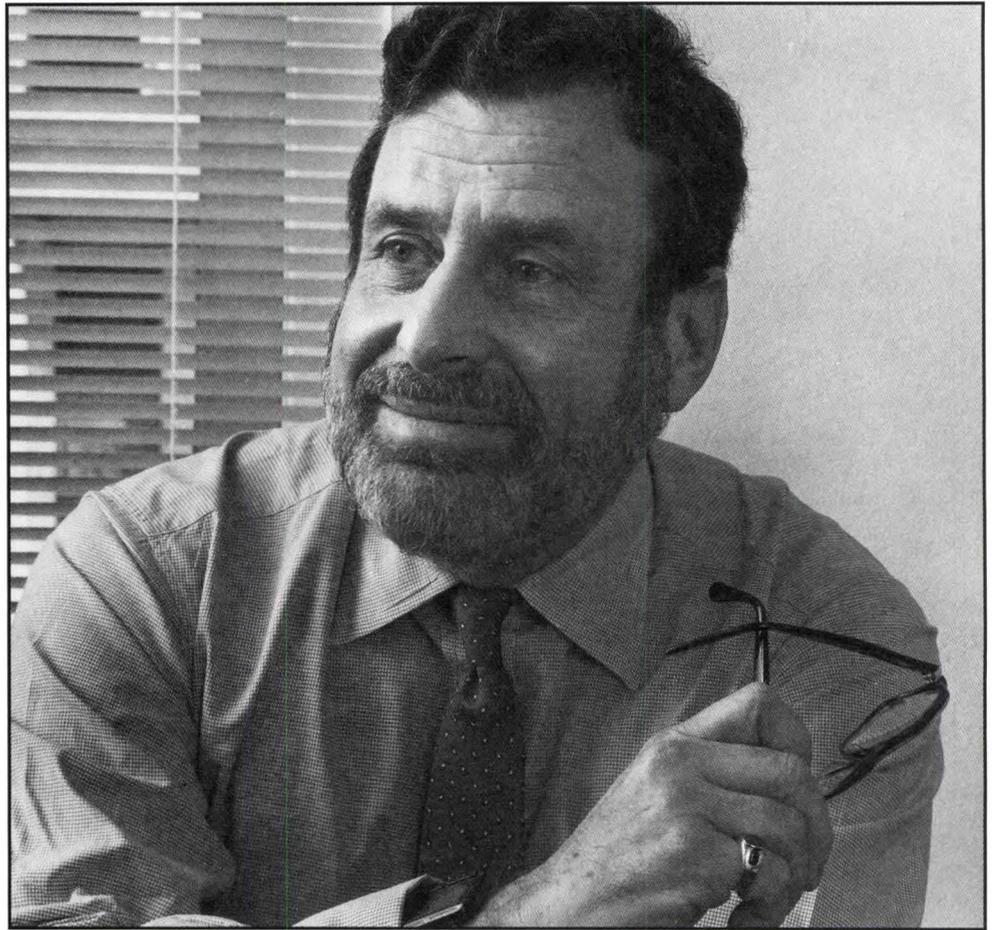
AEC EXPO is not affiliated with the A/E/C Systems show or its sponsors. AEC EXPO is a service mark of Expoconsul International, Inc. *The Enhancement Center for AutoCAD Users is not sponsored by or affiliated with Autodesk, Inc. (Images courtesy of Russo-Sonder, Architects P.C. and CUHZA)

Circle No. 320 on Reader Service Card

“ None of us studied architecture expecting to be defendants in a lawsuit. Most architects are creative people—they may or may not be businessmen, although the better they are in business the better it is—but few expected to be defendants in this changing profession. It’s something that has affected me personally, and, I expect, the growth of many architectural firms. It’s caused me concerns, maybe burned me out, in spite of the fact that we’ve won every one of our suits.

In the middle ’70s to the early ’80s, I felt insurance was the biggest problem architects faced—that and litigation. And it’s a continuing problem, no question about it. But I think that today DPIC Companies is with us for our entire future. Although we had only had two other insurers in 69 years, we really moved away from our previous insurer without any hesitation. DPIC was the first insurer that ever discussed loss prevention. And they were the first insurer that ever gave a damn about how we practiced architecture. That makes us very comfortable. Because, really, they are the most important partner in this firm. They provide us with the assurance we need to know they are going to be there. They assist us in undertaking contracts and procedures necessary to try to keep out of trouble in this litigious world. They provide us with legal counsel when there’s a problem brewing. In fact, we took advantage of their Early Warning program just this week.

I feel very good about them. ”



Manoir David Dubin

Dave Dubin is a principal in Dubin, Dubin and Moutoussamy, a 75-year-old architectural firm based in Chicago. He is past president of both the Chicago and Illinois AIA. We value our relationship with his firm and thank him for his willingness to talk to you about us.

Professional Liability Insurance
For Design Professionals
DPIC COMPANIES



Design Professionals Insurance Company • Security Insurance Company of Hartford
The Connecticut Indemnity Company
Available through an exclusive network of independent agents. Please call
1-800-682-3400 (in California) or 1-800-227-4284 for the agent serving your area.

2959 Monterey-Salinas Highway, Monterey, California 93942

(är/ki tekt/)

Law: Using the Title Architect

In most jurisdictions it is unlawful for a person to use a professional title unless that person is duly registered or licensed. The widespread use of the title architect by persons who are not trained and licensed as architects jeopardizes the public interest and otherwise subverts the profession. In several states this is a crime, but enforcement officials have been slow to utilize the criminal law to halt this practice. Professional architectural associations and others have pressured the enforcement authorities to become more active in policing the profession and to utilize all available remedies including criminal prosecution. An important issue in this regard, however, is whether the use of the title architect (by a person who does not intend to mislead the public) constitutes a crime or whether criminal intent must be established to support a conviction. A recent case in New York (*People v. Merriweather*) considered this issue.

An unlicensed person using the title architect was charged with a class A misdemeanor. Under the penal law of the State, the minimal requirement for criminal liability is conduct that includes a voluntary act or the omission to perform an act that the person is physically capable of performing. If such conduct is all that is required for the commission of a particular offense, it is known as an offense of "strict liability." If a criminal intent on the part of the accused is also required, then it is known as an offense of "mental culpability." The statute making it a misdemeanor to use the title architect, if not licensed, did not explicitly state whether it was an offense of "strict liability" or one of "mental culpability."

The defense argued that the use of the professional title architect, in violation of law, was similar in some respects to perjury and that criminal laws governing perjury require the proof of a

(continued on page 52)

Products Industry: Salesmen

Building product salesmen can make an important contribution to an architect's practice. While they must tout the benefits of their products and take orders, salesmen also offer valuable services: providing information with which architects can evaluate, select, and specify products; introducing architects to new materials and techniques; helping assure that contractors understand the specified products and that the products are installed correctly; and providing trouble-shooting assistance to avoid or resolve problems during design and construction. By understanding building product salesmen and the work they do, an architect will be able to make better use of the resources they may offer.

(continued on page 52)

Computers: 13 Myths of CAD

As the use of CAD systems has grown, so have myths and misconceptions about its acquisition, use, and understanding.

Myth 1: "CAD" Means Computer Aided Drawing. CAD is more than computer aided drawing. It is a powerful design and data management tool. Think of CAD drawing as entering graphic data, then of CAD design as extracting answers, whether graphic answers or data. CAD allows you to explore alternatives and to make decisions more easily.

CAD data management is the least used and understood, yet is potentially the most powerful of all CAD tools. A database is information organized in a discrete manner, which can be rearranged and summarized. An example might be a database of furniture containing three fields of information: manufacturer's name, catalog number, and location. Every item of furniture on a drawing contains a discrete record composed of these three fields. One might then arrange

(continued on page 54)

Law: Norman Coplan discusses protecting the title Architect.
Products Industry: Michael Chusid describes the different types of product salesmen.
Computers: Lee Kennedy exposes 13 myths related to CAD.

Practice Points

The 1986 Tax Reform Act has resulted in a severe drop in building rehabilitation activity. The money invested in rehab projects fell from \$2.4 billion to \$1.1 billion between fiscal 1985 and fiscal 1987, according to the National Park Service. Relief may be coming, though, with the proposed Community Revitalization Tax Act, which would in effect reverse the 1986 act's restrictions on the use of the rehabilitation tax credit.

The New England and Middle Atlantic states (CT, ME, MA, NH, NJ, NY, PA, RI, VT) offer the highest compensation for newly licensed architects, according to the AIA's Architecture Fact Book. Average 1986 compensation figures in those regions were \$27,700 and \$28,400, respectively. The West North Central region (IA, KS, MO, MN, NE, ND, SD) offered the lowest pay for new architects: \$23,100.

Automatic sprinklers will soon be required under the BOCA Basic Building Code in all new apartments of three or more units and in every hotel with 20 or more guest rooms. BOCA currently requires sprinklers only in multifamily dwellings over 12 stories or 150 feet in height.

America's dependence on imported oil will rise to 55 percent by the year 2000, says the Department of Energy's "Annual Energy Outlook." In 1987 imports totaled 5.8 million barrels, or 35 percent of the oil consumed in the U.S.

If your firm has trouble collecting fees, you're not alone. Birnberg & Associates' latest survey of design firms reports an average collection period of 77 days. On the up side, Birnberg's survey shows net profits for A/E firms up a full point over 1987 to 8.1 percent.

Law (continued from page 51) criminal intent. The Court, in rejecting this argument, pointed out that perjury is one of the notorious crimes recognized by the common law and that it was appropriate that mental culpability be a prerequisite for conviction. However, said the Court, an offense that is created by statute and that was unknown in common law must be viewed in a different light. The unauthorized use of a professional title was not a crime in common law, pointed out the Court, "and absent a clear showing that the prohibited conduct is completely encompassed with a common law crime, a thorough analysis of the statutes and the intent of the legislature must be pursued."

Where a particular statute is silent upon the question of mental culpability, courts will examine several factors to determine the intention of the enacting legislature. Among these factors is the nature of the act itself, the purpose for which it is proscribed, and more important, the relationship between the prohibited act and the protection of public safety or health. Where "the offenses prohibited and made punishable," said the Court, "are capable of inflicting widespread injury, and where the requirement of proof of the

offender's guilty knowledge and wrongful intent would render enforcement of the prohibition difficult if not impossible, the legislative intent to dispense with *mens rea* (intentional wrongful conduct) as an element of the offense has justifiable basis."

The Court pointed out that a guilty mind or corrupt purpose is not an essential element of a misdemeanor created by statute. The Education Law of New York (which governs the practice of architecture there) was adopted to provide for licensing and administration of those professions that have a wide and potentially harmful effect upon the health and welfare of the public. This statute, concluded the Court, like prior legislative enactments, established criminal liability without requiring criminal intent. "All that is required," stated the Court, "is the intentional doing of the prohibited act itself regardless of whether the doer intended to commit the crime resulting from the intentional act. When one deliberately violates a positive law which he is presumed to know, he cannot be excused on the ground that he intended no wrong or that his desire was . . . praiseworthy."

The Court in this case was obviously influenced by the practical necessity of enforcement.

To require proof of criminal intent of the party charged with violation of the Education Law regulating the professions would seriously impede the enforcement of the statute, "negating the impact of the legislation," said the Court, "and hampering the effort to protect the public from the inherent harm in trusting their lives and property to nonlicensed individuals passing themselves off as professionals in a particular field."

The significant incursion by the unlicensed and incompetent into the professional practice of those duly qualified and appropriately licensed shows the lack of effective enforcement of the laws governing the practice of architecture or the use of the title architect. This decision will be of welcome assistance to those who seek to protect the public interest. **Norman Coplan** ■

The author is a partner in the New York law firm of Bernstein, Weiss, Coplan, Weinstein & Lake.

Products (continued from page 51)

It takes a special type of individual to sell building materials. A salesman must have a professionalism that matches that of his architectural clients, a complete grasp of his own products, and at least a basic understand-

ing of design and construction technology.

Building product sales require a much longer time frame than do many other types of sales. A building product salesman must often make repeated sales calls before gaining the trust of an architect, and then must wait until the architect has a project for which the salesman's product is appropriate. And after getting his product specified, the salesman's "sale" might not be completed until many months later when a contractor places an order. Because the salesman must promote his product to each of the many decision makers involved in a typical architectural project, from designer and engineer, to specifier and job captain, to contractor and building owner, a salesman who expects to turn a "cold call" into "cold cash" in just a single sales presentation is *not* likely to find satisfaction in construction product sales. Recruitment, training, and motivation of salesmen is a constant challenge for all building product manufacturers.

There are several types of business relationships into which most building product salesmen can be categorized. These categories affect the range of products and services a salesman (continued on page 54)

(Advertisement)

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

Pro Hits 400-Yard Tee Shots During Test Round

Want To Shoot An Eagle or Two?

By Mike Henson

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

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

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

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

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

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

If you would like an eagle or two, here's your best chance yet. Write your name and address and "Code Name S" (the ball's R&D name) on a piece of paper and send it along with a check (or your credit card number and expiration date) to National Golf Center (Dept. H-879), 500 S. Broad St., Meriden, CT 06450. Or phone 203-238-2712, 8-8 Eastern time. No P.O. boxes, all shipments are UPS. One dozen "S" balls cost \$21.95 (plus \$1.95 shipping), two to five dozen are only \$19.50 each, six dozen are only \$99.00. You save \$43.00 ordering six. Shipping is free on two or more dozen. Specify white or Hi-Vision yellow.

© Bost Enterprises, Inc. 1988

Making more elevators makes Dover No.1.

Large complexes like Regency Park have helped make Dover the best-selling elevator in America.

All three of the completed buildings in this projected three-million sq. ft. office park are served by Dover. With more to come.

Why Dover again and again? Owners cited past performance, on-time delivery, competitive

prices, superb installation.

But Regency vice president Eric Salomon put it best—"They run well. No problems, no complaints, fantastic service."

For more information on Dover elevators or help on any elevator project call your local Dover office. Or write Dover Elevator Systems, Inc. P.O. Box 2177, Memphis, TN 38101.

Regency Park, Cary, NC

Owner: Regency Park Corporation

Architect: Thompson, Ventulett, Stainback & Associates

Contractor: Metric Constructors, Inc.

Elevators sold and installed by Dover Elevator Co., Greensboro, NC

DOVER
ELEVATORS



Products (continued from page 52) offers, and his style and motivation for doing business.

The *company salesman* is an employee of a manufacturer. Obviously, this type of salesman is limited to promoting the products of one company. A company salesman may be commissioned or *salaried*, but in either case is expected to promote his company's reputation and long-term goals in addition to making immediate sales.

By comparison, the *manufacturers' agent* is independent and usually represents several manufacturers. Agents typically do not stock materials, but place orders with their manufacturers and provide local service to customers. Frequently, they are paid a commission only on sales delivered to customers within their territories. This means that if an agent in Chicago, for instance, helps an architect specify his product on a project in Dallas, there may be no commission for servicing the architect.

Distributors are also independent, but usually maintain an inventory of selected products. Instead of getting a commission, distributors generate income by purchasing materials at a wholesale discount and marking up the price. One reason many manufacturers use distributors

is to pass to the local level the onus of providing contractors with goods on credit.

Architectural catalog services are becoming more common in some parts of the country. These services are retained by a number of manufacturers to periodically "detail" the architectural offices in an area by updating their catalogs and making brief presentations about new products. The salesmen also collect information from the offices they visit about the types of projects on the boards and whether an architect would be interested in more information about a product.

Frequently, architects will also rely on trade *contractors* for product information. Contractors can add the extra benefit of knowing how products actually perform in the field, and can include installation costs in the prices they quote.

Not all building product salesmen are trained to service architects. Many "countermen" for example, inside salesmen who process orders, do not know how to respond to the design- and engineering-oriented questions typically asked by an architect. To provide recognition to building product salesmen who have demonstrated an understanding of specifications and other construction documents, the Con-

struction Specifications Institute started their Certificate Program last year. The written exam for this program is similar to that taken by Certified Construction Specifiers.

By cultivating relationships with good salesmen—salesmen who are both knowledgeable and responsive—an architect can avoid countless hours of costly product research, assure himself of an up-to-date catalog and sample library, obtain assistance in detailing and specifying, and call upon their experience and product knowledge whenever help is needed.

Michael T. Chusid ■

The author is an architect and conducts sales training programs to help building product salesmen.

Computers (continued from page 51) the information according to furniture location, for instance, in order to facilitate installation.

Myth 2: CAD Draws Faster. No, but it draws better. While productivity on some segments of CAD drawing can exceed 50:1, overall productivity rarely exceeds 1:1. CAD allows one to draw better because it:

1) Mandates greater accuracy; 2) generates greater drawing consistency; 3) Provides built-in checks on dimensional align-

ment; 4) Allows one to develop options; 5) Eliminates repetitive drawing through the use of "figures"; 6) Facilitates multiple scales with parametric "figures"; 7) Matches drawing elements to specifications.

What that means is a higher quality of information, better coordination, and fewer errors.

Myth 3: CAD Makes Revisions and Changes Easy. Editing a CAD drawing is easier than erasing and redrawing. But because revising with CAD is easier, the task is often abused. Changes are made too frequently, killing productivity and profits. To break this habit, the staff should limit revisions to periodic updates. An in-house check set is ideal for this.

Myth 4: A Novice Can Design with CAD. It is important to master the basics of CAD drawing first. Using CAD to design requires an advanced understanding of and experience with computers to be fully productive.

Myth 5: CAD Is Too Expensive. It is not the hardware or software that is expensive; one can buy a CAD system for less than the cost of a moderately-priced automobile. The real cost is that of staff training and practice, all of which take time that can't be billed. Plan CAD staff and man-

(continued on page 56)

LEARN THE FACTS!

Beware of misleading fire rating data

Ambiguous and potentially misleading information on glass block fire resistance has been disseminated to architects, interior designers, owners, builders and national code bodies by a U.S. distributor of a foreign-manufactured glass block.

Get the facts before you specify any glass block for fire-rated applications!

All UL fire-rated glass block on the market are tested in accordance with UL9, "Fire Test of Window Assemblies," for a 45-minute period in openings not to exceed 120 ft² in area.

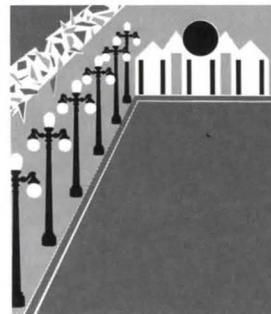
All national building code bodies recognize nothing longer.

The UL window assembly tests performed on the imported glass block **do not** qualify these glass block products for use as **wall assemblies**. **Presently, no glass block are qualified as fire-rated wall assemblies** as no glass block presently can pass the UL wall assembly test.

Don't be misled by incomplete information. Get the facts about glass block fire rating. Ask for the free brochure, "GLASS BLOCK FIRE RATING FACTS," by calling our Architectural Products Hotline at 800-992-5769; or write Pittsburgh Corning Corporation, Technical Systems, 800 Presque Isle Drive, Pittsburgh, PA 15239.



PITTSBURGH
pc
CORNING



DESIGN COMPETITION CALL FOR ENTRIES

Celebrating A New Legacy

The problem of housing a growing number of elderly citizens in a humane and comforting environment is one of the most intriguing issues in architecture today. In the first-ever open international competition for affordable elderly housing, the southern California community of Colton challenges the international architectural and design community with the opportunity to design and execute 100 dwelling units of senior housing in a historic setting. Through this architecture we hope to celebrate and honor the legacy of elder citizens, and provide a catalyst for the revitalization of the center of our community.

To Register and receive the program materials, send name(s), address, telephone number and US \$75 to:

City of Colton
650 N. La Cadena Drive
Colton, CA 92324

Submissions: First stage seeks two (2) 30" x 40" boards.

Awards of \$50,000 in prizes plus opportunity for commission to build the project.

Eligibility: first stage is anonymous and open to any interested party. Up to five finalists will be invited to compete in a second stage.

Professional Advisor:

Michael John Pittas

Schedule: program available September 12. First stage deadline December 20. Second stage finalists announced January 9, 1989.

Information: Brian S. Oulman
(714) 370-5071

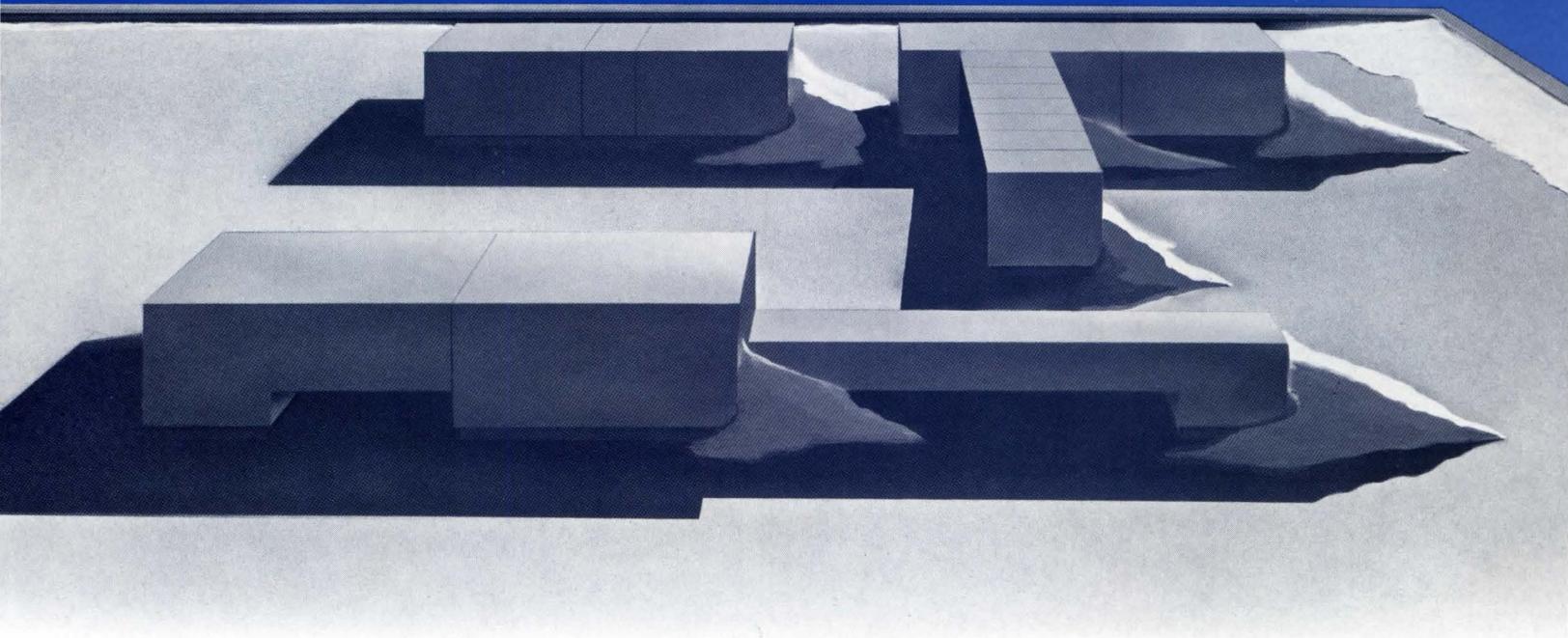
FAX: (714) 370-0813

Professional Jury:

- Donlyn Lyndon, *architect/educator*
- Robert Wellington Quigley, *architect*
- Dana Cuff, *design consultant/educator*
- Hilario F. Candela, *architect*

IT'S 2001

DO YOU KNOW WHERE YOUR R VALUE IS?



with some insulations R value is lost forever.

The fact is, some board roof insulations lose R value. Insulations made with R value enhancing gases give up R value as the gas is lost. MRCA tests on these insulations have shown R value losses on roofs as new as 3 years old. This loss may continue for years.

Constant R value.

EPS is a unique closed-cell foam that contains no CFC's. Because EPS is inert and does not change, it holds a constant R value. Air is the only other material in the EPS

cells. A study by NRCA, MRCA and SPI showed EPS insulation taken from 10-year-old built-up and single-ply roofs kept virtually 100% of its R value.

Associated Foam Manufacturers guarantees the R value stability in their Perform and Contour Taper



AFM[®] Corporation

6140 Lake Linden Drive
Box 246, Excelsior, MN 55331
Phone 612-474-0809, 1-800-255-0176

Tile EPS insulation. These roofing products don't leave the plant until their R value and thermal stability are certified.

AFM guarantees it.

They will send you a condensed version of the Roofing Report on EPS and a copy of their 100% R Value Performance Warranty. They feel all roofs should be covered this way. It's the assurance you get that an AFM roof won't leave you cold in the next century.



Computers (continued from page 54) agement expenses with the same thoroughness as the hardware purchase. Without solid CAD supervision, a CAD purchase can become a financial disaster.

Myth 6: The Best Person to Draw with CAD is a CAD/Specialist. On the contrary, the ideal people to draw with CAD are design professionals who can make decisions as they draw. The "detailer/CAD draftsman" concept separates the decision and drawing processes. A high-performance tool is more valuable in the hands of a senior rather than a junior person. Besides, you can teach a design professional how to use CAD more easily than you can teach a computer person how to design.

Myth 7: You Can Save Money by Omitting the System Manager and Training Yourself. CAD equipment won't run itself. Someone must administer the staff and equipment, and solve the technical issues. A person busy executing projects will have difficulty allotting the necessary time to manage a system.

Formal training is one of the best bargains in CAD. Learning from a skilled trainer not only cuts learning time by as much as a half, but saves money. A formal class doesn't tie up your terminals or senior staff members.

Plan and budget for one week Basic Drawing and one week Advanced Drawing for each person, plus one week Systems Administration for the System Manager. Also plan for attrition, just as with your apprentices. An experienced draftsman can learn how to draw on CAD in one week, and can become comfortable in one month, billable in two, skilled in six, and an expert in twelve months.

Myth 8: Hardware Speed Is the Key Ingredient of a Fast CAD System. Hardware speed is a key ingredient, but not the only one. The hardware configuration should be flexible enough to allow multiple combinations of computer elements, as well as to provide enough growth potential to permit the addition of more sophisticated components as they become available. Many computers now come with up to 1Mb of memory (RAM) and can be expanded to 16Mb, which is considerably more than most people need. Picking the right monitor and graphics card is as important as picking the right computer. Resolution is determined by the number of picture elements (pixels) per inch, not screen size or the number of pixels on the screen. The graphics card determines how many pixels will be displayed.

Myth 9: Software Must Be User Friendly. Many people misconstrue the term "user friendly" to mean "easy to learn." "Ease of use" in the long run is significantly more important than the initial learning process.

Easy-to-learn software earns its reputation by eliminating the options that render software easy to use. User friendly software has: a rich and complete set of commands for drawing, design, and data management; logical data entry and programming standards; well-thought-out structure; a method of trapping errors; a variety of data entry methods: parameters, arguments, and expressions; prompts, help, and default; and customizing options such as macro commands.

Myth 10: Menu Entry Is Best. Not in all instances. If specific tasks are performed repeatedly, or the lexicon of commands is limited, menus are superior for selecting tasks because all options can be easily displayed. Menus can help a novice get started, but they are not a substitute for learning the software, nor are they the most efficient or fastest means of selection. Keyboard entry is the fastest and most flexible way to communicate with any computer. The most efficient and least fatiguing

menu allows the user to maintain eye contact with the screen monitor.

Myth 11: Selecting a System Requires Benchmarks. No, it doesn't, but it does require a visit to the vendor for a simple demonstration. Don't expect to learn much about the software there, but do qualify the vendor. Find out about the company, request a financial statement, and get a list of customers to call. Judge your purchase on these criteria and the deal you can strike, not on what you see demonstrated.

Myth 12: Computer Prices Will Continue to Drop. Prices have fundamentally ceased to drop on personal computers, and manufacturers are adding performance back into the product in response to demand.

Myth 13: CAD Helps You Create. Don't be mesmerized by CAD. There is no magic button that will think for you, decide for you, or create a building in a vacuum. Used intelligently, however, CAD is a powerful tool. **Lee Kennedy** ■

The author is an architect who wrote CAD: Drawing, Design, Datamanagement published by The Whitney Library of Design in 1986.

How many ways to use cedar shingles? How many trees in a forest?



Architect: Bahri & Associates

The possibilities are as infinite as your own imagination. Because the enduring beauty of red cedar shakes and shingles adds striking warmth to any design you create.

To learn why red cedar shingles and shakes are such an excellent architectural solution, send for your free copy of our Architect's Cedar Library. It offers everything you need to know about cedar shake and shingles.



These labels on the bundles of Red Cedar shingles and shakes are your guarantee of Bureau-graded quality. Insist on them.

Red Cedar Shingle & Handsplit Shake Bureau

The recognized authority

Suite 275, 515-116th Ave. NE, Bellevue, WA 98004

5 reasons why shrewd ice rink owners choose Viking to build their arenas.

- 1. Experience:** Viking is America's first name in rink construction, maintenance and rehabilitation.
- 2. Turnkey Facility:** We provide a TOTAL ice rink package. Financing, design, construction. Ready for operation and staffing.
- 3. Minimum Investment:** Our unique & imaginative construction methods permit us to build your rink at lowest cost consistent with quality.
- 4. Reliability:** A long list of satisfied private and community ice rink owners attest to our proven dependability.
- 5. A Tradition of Quality & Excellence:** Backed by 40 years of recreational construction experience guarantees your satisfaction.

May we discuss your needs? Call our president Chad Ramsdell at 215/687-5744

Viking



P.O. Box 464, Wayne, PA 19087 ■ 215/687-5744 ■ Fax 215/964-1670

Circle No. 340 on Reader Service Card

Circle No. 349 on Reader Service Card

THE BEST WAY TO SEE THE FUTURE IS TO LOOK AT THE PAST.

One look at Notre Dame's magnificent rosette window is all it takes to see that the design was far ahead of its time. Constructed in 1163, it's still a brilliant example of innovative glass architecture.

Dow Corning can help you build tomorrow's monuments, today. Because our glazing technology is far ahead of the competition. And far ahead of its time. State-of-the-art products and technical knowhow that let you work with the most advanced materials, to build the most futuristic designs.

DOW CORNING® 795 for example, is a unique one-part structural silicone adhesive/sealant for both in-shop and field glazing, as well as curtain wall assembly and weatherseals. It provides exceptional primerless strength and adhesion to more substrates than any other silicone sealant.

DOW CORNING® 983 is a two-part adjustable-cure silicone curtain wall glazing sealant/adhesive. It helps to speed production and delivery of structural curtain-wall units that are glazed in-shop.

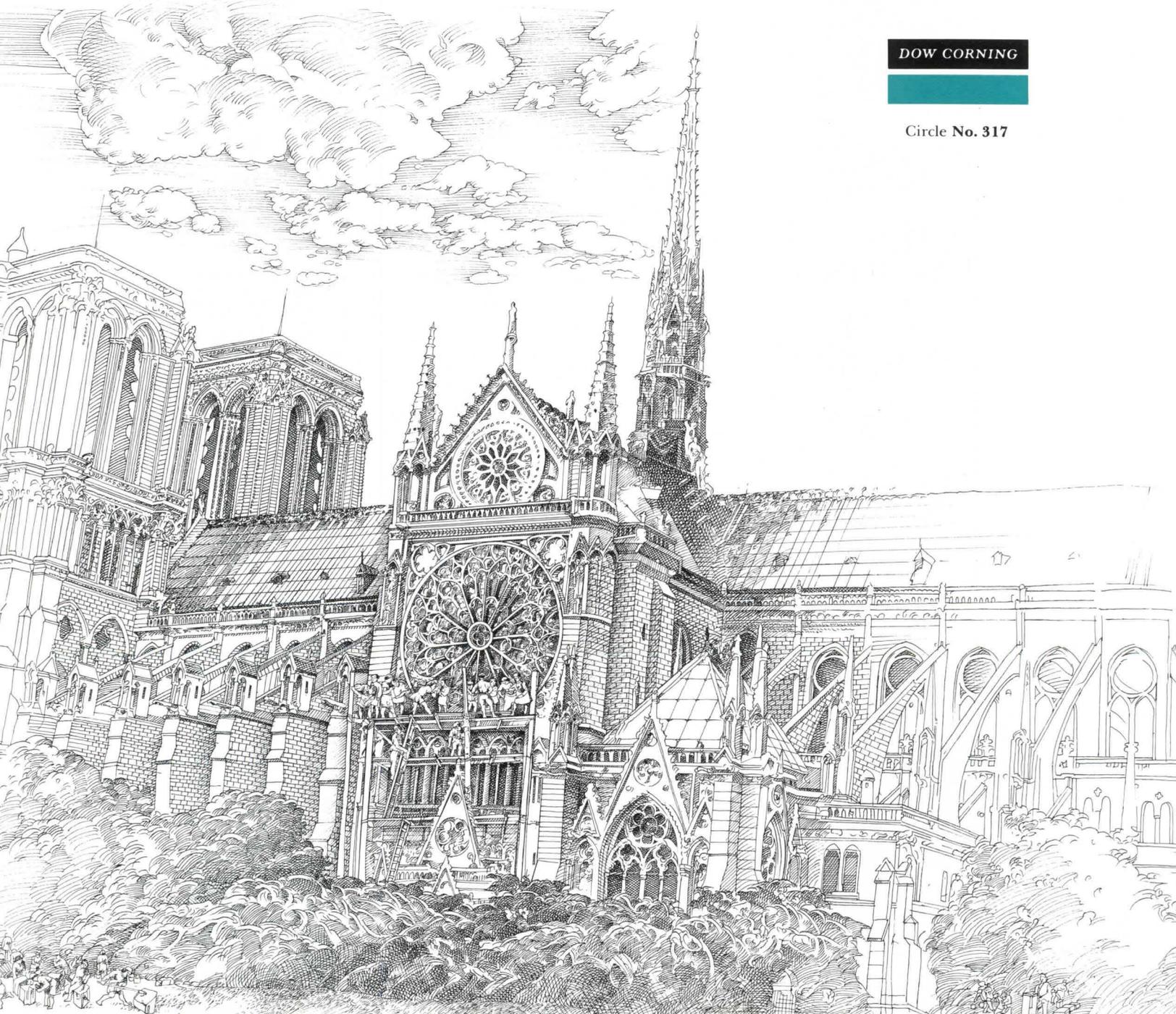
DOW CORNING® 790 offers unmatched movement capability and adhesion for a variety of weather-sealing applications in stone, concrete and metal curtain-wall construction.

You get something else with Dow Corning glazing sealants that only the world's largest silicone producer can offer: The Dow Corning commitment to research and development, technical service and quality products.

For specification information and technical literature call toll-free **1-800-346-9882 ext 8201**. Or write Dow Corning, Dept 4009, Midland MI 48640. We'll help you build for the future, today.

DOW CORNING

Circle No. 317



— *Logix* —

It works...

An expansive modular seating system that works in public areas... without great expense.

- Interchangeable seating, table, planter, waste receptacle and display case components.
- Available in a wide array of sizes and shapes.
- Colorful standard or custom finishes and upholstery.

Put Logix to work for you. Call KI at 414/468-8100 or write KI at P.O. Box 8100, Green Bay, WI 54308-8100 for brochures.

KI

The Contract Furniture division of Krueger International

Circle No. 330 on Reader Service Card



Engineering/Science Library Center,
University of New Mexico,
Albuquerque, New Mexico

Architects, Interior Designers:
Dean/Krueger and Associates, Incorporated
Albuquerque, New Mexico

How many Sylvania take to change



This is the light bulb that changed the face of lighting. Sylvania Capsylite®—the first commercially successful tungsten-halogen bulb that fits into ordinary light bulb sockets.

Chances are you're reading this ad by an ordinary bulb that has a few shortcomings. An ordinary light bulb, for example, begins to lose light almost as soon as you screw it in. An ordinary bulb eats up more money in energy than you need to pay. An ordinary bulb will go "poof" sooner than it needs to.

The shortcomings of ordinary bulbs led Sylvania engineers to invent a better light bulb. They used their expertise in tungsten-halogen technology. The result?

Capsylite.

Already, it's changed the face of lighting in lots of places—hotels, restaurants, schools and stores. Architects, engineers, designers all have recognized its virtues. There are so many, where do we begin?

These men managed to give Capsylite bulbs 3500 hours of light while maintaining brightness longer.

To begin with, Sylvania engineers

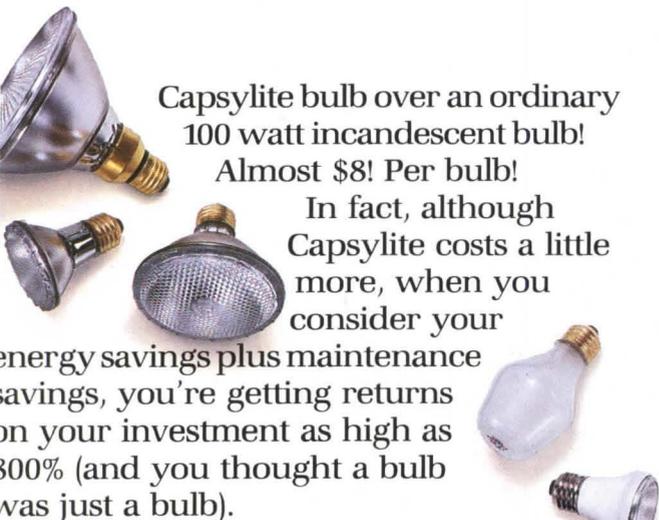
didn't leave well enough alone. They made sure Capsylite bulbs maintain practically all their lumens for virtually the entire life of the bulb (unlike an ordinary bulb).

And speaking of life, Sylvania engineers made Capsylite bulbs last 40% longer than the typical long life incandescent. 3500 hours. That means an extra thousand hours of life and a big cut in replacement costs.

And, Capsylite bulbs save energy. A lot of energy. The savings range (depending on the wattage) from 19% to 31%. Based on a utility rate of 8¢ a kilowatt hour, that means you can save \$7.84 in energy on a 72 watt



engineers does it a light bulb?



Capsylite bulb over an ordinary 100 watt incandescent bulb!

Almost \$8! Per bulb!

In fact, although Capsylite costs a little more, when you consider your

energy savings plus maintenance savings, you're getting returns on your investment as high as 300% (and you thought a bulb was just a bulb).

Sylvania offers you the broadest line of halogen capsule lamps. And our family keeps growing.

Now think of how many bulbs you use in your office or factory or hotel or store. The money you can save with our wide range of Capsylite lamps boggles the mind. They make efficiency experts ecstatic. Capsylite light makes sense.

Pure and simple.

There's something else pretty spectacular about Capsylite lamps. Color. Capsylite lamps give off a whiter, more natural light than ordinary incandescent sources. They make colors look truer. Interiors become more appealing. Merchandise sparkles. And people look better. Amazing isn't it?

Consider this: lighting over 1 million square feet of public space. Whew. That's just what the Riviera in Las Vegas has to do every single day and all night long.

The Riviera Hotel and Casino bet on Sylvania and won big.

When the ante kept going up on energy costs, the Riviera threw in their chips with Sylvania. The results? By switching to Sylvania Supersaver Fluorescents and Capsylite lamps, the Riviera is saving about \$85,000 a year in lighting costs alone. That's a load reduction of 357 kilowatts.



We offer more energy saving lighting and best of all it's made right here.

The fact is that Sylvania engineers have helped lead the way in lighting for the last decade. With more energy saving lamps than anyone else in the world. With innovations that the lighting industry

has welcomed, embraced and is using. With the most technologically advanced lamps you can think of. And we'll keep doing it. Because Sylvania engineers are obsessed with lighting, so you won't have to be. Contact your Sylvania Independent Electrical Distributor or call 1-800-LIGHTBULB.



SYLVANIA GTE
WHERE THE BEST COMES TO LIGHT.™

Circle No. 004 on Reader Service Card

Of all the reasons why CAD/CAE workstations than this is the



This extraordinary fact bears elaboration. The COMPAQ line of 386 high-performance workstations outsells Sun, Apollo and even IBM, because CAD/CAE users recognize the compatibility, cost-efficiency, performance and flexibility they get from Compaq that they don't get from others. As a result, Compaq has pushed ahead as the leader in the 386 PC CAD/CAE marketplace.

Introducing the new COMPAQ DESKPRO 386/25

The latest and most powerful example of Compaq 386 technology leadership is the COMPAQ DESKPRO 386/25. It features a 25-MHz Intel 386™ microprocessor, exclusive COMPAQ Flexible Advanced Systems Architecture, and can be configured with more than 1.2 gigabytes of storage*. All of which makes a COMPAQ CAD/CAE PC workstation the performance platform of choice.

The world's most powerful PC's

Each member of the COMPAQ 386 PC family is designed to meet the increasing demands of sophisticated users, and provide increasing performance as needs change.

Compaq sells more other leading manufacturers, most powerful.

The 32-bit COMPAQ DESKPRO 386/25 is no exception. With FLEX Architecture, information bottlenecks are eliminated, thus providing optimum power, performance and industry-standard compatibility with calculation-intensive CAD/CAE applications.

Complementing this is a 25-MHz cache memory controller that whisks data through the processor with zero wait states 95% of the time, for more productivity and cost savings.

With an optional Intel 387™ math coprocessor, applications such as AutoCAD, Concept Station, Arris and Micro Station run faster on the COMPAQ DESKPRO 386/25.

You can boost performance of specialized applications such as finite element analysis and 3-D solids modeling by adding an optional Weitek coprocessor. ANSYS-PC and Cosmos/M 386 are among the many software packages that support Weitek.

We know how quickly CAD/CAE users soak up both memory and storage. So you have the option of up to 16 megabytes of high-speed memory and over 1.2 gigabytes* of high-performance storage. In addition, a high-capacity tape backup option protects your stored data.

With this degree of system performance, the COMPAQ DESKPRO 386/25 can be used as a stand-alone CAD/CAE workstation,

Performance Comparisons

Performance Benchmark	COMPAQ DESKPRO 386/25*	IBM PS/2 Model 80-111†	SUN 386i/250*	APOLLO DN 4000*
Dhrystones/sec	10000	5514	8335	6250
MWhetstones/sec	5.6	1.8	5.6	3.8

*Using Weitek Coprocessor

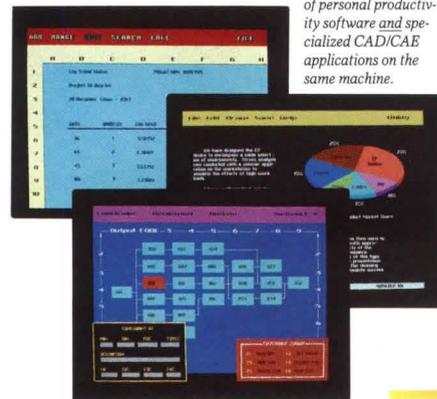
†Using 387 Coprocessor

as part of an Ethernet or Token Ring network, or as a network server. It handles complex applications with the ease of a dedicated workstation, more cost-effectively.

The world's most flexible platform for CAD/CAE

A bold claim, perhaps. But an accurate one. You can work with a variety of operating systems, including UNIX, XENIX®, MS-DOS® and Microsoft® Operating System/2. Under a protected mode operating system, the COMPAQ DESKPRO 386/25 has the multitasking capabilities to run

Industry-standard compatibility makes it possible to access thousands of personal productivity software and specialized CAD/CAE applications on the same machine.



your design applications while your personal productivity software is running simultaneously in the background.

An industry-standard COMPAQ CAD/CAE platform assures you of full compatibility with thousands of industry-standard peripherals. Your system is easily tailored to your specific needs.

A supporting cast of thousands

There are over 3,000 Authorized COMPAQ Computer Dealers worldwide to provide you with service and support. Unlike most workstation vendors that can make you wait for upgrades, add-ons, or installation, Authorized COMPAQ Computer Dealers help you streamline system administration and avoid downtime by responding quickly. No wonder Compaq now has more systems installed for CAD/CAE than any other leading manufacturer.

A custom-built system

Your dealer can help you select the right software and hardware add-ons to build a custom workstation from the COMPAQ 386 PC family. Call 1-800-231-0900, Operator 69 and ask for the dealer nearest you. In Canada, 1-800-263-5868, Operator 69.

COMPAQ

It simply works better.

*With two optional COMPAQ 300-/600-Megabyte Fixed Disk Drive Expansion Units.
COMPAQ® is a trademark of Compaq Computer Corporation. Microsoft®, XENIX®, MS-DOS® and MS® are trademarks of Microsoft Corporation. MS OS/2 is a product of Microsoft Corporation. Intel 386 and Intel 387 are trademarks of Intel Corporation. Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies. *Registered U.S. Patent and Trademark Office. ©1988 Compaq Computer Corporation. All rights reserved.



Project: Headquarters, Real Estate and Construction Division, IBM, Stamford CT
Interior Architect: HOK, Dallas
Lighting Design: Ralph Savarese, IBM, Stamford
Lighting: 10" x 3 3/8" Rounded Softshine Indirect Small Office Light by Peerless



The first fixture designed specifically for today's small office

The Peerless Small Office Fixture makes a real difference in the office environment.

It reduces reflections on VDT screens. It softens hard shadows, saves energy and makes the office seem better lit.

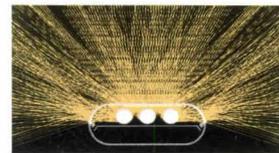
It achieves all this as a result of some very specific applied engineering. The Small Office Fixture differs from other indirect fixtures in the amount of light it throws to the side.

Its lensed optical system has the ability to produce an exceptionally wide spread indirect distribution. A single 8' long fixture can turn the ceiling and walls of a 10' x 15' office into a single, softly glowing light source.

Under an average 8'6" office ceiling, a lensed or parabolic down light — or just about any other practical lighting solution — creates a bright spot in a dark ceiling.

This bright spot bounces back into your eyes off any reflective surface: a desk top, a VDT or this magazine page. It also makes the rest of the office seem dark by comparison.

The unique optics in the Peerless Small Office Fixture make the entire office seem brighter and better-lit. You can see the truth of this claim in a booklet called "Lighting the Small Office" that offers a side by side comparison of the four most commonly used



Very wide spread distribution covers whole ceiling, illuminates walls.

office lighting systems.

Just ask and we'll send you the booklet along with complete product information on the Small Office Fixture. Because the more you know about this specific problem, the better you'll understand why we developed this specific lighting system.

 **PEERLESS**

If you'd like to see the Small Office Fixture installed in an actual office, write on your letterhead to Peerless Lighting, Box 2556, Berkeley CA 94702-0552. (415) 845-2760.

"PEERLESS" AND "SOFTSHINE" ARE REGISTERED TRADEMARKS OF PEERLESS LIGHTING CORPORATION. © 1987, PEERLESS LIGHTING CORPORATION

Circle No. 336 on Reader Service Card

Solving the Housing Crisis

In this special issue, P/A studies the ways in which architects are contributing to the search for solutions to the housing crisis.



New York City, June 1986, photograph © Abraham Menashe.

Introduction Solving the Housing Crisis

"The 1990s are going to be the decade of the housing crisis. It's come upon us swiftly, but we ain't seen nothing yet," New York Representative Charles Schumer told a packed audience of architects at the AIA Convention in May. "We are in danger of developing two architectures, one for the affluent and another for those who are not well off. Has this profession lost its compassion?" challenged New York architect Herbert Oppenheimer.

If the projects shown in this issue are any indication, the answer to that question is an ever louder "no." Whether through organized programs like the AIA's Search for Shelter (pages 68–69) or through individual commissions, architects are addressing the housing crisis by doing what they do best—designing solutions to specific problems. "It may not be very avant-garde," says architect Steven Peterson of his design for an affordable housing project in New York City (page 94), "but it's riskier than that. We've taken an advocacy position here; we're saying we believe in this."

The need for such advocacy has never been greater. Reports issued over the last several months by the National Housing Task Force, the National Low Income Housing Coalition, the Joint Center for Housing Studies at Harvard University, Election '88: The Campaign to End Hunger and Homelessness, and the National Housing Preservation Task Force—organizations from all points on the political spectrum—tell the same story with remarkably few discrepancies. According to the March Report of the National Housing Task Force, which many housing experts consider to be a relatively mild and politic appraisal of the problem, one million families fill the waiting lists for public housing around the country; 4.5 million families are eligible for but receive no rental assistance. For the first time since World War II, the nation's homeownership rate has declined, especially among young families. And, while the number of homeless Americans has been the subject of considerable debate, with estimates ranging from 350,000 to 3 million, all sources agree that the homeless population has expanded beyond the deinstitutionalized mentally ill and substances abusers to include families with children who have simply fallen out of the housing market. (One such family is portrayed on the cover of this issue.) The Task Force estimates that a shocking 20 percent of these homeless hold full- or part-time jobs.

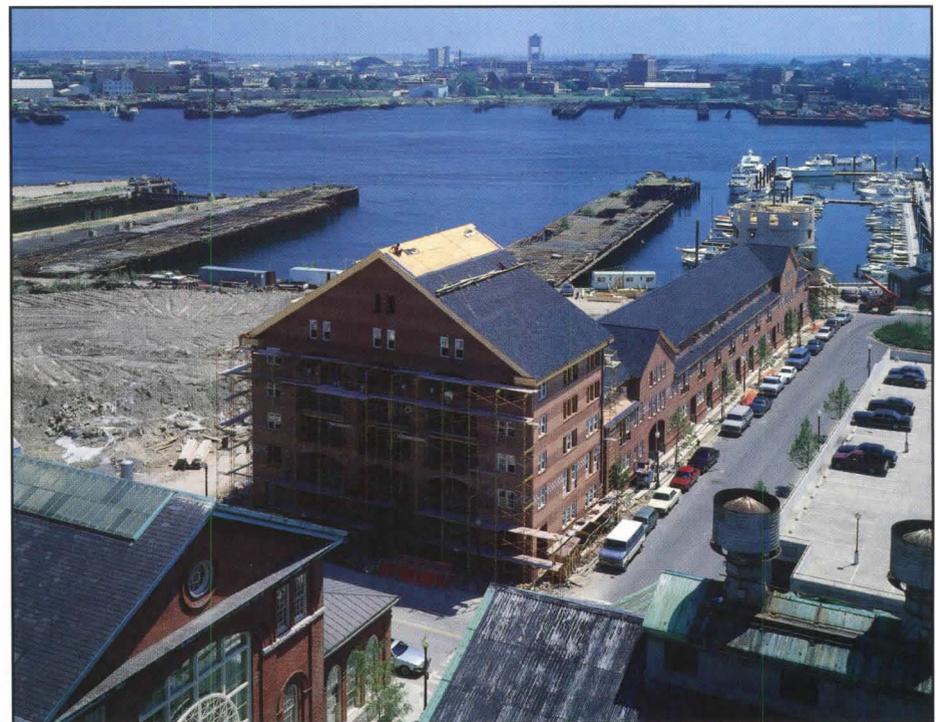
Those who have housing may be only marginally better off than those who don't. Six million Americans pay more than half of their incomes for rent, with the highest burden falling on single-parent households. According to the Harvard study, 4.5 million owners and 5 million renters live in substandard housing, concentrated in inner cities and outlying rural areas. The occupants of an additional 3 million units of privately owned assisted housing could lose their homes as rent subsidy contracts or prepayment prohibitions expire over the next several years (see essay, page 87).

Architects obviously can respond to these chilling statistics as voting citizens. But, as Millard Fuller of *Habitat for Humanity* put it, "There is more that we can do than hoping proper people get elected this fall. Act yourself into a new way of thinking, instead of thinking into a new way of acting," he urged his audience at the AIA Convention. "Many architects in our region won't or can't get involved in this kind of housing," says one young architect, whose work is shown in this issue. "We haven't earned much money on this job," admits Peterson. But "architects can play a key role in formulating methods for solving the housing problem. Good design doesn't have to cost more."

(continued on page 68)



The projects shown on these pages illustrate a range of solutions to regional housing problems pursued by non-profit community corporations, the newest clients in affordable housing. A 50-unit development in the Charles-town Navy Yard, Massachusetts (left and below), for example, is only the third project undertaken by the Bricklayers and Laborers Nonprofit Housing Corporation of Boston. All three are the work of William Rawn Associates (see facing page and page 83), whose design in Charlestown is a showpiece for the Bricklayers, proving the cost-effectiveness of brick construction. Forty-seven of the 50 one- to four-bedroom units, organized as flats over duplexes or vice versa, enjoy water views.

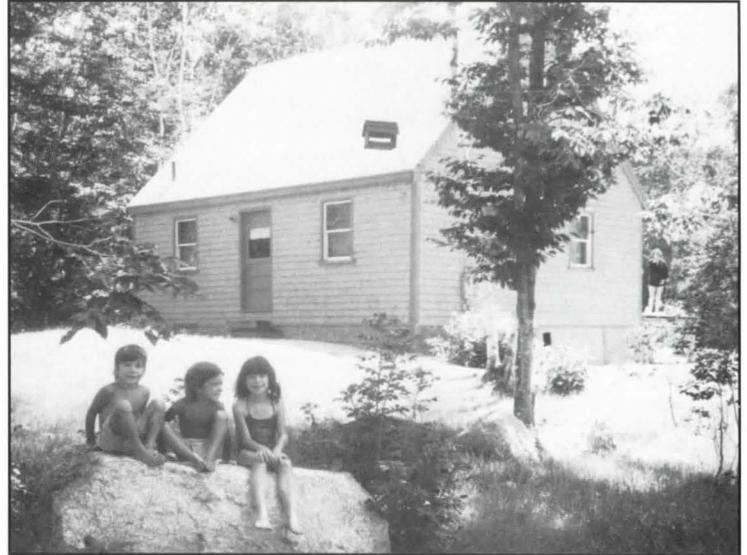


Responding to the needs of migrant workers, the Centro Campesino-Farmworker Center, Inc., is renovating mobile homes in a 400-unit trailer park in Florida City. Architects Chisholm, Santos & Raimundez and Ted Hoffman, Jr., both of Miami, developed plans to rebuild old, uninhabitable mobile homes for \$12,000–\$14,000 each (left). Migrant workers enrolled in Campesino's construction training program provide free labor. The camp is owned by Dade County and operated by the nonprofit Everglades Community Association, which rents the units to migrant laborers for \$50 a week.

Built to coincide with the Democratic National Convention in Atlanta, this 1300-square-foot house was designed by William Rawn Associates of Boston for the Bricklayers and Laborers Non-Profit Housing Corporation. The property was donated by the South Atlanta Land Trust. The three-bedroom house (right) distinguished by a front porch, nine-foot ceilings, and large family/dining room, is the first new home in its neighborhood in 30 years. It was completed in seven weeks for \$70,000 and sold (with subsidies) to an Atlanta family selected from the Land Trust's Operation New Start, a transitional program for the homeless.



Brian Gassell/MPP



Two projects by Michael Pyatok Associates of Oakland, California, illustrate the range of low-cost housing accomplished by that firm. The Gateway (left, top), a low-income housing project of the 1940s that Pyatok gutted and redesigned as 140 units of mixed elderly and family housing, was funded by a nonprofit development corporation working with the City of Menlo Park. Stairways and landscaping by Richard Seyfarth replaced parking in the center court, with fenced front yards. The Peter Claver Community (left, bottom) is housed in a rehabilitated 1910 building whose roof terrace provides the project's only outdoor space. Sponsored by San Francisco Catholic Charities, the Claver House will shelter 33 homeless people with AIDS.

The Covenant Community Land Trust of Hancock County, Maine, an offshoot of the grassroots organization HOME (Homeworkers Organized for More Employment), builds and rehabilitates houses for the county's low-income families on 660 acres of Trust land. HOME was started in 1970 as a craft cooperative; the program grew to include construction and operation of emergency shelters and apartments for the elderly. HOME also operates a literacy training center, an Adult Education program, and Project Woodstove, which provides free wood from HOME land to the elderly and handicapped. This \$25,000, 3-bedroom home (above) is one of nine built on Trust land with volunteers and salvaged materials to house homeless families.

Introduction Solving the Housing Crisis

Introduction (continued from page 66)

affirms architect Richard Bradfield, whose scattered-site low-income housing project in Charleston, South Carolina, won a Presidential Design Award in 1985 (P/A, March 1985, p. 21). Moreover, those architects who do participate, whether as commissioned professionals or volunteers, may find unexpected rewards. "Affordable housing can actually give the designer more opportunity because the field is not driven by conservative marketing strategies," says William Rawn, who has designed three projects totaling over 300 units for a nonprofit housing corporation founded by two Boston unions (pages 66, 67, and 83).

Nonprofits like the Bricklayers and Laborers Nonprofit Housing Corporation represent a new force in the housing field that architects cannot afford to ignore in exercising what Robert Hayes of the Coalition for the Homeless tactfully terms "enlightened self-interest." These new clients are a remarkably diverse group whose leaders range from welfare mothers fed up with public housing to local pastors to social workers who see the housing problem as the root of many social evils. Aided by new national networks such as the Enterprise Foundation in Columbia, Maryland, and serviced by new publications like *Homewords*, a quarterly publication of the Homelessness Information Exchange, the nonprofits are widely perceived as the last, best hope for housing in America. It is to these groups, working in conjunction with local or state agencies, that the Federal government has turned in an effort to leverage what few funds are available for housing.

But nonprofits are not the only players in affordable housing. New York architect Theodore Liebman contends that architects can influence more conventional clients to get into what has been traditionally perceived as a risky, overregulated field. "Many developers are realizing it's better to earn a steadier, albeit smaller profit margin building 5000 middle-income units than 1000 luxury condos," says Liebman whose firm is now designing a 1200-unit development of moderate-income housing in the South Bronx for a joint venture of Worldwide Holdings, William Zeckendorf, and Arthur Cohen. These developers, whose names are more likely to conjure up images of the Upper East Side than the Bronx, "saw the handwriting on the wall," says Liebman. "Sites for luxury housing in Manhattan are increasingly scarce." Moreover, mid-income housing, while it may seem at first to represent a different universe from low-income housing and emergency shelters, nevertheless forms a crucial link in what many experts regard as a continuous housing chain. The more people that move into a Nehemiah project, goes one argument, referring to a well-publicized moderate-income housing development in Brooklyn built by a coalition of religious groups, the more low-cost units are made available for those who really need them.

Indeed, the sources of—and solutions to—the housing problem are increasingly focused further and further outside the traditional boundaries of low-income housing design, as experts study the hidden costs of zoning, building codes, and construction methods. These concerns are conveyed in a multitude of research papers and competition proposals, from the massive MIT Housing Policy Project, a research program involving over 20 scholars and housing experts, to a competition sponsored by the Greater Boston Real Estate Board, seeking new methods for the production of multifamily housing (watch Calendar, page 47 this month, for information on upcoming housing competitions). Conferences on the subject abound.

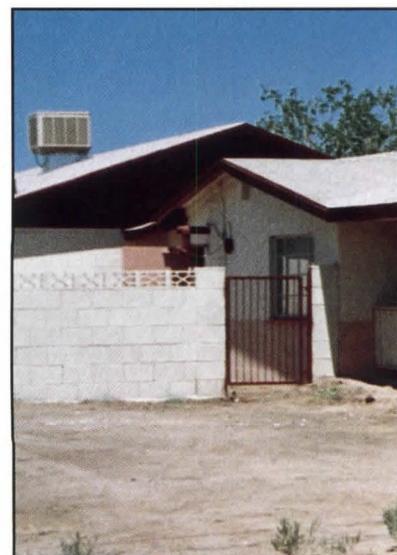
Next month, for example, a coalition of over 50 organizations led by the National Association of Home Builders will sponsor a two-day symposium on homelessness in Washington, D.C. And, as if to prove the permanence of the problem, McGill University in Montreal has established a Masters of Architecture in Affordable Housing.

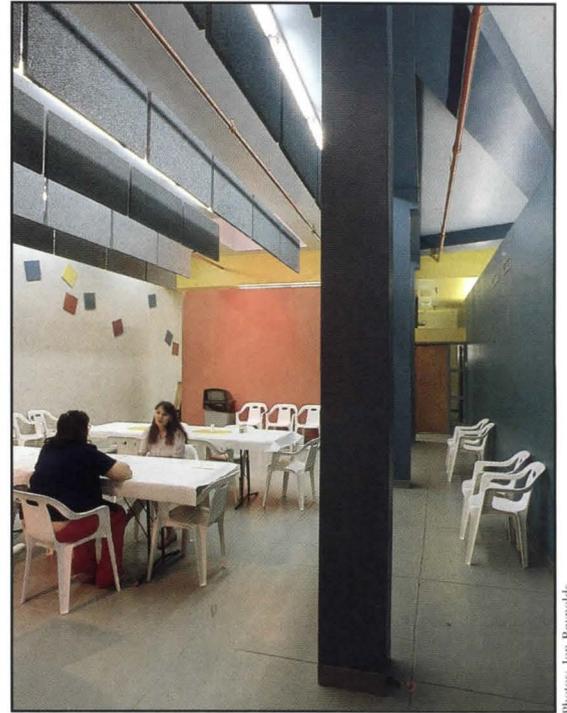
These programs are just the tip of the iceberg. Similarly, the projects shown in this issue represent a mere fraction of work under way, yet they effectively demonstrate the crucial role of design in solving the housing crisis. In this area, as in few others, architects have the expertise to take the lead in addressing a social problem. Design makes a difference, not in the sense of decorating a façade or furnishing a lobby, but at the most fundamental level of how and where people live, how they eat, sleep, and socialize.

For that reason, we hope you will study carefully the projects shown in this issue. Look beyond the pictures to examine the plans and trace the ways in which these architects have rethought the problems of low-cost housing, making the most of tight budgets to provide shelter that suits particular occupants and their very specific needs. Check the project data and captions for square footages and costs. Read about the clients, a true rainbow coalition of community activists, government agencies, nonprofit experts, and volunteers. Review the funding, drawn with as much imagination as were these designs. And recognize that there is no one answer to the housing crisis. The problem, if it is to be solved, will be solved at the local level, project by project. And who better to help lead that process than architects? **Darallice D. Boles** ■

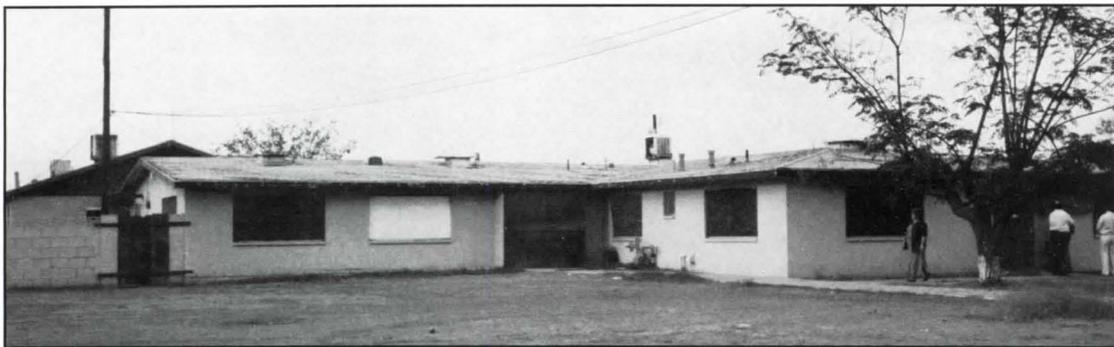
The following list, while not conclusive, is intended to direct interested readers to appropriate organizations and information sources mentioned in this issue. *A Decent Place to Live: The Report of the National Housing Task Force* is available through the Task Force, 1625 Eye Street, N.W., Suite 1015, Washington, D.C. 20006. Copies of *The Preservation of Low and Moderate Income Housing in the United States of America*, a Report by the National Housing Preservation Task Force may be secured by contacting The National Advisory Council of HUD Management Agents, 1625 Eye Street, Suite 1015, Washington, D.C. 20006. *The State of the Nation's Housing 1988* is available through the Joint Center for Housing Studies at Harvard University, 53 Church Street, Cambridge, Mass. 02138. *Meeting America's Housing Needs Through Rehabilitation of Existing Housing and Vacant Buildings* is available through the National Institute of Buildings Sciences, 1015 15th Street, Suite 700, Washington, D.C. 20005. *Housing Special Populations*, a resource guide to publications and organizations relating to housing for the homeless, the elderly, and the handicapped, is available for \$3.00 from HUDUSER, Dept. 1Dx, P.O. Box 280, Germantown, Md. Information on the Search for Shelter Program can be obtained from Project Coordinator Lee Waldrep, American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006. *The Cost Cuts Manual: Nailing Down Savings for Least-Cost Housing* is available for \$45.00 from The Enterprise Foundation Rehab Work Group, P.O. Box 1490, Alexandria, Va. 22313. *Homewords*, a quarterly of the Homelessness Information Exchange, is available for \$10 per year from the Exchange, 1120 G Street, N.W., Suite 900, Washington, D.C. 20005. For more information on Election '88: The Campaign to End Hunger and Homelessness contact Leslie White, Field Coordinator, 714 G Street S.E., Washington, D.C. 20003.

The first two projects to be completed in the Search for Shelter program are shown on these pages. The program, sponsored by the American Institute of Architects, the AIA Students, and the Neighborhood Reinvestment Corporation, has sponsored design workshops in over 30 communities across the country. These workshops addressed specific local needs and in some cases provided the catalyst for actual construction. The program's pilot project, the McAdoo Hotel in Shreveport, Louisiana (facing page, top three photos) was the subject of a workshop conducted in July 1987 by the Shreveport Chapter of the AIA with the Louisiana Tech University School of Architecture in Ruston, Louisiana. The 80-year-old single-room-occupancy hotel, which had stood vacant since 1964, reopened in September. Architects Morgan, O'Neal, Hill & Sutton of Shreveport directed its renovation for SRO, Inc., a nonprofit organization which will operate the McAdoo, providing accommodations for 45 low-income single elderly or deinstitutionalized mentally ill. Support services for residents and the surrounding community are also housed in the McAdoo; these include a homeless referral center, on-site health care, common dining (facing page, bottom right), library, and neighborhood grocery on the ground floor.





Photos: Jon Reynolds

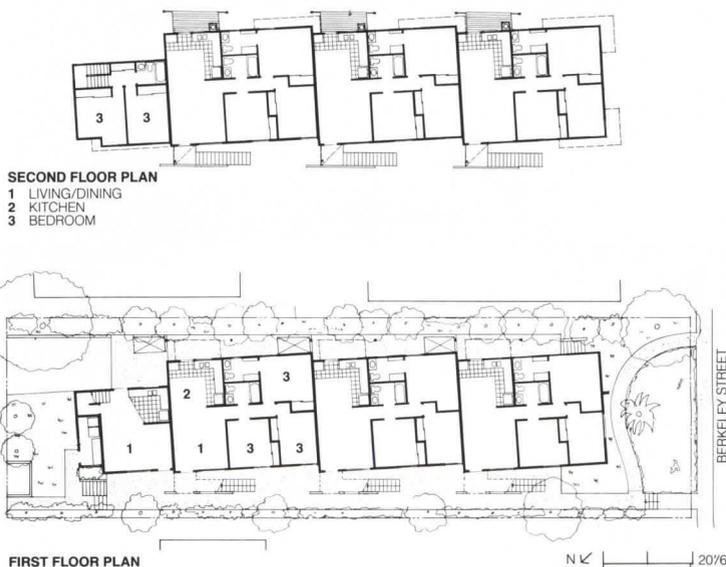


Photos: James Abell

In Phoenix, the Search for Shelter program focused on the community's need for single-room-occupancy housing, studying three potential sites. One, an abandoned nursing home considered an eyesore by its community (left), has since been renovated to provide long-term housing for 32 homeless women (bottom left). Casa Teresa, named for Mother Teresa, opened this month. The project was sponsored by the Valley Partnership, a coalition whose members were asked to "adopt a room," and the nonprofit Community Housing Partnership, which will manage the boarding house. Residents will pay what they can afford towards the monthly rent of \$326, which also covers two meals a day. Grants from the Federal government will make up the difference. Architects James Abell & Associates of Tempe donated partial services for the project, which was completed for \$190,000. Other items, including the new roof, paint, and landscaping, were also donated.

Low-Cost Housing

Eleven projects by eight architects represent a range of building types, from emergency shelters to single-room-occupancy hotels to four-bedroom townhouses.



The Berkeley Street project (above) occupies a flat 60' x 150' lot. Its six stacked flats are entered from the side (facing page) with each pair offset to provide a varied sequence of distinct entrances, each marked by a different colored stucco portal (facing page, bottom). The rear unit is a duplex, and parking is placed below-grade.

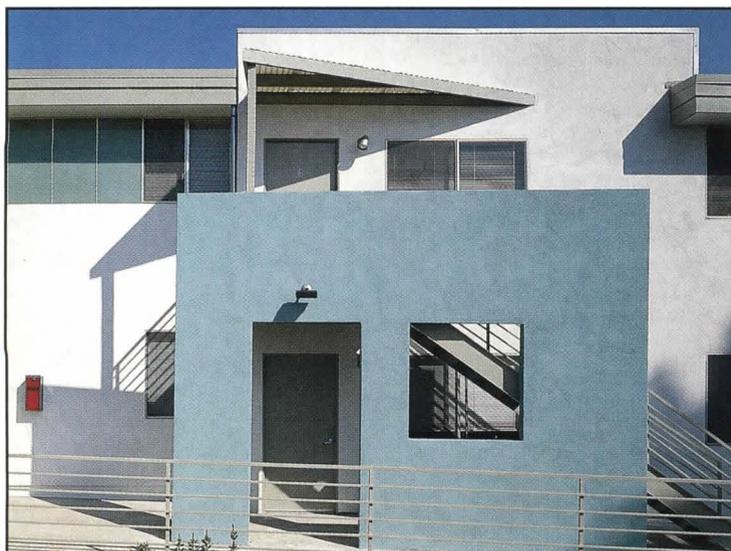
5th, 6th, and Berkeley Streets Santa Monica, California

Three projects designed by Hank Koning and Julie Eizenberg, which together won a First Award in the 1987 P/A Design Awards program, demonstrate a convincing strategy for small-scale affordable housing. These are among the first new construction projects undertaken by the nonprofit Community Corporation, established by the Santa Monica City Council in 1983 with a citywide mandate to increase the supply of affordable housing. The Corporation has completed about 240 units, with another 230 under development.

Two of the Koning Eizenberg projects are located in the beachfront neighborhood of Ocean Park, whose residents inspired a newly elected City Council to set up the Corporation. Design also matters to these community activists, who watched open space rapidly turn into luxury developments. Other residents, however, have not wanted low- or moderate-income housing in their neighborhood. Recognizing that architects can be mediators and their designs the tools for mollifying community opposition, the Corporation enlisted Koning and Eizenberg to design two rental projects with a total of eight low- (subsidized) and four moderate-income units on 5th and 6th Streets in Ocean Park. Says Mike Alvidrez, the Corporation's management director, "As we were expanding into new construction, we needed to have support—for people to say, 'Oh, is *that* affordable housing?'"

A later commission in another section of Santa Monica, on Berkeley Street, was sponsored jointly by the Corporation and St. Johns Hospital and Health Center to replace low-income housing torn down to make way for hospital expansion. (The two Ocean Park projects provide replacement units for downtown development and are funded in part by the Santa Monica Redevelopment Agency.)

The designers distinguish their solutions from conventional profit-driven development, which typically covers entire lots with repetitive units. By contrast, says Eizenberg, "We use light, space, color, and a minimum of ornament to compose unexpected



Architects: Koning Eizenberg Architecture, Santa Monica (Hank Koning, Julie Eizenberg, partners in charge; Tom Goffigon, project architect).

Client: St. John's Hospital & Health Center and Community Corporation of Santa Monica.

Site: 7783-sq-ft urban lot.

Program: seven 2-to-3-bedroom (752–892 sq ft) rental units; subterranean parking.

Major materials: (see *Building Materials*, p. 126).

Consultants: Freet/Yeh, structural; Campbell & Hendricks, energy.

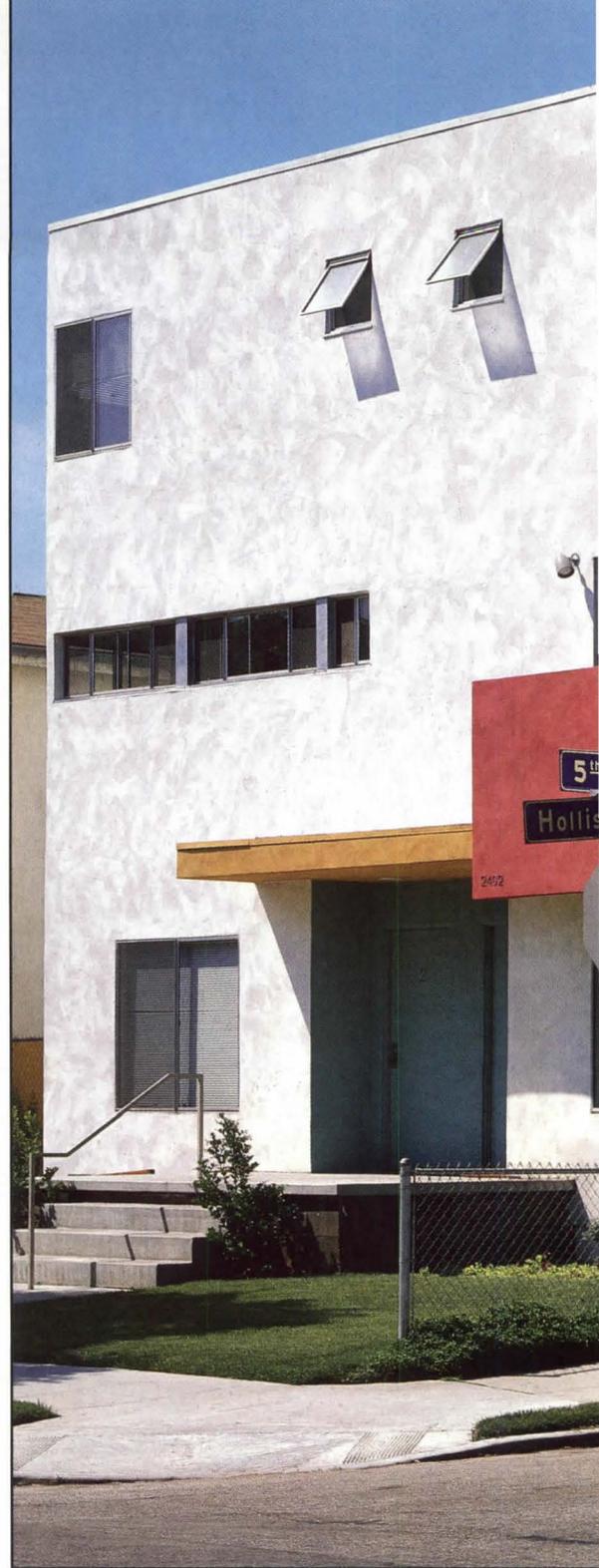
General contractor: Salter Construction.

Costs: \$393,994 (\$38 per sq ft).

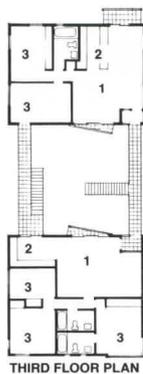
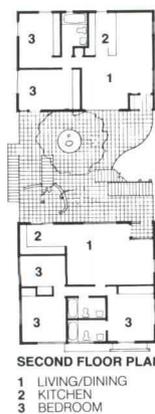
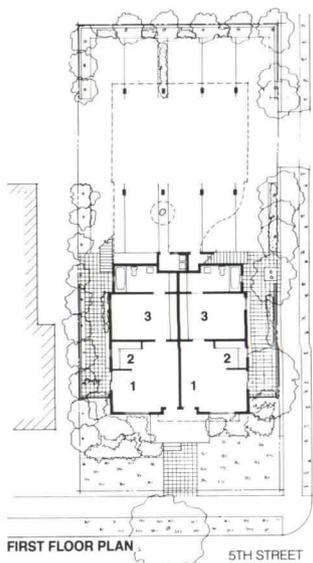
Photos: Grant Mordford

(continued on page 74)

**Low-Cost Housing
Mixed-Income Apartments**



At 5th Street, two ground-floor flats reserved for seniors are entered from the street. All other units are entered from a mid-block courtyard (left top and middle). Stairs and catwalks casually define more private space adjacent to the units (bottom left). When Koning Eizenberg's designs were selected for a First Award in the 1987 P/A Awards, juror Thomas Hines said, "This project emphasizes the California tradition of Modernism. It picks up on Neutra, Schindler, and Gregory Ain," whose legacy is evident in the elevations of 5th Street (above).



Architects: Koning Eizenberg Architecture (Hank Koning, Julie Eizenberg, partners in charge; Tom Goffigon, project architect).
Client: Community Corporation of Santa Monica.
Site: 6010-sq-ft urban lot.
Program: 6 1-to-3-bedroom rental units (600–1000 sq ft), with 2 for seniors; laundry; parking.
Major materials: (see *Building Materials*, p. 126).
Consultants: Davis-Fejes, structural; Campbell & Hendricks, energy.
General contractor: Salter Construction.
Costs: \$344,595 (\$53 per sq ft).

Low-Cost Housing Mixed-Income Apartments

(continued from page 71)

but neighborhood-appropriate buildings." At 5th and 6th, units were made slightly smaller to allow for larger common courtyards. At Berkeley Street, the architects adopted the client's suggestion to step back units progressively, increasing the distance between front doors and their colored portals.

Believing, as Koning puts it, that "buildings can take change," these architects also built in adaptability. Told that first-floor tenants in the 5th Street front building were upset because their entrances could be watched by people living in vans on the street—evidence of increased homelessness in this city—Koning suggested that a second more protected entry could be provided connecting parking to the secure patio, which is accessed from the units through sliding doors.

Conversations with new tenants reveal the success of the architects and the Corporation. At Berkeley Street, two young sons of a Spanish-speaking woman translate her appreciation of "how beautiful the apartment is." At 6th Street, an older woman gazes around her new home in wonder. When this tenant is asked if people are using the common space between the two buildings, she reluctantly answers, "Not yet. It is too soon; we are still moving in." But the seeds for community are there. A woman on the first floor tends the common garden. People talk with each other, casually neighboring. At 5th Street, two neighbors in the front building have worked out an informal security system, using the connecting wall between closets to alert each other in case of emergency.

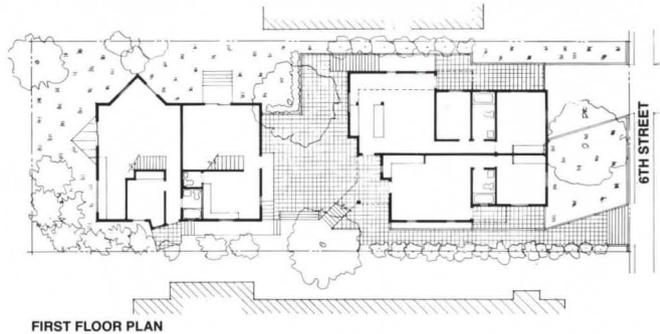
In these projects, Koning and Eizenberg have gone beyond solving site-specific problems to define a social or community architecture that supports neighborliness, provides an opportunity for tenants to make changes inside and outside their apartments, returns something back to the community, and gives a form to the ongoing struggle for affordable housing.

Jacqueline Leavitt

The author is Acting Associate Professor at UCLA Graduate School of Architecture and Urban Planning.



Photos: Grant Mudford



FIRST FLOOR PLAN



SECOND FLOOR PLAN, REAR UNITS

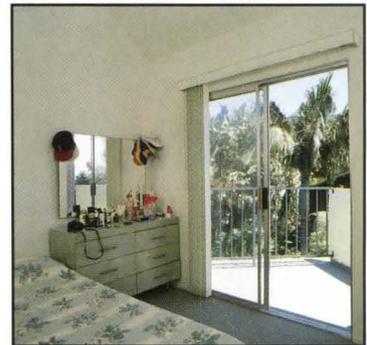


SECOND FLOOR PLAN, FRONT UNITS

- 1 LIVING/DINING
- 2 KITCHEN
- 3 BEDROOM

N 20/6m

At 6th Street, the six units are again split into two blocks, with two duplexes to the rear and stacked flats on the street. The 50' x 141' infill lot rises from the street so that the upper floors of rear units have a view of the ocean (even the rearmost unit has a view from its deck, which is seen through a sliding door above). Laundry, below-grade parking, and all units are entered from the common courtyard (facing page). The design plays on two California vernaculars—stucco and wood siding (top).



Architects: Koning Eizenberg Architecture (Hank Koning, Julie Eizenberg, partners in charge; Tom Goffigon, project architect).

Client: Community Corporation of Santa Monica.

Site: 7070-sq-ft urban lot.

Program: six 1-to-4-bedroom rental units (536–1191 sq ft), with two for seniors; subterranean parking.

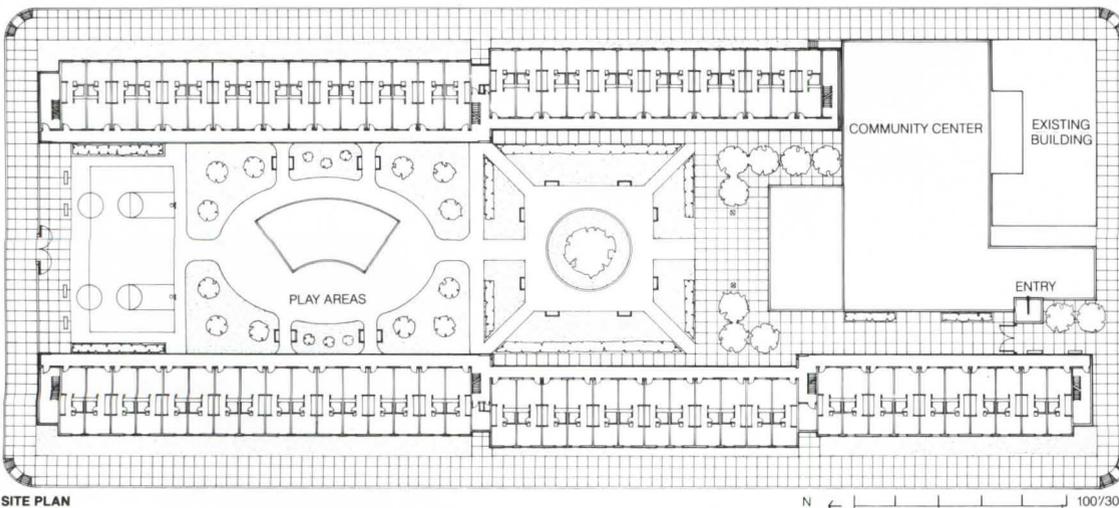
Major materials: (see *Building Materials*, p. 126).

Consultants: Davis-Fejes, structural; Campbell & Hendricks, energy.

General contractor: Salter Construction.

Costs: \$407,770 (\$45 per sq ft).





**HELP I
Brooklyn, New York**
This prototype shelter strives not merely to house homeless families but to usher them back into the mainstream. "Virtually no one had done this before," says Alex Cooper of Cooper, Robertson & Partners, noting the challenge of developing HELP's two-part program. Two three-story wings hold 200 units of "transitional housing" with a capacity for 800 residents. But the key element is the on-site community center, which nourishes residents' efforts toward self-sufficiency. The center's services include a day-care program for resident children, coin laundry, and counseling by 17 in-house social workers. Tenants, mostly single mothers with children, are placed in the rent-free shelter by the city's Human Resources Administration. Stays are limited to 13 months, during which many clients seek training.

Land was donated to HELP, a nonprofit corporation, by the city; developers worked at cost; and the architects contributed partner time. Tax-exempt bonds issued by the state Housing Finance Authority provided financing, and city-assigned emergency housing funds pay operating expenses and debt service. The Red Cross operates the facility.

Surrounded by blighted apartment buildings and vacant lots, HELP I fosters residents' sense of security with a protected courtyard. Entry is controlled at a reception desk in the community center. Each 390-square-foot apartment is an exercise in economy: A kitchenette and bathroom (with shower, no tub) separate the front and rear rooms. Study of alternative construction methods during design led to use of prefab concrete units originally designed for hotels. Use of the stackable 12' x 40' modules eliminated costly structure and sped construction time, which took 13 months, including design. Windows, wiring, plumbing, and exterior finishes were installed prior to shipping. That, plus agreements from trade unions to allow off-site work, held construction costs to about two-thirds the norm. All of which adds up to a successful test case, for three more HELPs are on the way.

Vernon Mays



Photos: Jack Pottle/ESTO



Day-to-day life is centered on the courtyard (facing page, top), a parklike playground that is visible from most apartments. The street façade (facing page, middle), shown here before final landscaping and installation of a three-foot-tall iron fence, has a residential rhythm and scale. Each unit is reached via an exterior walkway (above), a strategy that allows light and fresh air into apartments from both ends. The basic two-room plan can be converted to three rooms (plan, left) to accommodate families of up to six people. Residents sign in and out at a single, monitored entry (left).

Architects: Cooper, Robertson + Partners, New York (Alex Cooper and Roland Baer with Sam Packard, Michael Stern, Tom Sze, David Virgil) with Preiss Breismeister Coats, Stamford.
Program: 200 apartments, a 12,500-sq-ft community center, and a recreational courtyard.
Client: HELP (Homeless Emergency Leverage Program) Inc.
Major materials: (see Building Materials, p. 126).
General contractor: Tishman Speyer Properties; prefab units by F.D. Rich Housing, Inc.
Cost: \$14.5 million (\$69 per sq ft for housing).



**St. James Social Services
Four Sisters
Vancouver**

Two infill housing projects by Davidson/Yuen Partners are situated in Vancouver's Downtown Eastside, one of the city's oldest neighborhoods and one of few where property is still affordable. Both are sponsored by community-based development groups actively involved in their neighborhood's renewal.

The new St. James Social Services Center (left), which replaced two demolished buildings on a retail street, reconciles a complex set of social programs for three distinct user groups. Planning is organized horizontally, one group per floor, with social workers' offices, community crafts workshops, and a commercial laundry for public use at street level; an emergency residential facility with communal living space for women and children on the second floor; and, on the third floor, longer term accommodation for families in post-crisis transition. (The next phase, now under construction, includes apartments for long-term residency.)

Four Sisters (right), a Canadian-style cooperative in which 70 percent of the residents receive rental subsidies, occupies most of a large block: on one side, two buildings—a factory and a warehouse—have been rehabilitated; on the other, a new building fills out its urban lot. Between these, a through-block city fire lane has been transformed into a courtyard, where screens separate active play from the vine-enclosed "sun trap" regularly used by elderly residents. Landscape elements screen private patios from open space and negotiate grade changes.

St. James's great virtue, given its program, is its protective modesty, the result of a carefully contextual design. Four Sisters, on the other hand, exhibits a greater architectural complexity. Its more permanent residents have taken great pride in claiming their territory, and this new confidence has crept through the walls to reinforce the neighborhood and enrich the city fabric.

Catherine Alkenbrack

The author is coordinator for the Vancouver League for Studies in Architecture and the Environment.



In the St James Social Service Center, new construction echoes the neighborhood's storefront architecture while also reflecting phased construction (above). A small internal courtyard provides a quiet, protected space for residents of the emergency shelter and transitional housing (left). Interior offices and workrooms borrow light from a sunny lounge adjoining the court.

Photos: Selwyn Pullan



- 1 COMMERCIAL
- 2 SOCIAL SERVICES OFFICES
- 3 WORKSHOPS
- 4 RESIDENTIAL ENTRY
- 5 HOME HELP OFFICES
- 6 EMERGENCY SHELTER
- 7 APARTMENTS
- 8 DECK
- 9 PARKING
- 10 AMENITIES ROOM

Architects: Davidson/Yuen Partners, Vancouver (Ronald Yuen, partner in charge; David Simpson, head of design).

Client: St. James Social Service Society.

Site: downtown retail district.

Program: emergency shelter for women and children, studio and 1-bedroom units (450–850 sq ft) in a transition center; community social service offices; commercial.

Major materials: (see Building Materials, p. 126).

Consultants: Wilkins Chan, structural; D.W. Thomson, mechanical.

General contractor: Owest Construction.

Costs: \$873,327, first two phases (\$63 per sq ft).

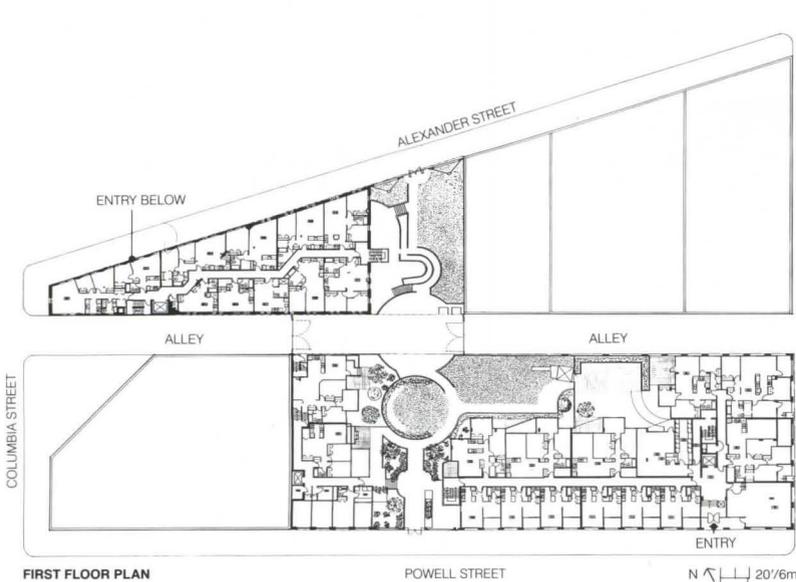
**Low-Cost Housing
Mixed-Income Cooperative**



The 153 units of the Four Sisters Housing Cooperative are contained in two renovated buildings (below) and one new structure (left), which has been designed to emulate industrial buildings in the neighborhood. A through-block park (below left) is secured at either end by "false" façades, which preserve the street wall. The common courtyard is divided by screens into active play space and a passive circular sitting area for the elderly, which enjoys sun in all seasons. Units in the renovated buildings suit their irregular footprint (plan, below).



Photos: Selwyn Pullan



Architects: Davidson/Yuen Partners, Vancouver (Ronald Yuen, partner in charge; David Simpson, head of design).
Client: Dera Housing Society.
Site: block in Gastown heritage district.
Program: rehabilitation and new construction for total of 153 studios and 1-to-3-bedroom units (400–1100 sq ft).
Major materials: (see Building Materials, p. 126).
Consultants: Vagelatos, landscape; Sayers Engineering, structural; J. Poon, mechanical and electrical; Terra Consulting, housing resource.
General contractor: Buron Construction.
Costs: \$5,994,000 (\$53 per sq ft).



Design Archive/Burley

**Third House
Toronto**

This high-rise hostel for low-income singles was the pilot project of Homes First Society. The idea was to provide cheap, stable, inner-city rentals for 77 men and women of mixed age and family composition who, given a fixed address and the chance to become self-sufficient, might eventually move up and out. As designed by David Tsow and Douglas Pollard, all accommodation is shared in 17 apartments on nine of the eleven stories. Two units per floor flank the elevator lobby, which doubles as a common room. Each has a shared kitchen, eating and living area with a corner sunroom, and four or five bed-sitting rooms with semiprivate or private washrooms. A lounge, laundry facilities, community and counseling rooms are located on the first and second floors. A large terrace on the roof is used for meetings and social events.

Working within a budget of \$2.1 million, or \$45/square foot, the architects nonetheless tried for a feeling of permanence and modest luxury. "This was designed to look like a condominium," says David Tsow.

Still, security was and is an issue. Each resident has a key to the front door and one that takes the elevator to his or her floor only. The original tenants, chosen in consultation with a dozen social service agencies, were involved in design development, and residents take an active role in managing the building. Each apartment sets rules and expectations for behavior and screens applicants when a vacancy arises in the unit. All cleaning and most repairs are done by residents, who are paid competitive rates.

In operation since 1984, Third House was built with a loan from the Canada Mortgage and Housing Corporation. The government set the market rent at a low \$373 per month, per person, with residents contributing a minimum of 25 percent of their income. The average tenancy is two to three years, and a significant number of residents have stabilized their lives to the point where they can afford to pay full market rent. Adele Freedman

The author writes about architecture for The Globe & Mail of Toronto.

Completed in 1984, Third House (above) has already been subjected to a post-occupancy evaluation by architect Peter Pragnell, who questioned the use of family-style kitchens (seen from sunroom, far left and left) for unrelated, single individuals, preferring an alternative based on cooking classrooms with separate storage and counter space.



Photos: Design Archive/Benceteru



TYPICAL FLOOR PLAN

N ↑ 10/3m

Architects: Tsow-Pollard Partnership, Toronto (Doug Pollard, David Tsow, architects; Gary B. Silver, planning; Michael Steele, project coordination).

Client: Homes First Society.

Site: urban lot.

Program: 18 units of 4 or 5 bedsitters (130–175 sq ft each) with shared kitchen, living, and semiprivate washrooms, two per floor with communal lounges.

Consultants: Kazmar, structural; Sigma, mechanical.

General contractor: Karvon Construction.

Costs: \$1,741,500 (\$36 per sq ft, 1984).

**The Baltic Inn
San Diego**

The Baltic Inn is the first new single room occupancy hotel to be built in San Diego in over 50 years. As in many other cities, downtown redevelopment in San Diego has removed much of the housing stock that served the city's low-income and transient population. The Baltic Inn, designed by Rob Wellington Quigley, is located in a part of town now in transition from warehouses to housing, much of it upscale.

As a pioneering effort by a private developer, the Baltic Inn required extensive negotiations and coordination with the city building department to keep the building from having to meet commercial hotel requirements that would have made it unaffordable for low-income residents. Unlike the owners of older, renovated SRO hotels, which are mainly nonprofit organizations, the developer (BMW Partnership) expects this hotel to turn a profit and intends to build another one.

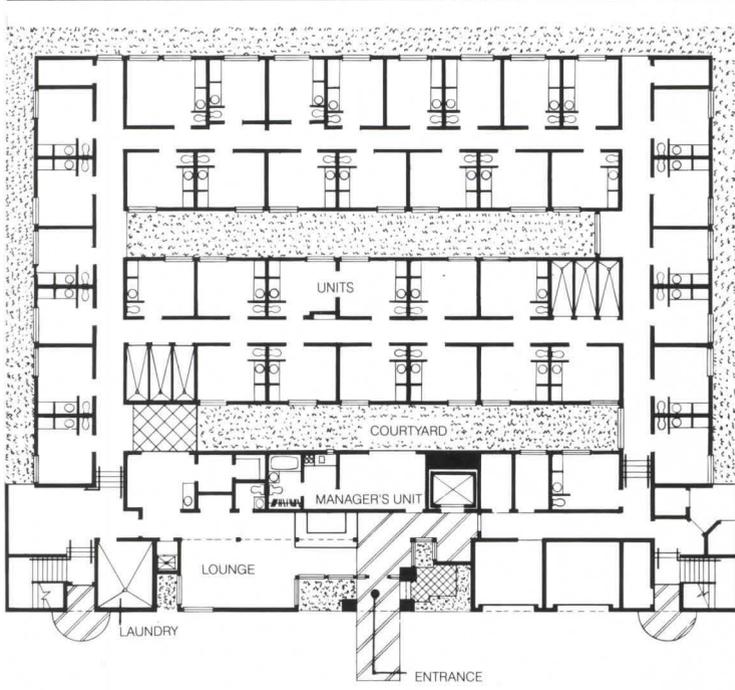
The four-story structure houses 209 units, each consisting of a 10' x 12' room with a standardized, built-in wall unit containing a toilet, lavatory, closet and storage space, refrigerator, and TV. The factory-built wall units are a benefit of new construction and would probably not be cost effective for renovations. Common showers are located on each floor. The ground floor has a lobby, TV lounge, vending area, bicycle storage, and laundry.

While courtyards were not possible on this tight site, lightwells were a necessity. The architects have turned these to advantage with landscaping whose vertical emphasis transforms potentially dreary airways into pleasant greenways.

Low-income housing in central downtown areas rarely if ever has a positive presence on the street. This challenge is addressed simply and effectively in the Baltic Inn through a high-arched entranceway, accented on the roof by a tower that rises above the elevator shaft and is topped by a neon sculpture. The selective use of colorful tiling on window boxes and other elements also accents the entry. Altogether, the results demonstrate that an impoverished budget need not limit design. *Sally Woodbridge* ■

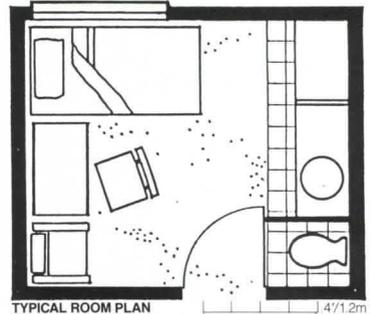


Frank Domin



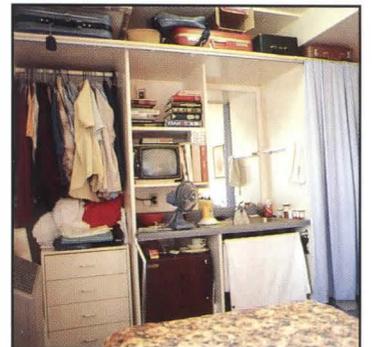
FIRST FLOOR PLAN

N ← 20'/6m



TYPICAL ROOM PLAN

4/1.2m



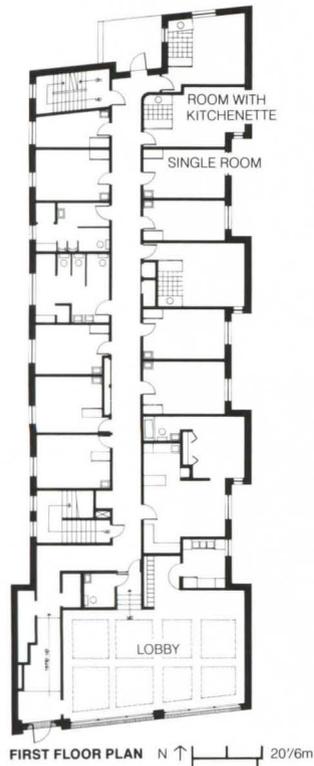
Frank Domin

Within strict budget constraints, Quigley was able to incorporate touches that alleviate some of the severity inherent in this building type. The entry façade (top) is enlivened by the wedge of darker color that focuses on the entry. Every square inch of the units is efficiently used (above) with standardized wall units. Two landscaped four-story light wells (left) cut through most of the building's length, providing natural light and ventilation to interior rooms. Windows across the wells are offset in a valiant attempt to minimize the lack of aural or visual privacy.

Architects: Rob Wellington Quigley, San Diego (Guillermo Tomaszewski, project architect).
Client: BMW Partnership.
Site: 100' x 125' parking lot.
Program: 209 120-sq-ft single occupancy rooms with toilets and sink; shared showers; common lobby, laundry and vending.
Major materials: (see Building Materials, p. 126).
Consultants: Kathleen McCormick, interiors and colors; South Bay Engineering, structural; Mesa Mechanical; Patrick Quigley & Associates, lighting; Gloria Poore, neon sculpture.
General contractor: C.A. Larsen.
Costs: withheld.



Farhad Ashofteh



FIRST FLOOR PLAN N ↑ 20/6m



George Gray

The visible evidence of the resurrection of the Harold Hotel is its renovated façade (top). The hotel interior was completely gutted and rebuilt to meet current codes. Some of the units have kitchenettes (above); others do not. This type of small SRO hotel (the Harold has only 57 rooms) is typical not only of Los Angeles but of many American cities; its renovation and continued life as an SRO, however, is more rare. Existing SROs, an underappreciated resource, continue to be lost through demolitions or conversions to higher cost housing.

Architects: Urban Innovations Group, Los Angeles (Rex Lotery, principal in charge; Stuart Grinstead, project architect).

Client: Single Room Occupancy Housing Corporation.

Program: renovation of downtown SRO hotel to include 57 single rooms averaging 150 sq ft (16 with kitchenettes); 1 manager's unit; common bath facilities on each floor; community lounge.

Major materials: (see *Building Materials*, p. 126).

Consultants: Reiss Brown & Ekmeçji, structural; Kim, Casey Harase, mechanical.

General contractor: Clark Porche.
Costs: \$1,131,696 (\$60 per sq ft).

The Harold Hotel Los Angeles

Since its establishment in 1984 as a nonprofit arm of the Community Redevelopment Agency, the Single Room Occupancy Housing Corporation has acquired 11 hotels in the "skid row" district of Los Angeles in an effort to stabilize and improve that area's low-income housing stock.

Low-interest loans from the CRA and the State's Department of Housing and Community Development have been SROHC's main source of funds. Its energetic and committed Director, Andy Raubeson, who came to L.A. from Portland, Oregon, where he headed a similar nonprofit corporation, engaged the Urban Innovation Group, a nonprofit adjunct of the architecture and planning graduate school of UCLA (P/A, Oct. 1987, p. 84) to renovate three of the hotels, one of which—the 58-unit Harold—is shown here.

L.A.'s existing SRO hotels tend to be multistory, unreinforced brick structures built over 75 years ago that do not meet fire and seismic codes. Most need new plumbing and heating systems, handicapped access, renewal and replacement of flooring, walls, and furnishings, and improved egress. Although parking is not required of renovations by the city, the cost of structural upgrading to meet the seismic codes offsets much of these savings.

The SROHC renovations give residents simple, clean rooms furnished with a bed, table, chair, wardrobe or closet, sink, and small refrigerator. A few large rooms may have small pre-fab kitchen units. Shared facilities, including kitchens, dining and lounge areas, toilets, showers, and laundries, are typically placed on the ground floor along with a manager's unit situated so as to provide surveillance of the entry.

Rex Lotery, President of UIG, described the firm's work on the SROHC hotels as "cost effective intervention." Noting that flashy design is not an option in such work, Lotery affirms that making degraded places livable again through basic problem-solving brings high rewards.

Sally Woodbridge

**Low-Cost Housing
Mixed-Income Townhouses**

**Back of the Hill
Boston**

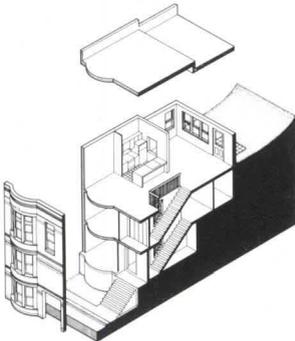
If brick is the folk material of Boston architecture, the Bricklayers and Laborers Unions are the new folk heroes of affordable housing. The Back of the Hill Rowhouses, a 165-unit complex of brick townhouses designed by William Rawn Associates for a hotly contested site in Mission Hill, suggests that the union's adroitness as developer and builder, demonstrated first at Andrew Square (P/A, Feb. 1987, p. 89), was no fluke.

Deploying his considerable political skill, union vice president Thomas McIntyre persuaded the neighborhood to accept affordable housing in lieu of a park and convinced the city to pay for infrastructure. The Bricklayers and Laborers Non-profit Housing Corporation secured low-interest construction loans from union bankers, to be repaid through sales of the 49 low (\$69,500 to \$87,500), 57 moderate (\$89,500 to \$107,500) and 59 market (\$111,000 to \$143,000) units.

The political logistics of this large project were matched by the problem of building on a site that rises, as the name implies, up the back of a hill. Cliff would be a better name for the steep pitch of the 10.3 acres. Nonetheless, architect William Rawn has capitalized on the topography, grading the tones of brick as the project rises and, even, in the case of one upper block of townhouses, switching the living room to the top floor for views.

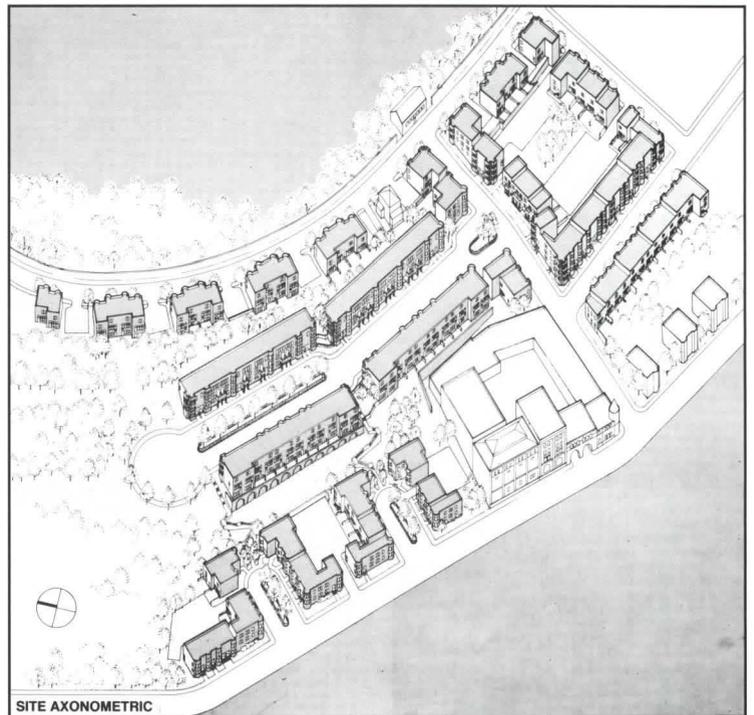
More important, he has contoured his design to parallel its 19th-Century neighborhood, keeping the street wall along Heath Street and shaping the rising tiers of buildings around cul de sacs. The somewhat undersized two-story townhouses and suburban-style use of clapboard-encased entryways and rear façades take away from the urbanity of the entourage, but the varied bay windows, the enclosing quality of the cul de sacs, and the scale and fabric of the project as a whole give the "civic quality" the architect seeks to a site that was an urban wilderness in more ways than one.

Jane Holtz Kay



UNIT AXONOMETRIC

The City of Boston paid infrastructure costs for Back of the Hill which, given the site's steep slope (bottom right and site axonometric), were considerable. In some units, the section is reversed, with living/dining space on the top floor to take full advantage of the view (axonometric, above). At the foot of the hill, two-story townhouses line new culs-de-sac (top).



SITE AXONOMETRIC

Architects: William Rawn Associates, Boston, Mass. (William Rawn, principal in charge; Alan Joslin, project architect; Diane Sokal, job captain).

Client: Bricklayers and Laborers Non-Profit Housing Company.

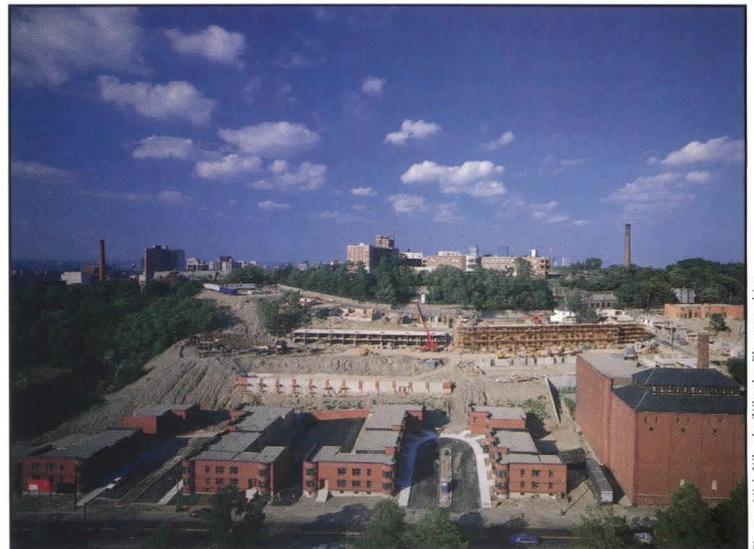
Site: 10.3 acres (2.8 acres reserved for public open space).

Program: 165 1-to-3-bedroom units (850–1300 sq ft) in attached rowhouses.

Major materials: (see Building Materials, p. 126).

Consultants: Michael Van Valkenburgh, landscape; LeMessurier, structural; CAQ Engineering, civil engineering; McPhail, geotechnical.

Costs: \$17.5 million (\$65 per sq ft).



Photos: Nick Wheeler/Wheeler Photographics



Alex S. MacLean

Tent City
Boston

Tent City is the latest and most dramatic testament to Boston's longstanding practice of heterogeneity—or, one might say, democracy—in housing. The Massachusetts Housing and Finance Agency (MHFA) has consistently distributed units at low, moderate, and market rates with barely a neighbor the wiser. Tent City perpetuates the process, in a project that is at once typical of MHFA and yet striking. One quarter of its units rents at market rates from \$885 to \$1800; another quarter is earmarked for low-income, and the last half for moderate-income residents. (Rent in the latter two categories is set as a percentage of income and supported by subsidies.)

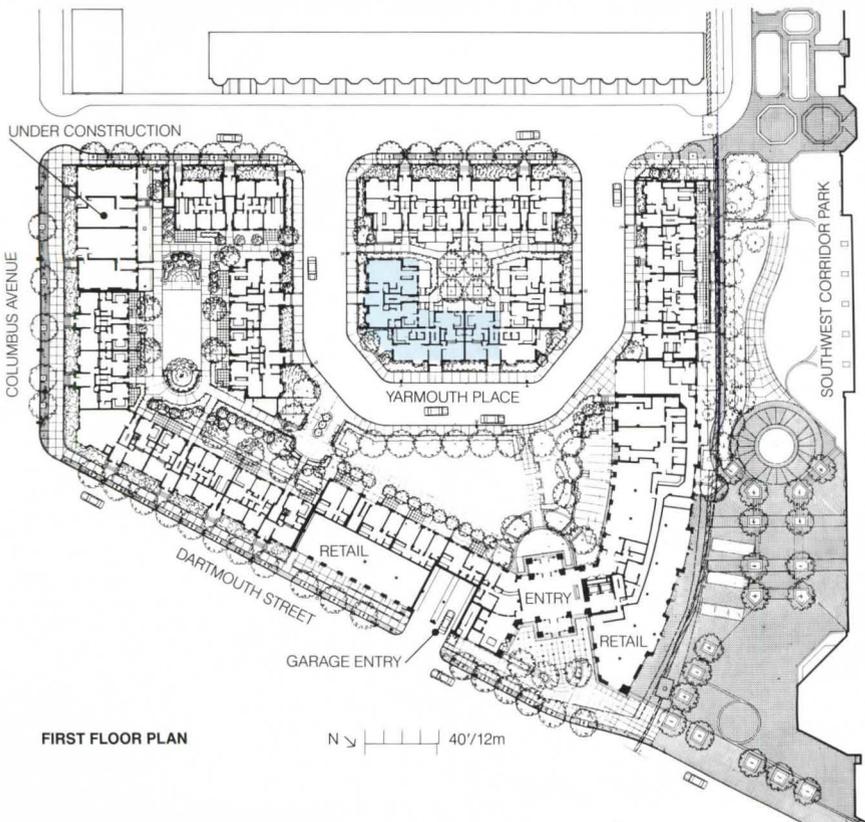
Tent City's 271 units side up to the city's most luxurious mall at Copley Place. Born in an era when the homeless were less in evidence and today's "tent cities" a rarity, Tent City was launched by black activists who occupied the site to protest the gentrification of the South End exacerbated by Copley Place. Twenty years later, the project has surprisingly clung to its political name, its low-income purpose, and its aim of social and architectural integration.

Context is a much-abused word (one architect's context is another's kitsch), but this city block of mid-rise apartments and rowhouses designed by Goody, Clancy & Associates fits into the community like a long-time settler. Softening the former no man's land between Boston's Victorian South and the blank concrete envelope of Copley Place, its multicolored patterned brick façades cover both 12-story apartment buildings and duplex-over-duplex rowhouses equipped with patios and private entrances.

Tent City's success as connective tissue derives in part from its capacity to bury 698 cars in an underground garage paid for by its affluent neighbor Copley Place.

Equally important, the architects have made an attempt to incorporate storefronts on Dartmouth Street. Their detailed and lively façades say "home," while the site plan matches historic street patterns in the best tradition of good urban design.

Jane Holtz Kay



Sited in the shadow of the John Hancock Tower, Tent City (foreground, top) provides the link between Back Bay and the South End. A new park built atop the Orange Line (P/A, Sept. 1987, pp. 53–55) separates the project from the opulent Copley Place (left

middle ground, top) whose construction was one of several events that led activists to occupy the site of Tent City and force the city to change its program from a parking lot to affordable housing scaled to match its community (facing page).

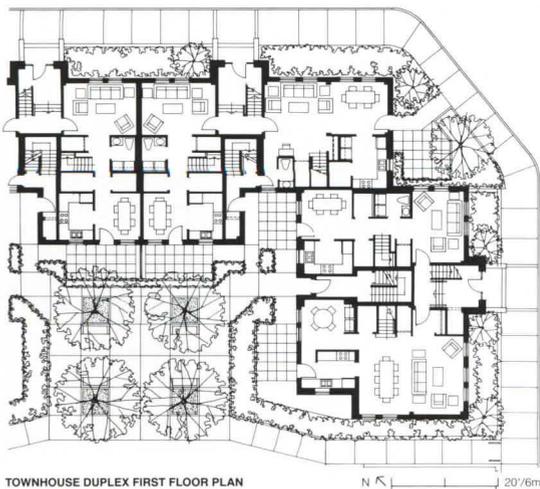




Photos: Steve Rosenthal



TOWNHOUSE DUPLEX SECOND FLOOR PLAN



TOWNHOUSE DUPLEX FIRST FLOOR PLAN

N 20'6m



Tent City's picturesque massing steps down along the street from 12-story apartments whose main entrance is set on a diagonal from Copley Square (right middle) to four-story townhouses that line Columbus Avenue and an interior courtyard (top right). These townhouses (interior above, top left, and plans) are detailed to complement the predominantly brick South End.

Architects: Goody, Clancy & Associates, Boston, Mass. (John M. Clancy, principal in charge; Paul H. Dudek, project architect; Geoffrey Wooding, project manager).

Client: Tent City Corporation (housing/retail); Urban Investment & Development Corporation (garage).
Site: full city block in South End, adjacent to Copley Place commercial development.

Program: 271 1-to-4-bedroom rental units (650–1525 sq ft); 7000 square feet of retail; 698-space underground garage.

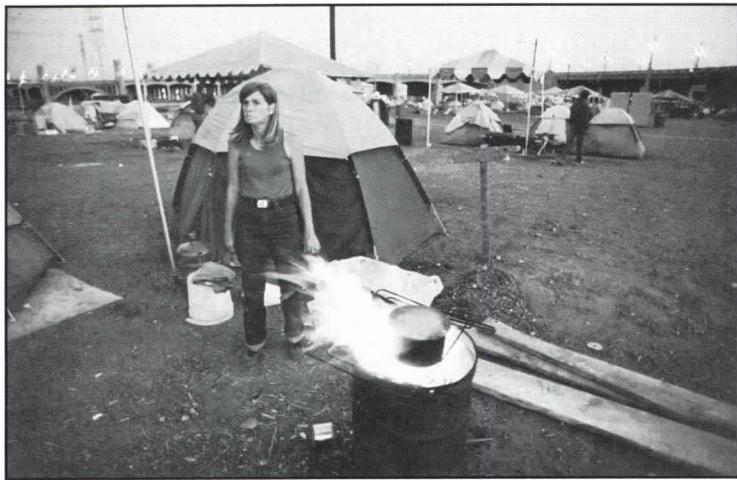
Major materials: (see *Building Materials*, p. 126).

Consultants: Halvorson Company, landscape; Zaldastani, structural; C.A. Crowley Engineering, mechanical; Verne G. Norman, electrical; Cavanaugh Tocci, acoustical; Greater Boston Community Development, consultant to owner.

General contractor: Turner Construction.

Costs: \$27.5 million, housing; \$12 million, garage (\$84 per square foot).

A Future for Federal Housing



"Tent City" Los Angeles, August 1987, photographed by Eugene Richards/Magnum.

Assisted Private Housing: A Threatened Resource

In the last seven years a number of economic, fiscal, and demographic factors, in combination with provisions of earlier housing legislation, have significantly changed the outlook for housing for low-income people. Housing resources assumed to be secure are, in fact, not secure. As the number of poor people has increased, the stock of housing traditionally available to them has eroded, both from upgrading for higher income tenants and through disrepair and abandonment. At the same time production of low-cost rental housing has come to a virtual standstill as tax reform has changed the financial ground rules for private developers, while federal policy has emphasized solving housing problems through vouchers rather than through production.

A further threat to this tight housing situation is the pending loss through expiration of use restrictions, or through default, of a very large portion of the assisted private housing stock. Perhaps as much as 80 percent of these units may be lost within the next two decades unless steps are taken now to prevent it. When the units were built, mainly in the 1960s, or when they accepted operating subsidies with contractual strings in the 1970s, the possibility that they might revert to market rents when their obligations to restrict tenants and rents expired or that they might go into default seemed far in the future. However, the contract periods are now beginning to run out. Given the continuing need for assisted housing, this potential loss has caused the preservation of this housing to emerge as a major issue.

The poor depend on 1.952 million units of federally assisted, pri-

While this issue documents new housing production, these essays, produced for the MIT Housing Policy Project, stress the need to preserve existing low-income housing.

vately owned housing units developed under a variety of programs, mainly between 1965 and 1982. These units are available to low- and moderate-income tenants at rents not exceeding 30 percent of their income. Low-income or poor households are defined as those earning less than half the local median income for a family of four, and moderate-income households are those that earn 50–80 percent of the local median income, using definitions developed for federal assistance programs. While early programs, Section 221 (d)(3) and Section 236, were targeted originally toward moderate-income households, over the years they became important resources for low-income households as well. In addition to these 1.952 million units with project-based assistance, nearly 800,000 Section 8 Existing Certificates and vouchers, tenant-based subsidies, cover part of the rent for private units under short-term contracts. While these units with various forms of project assistance are privately owned, the terms of their availability and their rents are governed by a variety of contracts and agreements that keep them available to the poor only as long as the contracts are in force.

The solution to the problems of default and prepayment is simple. In the case of default the issue is how best to inject revenues that will take the project out of red ink and put it on a sound footing. We recommend an injection of project-based subsidies that cover operating costs and debt service, including new debt service to cure physical or financial problems. In the case of prepayment, the issue is whether we are willing to pay the cost to dissuade owners from market conversions. We believe that the strategy of direct negotiation with owners is the route to the best arrangement. In the context of financial restructuring of the projects, it is in the long-term interest of low-income tenants to make sure that the projects are owned by sponsors committed to serving a low-income population. To that end, we believe that preservation policies should encourage the sale of the projects to capable nonprofit owners.

Closing the gap between what the poor can afford and what shelter costs is not likely to be done by the sleight of hand (i.e., limited subsidy, skimpy development budgets, construction shortcuts, or favorable tax provisions) that characterized the older subsidy programs. Indeed, many of the poor cannot afford to pay even the cost of operation of decent housing—maintenance, taxes, utilities—if the structure itself were provided at no cost, debt-free. Long-term solutions will require long-term commitments.

Philip L. Clay and James E. Wallace ■

Phillip Clay is an Associate Professor in the Department of Urban Studies and Planning, MIT. James Wallace is Deputy Manager for the Urban Economics and Finance Area at Abt Associates, Inc.

Preserving Public Housing

It has been said that public housing is unpopular with everybody except those who live in it and those who are waiting to get in. This includes more than 1.3 million families who currently occupy public housing units and nearly 800,000 more who are on the waiting lists of one of the nation's 3060 local public housing authorities. Despite the ebb and flow of popular and political support for the program over the past 50 years, there are more public housing units in American communities today than any other type of assisted housing. More than four out of every ten units of federally subsidized housing were built under the public housing program.

As momentum builds for the resumption of some form of deep subsidy production, the issue of the relative efficiency of various construction alternatives must be addressed. The available and somewhat conflicting analyses of the cost-effectiveness of public housing construction lead us to conclude that although more costly than other forms of subsidized new production, public housing's permanence and proven record of housing the most difficult low-income families warrants its continuation as an important component of our national housing policy. With the repeal of most other major HUD production programs and the serious threat to the standing stock of low-income units posed by the pending expiration of subsidy contracts on hundreds of thousands of federally assisted, privately built units, the long-term cost-effectiveness of public housing is now looking better and better.

A 1987 study of repair and modernization needs within the public housing stock indicates that, despite large previous federal investment, there is still a significant unmet need for revitalization of the public housing stock. Abt Associates, the independent contractor retained by HUD to prepare national estimates, has indicated a backlog of modernization needs of at least \$21.5 billion. According to Abt, at least \$9.5 billion is needed just to repair or replace existing structural, mechanical, and electrical systems; and it would cost another \$9.5 billion to upgrade or change existing features of individual housing projects to meet specific HUD standards or to enhance their long-term viability. The remaining \$2.5 billion would finance necessary cost-effective energy improvements, make more public housing units accessible to the handicapped, and eliminate all remaining health problems caused by the presence of lead-based paint in older projects.

Modernization policies must also be closely related to policies governing the demolition and disposition of public housing. On the one hand, there is justifiable concern among housing advocates that HUD will use the multi-billion-dollar estimates of modernization needs to justify a policy of planned shrinkage of the public housing inventory.

On the other hand, a sound future for public housing cannot be built upon a policy that would preserve every public housing building no matter the cost. Selective demolition for density thinning and project reconfiguration to enhance livability and the disposition of some older projects needing substantial redevelopment (where permanent replacement housing can be financed from net sales proceeds) are integral parts of an enlightened public housing policy. The key to a fair and equitable disposition policy is ensuring that the replacement housing is for the same group displaced. A recent survey placed the number of potentially unviable public housing units in excess of 138,000, or 12 percent of the nation's total. All of these are family units in projects that were built an average of 34 years ago. These 40–60 seriously troubled family high-rise projects in major cities across the country must be radically altered, reconfigured or demolished. Not only do those mistakes of the past provide inhumane living environments, but by stereotyping all public housing they cast a long shadow over the program and threaten its very foundation. There is an urgent need to tackle the troubled projects, and a bold initiative to do just that must be the centerpiece of a revived public housing program. Most seriously troubled projects have vacancy rates in excess of 15 percent and require an average of \$28,000 a unit in capital improvements. In a limited number of instances projects are too far gone to be preserved and should be replaced on economic and humanitarian grounds. In other cases, modernization will require selective demolition of whole projects,

the removal of several floors from high-rise buildings, and the reconfiguration of building interiors, which would also reduce the total number of units in the local public housing stock.

We would suggest that Congress establish a modest annual goal to construct 20,000 new public housing units. Half of this annual authorization could be allocated for troubled projects to help Public Housing Authorities (PHAs) raze and reconfigure their inventories of the worst high-rise projects that plague the families who are forced to live there. Another 5000–7000 units should be made available through a competitive process to the hundreds of PHAs throughout the country in communities with documented housing shortages and proven development capacities. The remaining 3000 units are needed just to replace the public housing units that are now being lost to the inventory each year through demolition or disposition at the local level.

It is important to emphasize that new public housing development does not have to be of the conventional mold. It could include the redevelopment of existing public housing units that are currently unsuitable for occupancy; major redevelopment of existing projects that are currently wholly or mostly vacant; acquisition of private market units, with or without rehabilitation; new construction; acquisition of units built or rehabbed specifically for the housing authority; or acquisition of some units in a larger building or subdivision where the balance of the units are not owned by the PHA. The most current estimates of public housing development costs indicate that a new unit costs \$68,857. Therefore, to produce 20,000 units would cost \$1.4 billion a year.

From a historical standpoint, low-income housing programs have had very limited life cycles. Starting most recently, the Section 8 production programs lasted about a decade, and the interest subsidy initiatives they replaced were even shorter lived, and so on down the line. Housing programs also vary in the way they are terminated. Rightly or wrongly, some, like Section 8, became symbols of budget-busting programs and were formally repealed by the Congress in a public show of outrage, while others, like rent supplements, faded quietly from the scene with scarcely a whimper.

Against this backdrop of "housing as fashion," the public housing program stands tall with 50 years of continuity and proud tradition. The permanence of public housing as a community resource for the poor and the stability of local housing authorities that administer the program stand in stark contrast to other housing efforts that have come and gone. Public housing might not be cheap, but neither is it a tax dodge. Public housing authorities might not be as well staffed as we would like, but neither are they shell corporations that were created merely to receive federally insured mortgage or subsidy contracts. Even the high cost of improving the public housing stock is preferable to the speculation about the number of privately owned low-income projects that will opt out of the system when their subsidy contracts expire.

While program change and reform are necessary on a variety of fronts, history warns us that we should proceed with caution. Public housing has outlived all of its successors for good reason. It was soundly conceived; it continues to meet an urgent public need more cost-effectively than most other programs; and it is capable of significant additional improvement without destroying its basic framework.

Michael A. Stegman ■

The author is a Professor and Chairman of the Department of City and Regional Planning at the University of North Carolina at Chapel Hill.

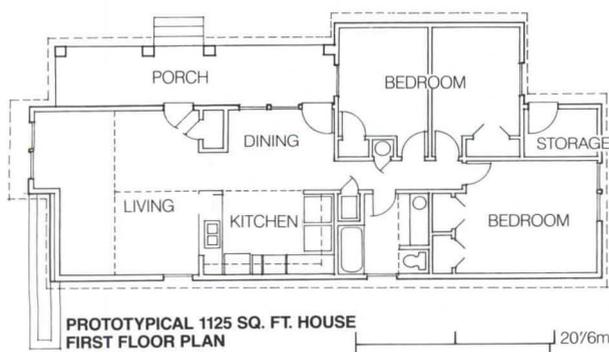
These excerpts are published with permission from the MIT Housing Policy Project, which was funded by the Ford Foundation, Fannie Mae Foundation, Robert Wood Johnson Foundation, and Freddie Mac. These and 18 other papers are available through the MIT Center for Real Estate Development, Building W31-310, Cambridge, Mass. 02139. © Massachusetts Institute of Technology

P/A Portfolio Housing for the Future

The results of housing design competitions in Indianapolis, Los Angeles, and Seattle, prototypes for infill housing in Memphis, and a radical squatters program in Atlanta are among the projects in this portfolio.



Kelley Costello



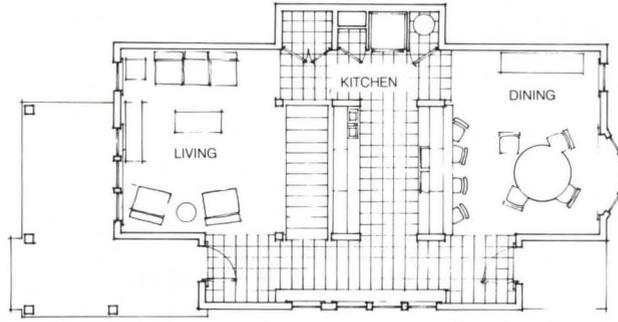
Prototypes for Memphis Mockbee-Coker-Howorth Architects of Jackson, Miss., and Memphis, Tenn., have designed four prototypes for replacement housing in seven inner-city neighborhoods for the Memphis Department of Housing and Community Development. These contextual designs (shown above and left in preliminary designs not yet approved by the City) are based on an extensive analysis of regional housing types in an effort, says Coker, to overcome the stigma attached to the "shoeboxes" formerly used to replace sub-standard housing.



1a VARIATIONS ON HOUSE DESIGN



1b STREET ELEVATION



1c FIRST FLOOR PLAN

10'/3m



2a FRONT ELEVATION



2b REAR ELEVATION



2c FIRST FLOOR PLAN

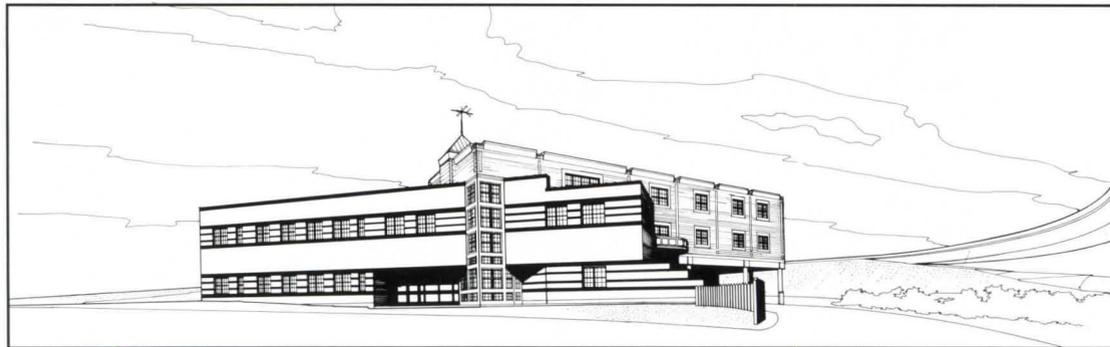
10'/3m

Affordable Housing in Indianapolis

Two equal first-prize winners in a competition for the design of affordable housing sponsored by the city of Indianapolis treat all facets of the problem, from cost implications of various construction techniques to security in a changing neighborhood. The competition program, developed by the Department of Metropolitan Development with the Indianapolis Chapter of the AIA, called for a 900-to-1100-square-foot prototype with a minimum of two bedrooms that could be constructed for \$27,000 to \$32,000 on any of 22 vacant city-owned lots in a six-block section of midtown. One of the winners, a team of fifth-year students at Ball State University led by professor Alvin Palmer, developed a tripartite plan with a uniform core but changeable façades (top and middle left). Architect Richard Hadjnosz proposed a modest house (bottom left) that could be expanded easily to the rear. Other modifications for increased security include entry doors that swing outward "in spite of common tradition, in order to make forced entry into the house more difficult."

A Shelter in Alexandria, Virginia

In an effort to address several social needs in one building, the City of Alexandria commissioned Dewberry & Davis of Fairfax, Virginia, to design a \$2.1 million combination substance abuse center and homeless shelter (left) to be located in an underdeveloped area outside the city's historic center. The separate functions of the 25,000-square-foot building are articulated in two distinct wings, one domestic in flavor, the other institutional. A 35-bed residential detoxification center and related outpatient counseling center, which will handle up to 160 patients a day, share one wing. The 65-bed homeless shelter provides separate accommodations for singles or families. Each program has its own separate ground-floor entrance, and only staff members are permitted internal access from one unit to another. The homeless shelter wing will be occupied in January 1989, and the substance abuse wing will open in March. Debra Ladestro



FIRST FLOOR PLAN

N

20'/6m



SECOND FLOOR PLAN

- 1 ENTRANCE
- 2 OFFICES
- 3 CLASSROOMS
- 4 MECHANICAL
- 5 SHELTER ENTRANCE
- 6 BEDROOM
- 7 DINING
- 8 KITCHEN
- 9 PLAYROOM
- 10 DAYROOM

Huts for The Homeless in Atlanta

The most immediate need for the homeless is for shelter, and that is what the so-called Madhousers build. The group is made up largely of recent graduates of the College of Architecture at Georgia Tech in Atlanta. Since February 1987, they have been building plywood huts (photos, right) from salvaged materials with the help of would-be occupants met through a shelter or on the street. Says Madhouser Mike Connor, "The huts give the homeless a sense of personal identity and personal space."

The huts have been built in secluded areas on farms or on city land. They are not built with permission of the landowner, nor do they conform to any building code. Because of these illegalities, the huts are constructed off-site in wall, floor, and roof panels, which are then taken to the site and quickly erected.

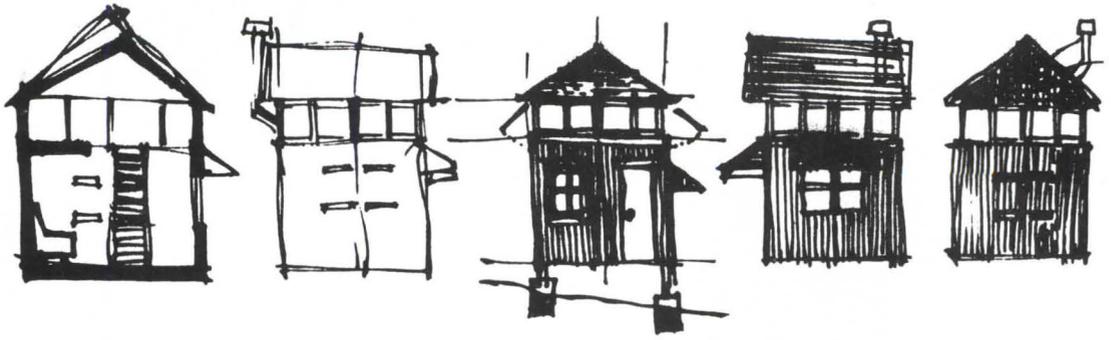
The squatters have attracted a great deal of media attention, including appearances on network television. Not all of the Madhousers feel that publicity is appropriate, but media coverage has brought donations, including free warehouse space in which to work, land on which to build, and materials. Construction costs have dropped as a consequence from \$200 to \$40 a hut. And the City of Atlanta, influenced perhaps by fear of negative publicity, is tolerating the huts, despite the building code violations.

The huts, while crude, have given some homeless people a stable environment from which several have gone on to jobs or more permanent housing. The Madhousers are now working on new and more conventional house/hut designs like those worked out in Brian Finkel's graduate thesis (right, top). The units would be arranged in villages and serviced by utilities. (The first huts have no heat, electricity, or plumbing.)

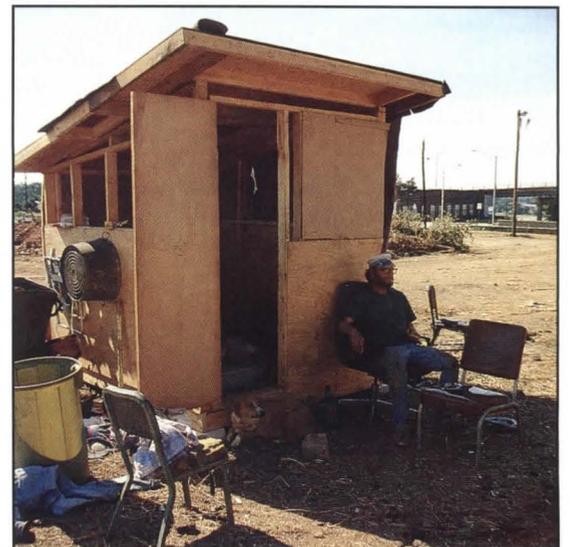
So far the city has not authorized this project, but is examining it and others proposed by the Madhousers. Plans now under way to build bungalows for the homeless on privately donated land are likely to be approved.

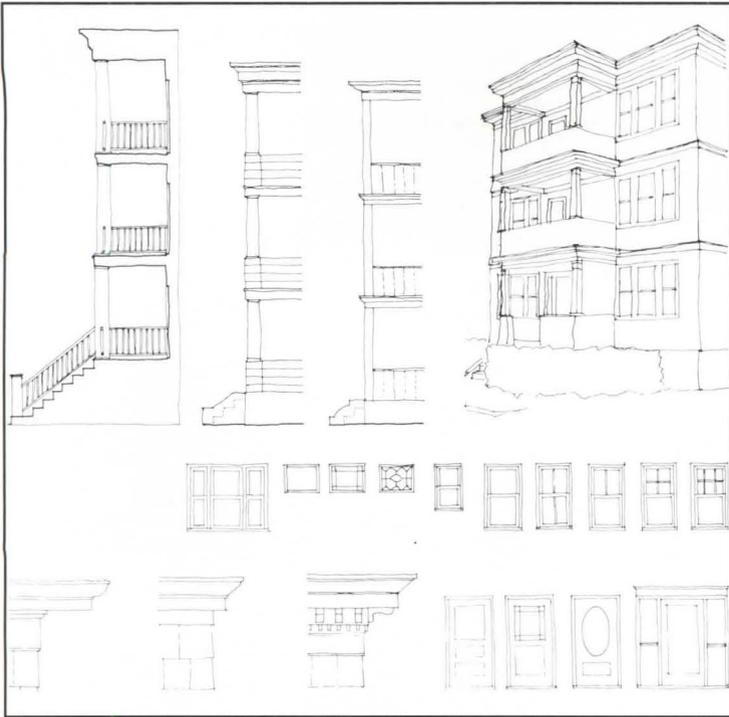
Claire Downey

The author, an architect with John Portman & Associates, writes occasionally for P/A.



Photos: Mike Connor





GUIDELINES FOR TRIPLE DECKERS



NEW TRIPLE DECKER PER GUIDELINES

Filling Boston's Vacant Lots
"Avoid a monotonous appearance by the use of color or other architectural elements," reads rule #11 in *Design Guidelines for Neighborhood Housing*. That publication and its more architectural sequel, *A Pattern Book of Boston Houses*, from which these illustrations (far left) are drawn, were published this year by Boston's Public Facilities Department to guide the development of vacant, city-owned land. The program, called Project 747 for the number of lots involved, revives the traditional Boston types, such as the triple-decker, for new affordable housing. (One of the first designs approved under the new program—the work of architect T. Owen Trainor of Quincy, Mass.—is shown at left.)



A New Block in Boston's South End
Boston has pursued the problem of affordable housing at all levels, from infill lots (see above) to large-scale developments (see *Tent City*, page 84). One mid-sized development now under way in South Boston exemplifies two key aspects of Boston's many programs: the emphasis on fitting into existing neighborhoods and the mixing of housing types and income groups within a single development. Units in Langham Court, designed by Goody, Clancy & Associates for a nonprofit corporation building on a Boston Redevelopment parcel, range from SROs to three-bedroom townhouses. The 84-unit complex, now under construction, emulates its Victorian neighbors in materials and details.

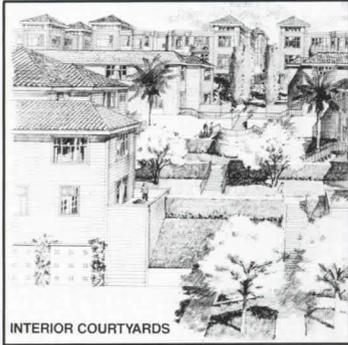


PROPOSED INFILL HOUSING



Infill Housing in Lowell
Activities of the Coalition for a Better Acre in Lowell, Massachusetts, run the gamut from home daycare to a recent consumer action suit which prevented HUD from auctioning off a troubled rental project. Other projects, including the construction of 20 units of new scattered-site, low-income housing (far left) designed by Downer & Mostue of Cambridge and the rehabilitation of four existing houses directed by Woo & Williams of Cambridge, have drawn the visible support of Massachusetts Governor Michael Dukakis (near left).

Drawing: Bob Vint



INTERIOR COURTYARDS



Poly High Housing in San Francisco

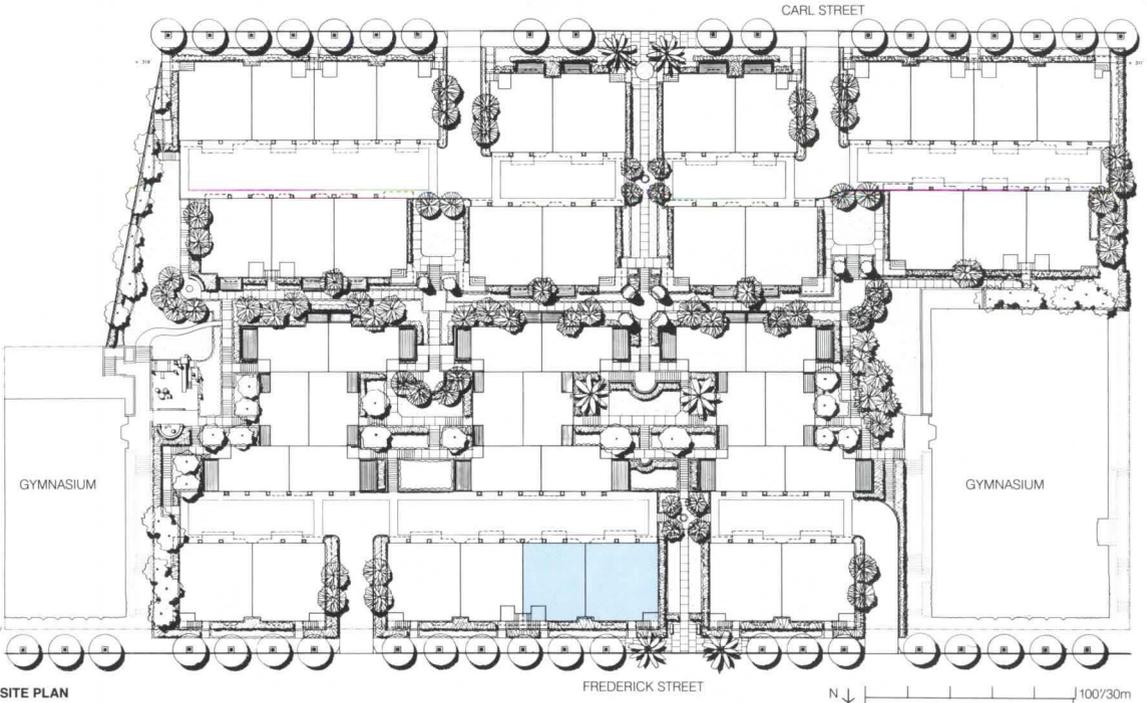
In 1986, David Baker & Associates of San Francisco won a limited city competition to design low- and moderate-income, owner-occupied housing for the former Polytechnical High School near Golden Gate Park in San Francisco. The developers were BRIDGE Housing Corporation, one of the first nonprofits dedicated to affordable housing in the city, and Pacific Union Development. When completed, the project will have 11 three-story buildings of two-, three-, and four-bedroom flats with private street entrances (right, top), and a mid-block row of 18 four-bedroom cottages (right, middle left). The units were designed mainly for families with children, although some are targeted for handicapped. The Art Deco gymnasiums were preserved for future rehabilitation as community centers.

Open spaces inside the block counter the dense urban character of the street elevations. The site plan (right) reflects the density of the surrounding neighborhood blocks, which in older parts of San Francisco often have dwellings at the backs of lots behind row houses.



MIDBLOCK COTTAGES

TYPICAL UNIT PLAN



SITE PLAN

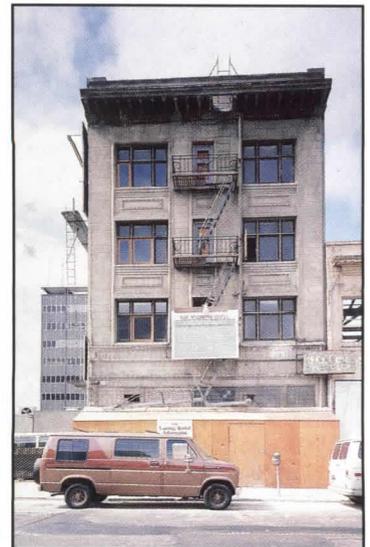
FREDERICK STREET

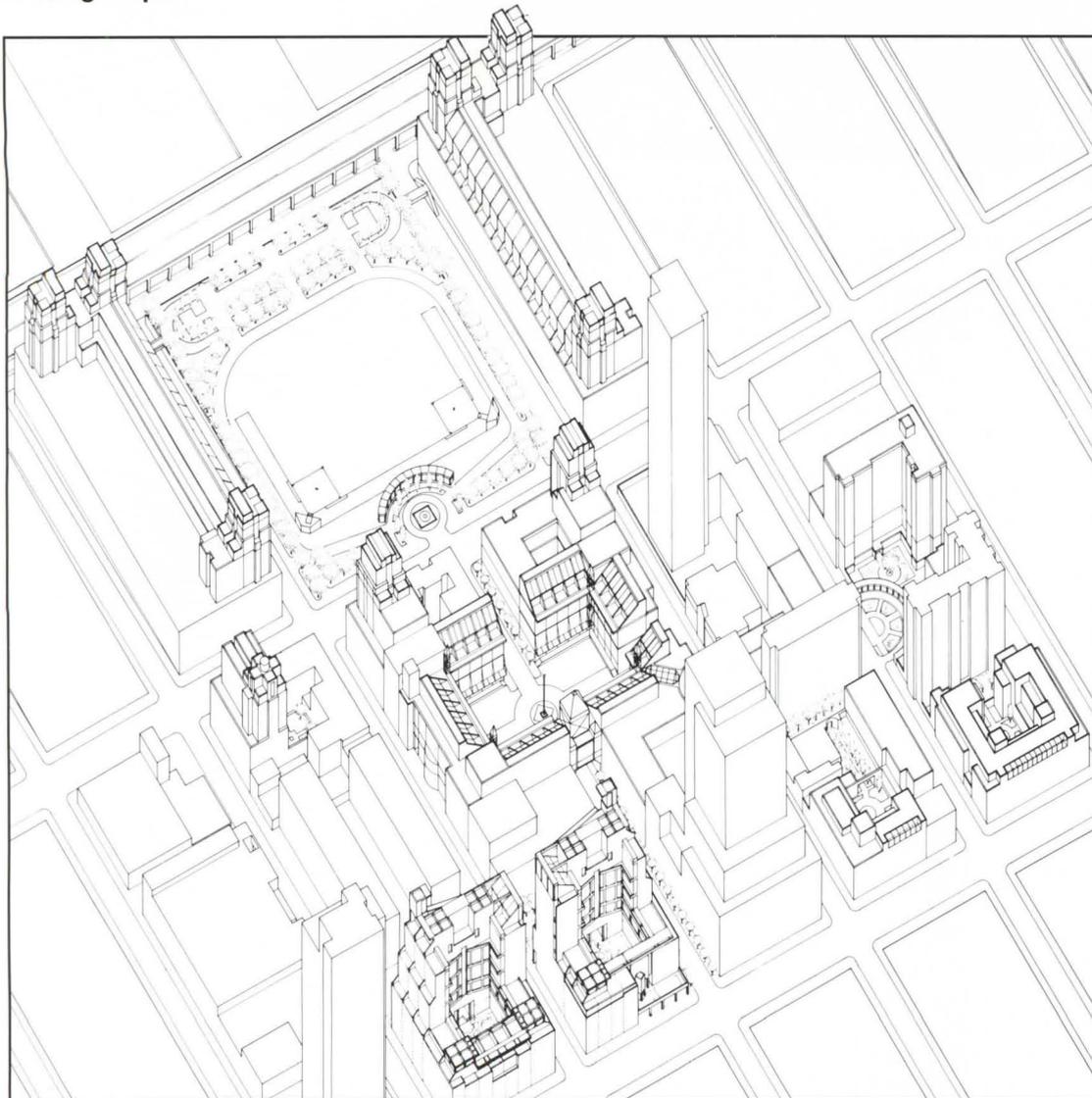
N ↓

100/30m

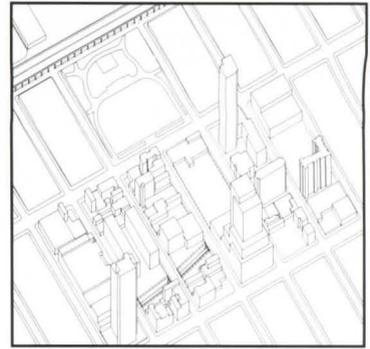
On-The-Job Training

Asian Neighborhood Design is a 15-year-old nonprofit community agency in San Francisco that has rehabilitated over 12 hotels in that city and one, the Madrone (far right), in Oakland. The agency also operates a not-for-profit woodwork shop called Specialty Mills Products, which trains area youth to produce furniture for low-income housing developments. The shop now has 30 workers and has furnished six SRO hotels, including the Harold in LA (see p. 82) and the Madrone. SMP's line of SRO furniture (right) is both homey and durable. Sally Woodbridge





PROPOSED MASTER PLAN



EXISTING NEIGHBORHOOD

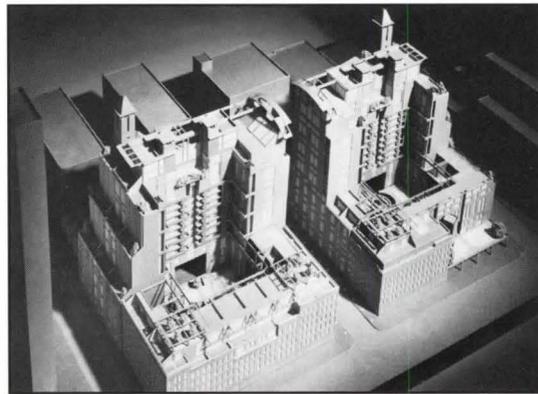
Alternatives to High Rise In New York Housing

"We were able to produce a consensus in a diverse community through design," says architect Steven Peterson of his work in the Clinton neighborhood on New York's West Side. Confronted with the City's request for proposals to build two 30-story towers on Tenth Avenue, the community reacted initially with a knee-jerk negative. "Don't build anything" gave way, however, to hope of a compromise fostered by Peterson/Littenberg Architects, who were hired by the Clinton Preservation Local Development Corporation.

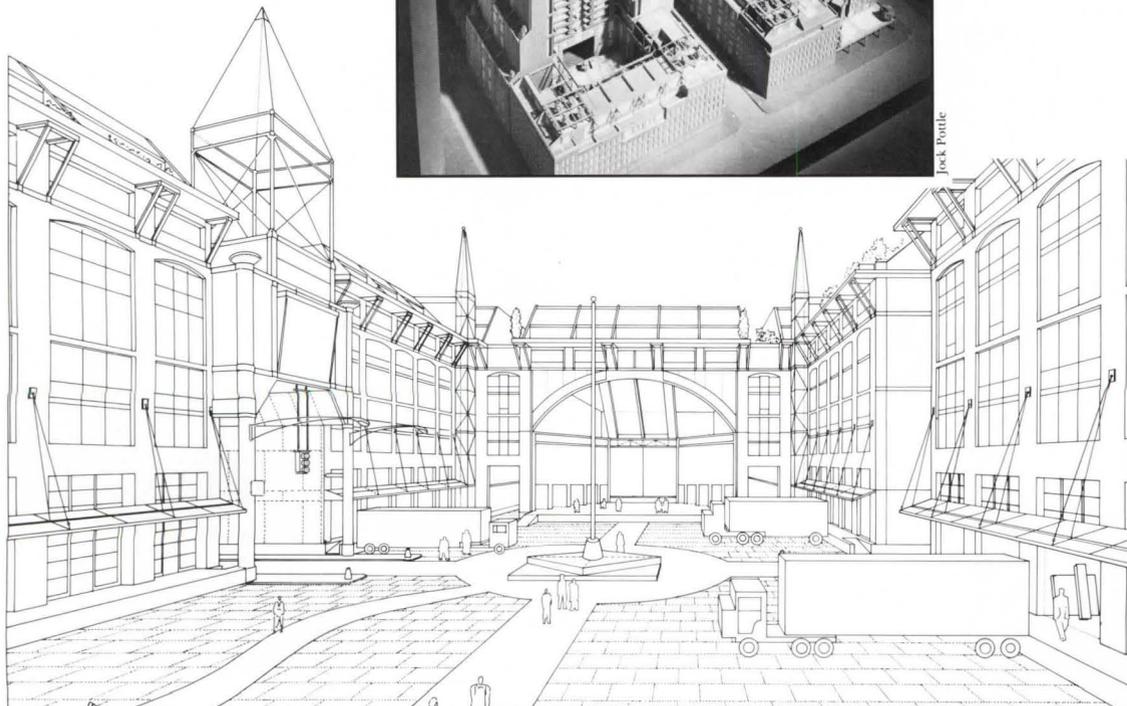
Peterson and partner Barbara Littenberg designed a low- and mid-rise alternative that reused existing walkups on Tenth Avenue while matching the number of dwellings and square footage contained in the city's twin tower proposal. From those two blocks (model, left), "we backed into the master plan," says Peterson, whose firm went on to study the entire six-block urban renewal area (compare axonometrics above).

For some blocks, the proposed master plan would retain the light manufacturing uses now characteristic of the area and build loft housing above (bottom left). The SoHo model, says Peterson "works architecturally and socially," permitting existing commercial tenants to stay while adding new and necessary housing, only 20 percent of which would be market-rate, with 80 percent held for low- or moderate-income tenants.

The community plans to submit the proposal formally to the City as part of a Uniform Land Use Review Process for the area that gets under way this fall. They hope the design will be incorporated as a master plan amendment, which would form a series of design guidelines for future block development.



JECK FORTIC



CLINTON MARKET SQUARE AND AMPHITHEATER

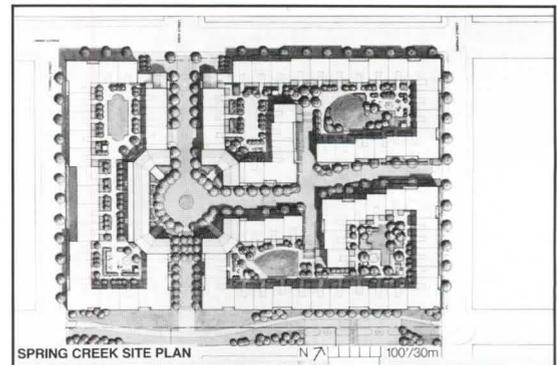
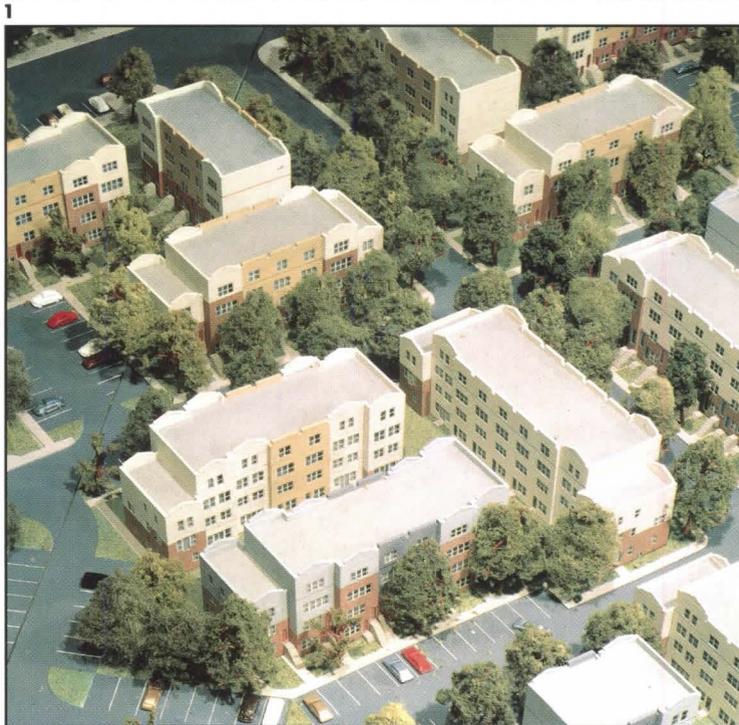
Housing for All Incomes in New York

Building on experience gained by the partners when they worked for the Urban Development Corporation of New York over a decade ago, the Liebman Melting Partnership now has 3000 units of housing—over 90 percent of it affordable housing—totaling \$250 million, in design or construction.

Three projects shown here reflect the unique characteristics of the New York market, where lines of people wait to fill out the forms to buy a \$144,000, two-bedroom duplex in a development of two-family houses in the Bronx. That \$80 million development, called Shorehaven (middle left and right), is aimed, says architect Theodore Liebman, for “those people who can’t make it in Manhattan or Brooklyn.” At a density of 27 units per acre for 1183 units total, Shorehaven is not exactly suburban, but it’s not urban either. “There’s not one square inch of public interior space, no corridors,” says Liebman. (Stairs to the upper unit in the duplex-over-duplex arrangement are internal to that unit.) Cost savings are derived in part from modular construction.

Costs at Spring Creek, a low-income rental project near Kennedy Airport (bottom left and right) are similarly reduced through panelization. Built in return for tax abatements for luxury housing in Manhattan, the \$85 million complex is the antithesis of traditional high-rise, low-income housing. Its low-rise walkups with a maximum of eight units per stair surround secure semipublic space. Parking is buried mid-block beneath the courtyards and wrapped on the street by retail. The 765 units will rent for \$280 to \$400 a month to the “working poor” who earn \$15,000 to \$20,000 a year.

Tibbett Gardens, on the other hand, is targeted for moderate-income (\$25,000–\$48,000) residents who will pay \$107,000 for a two-bedroom unit in the 750-unit Riverdale development (top). As the first project to be built under Mayor Koch’s Affordable Housing Program, the \$35 million project is a model in more ways than one, with special emphasis placed on security, green space, and common facilities, including a laundry on every floor.



2a

3a

2b

Tibbett Gardens (1) in Riverdale designed for the Real Estate Board of New York; Shorehaven (2a, b) in the South Bronx, a Worldwide, Zeckendorf, Arthur Cohen project; and Spring Creek (3a, b) near Kennedy Airport in Queens. (Associate Architects: Philip Birnbaum & Associates, New York), designed for General Atlantic Realty et al.

3b

**LA NIMBY
(Not in My Backyard)**

Architects have a complex and often ambiguous role to play in the intense struggle under way in Los Angeles, and many other Californian cities, between growth and antigrowth forces.

The conflict has been brought into sharp relief by the program for an affordable housing complex in Hollywood, sponsored jointly by the Museum of Contemporary Art and the Los Angeles Community Redevelopment Agency. The proposal is part of a planned 1989 MOCA exhibition titled "Blueprints for Modern Living," which will feature the innovative Case Study houses built in the Los Angeles area from the 1940s through the 1960s.

Designers Eric Owen Moss and Craig Hodgetts of Los Angeles and Adele Naude Santos of Philadelphia competed earlier this year in a limited developer-architect competition for 40 multifamily units on the corner of Franklin and La Brea Avenues—a prominent Hollywood site in an area where many large market-rate apartment complexes have been built recently. In July, the team of Adele Santos and developer Metro Housing was selected as winner by a jury that included MOCA director Richard Koshalek and CRA commissioner Dollie Chapman.

The jury may have been happy with the designs, but local Hollywood residents were not. In a public meeting in March, hosted by Hollywood councilman Michael Woo who supports the project, Moss and Hodgetts were shouted down by a large and hostile audience when they attempted to present slides of their past work. "Forget the architecture! Give us a park!" the residents yelled.

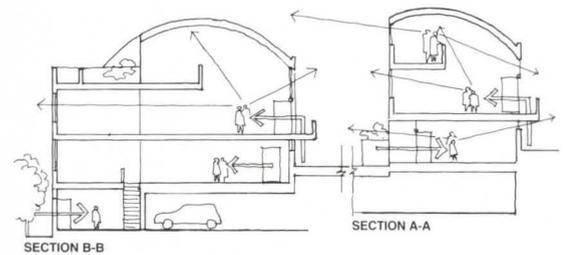
Woo tried in vain to remind the audience of their social responsibility towards less privileged fellow Angelenos. Switching tactics, he then pleaded for "the possibility of having a fine piece of architecture in your area." Both appeals fell on deaf ears.

Hodgetts' comment after the meeting was sad and succinct. He said: "The avant-garde meets the people, and sinks." *Leon Whiteson*

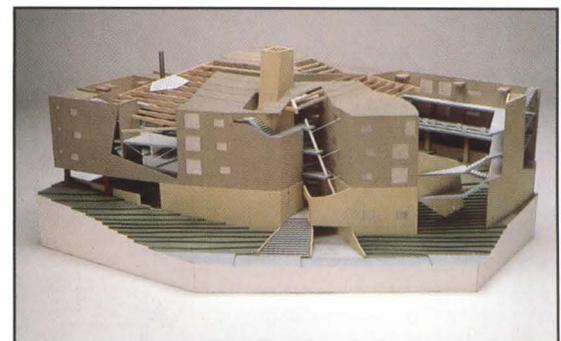
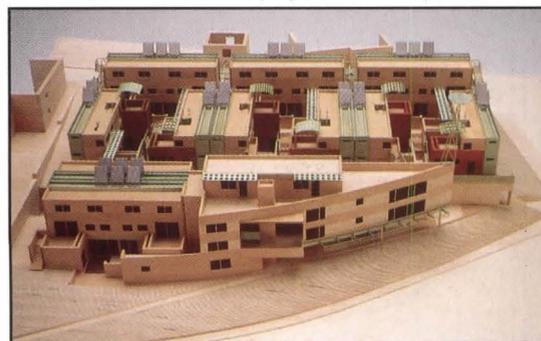
The author is an architecture critic for The Los Angeles Times.



Photos: Squidri & Nunn



Jurors praised the winning design of 40 affordable housing units by Adele Santos (above) for its flexible through-unit plans, some of which have dual entrances from garden and deck (see diagrammatic sections above) and villagelike courtyards (plan, left). Also competing for the commission were Craig Hodgetts (bottom left) and Eric Owen Moss (right).

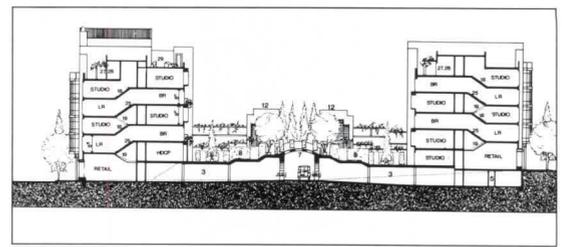
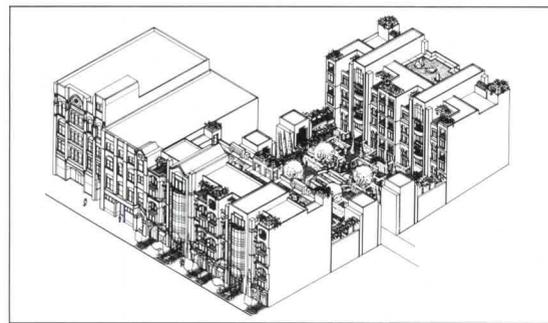


Drawing the Middle Class to Downtown Seattle
 How does a mid-sized American city spark the magical mix of supply and demand for middle-income apartments in its urban core? The Seattle Department of Community Development asked that question in a national architectural competition designed to nudge the city's development community towards increasing the supply of middle-income housing and simultaneously improving the underbuilt neighborhood known as Belltown, adjacent to the central business district. Entrants could pick among 30 sites in four different but typical lot configurations: single infill, double corner (a corner and adjacent lot), four in a row, and back-to-back double lots. Over 400 entries vied for 12 cash prizes (no commissions) totaling \$32,000.

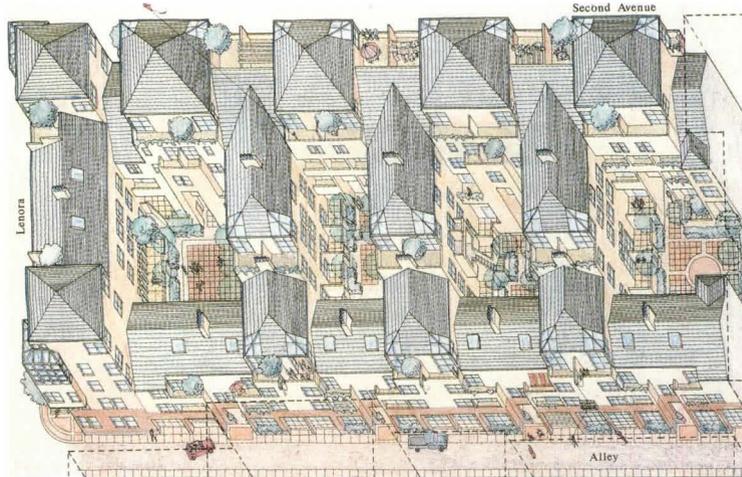
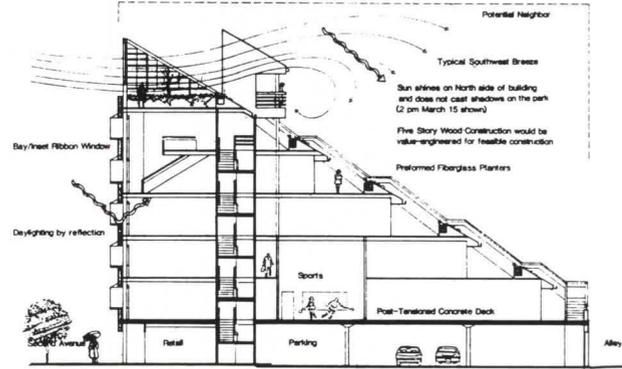
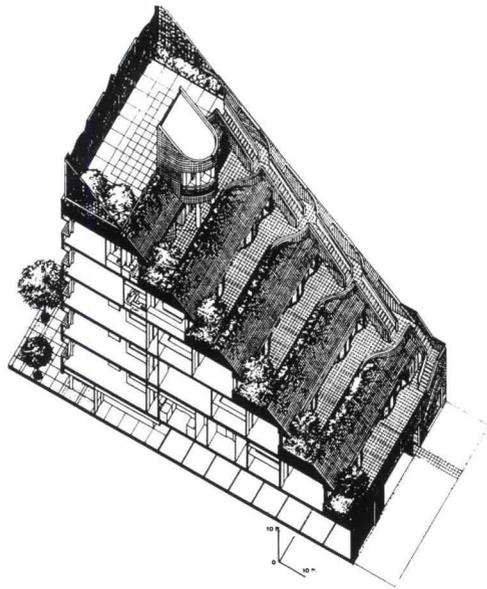
The competition was successful as a public relations effort in that all the local papers carried stories on the results, but real success will require some visionary developers or heavy subsidies, says Seattle contractor Don Etherington who built one of the neighborhood's new low-income apartment buildings. And, although the competition set a minimum of 20 units per lot, developers now say 30 units are necessary to make projects financially feasible without subsidies. Moreover, new ideas, such as terracing buildings towards the midblock alley, building over the alley with private garden courts, or using roofs as social spaces with laundry rooms, jogging track, amphitheater, or public garden, while they impressed the jury, may not fly in the real world.

The DCD hopes, however, to build at least one of the winning schemes with subsidies from commercial development. And Marcia Gamble Guthrie of the DCD is planning a fall symposium on the winning projects and implementation strategies. But in a city in which 80 percent of the land is dedicated to single-family residential neighborhoods within a half-hour bus ride of downtown, the DCD has quite a task ahead in creating the desired new class of urban residents. *Glenn Weiss*

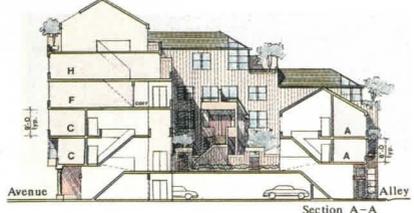
The author is an independent architectural curator in Seattle.



First-place winners in Seattle competition are by category: James Tippett, Mark and Judith Hower, Gene Tompkins, and Gregory Vohs of Seattle for corner double-lot (top); David and Susa Goodale of Santa Monica for back-to-back double lots (above).



DMJM of Phoenix (Jeremy Jones, Gregg Williams, Stephen Aluotto, Nabil and Maha Abou-Haidar) for single lot infill (above); and Pyatok Associates of Oakland, California (Michael Pyatok, L.K. Oon, Wenche Solfeld, and Peter Soland) for four linear lots (below).



P/A Technics

Low Cost, High Design

The Weissenhof development in Stuttgart, West Germany, has been carefully restored. Often studied for its aesthetics, the project also offers many spatial and technical solutions to the problem of low-cost worker housing.

It was famous in its youth, ridiculed and nearly destroyed in its adolescence, abused in its middle years, only to be revived in its old age. It is the Weissenhofsiedlung: an experimental development of low-cost worker housing built in 1927 in the Weissenhof section of Stuttgart, West Germany. Constructed in less than five months for a scant budget of 35DM/cubic meter, the houses and apartment buildings were designed by some of that era's leading Modern architects: Le Corbusier, Mies van der Rohe, Walter Gropius, Peter Behrens, J.J.P. Oud, Hans Scharoun, Ludwig Hilberseimer, and others.

Fame came quickly to the project. In 1928, the founders of the International Congress of Modern Architecture (CIAM), many of whom had designed houses at Weissenhof, pointed to the development as an example of functionalist urban design. And in 1932, Henry-Russell Hitchcock and Philip Johnson saw, in the houses' stucco walls and flat roofs, evidence of an International Style.

But Weissenhofsiedlung's reknown also made it a target of rising right-wing factions in Germany. Shortly after its completion, for example, the development was branded by the conservative press as "a suburb of Jerusalem." In 1938, the Nazis had the buildings evacuated with the intention of tearing them down to make way for a headquarters for the Nazi General Command. Although World War II forced the scrapping of those plans, the fate of the development was nearly sealed when the Germans placed flack guns along the eastern edge of the site overlooking Stuttgart. Allied bombardment of those positions in 1943 leveled 10 of the original 21 structures.

The post-war years brought their own form of abuse to the remaining houses and apartments. Gable roofs were added, open plans enclosed, and windows altered. Years of deferred maintenance also began to take their toll in cracked stucco, corroded steel frames, and crumbled retaining walls. It wasn't until April of 1981 that a government-sponsored restoration was begun, the final phase of which was completed in 1987.

It is ironic that the Weissenhofsiedlung has been restored in a period of eclipse for the International Style and functionalist urban design. Yet, in another sense, the restoration is timely, for we may be more receptive now to the spatial and technological innovations that were largely ignored by Hitchcock and Johnson.

The architects at Weissenhof took two different approaches to reducing the square footage and with it the cost of housing. Some, such as Mies van der Rohe, Le Corbusier, Mart Stam, and Hans Scharoun, used mova-

ble walls or freestanding partitions to open up the house interiors, making small spaces appear larger and, in the case of Le Corbusier, finding ways for living areas to double as sleeping spaces. Others, such as J.J.P. Oud and Peter Behrens, created more conventional plans, but worked them out so that, in the case of Behrens, every apartment had cross-ventilation and access to a private terrace, or in the case of Oud, every square foot of space was efficiently used.

Ways of reducing the cost of construction also were explored by most of the architects. Victor Bourgeois, Ludwig Hilberseimer, Richard Döcker, and Josef Frank, for example, used innovative construction systems developed by engineer Albert Feifel. The most unconventional of these, called the "Feifel-zickzack" system, involved nailing boards in a zigzag pattern and using them as permanent formwork for poured concrete floors and as the wall structure. Other Feifel inventions included oversized L-shaped bricks that reduced heat transfer through the joints and reduced the labor required to build a masonry wall, and oversized bricks with horizontal cells that prevented the thermal cycling possible in vertical brick cavities.

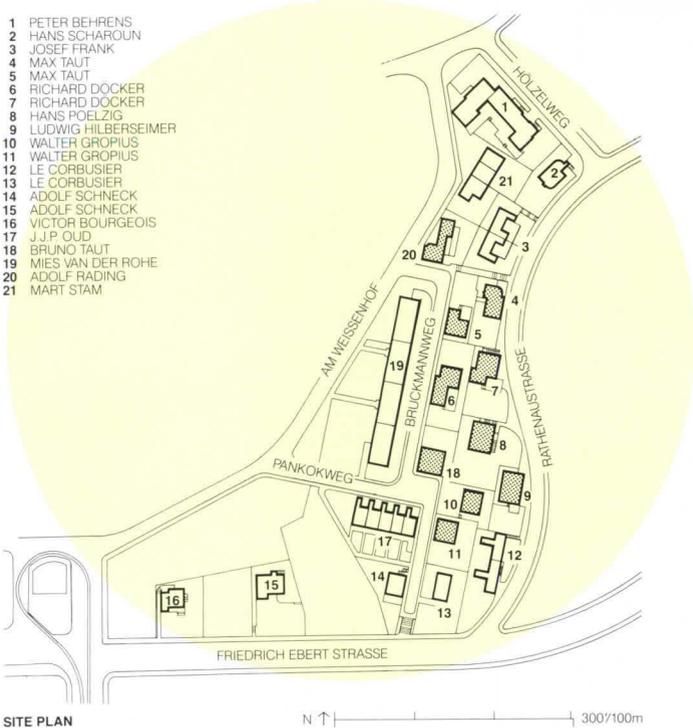
Interested in prefabrication, Walter Gropius developed (for a house destroyed during the war) a steel-framed construction system that featured interlocking cork-board insulation and asbestos panels fastened to blocking on both the interior and exterior walls. Gropius and others refined this system in later houses.

The ongoing operating costs of the housing also was a concern of several architects. Hans Scharoun, for example, reduced heating costs with "thermosplatten," insulating panels consisting of a wood box frame set between the joists and filled with many layers of heavy paper separated by wood blocking.

Many of the spatial and technical innovations at Weissenhof became widely adopted. The idea of built-in storage cabinets in Le Corbusier's double house, gypsum board walls in Josef Frank's house, and poured gypsum subfloors in Mies's apartment building are all techniques still in use today. The most impressive feature about the development, however, was the willingness of so many leading architects to explore and of the City of Stuttgart to support such innovation. The restoration of Weissenhofsiedlung is not just a window to an era when the housing problem challenged some of the best minds and greatest architectural talent in Europe, but a mirror to our own place and time, where—shamefully—it has not.

Thomas Fisher ■

- 1 PETER BEHRENS
- 2 HANS SCHAROUN
- 3 JOSEF FRANK
- 4 MAX TAUT
- 5 MAX TAUT
- 6 RICHARD DOCKER
- 7 RICHARD DOCKER
- 8 HANS POELZIG
- 9 LUDWIG HILBERSEIMER
- 10 WALTER GROPIUS
- 11 WALTER GROPIUS
- 12 LE CORBUSIER
- 13 LE CORBUSIER
- 14 ADOLF SCHNECK
- 15 ADOLF SCHNECK
- 16 VICTOR BOURGEOIS
- 17 J. P. OUD
- 18 BRUNO TAUT
- 19 MIES VAN DER ROHE
- 20 ADOLF RADING
- 21 MART STAM



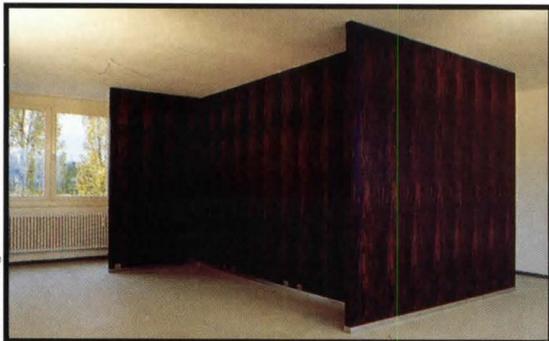
Mies van der Rohe's original site plan for the Weissenhofsiedlung followed the S-shaped curve of the site's eastern edge with a series of low buildings and terraces. But for reasons of cost and flexibility, the final site plan was more conventional (left), with apartment blocks and rowhouses along the higher, western side of the site and separate villas along the eastern edge. Ten of the original 21 structures (shaded on the site plan) were destroyed during or just after World War II. Photographs of the development taken soon after its completion (below) show the consistent vocabulary of the buildings.



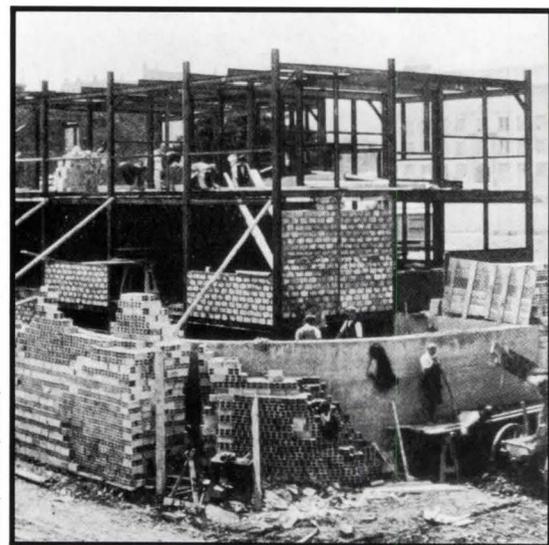
Mies van der Rohe Apartment building
The largest building in the development, this apartment building, designed by Mies (top right), contains 24 units grouped around four stair towers with roof gardens, laundry rooms, and storage cubicles on the top floor (facing page). Sixteen different architects designed the apartment layouts; Mies himself designed one whose free layout (circled on the plan) creates a greater sense of space than the other, more conventional room arrangements. The Mies apartment (middle right) contained a central, Z-shaped partition with a slip-matched Madagascar Ebony veneer. Although that finish material was expensive, the structure that Mies designed was inexpensive to build. The steel frame structure incorporates infill brick and thin block (bottom right) to which the cement stucco and gypsum plaster were directly applied. The interiors contain such low-cost materials as pumice blocks, celotex panels, plywood, and linoleum. Other cost-saving techniques included the use of repetitive window units, stacked plumbing fixtures, and minimal public circulation space. Little provision was made for sun control, however, and there was little insulation in the exterior envelope (4 cm of a peatlike material). The restoration architects had the windows set back slightly and exterior shades installed. They also replaced the stucco with an exterior insulation system by STO, finished to match the building's original cream-color walls and brown roof terraces.



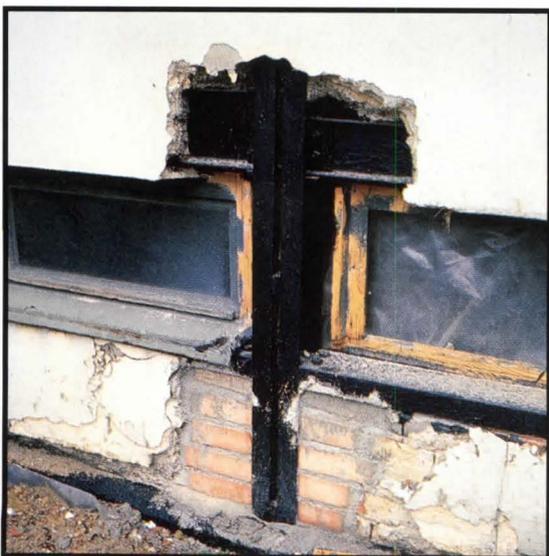
Uwe Rau



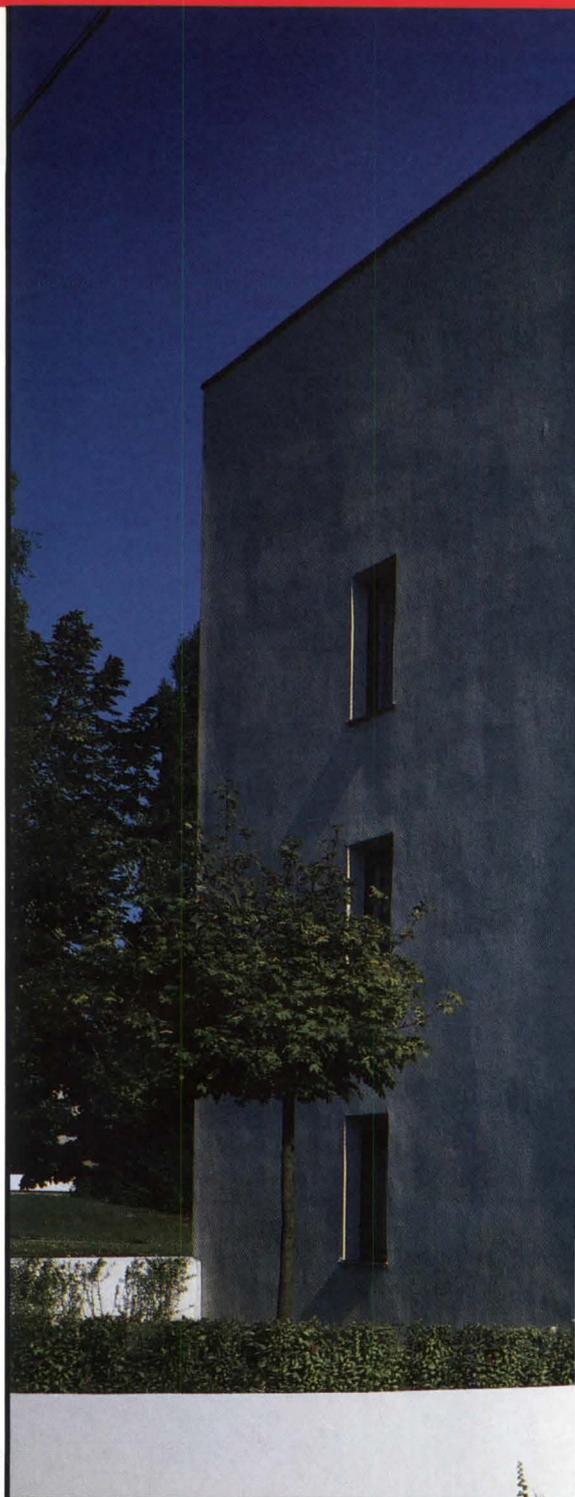
Hermann Nagele



Courtesy of Avery Library



Courtesy of STO



Uwe Rau



THIRD FLOOR PLAN



N → |—————| 20/6m

**J.J.P. Oud
Rowhouses**

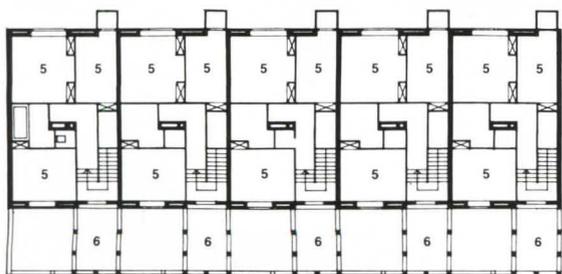
Dutch architect J.J.P. Oud was a functionalist, and it shows in the thoughtful planning of these rowhouses. For example, the garden façades (top right) have small concrete seats adjacent to the front doors for sitting or resting packages. The back entrances (middle right) have shoulder-height gates so that delivery people could be seen and heard from the kitchen without the back door having to be opened. And rear washing rooms (with built-in cabinets for clean and dirty laundry) were designed to have hand-operated lifts to take clothes up to the second-floor drying rooms, where bands of narrow, operable windows fostered cross ventilation. (These back rooms also doubled as storage or sleeping rooms.) Oud's rowhouses are notable not only for their attention to such details, but for their low cost. Oud was one of few architects at the Weissenhofsiedlung who actually met the very tight budget of 35DM/cubic meter. One reason for that may have been that the concrete building system that Oud used was familiar to the contractors (bottom right). Concrete with a lightweight aggregate was used for the bearing walls and the exterior cavity walls. Other concrete walls had brick cores.



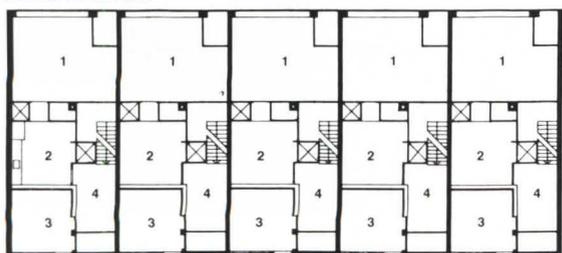
Uwe Raut



Uwe Raut



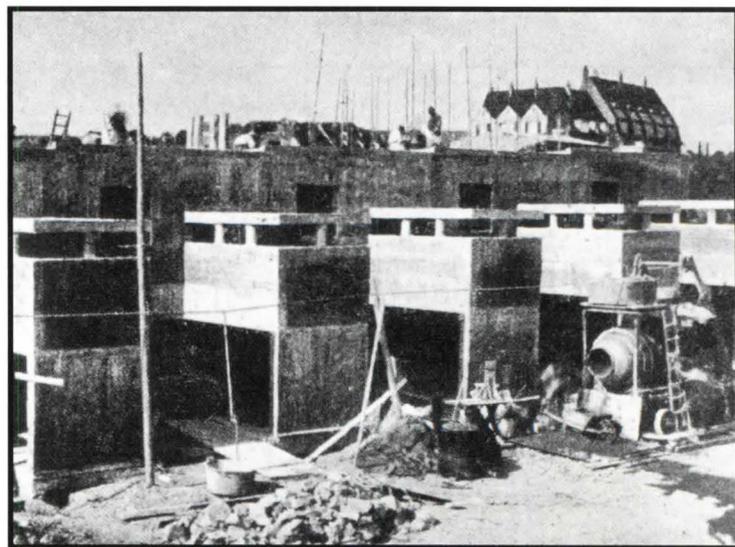
SECOND FLOOR PLAN



FIRST FLOOR PLAN

N ↓ 20/6m

- 1 LIVING/DINING
- 2 KITCHEN
- 3 COURT
- 4 LAUNDRY
- 5 BEDROOM
- 6 DRYING ROOM



Courtesy of Avery Library

Uwe Rau



Mart Stam Rowhouses
 Like J.J.P. Oud, Dutch architect Mart Stam capitalized on the repetitive nature of rowhouses to reduce costs. But unlike Oud's more conventional plans, Stam's employed sliding walls to open up the small interiors of the rowhouses as much as possible. A triple-paneled wall on the first floor (middle left) slides into a pocket to open the relatively large entrance hall to the combined living and dining room; spatial definition is otherwise maintained by a change in wall color. A pass-through opening between the kitchen and dining room visually connects those two spaces. On the second floor, a sliding wall also allows the bathroom to open out to the hall (bottom right). Even in the playrooms adjacent to the back gardens, the steel stairs (bottom left) have minimal rails and no risers to allow as much natural light as possible to penetrate into the basements. Construction of the rowhouses was fairly conventional, using a steel skeleton with concrete block infill. However, their exterior color—light blue façades, deep blue entrance surrounds and soffits, yellow side and rear walls—is anything but conventional (above left), and dispels the idea that International Style buildings were always white.

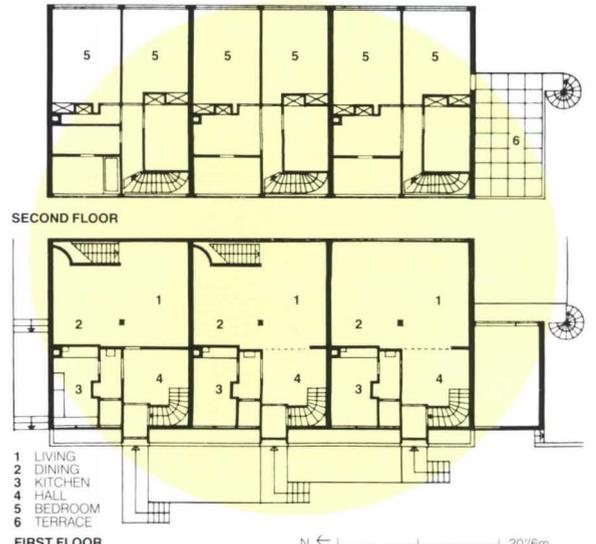
Hermann Nägele



Hermann Nägele

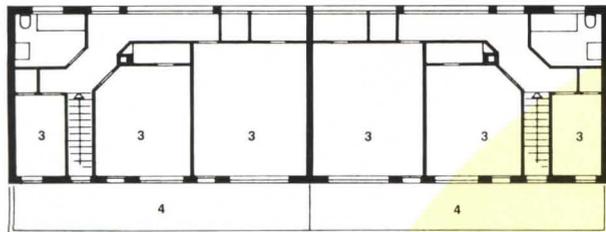
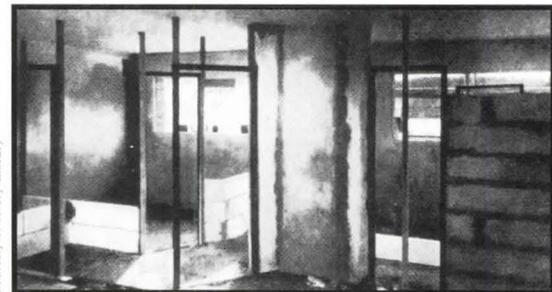
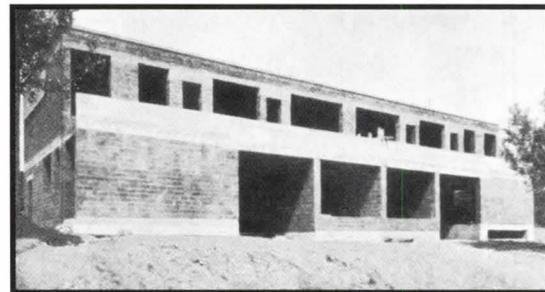


Hermann Nägele



**Josef Frank
Double house**

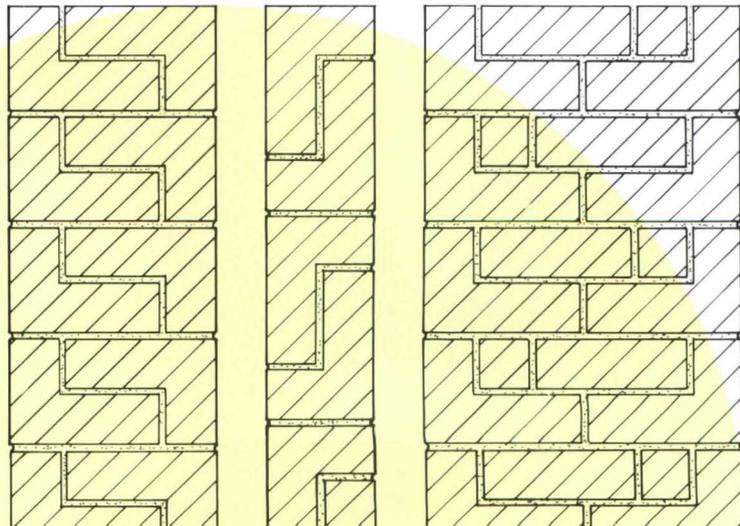
This house, designed by Viennese architect Josef Frank, is one of the most technically innovative of the buildings. It is a double house (bottom left). The two units each contain a block of service functions—kitchen, bathroom, entry hall—adjacent to an L-shaped living/dining area. The second floor of each unit, set back to form a continuous terrace (above right), has bedrooms facing west and arranged along a single-loaded corridor. However, the significance of this double house for contemporary low-cost housing lies not in its plan, since each unit is relatively large, but in its construction. Frank used a structural system of brick bearing walls and concrete lintels and slabs (middle left). To reduce the labor and material required and to lower the amount of heat lost via through-joints, Frank employed a system of large, L-shaped bricks, developed by the engineer Albert Feifel, that accommodated a variety of wall thicknesses (bottom right). For interior partitions, Frank used another unusual system. Horizontal gypsum panels, with tongue-and-groove edges, were stacked and held in place by widely spaced vertical steel studs that doubled as interior door frames (middle right).



SECOND FLOOR PLAN



FIRST FLOOR PLAN



WALL SECTIONS SHOWING ALBERT FEIFEL'S BRICK SYSTEM

Uwe Rau

Courtesy of Avery Library

Courtesy of Avery Library

Drawing: Garry Hartley



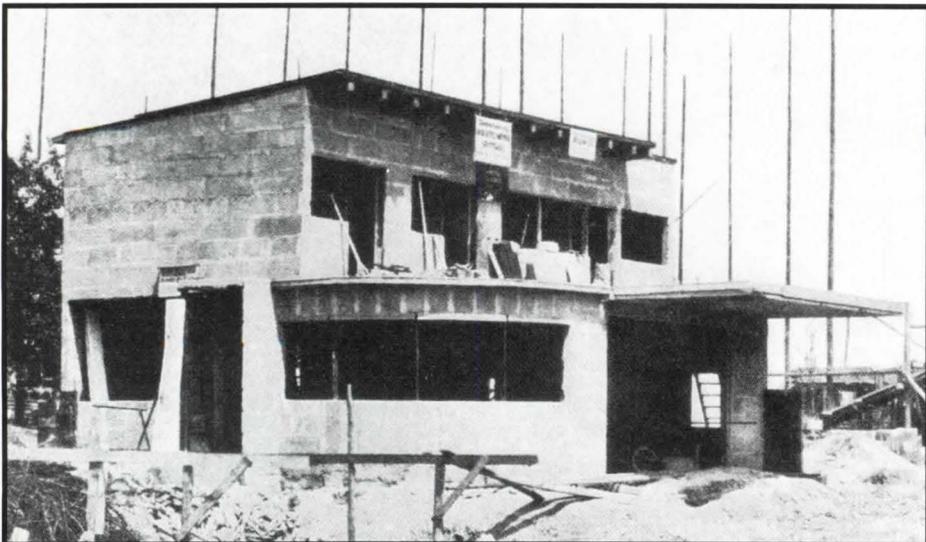
Hans Scharoun
Single-family house
 Hans Scharoun's single-family residence is more a villa than it is worker housing, although it too used some innovative construction methods. Formally, such elements as the expressed, quarter-circle stair on the entrance façade (top left) and the brightly colored, planar composition of the living room (middle left) look ahead to Scharoun's later, more sculptural work. It is in the plans (bottom right) and the garden side of the house (middle right) that the house's underlying order is revealed: Two blocks, each with a curved end, about a central circulation path (plans, bottom right). The house has a steel frame structure with large pumice blocks used as the substrate for the exterior stucco (bottom left) and interior gypsum board. Under the roof, affixed to the steel frame, are wood-framed insulating panels that contain layers of a heavy paper creating dead air spaces.

Uwe Rau

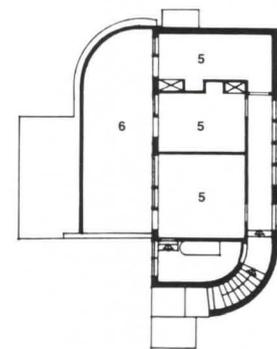


Waltraud Kruse

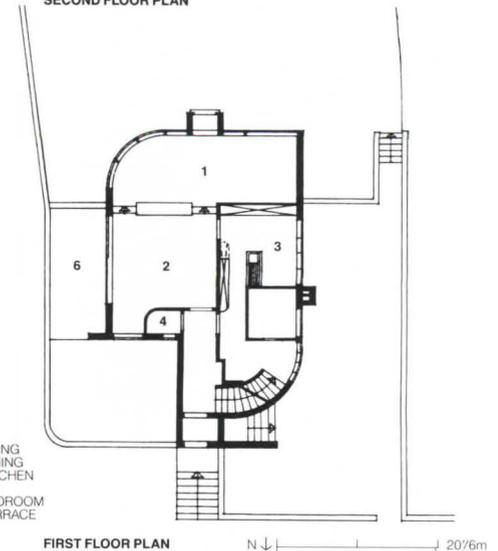
Waltraud Kruse



Courtesy of Avery Library



SECOND FLOOR PLAN



- 1 LIVING
- 2 DINING
- 3 KITCHEN
- 4 WC
- 5 BEDROOM
- 6 TERRACE

FIRST FLOOR PLAN

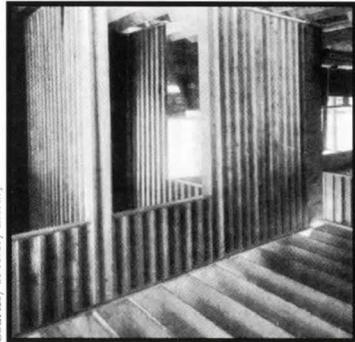
N ↓ 20/6m

Victor Bourgeois
Single-family house
 The Flemish architect Victor Bourgeois was 30 years old when he designed this house (right). It is simply organized, with the major living and sleeping rooms facing south and service spaces such as the kitchen, entry, and stairs along the north side. The house is most interesting for its construction. The outside walls were built of hollow pumice blocks, which were plastered on one side and stuccoed on the other. The floor, roof, and interior walls used Albert Feifel's "zickzack" system (middle right), which involved the fastening together of rough boards in an accordion arrangement to serve as permanent formwork for concrete floor and roof decks and as structural support and a nailbase for interior walls.

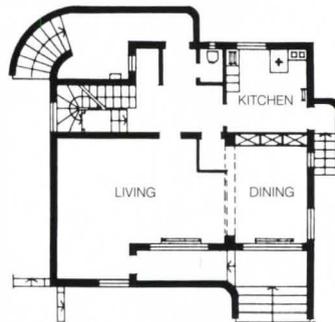
Peter Behrens
Apartment building
 Peter Behrens' apartment building, like that of Mies, has units clustered around stair towers. But unlike Mies, Behrens offset the units in both plan (bottom left) and section to create balconies or terraces for every apartment (bottom right). The building had bearing walls of hollow pumice blocks with reinforced concrete decks, which were underdesigned and had to be rebuilt.



Uwe Rau



Courtesy of Avery Library



FIRST FLOOR PLAN



SECOND FLOOR PLAN N ↑ 20'/6m

- 1 LIVING/DINING
- 2 KITCHEN
- 3 BEDROOM



FIRST FLOOR

N ↓ 20'/6m



Uwe Rau



Uwe Rau

Le Corbusier
Single-family house
 This house (above left) was the first built version of the Citrohan houses that Le Corbusier had developed at least five years earlier as a solution to the housing problem. As in those earlier schemes, this house has a two-story living area, roof garden, pilotis, and cascading stairs. Although the house, with its reinforced-concrete frame and pumice-block walls, did come in considerably over budget, the design did address the issue of space allocation in low-cost housing. Corb believed that the living areas, in which people spend most of their time, should be large and airy, and that sleeping rooms and other service spaces, in which people spend relatively little time, should be smaller than required by building codes. The plans (middle left) reflect that idea, with their overly large living/dining space on the second floor and the small bedrooms on the top floor.

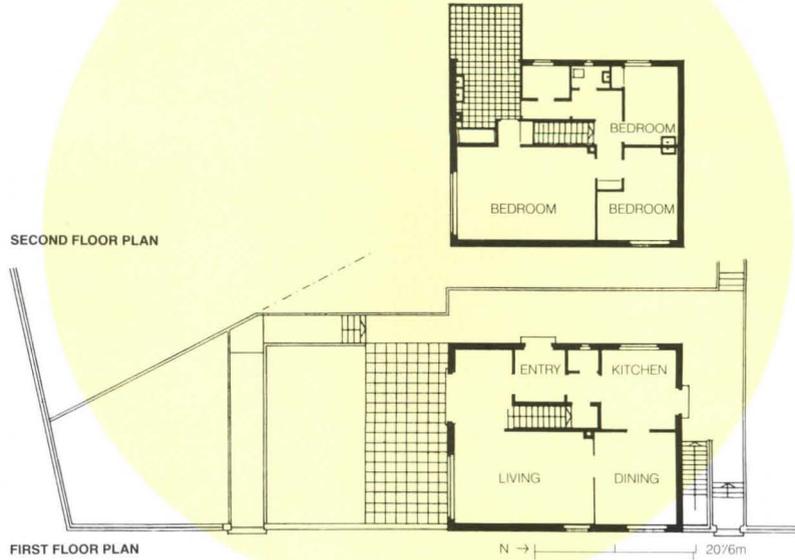


N ↑ 20/6m

Adolf Schneck
Single-family house
 Schneck designed two houses for the Weissenhof-siedlung, one of which is shown here (bottom). Constructed of hollow pumice block bearing walls and reinforced concrete decks, the house has plywood panels on some interior walls.



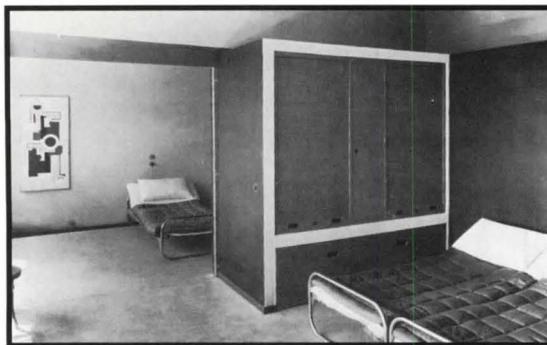
Uwe Rau



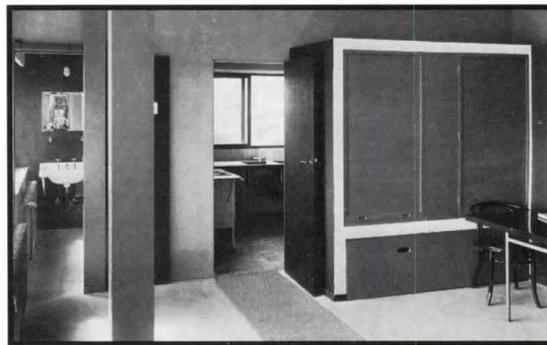
N → 20/6m

**Le Corbusier
Double house**

Le Corbusier also went considerably over the budget on this double house (right, facing page), although it too offers a serious solution to the low-cost housing problem. Likening his plan to a sleeping car on a train (plans, bottom) Corb placed, within the main living space, concrete-framed storage units whose bottom section housed folding beds that could be pulled out and set up at night (historic photos, top left). Sliding walls, stored against the concrete units, also could be extended at night to provide visual privacy (middle); the walls slid between paired structural columns (visible in photo on facing page) to gain lateral support. To minimize plumbing cost, Corb placed the kitchen and bathroom along the end wall, and to ease access to the bedrooms, he ran a narrow corridor—the width of those in sleeping cars—along the eastern side of the house. Stairs and enclosed rooms that afforded more quiet (Corb recommended such uses there as a breakfast room or library) occupy two rear blocks that run perpendicular to the main block and are painted a light green (top right). Colors elsewhere in the building are more vivid and show Corb's painterly side. The entrance level, for example, has a sienna back wall, a dark red party wall, and navy blue pilotis (facing page). The blue columns and sienna back wall reappear in the main living space (middle), while in the small spaces behind the stairs, Corb specified ocher, sienna, brown, and black-gray for the walls in just one room. One reason for the high cost of the structure (constructed of steel with concrete decks and pumice-block walls) is its steeply sloped site which required extensive site work, retaining walls, and stairs (facing page).



Landsbibliothek Würtemberg



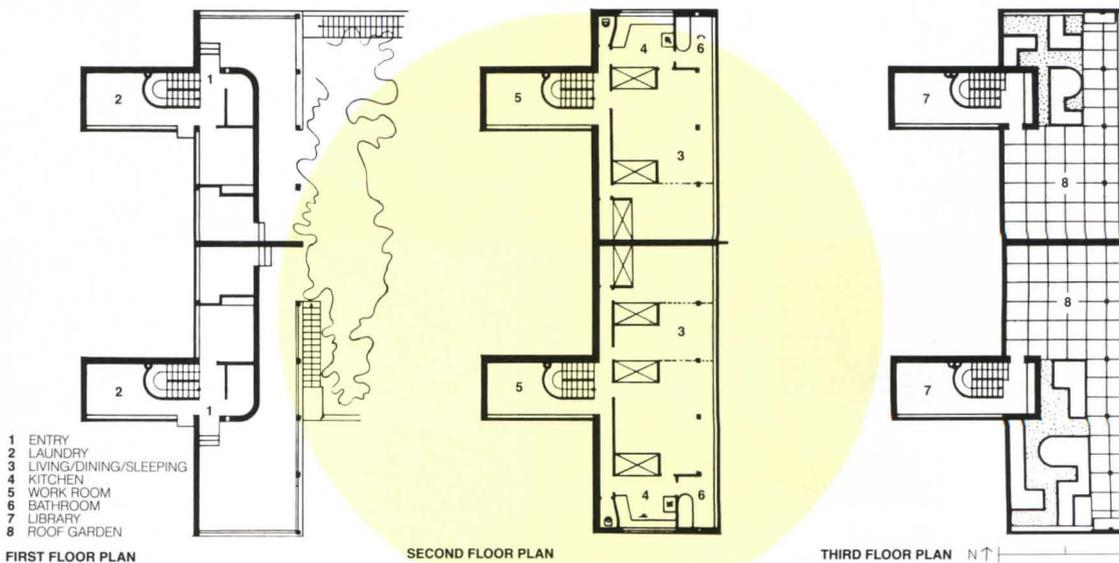
Landsbibliothek Würtemberg



Karl H. Kraemer

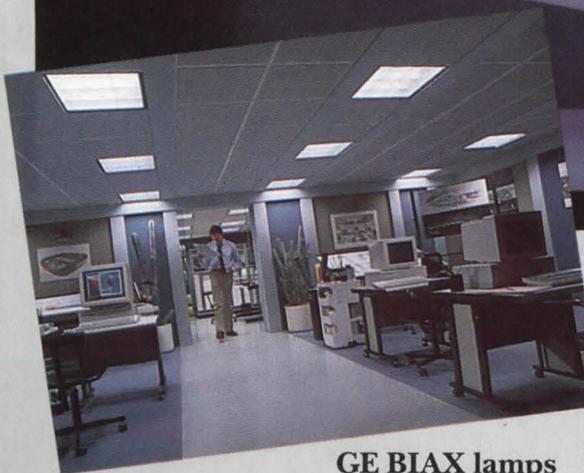


Hermann Nagel





GE IS THE LIGHT THAT WILL RESHAPE THE WAY



**GE BIAX lamps
make everybody and everything,
including operating costs, look better.**



It won't take you long to discover that with GE BIAX™ 40-watt lamps, the design possibilities are endless.

Because they're only 22.5 inches long, yet deliver all the light of standard four-foot fluorescents, you can design with smaller fixtures. And that means more attractive ceilings.

And because BIAX lamps make colors look richer and more vibrant than standard fluorescents,

YOU DESIGN LIGHTING.



cents can, the lighting you design will make the environment and the people who work in it more attractive.

Equally attractive is the amount your clients will save on operating costs. GE BIAX 40-watt lamps, you see, last up to 8,000 hours longer than conventional U-shaped tubes. And 13 times longer than incandescents.

Feast your imagination on the endless pos-

sibilities of the GE BIAX family of lamps.

For more product or application information, call your local GE Specification Area Manager. Or call the GE Lighting Information Center at 1-800-523-5520.



GE is Light.

GE Lighting

The Conde House collection includes



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



It is a diverse collection with a common focus



on fine design, craftsmanship and exceptional wood finishes.



Call your nearest Conde House representative for more information.

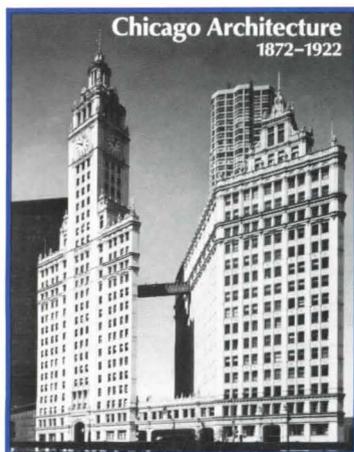
Circle No. 316

Conde House 200 Kansas Street #225
San Francisco CA 94103 Telephone 415 864 8666
Birmingham, MI: 313 646 0097. Boston: 617 268 5020. Charlotte, N.C.: 704 365 3500. Dallas: 214 698 9296.
Houston: 713 961 9220. Los Angeles: 213 652 7090. New York: 212 753 8906.
St. Louis: 314 241 3324. Smithfield, N.C.: 919 934 3773.

CONDE
HOUSE

Chicago Architecture 1872–1922, edited by John Zukowsky. Munich, Prestel-Verlag, in association with the Art Institute of Chicago, 1987. 480 pp., illus., \$60.00.

In the Shadow of Mies: Ludwig Hilberseimer by Richard Pommer, David Spaeth, and Kevin Harrington. New York, Rizzoli, 1988. 144 pp., illus., \$19.95.



Chicago and Europe

Based on a traveling exhibit (see P/A, Dec. 1987, pp. 23–24; Sept. 1988, pp. 23, 28), this sumptuous book of extensive text and 585 illustrations is a collection of 20 essays aimed chiefly at the interrelations between European and Chicago architecture. The largest group, comprising 11 chapters, is concerned thematically with European influences on Chicago architecture, chiefly German, Beaux-Arts, and Ruskinian. Among the remainder, six treat Chicago architecture in itself, as a largely original body of design; the first two chapters are introductory, although the second, by Ross Miller, contains some fresh insights into the place of the Fire in the creation of the Chicago myth; the final chapter is Stanley Tigerman's testament, which presents the well-worn argument that Sullivan, Wright, and Mies were the heroes, the rest followers and imitators (a view that seems to disprove the preceding 19 chapters).

Gerald Larson's essay on the evolution of iron framing in England, France, and the United States is the best historical piece and the one that at last places the Chicago Skyscraper in its proper perspective. The Home Insurance Building is properly dismissed, but two steps in this development deserve further exploration—namely, the pioneer achievements of William Strutt and Charles Bage in the 18th Century, and the growing application of experimental science to structural design. I would single out Roula Geraniotis's entry on German contributions to Chicago architecture as the most original and detailed in the category of European influences. A high proportion of the city's architects in the heroic age were born or educated in Germany.

On the subject of Burnham and Bennett's Chicago Plan, Joan Draper is an authority, and she carefully spells out its French antecedents in her contribution. On final balance, however, the

(continued on page 114)

Two Hilberseimers

The designs of Ludwig Hilberseimer (1885–1967), the German city planner who taught at the Bauhaus and, with Mies van der Rohe, at Illinois Institute of Technology, were either idealized and humane or cold and formal. Take your pick; both views are argued in *In the Shadow of Mies*, a new evaluation of Hilberseimer's work published by the Chicago Art Institute, which holds Hilberseimer's papers.

Richard Pommer's opening essay covers Hilberseimer's career in the years before he came to America. The essay's title, "More a Necropolis than a Metropolis," is taken from Hilberseimer's own later assessment of his early planning efforts, most notably his High Rise City project of 1924. Pommer traces the erratic changes in Hilberseimer's own theories, from Classical planning to treeless high-rise cities to wide-open garden suburbs, emphasizing Hilberseimer's failure to look beyond obsessive formalism and see the people who would inhabit his cities.

The essays by David Spaeth and Kevin Harrington discuss Hilberseimer's later work in America. Spaeth calls this work "holistic" and sees it containing viable and humane solutions. He points to the Lafayette Park redevelopment project in Detroit, designed with Mies, as a successful design that applies Modern principles to an existing urban fabric. Harrington details the socio-political aspects of Hilberseimer's postwar plan for the south side of Chicago.

The book also contains some of Hilberseimer's own essays, and a portfolio of his architectural work, including his contribution to the 1927 Weissenhof exhibition. What the book lacks, unfortunately, is a cohesive body of biographical information. Consequently, the book is unable to pull together the German Hilberseimer of Pommer's essay and the American of Spaeth's.

Mark Alden Branch

UIA Journal of Architectural Theory and Criticism, Vol. 1, No. 1. International Union of Architects. New York, Rizzoli, 1988. 96 pp., illus., \$25. The premiere issue of *UIA Journal*, "Vision of the Modern," includes essays and features on a diverse group of contemporary architects. Charles Jencks's essay defines current architecture as a "two-party system": Late-Modernists and Post-Modernists.

Interior Design by John F. Pile. New York, Harry N. Abrams, 1988. 544 pp., illus., \$49.50. This exhaustive introduction to interior design covers materials, furniture, and planning, along with discussions of the profession's history and business practices.

The Battle of St. Bart's by Brent Brolin. New York, Morrow, 1988. 288 pp., illus., \$18.95.

While the preservation dispute surrounding New York's St. Bartholomew's Church is still unresolved, Brolin has written a detailed account of the intrachurch and legal maneuvers employed so far. His approach is more journalistic than philosophical; those looking for insight into the larger issues raised by the battle should look elsewhere.

James Stewart Polshek: Context and Responsibility. New York, Rizzoli, 1988. 258 pp., illus., \$45 cloth, \$29.95 paper. Polshek's monograph spans 30 years of projects grouped thematically, and includes an autobiographical essay called "Notes on my Life and Work."

Managing, Marketing, and Budgeting for the A/E Office by George and Jan Head. New York, Van Nostrand Reinhold, 1988. 233 pp., illus., \$34.95. The title says it all in this dry, no-nonsense approach to running an A/E firm. The book is of greatest use to the small firm owner or principal.

(continued from page 113)

essay seems inconclusive: She comes close to saying that the plan is permanently valid, but qualifies her assertions in so many ways that we are not quite sure how it stands among modern urban plans. Elaine Herrington's chapter on the Glessner House is a model of architectural history, with Richardson's French antecedents well documented as a basis for a room-by-room description of the house, its furnishings, and its wall decor. Unfortunately, Mrs. Herrington says nothing about utilities—chiefly heating and plumbing—so that two essential rooms in the house go undescribed. By 1887, plumbing fixtures had reached a high level of design and reliability, and it is time that we had a proper account of kitchen and bathroom elements.

Richard Guy Wilson's chapter on Chicago and the Arts and Crafts movement properly follows the debt architects owed to this brief but influential phase of modern architecture, and he expertly draws into a unified account the multiple aspects of this diverse body of work. Lauren Weingarden's essay on Sullivan's ornament is the most philosophical contribution and deserves a review in itself. She offers a searching literary-symbolic reading of the ornament, but she fails to relate ornament to architectural form, and her claim that it is architectural "Poetics" is less than justice to Aristotle.

Robert Brueggemann's comparative examination of European and American entries in the Tribune Competition is an illuminating inquiry into the different attitudes of European and American architects toward the city and the skyscraper, with the Americans coming out well ahead. It underscores once again the unanswered question: What compelled American architects, who had created and mastered the skyscraper, to surrender to the Bauhaus and Le Corbusier, whose Neo-Platonic world bore little relation to history and to humanity?

Among the chapters that treat Chicago architecture as it evolved out of its own local conditions and solutions, Neil Harris's "Shopping—Chicago Style" strikes me as the best. He traces the rise of the department store from its beginnings in the warehouse, through the wholesale store, to the magnificent State Street emporiums, embellished with interior light courts and sophisticated ornament while



Bird's-eye view of Chicago near the Board of Trade in 1898.

keeping their humble origins intact in their sober articulated walls. Three entries, two by William Westfall on commercial-industrial buildings and hotels respectively, and one by Thomas Schlereth on the work of Solon S. Beman, reveal at once the strength and the weakness of a multisubject collaborative compilation. In the earlier piece, Professor Westfall focuses on grain elevators and speculative loft buildings, giving us original insights into the special relations among structure, function, and external form, but omitting entirely the city's greatest works of industrial architecture, in which the demands of industry were translated into an extraordinary kind of high design. The essay on hotels fares better because of its concentration on the Second Empire and Classical splendors of Marshall & Fox and of Holabird & Roche. But his treatment, like so many chapters in the book, is pictorial and external. Hotel architecture in the United States passed beyond its European counterpart by the mid-19th Century, and before 1900 the leading architects and engineers of the American hotel, concentrated in New York and Chicago, achieved total mastery of the intricate problems associated with planning internal spaces and working out the unique forms of braced framing necessary to support and enclose them.

Schlereth's survey of Beman's work, focusing chiefly on Pullman and its antecedents in the English planned industrial community, suffers from the attempt to examine the diversified corpus of an architect's lifetime achievement in a single article. The result is a rather breezy treatment, but at least it serves to rescue Beman from undeserved neglect. Professor

Sally Chappell's entry on the Wrigley Building, restricted to a single work, does full visual justice to this prize piece of Chicago architecture, still the dazzling prima donna in the great skyscraper enclave of Michigan Avenue and the River.

David Van Zanten's essay on Griffin's Canberra Plan stands in a separate category. It provides a thoroughgoing account of a remarkable event in urban history—namely, the creation of an original plan by a relatively unknown Midwesterner for the projected capital of a distant nation in the British Commonwealth. What gives the article its illuminating quality is the author's comparison of a humane and democratic design with the plans for New Delhi and Pretoria, where racist and ethnic authoritarianism was unmistakably implied in the symbolic trappings of imperialism. There were Beaux-Arts influences in Griffin's project—how could one escape them?—but they came by way of the Columbian and Louisiana Purchase Expositions. It took 50 years for the excellence of the Canberra plan to gain recognition and to be brought to realization, and we are grateful to Professor Van Zanten for giving us a convincing description of what town planning can be.

I have omitted a few chapters because, while they add to the total view of Chicago's architecture, they do not offer any novel insights. A critique of the whole might be more useful. The volume was derived from an exhibit and thus had to be tailored to the selected material, but since some entries transcend such possible limitations, I feel free to point out that it falls conspicuously short of an adequate account of Chicago architecture and its European antecedents. The city

is usually cited as the railroad capital of America, but the book contains nothing on railroad stations in the half century that it covers, although the six that were built were all creditable works and three were distinguished. One entry covers industrial architecture but is silent on the best works of the genre, most notably the buildings of the printing industry, manufacturing districts, and monumental warehouses. The same may be said for the architecture of public and cultural institutions, such as libraries, universities, and museums. The 50-year period ends at 1922, the date of the *Tribune* competition, but another ten years would have embraced some of the most compelling works of skyscraper design, the best among them the 333 North Michigan, the Palmolive, and Board of Trade buildings.

A more fundamental question precedes the detailed issues. Mr. Zukowsky, in his introduction, tells us that Chicago is the architectural capital of America, a statement that has been repeated so often that no one now questions it. His book and others offer abundant evidence of the extraordinary power and richness of Chicago's architectural achievement, but a strict height-limitation ordinance and the authority of the Burnham legacy placed commercial architecture in a 30-year straitjacket after 1891. In those years the New York skyscraper found its enormous potentiality. Maturity came with a series of graceful Classical towers erected in the 1890s, most notably the Gillender and the American Surety buildings. After the turn of the century the skyscraper exploded: A new formal dynamism kept pace with technical audacity in such masterpieces as the Singer, the Metropolitan Life, and the Woolworth buildings, to select a few of the most sensational. The debate as to which city stands first is tiresome and unrewarding. Both stand together at the highest level of commercial architecture and almost simultaneously brought its great age to a close with the Board of Trade Building in Chicago (1929–30) and the RCA Building in New York (1932–34). **Carl Condit**

The author is a Professor Emeritus in History, Art History, and Urban Affairs at Northwestern University and is a noted historian of technology and urban development.

© 1988 Flexco

SWEET INSPIRATION FOR YOUR NEXT FLOORING DESIGN: INTRODUCING ACHIEVEMENT™ TEXTURED SOLID VINYL TILE

For the first time ever, Flexco introduces solid vinyl tile with the delicious new dimension of citrus texture. Fresh flecks of color, (and soon, solid colors, too), will make Achievement the hottest new look on today's flooring design scene.

And while its exciting new look is busy turning heads, Achievement's sophisticated new speckles and texture are busy turning away scratches, nicks and discoloration. High style and

easy maintenance—what else would you expect from Flexco, the innovators in working floors for the working environment. For a free sample and more information on how you can be one of the first to use Achievement textured flooring in your designs, contact your nearest Flexco distributor or contact FLEXCO® Company, P.O. Box 81368, Atlanta, GA 30366, (800) 633-3151.



F L E X C O

WORKING FLOORS FOR THE WORKING ENVIRONMENT.

Circle No. 321 on Reader Service Card



TRUSSWALL

T H E · S H A P E S · O F T H I N G S · T O · C O M E

Trusswall from Kawneer introduces the rounded look to the high span entrance. Trusswall spans the clear story entrance area with the structural strength and the desirable aesthetic appeal of the rounded mullion. Formed by circular extruded aluminum chords connected by a separating web that adds stability, strength, and variety, Trusswall becomes a real design alternative.

There are two sides to every story.

On the outside, Trusswall presents a number of faces. One is the innovative circular cover for the sculpted look. Another is the more austere approach, silicone glazing, for an uninterrupted line. And the rectangular cover presents a third more traditional light.

On the inside, Trusswall offers a customization limited only to the imagination. The two-piece construction allows the exterior finish to mix or mate with the building exterior while the interior chords can complement the interior attitudes. The color palette of Fluropon® finishes suggests even more design alternatives.

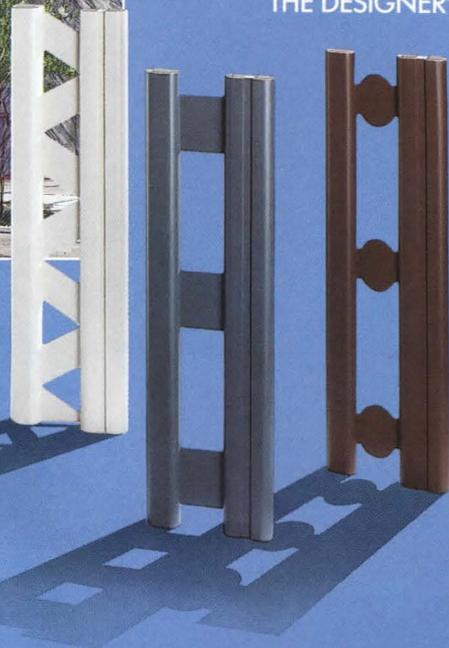
With four web options to choose from, design flexibility increases. The choices are offered. The choices are yours.



But while the design options offer flexibility, the integrity of the structure remains inflexible. A thermal break, and the flexibility of either 1/4" or 1" glass attest to Trusswall being ready and willing to take on nature's harshest elements.

Trusswall. Further evidence of Kawneer's commitment to space.

Kawneer
THE DESIGNER'S ELEMENT.

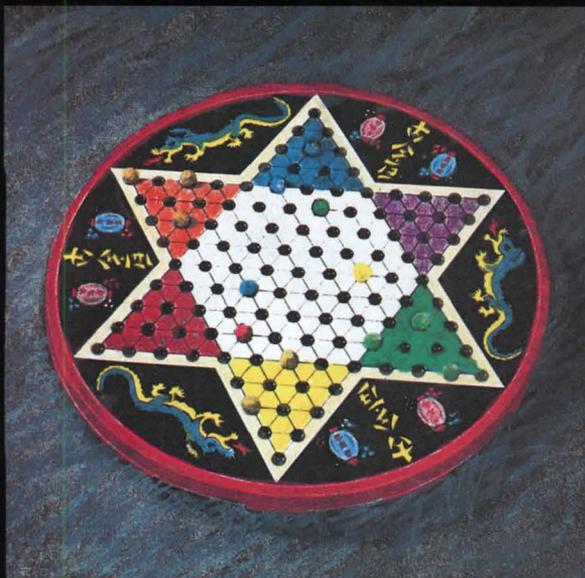


For product information on Trusswall contact:
Kawneer Company, Inc. Department C
Technology Park—Atlanta 555 Guthridge Court Norcross, GA 30092
Circle No. 329 on Reader Service Card

SHAW|WALKER

THE OLDEST

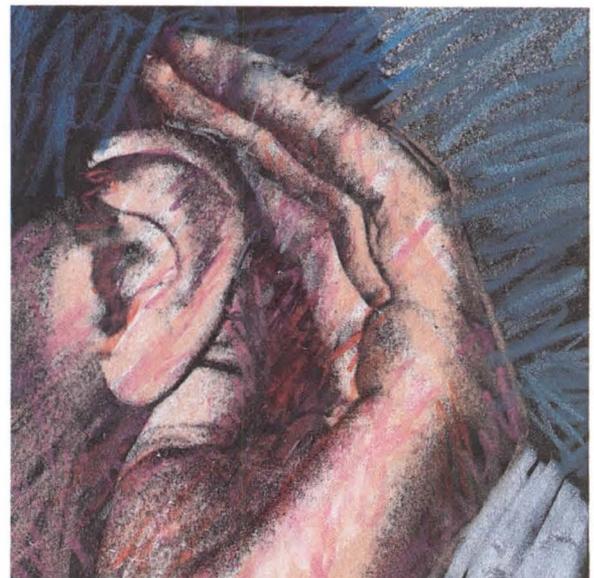
Shaw-Walker is taking exception to the rules of quick shipping.



Remember when you loved to play Chinese Checkers... except sometimes your marbles were hopelessly immobile?

Shaw-Walker's *Express Delivery* program addresses your real concern—not when your order leaves our dock, but when it will arrive at yours. Express Delivery means that your furniture will be delivered when promised, on time... no matter what obstacles get in the way.

Shaw-Walker is taking exception to the rules of customer service communication.



Remember when you loved to play Charades... except nobody ever quite seemed to understand your signals?

Shaw-Walker's comprehensive *Training Programs* ensure that, company-wide and throughout the dealer network, our people all speak the same language—yours.

Circle No. 345 on Reader Service Card

NEW GAME

Shaw-Walker is taking exception to the rules of design continuity.

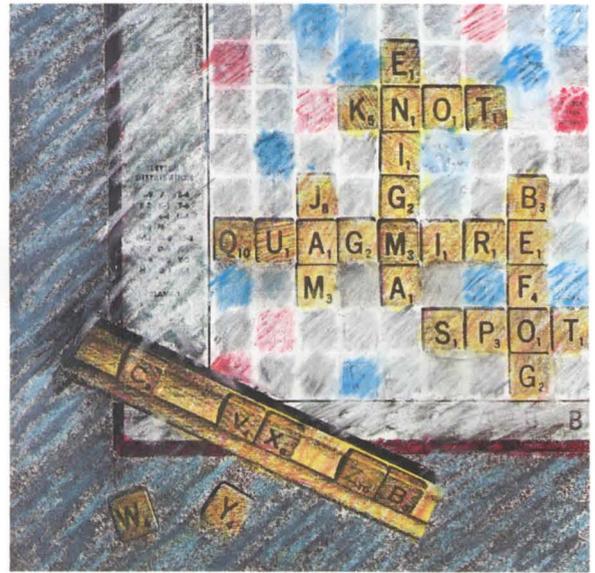


Remember when you loved to play Canasta... except your cards never quite matched your partner's?

Shaw-Walker's *Woodwind Modular and Freestanding Wood Furniture* provide design continuity, from our systems workstations to executive offices and conference rooms. Two *Woodwind* profiles, four hardwood veneers and ten wood finishes present hundreds of design options, ensuring that coordinated solutions are in hand.

IN TOWN

Shaw-Walker is taking exception to the rules of product obsolescence.



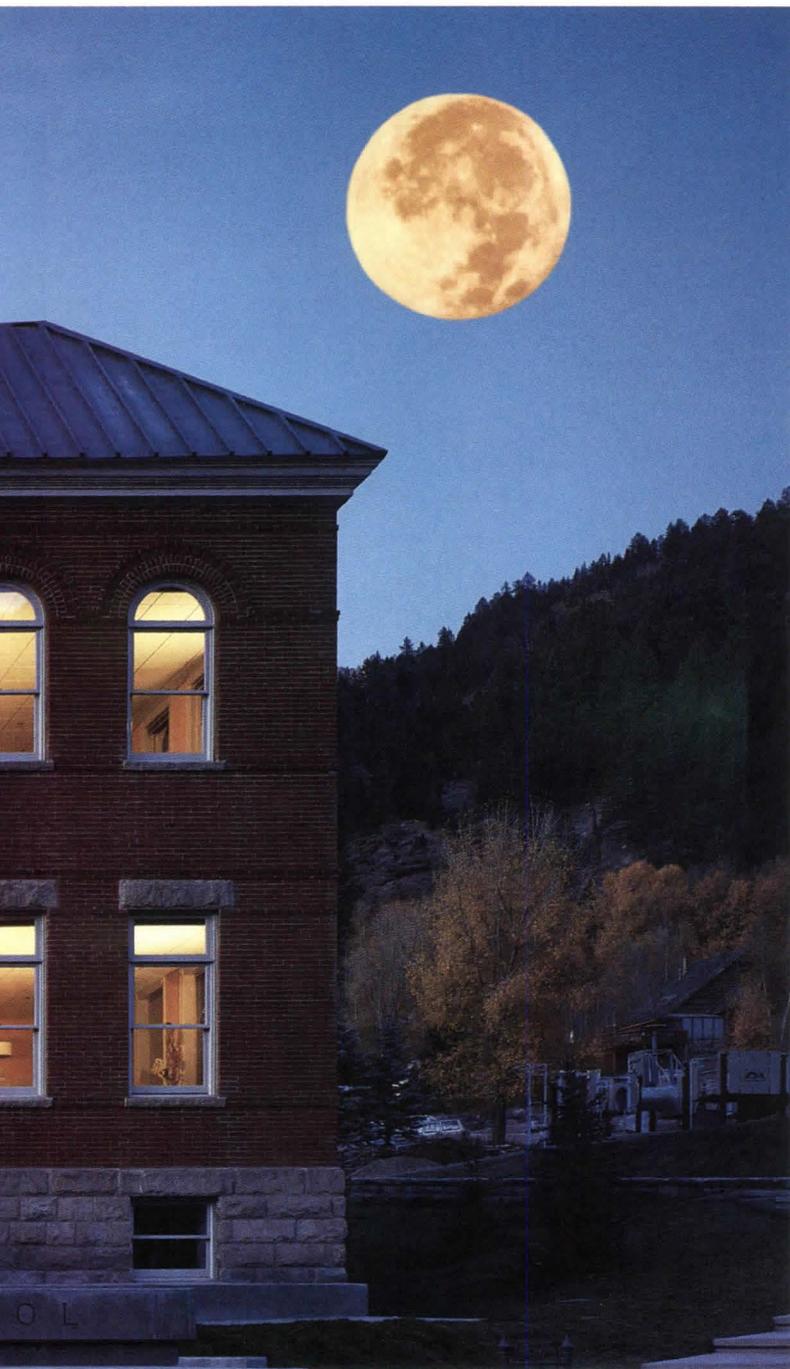
Remember when you loved to play Scrabble®... except your words were never expandable?

Shaw-Walker's *Tempo 3* system has been around for 10 years, yet its 3½" panels are still state-of-the-art, providing expandable cabling channels for electrical, data and telecommunications. You can add panels, or expand to an entirely new system. Shaw-Walker makes obsolescence a thing of the past.

For more information call 1-800-345-9404

THIS SCHOOL OFFERS AN ADVANCED COURSE IN WINDOW TECHNOLOGY.





When they decided to renovate and reopen the 93 year-old elementary school in Telluride, Colorado, they decided to install Marvin Magnum windows.

Smart. Magnums are among the best-performing wood windows in the world. Whether it's positive wind load, negative wind load, air or water infiltration, they'll handle all the weather the Rocky Mountains can dish out.

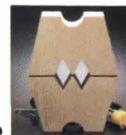
Because we make windows to order, we could incorporate Magnum performance features into historically accurate replicas. At the same time, we could include custom features such as a special brick mold casing and a durable polycron exterior finish.

Our made-to-order approach meant our windows fit better. And, working closely with the contractor, we were able to deliver on schedule.

The entire project was a textbook exercise in the benefits of using made-to-order windows in renovation. And when it comes to making windows to order, we wrote the book.

For more information, call us toll-free at 1-800-328-0268 (in Minnesota, dial 1-612-854-1464; in Canada, 1-800-263-6161). Or just write Marvin Windows, 8043 24th Avenue South, Minneapolis, MN 55425.

**MARVIN WINDOWS
ARE MADE TO ORDER.**



Circle No. 333 on Reader Service Card

Cool

a

warm

day

the

way

you

warm

a

cool

one.

Today, a new generation of advanced gas cooling equipment brings to commercial air conditioning the same economy and reliability that gas brings to heating. Before you design your next project, let your gas company show you how right gas cooling can be. Gas. America's best energy value.

Circle No. 307 on Reader Service Card





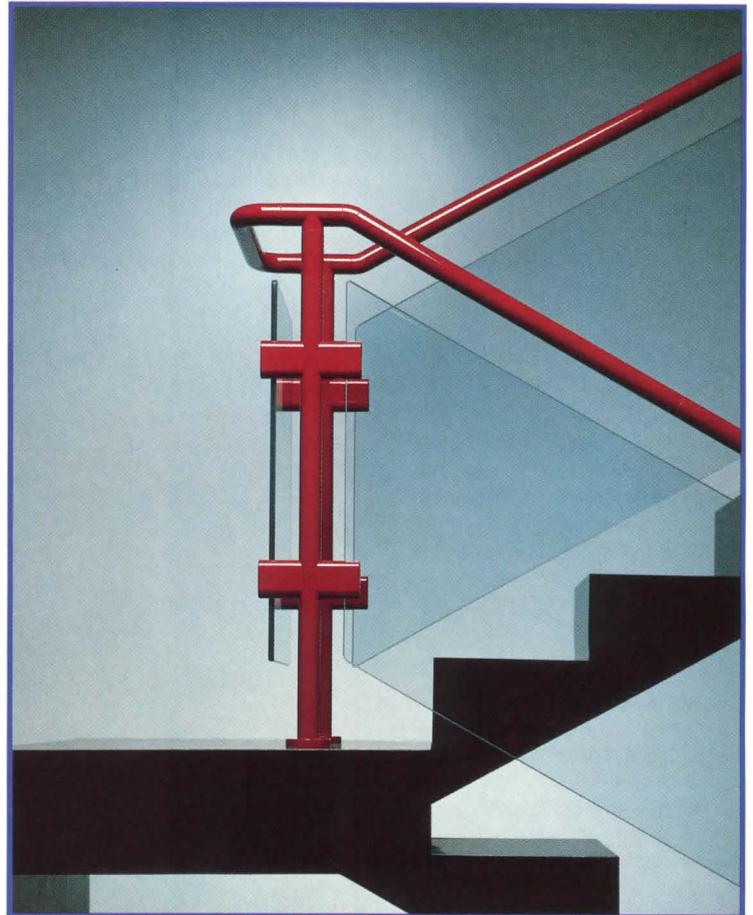
Custom bath enclosures available in gold, silver, bronze, and black anodized metal finishes can be configured to fit almost any shape bath or shower. The StikStall collection offers clear, obscure, decor, or mirrored glass options in addition to framed and frameless pivot doors. Alumax/Magnolia.

Circle 100 on reader service card



A large-scale lounge chair designed by Gary Lee is called the Club Chair. The 33-inch-wide, 32-inch-high chair with detail stitching is one of three pieces that make up the Salon Seating series. Niedermaier Contract Furniture.

Circle 101 on reader service card



Handrails and balustrades with corrosion-free steel cores have a smooth nylon finish that provides a secure grip without any electro-static discharge. Three fastener systems may be specified for the balustrades: through-bolt, side-mounting, and solid steel anchor with cross lugs. HEWI.

Circle 102 on reader service card



New carpet patterns join the Artline Collection of commercial carpets. The five designs—Pinline, Biline, Danceline, Triline, and Directline—are offered in a range of colorways coordinated with the collection's solid color styles. Armstrong.

Circle 103 on reader service card

Acoustical wallcoverings made of 25 percent wool and 75 percent polyester have a nondirectional surface. The upholstery program, called Right Stuff, offers ten muted colors, all of which are antistatic and mildew resistant. Ben Rose.

Circle 108 on reader service card

Three seating types, a loveseat, lounge chair, and sofa, make up the Esplanade seating collection designed by Lisa Bottom. A range of hand-rubbed lacquer finishes on cherry wood and optional rail veneer inlays accent the pieces, which are applicable for offices, lobbies, or residences. Hickory Business Furniture.

Circle 109 on reader service card

A seating collection consisting of a lounge chair, loveseat, and three-seat sofa can be upholstered in leather or fabric. A welt trim detail runs along each seat cushion and around the cushioned back. AGI.

Circle 110 on reader service card



A side chair upholstered in black leather rests on a single polished aluminum fin-shaped leg. Produced by Aleph/Driade for the Ubik Collection, Phillippe Starck designed the Ed Archer chair. Interna Designs.

Circle 111 on reader service card

Security systems, specifically closed circuit TVs, are described in a handbook written for architects and security personnel. The resource includes a lens selector guide, engineering template, and software. Chapters address communication alternatives, data signals, equipment mounting and other issues. Javelin Electronics.

Circle 200 on reader service card

Moveable wall panels, called Designer's Touch, have textile-laminated surfaces that can now be specified in four colors and

ten tones. The series includes two panels with acoustical composites and two nonacoustical matching gypsum panels, one of which is steel-faced for durability. Gold Bond.

Circle 112 on reader service card



Natural wood registers made of oak, maple, and other hardwoods can be added to wood, carpeted, and ceramic tile floors. The registers are available in two standard sizes—2¼" x 12" and 4" x 12"—and custom specifications. GrillWorks.

Circle 113 on reader service card

A flame-retardant fabric blended from SEF modacrylic and nylon fibers is available in a number of nondirectional woven patterns. Hobart features a mini dot pattern; Tosca is a tone-on-tone flat weave in a mini-check design; and Parsifa, a diagonal two-tone lattice work is larger in scale. Lee Jofa.

Circle 114 on reader service card

Site furniture is the subject of a 12-page color brochure. Seats, ottomans, display cases, directories, tables, planters, and waste receptacles make up the Shogun Site Furniture Group. All models have a precast concrete base and may be specified in square or radius shapes. Integrated Ceilings, Inc.

Circle 201 on reader service card



Decorative glass for contract and residential uses features color-fast fabrics encapsulated between shatter-resistant laminated safety glass. The glass comes standard in ¼-inch and ½-inch thicknesses, but custom productions up to 1⅝-inches thick may be ordered. Dlubak Corp.

Circle 115 on reader service card

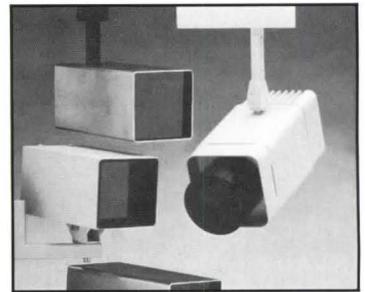
A studwall system offering strength, impact resistance, and fire protection in large jointless

panels uses Eterspan, a noncombustible, nonasbestos fiber-reinforced cement substrate. Workable with elastomeric coatings, ceramic tile, thin brick, or stone aggregate, Eterspan sheets can be applied easily. Eternet.

Circle 116 on reader service card

Open plan workstations from the CramerSpace® collection accommodate reception, executive, conference, and other work areas. Multipower or universal raceway panels are available in a variety of sizes and styles to complement the steel-frame system. Cramer.

Circle 117 on reader service card



Surveillance systems called Square Housing and Gemini Square Housing, part of the ArchiTech housing/camera line, measure 3" x 3" x 9.4". The Square unit is designed for either wall or ceiling mounting. The V33TL Gemini unit, offered in polished brass or white, blends well with track lights. Vicon Industries, Inc.

Circle 118 on reader service card

Composite panels called Formacore are made of aluminum corrugated core laminated to an aluminum face and a liner sheet to create a 6-millimeter-thick, flat panel weighing one pound per square foot. An eight-page brochure provides a structural capacity chart and test results. H.H. Robertson.

Circle 202 on reader service card

Low-voltage fixtures for architectural applications are shown in a new 40-page catalog. More than 60 lights for semirecessed and surface mounting are illustrated along with installation drawings. The book shows design solutions that use the Alesco® fixtures. Sylvan Designs.

Circle 203 on reader service card

A coffee and end table featuring a checkerboard design can be specified in natural and warm-toned finishes. The Paris coffee table stands 17 inches tall; the end table measures 24 inches in height. Donghia Furniture.

Circle 119 on reader service card

(continued on page 126)



Different table shapes can be had from the Lattice Table collection designed by Glenn Gee. An open-grid base adapts to marble, granite, glass, or wood tops in half-round, round, or rectangular sizes. Three edge treatments provide further options. Charlotte.

Circle 104 on reader service card

A cementitious fireproofing product called Retro Guard™ RG is 100 percent mineral-wool-free and formulated specifically for retrofit spray application to steel and concrete substrates. The factory-mixed compound applies easily and dries quickly with a hard, durable surface. W.R. Grace & Co.

Circle 105 on reader service card

Two aluminum panels join the complete line of PAC-CLAD metal roofing panels. Intended for use in fascia, wall panel, or soffit applications, the flush panels are rolled from aluminum or other metal and offered in 16 colors. On-center dimensions range from 11 to 18 inches. Petersen Aluminum Corp.

Circle 106 on reader service card



Office workstations called System Seven offer several new features: desk support panels, double-walled solid steel pedestals, deep overhead cabinets, and re-sized worksurfaces. Domore.

Circle 107 on reader service card

Quality & Service



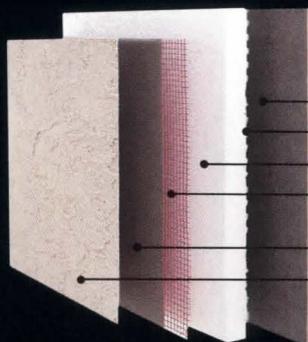
Quality products and technical service are part of what makes our ThoroWall Exterior Insulation Systems so perfect for new construction or retrofit.

ThoroWall A and ThoroWall H both provide those features so important to an insulating wall system; a waterproof, uniform finish, energy efficiency, aesthetically pleasing colors and textures, and excellent long-term weatherability.

All Thoro System products carry a limited material and labor warranty. For quality and service, count on Thoro!

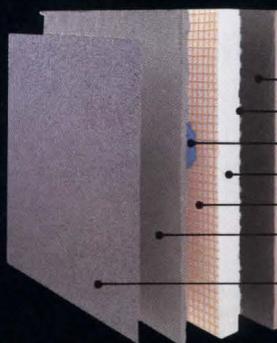
For more information, contact:
Thoro System Products, ThoroWall Division,
7800 NW 38th Street, Miami, Florida 33166.

Visit us at the CSI Show, Booth #1169.



ThoroWall A
Flexible acrylic, polymer base
insulated wall system

- Exterior Gypsum Sheathing
- ThoroWall Primer Base/Adhesive
- ThoroWall EPS Board
- ThoroWall Reinforcing Fabric-117
- ThoroWall Primer Base/Adhesive
- ThoroWall Acrylic Finish



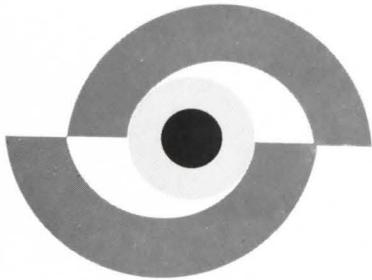
ThoroWall H
High impact, high build,
insulated wall system

- Exterior Gypsum Sheathing
- ThoroWall Primer Base/Adhesive
- Mechanical Fastener
- ThoroWall EPS Board
- ThoroWall Fiberglass Mesh-119
- ThoroWall H Fiberoptic Base Coat
- ThoroWall Acrylic Finish



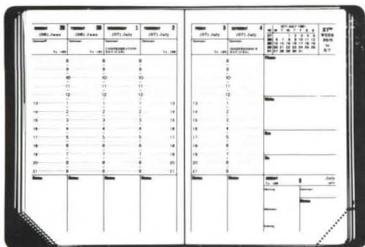
ThoroWall® Exterior Insulation & Finish Systems

THIS SIGN MAY CHANGE YOUR LIFE.



To get more out of every day, you need to set priorities and to follow up on what's important. A working companion can help you. Our Agenda Planning Diary® is as easy to use as an ordinary diary . . . but it does much more. Its unique layout lets you:

- Set the agenda for the week: people to phone, write to or see; and things to do.
- Organize each day and write notes without cluttering the appointment schedule.
- Tear off the perforated corner to automatically land on the current week.



quo vadis

the more efficient diary

FREE BOOKLET:

"Dr. Beltrami's R for Better Time Management"

I'd also like to receive your free color catalog:

- for personal use
- for business and promotion
- Contact me for a visit without obligation

Mr/Ms/Mrs _____ First Name: _____

Last Name: _____

Title: _____

Company: _____

Address: _____

_____ City: _____

State: _____ Zip: _____

Phone: (____) _____ Ext.: _____

Quo Vadis (Dept. PN) 120 Elmview Avenue
Hamburg, NY 14075 (716) 648-2602

Circle No. 003 on Reader Service Card

(continued from page 124)

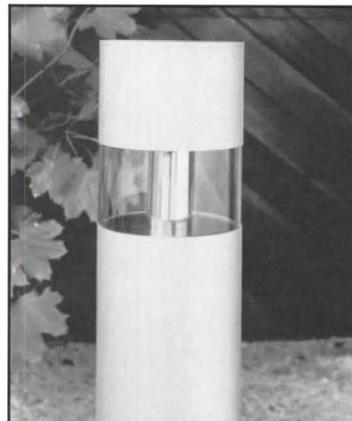


Granite for residential and commercial interiors is available in red, gem, rose, silver blue, crystal pink, and other colors. Two sizes— $\frac{3}{4}$ -inch and $1\frac{1}{2}$ -inch thick—may be specified for use on floors, walls, and horizontal surfaces. Granite Creations.

Circle 120 on reader service card

Transparent mirrors with an abrasion- and scratch-resistant pyrolytic coating can function as room dividers, pedestrian screens, or decorative art forms. Like other float glass products, the mirrors can be tempered, laminated, cut, or bent. Libbey-Owens-Ford Co.

Circle 121 on reader service card



A cylindrical reflector available in four finishes has been added to the KB Series of bollard fixtures. Equipped with the new feature, the fixtures are ideal for parking lots because light is directed down and away from drivers' eyes. Lithonia Lighting.

Circle 122 on reader service card

Fiberglass doors made from fiber-reinforced plastic are designed to decrease corrosion damage in industrial and commercial applications. Fib-R-Dor is finished with a smooth gel-coat for easy cleaning and is available in custom sizes with or without windows. Advance Fiberglass.

Circle 123 on reader service card

Kitchen appliances, including the new Designer Line of white wall ovens, grill range cooktops, compactors, dishwashers, and refrigerators, are described in a 50-page, full-color product catalog. Jenn-Air.

Circle 204 on reader service card

Wood windows with jambs designed to accept a drywall return eliminate the need for interior wood trims. The windows, part of the Woodview II Casements line, can also be ordered with flat exterior casings, snap-in nailing flanges and other cost-cutting options. Malta Division, Philips Industries, Inc.

Circle 124 on reader service card

Emergency lighting and power systems are discussed in a comprehensive catalog. Among the product lines detailed are: architectural fixtures, hazardous and explosion-proof fixtures, and compact power systems. Siltron.

Circle 205 on reader service card



An oval dining table that stands 30 inches tall and measures 72 inches long was designed by Larry Totah. The all-steel table, which is also available in aluminum, can be specified with a graphite or custom finish. Cozmopole.

Circle 125 on reader service card

Clay roofing tiles, including the two-piece and S-shaped El Camino styles, are described in a full-color brochure. Photographs depict a variety of installations while descriptions provide production information. United States Tile Company.

Circle 206 on reader service card

Safety flooring developed for high-traffic areas has aluminum oxide grains embedded throughout the vinyl sheets for slip resistance. Available in natural earth tones, the D25 Designer Series is resistant to most acids and alkalies. Compass Flooring, Inc.

Circle 126 on reader service card

Building Materials

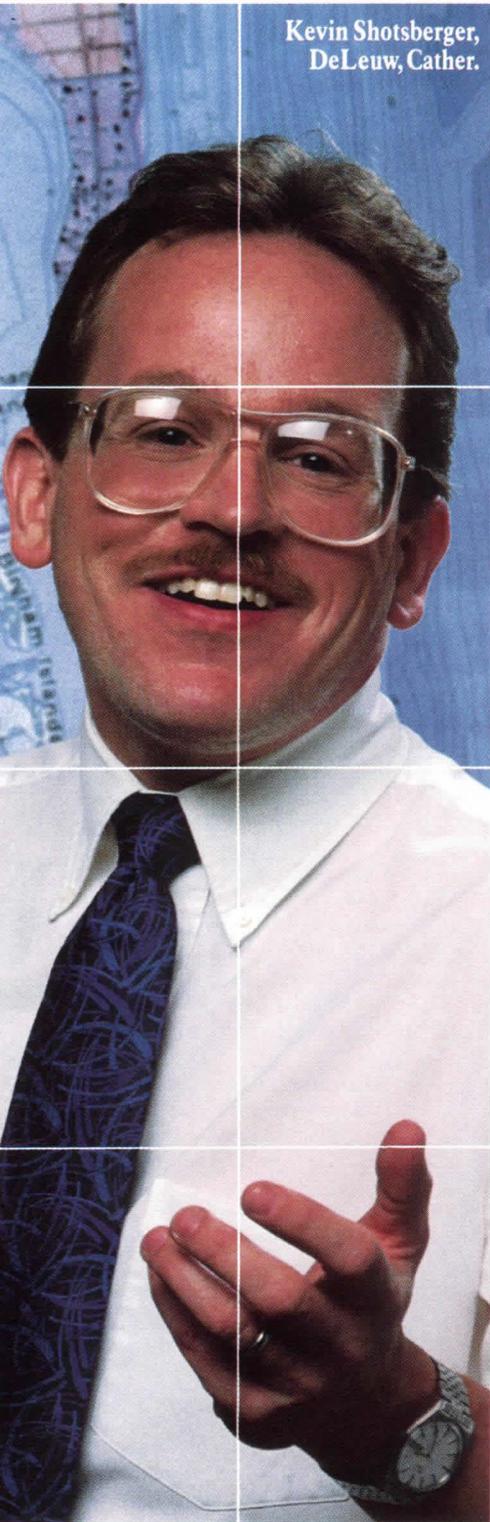
Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

Berkeley, 5th, and 6th Streets Housing, Santa Monica (p. 70). Architects: Koning Eizenberg Architecture, Santa Monica. Windows: Rolleze. Exterior paving: Pacific Polymers. Interior and exterior paint: Dunn Edwards. Locks: (continued on page 128)

"The Color And Clarity Are Amazing, It Really Gives Impact

To Our Ideas"

Kevin Shotsberger,
DeLeuw, Cather.



Multi-Page Enlargement

When your business concerns reach from Lake Michigan to the South China Sea, you need a copier with far reaching capabilities.

So when Kevin Shotsberger was asked to find a new color copier for the engineering firm of DeLeuw, Cather & Company, the Canon Color Laser Copier was the obvious choice.

"We've used other color copiers in the past," says Kevin. "But the quality just was never there. Now we can make single color prints of artist's renderings or use the slide projector and multi-page enlargement to make room-length presentation boards."

Turn-around time is equally important with the complexity of the presentations DeLeuw, Cather prepares. Work that once required outside sources can now be done entirely in-house. And at a fraction of the cost.

"To do this kind of work on the outside would be positively prohibitive," Kevin explains.

"We can merge documentation photos with text, or use color conversion to highlight or even change the color for greater emphasis—with the Color Laser Copier we can do overnight what used to take days. Add that to the cost savings we can pass along and everyone comes out a winner."

For a company with interests as widespread as DeLeuw, Cather, the Color Laser Copier makes a world of difference.

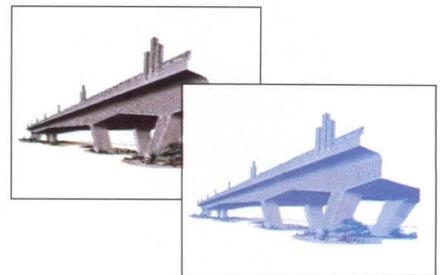
Canon 
COLOR LASER COPIER



Digital Full-Color Copies



Color Copies From Slides



Color Conversion

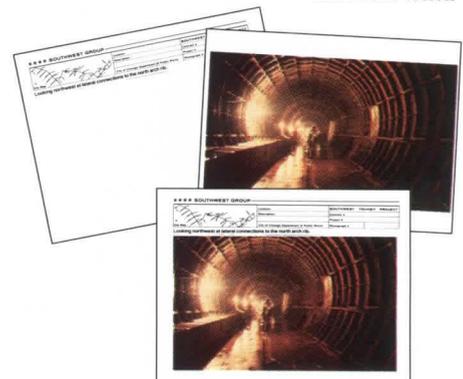
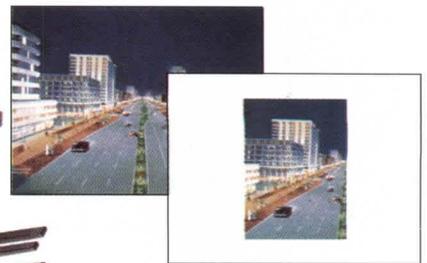


Image Composition



Area Designation

Canon Enjoy easy extended payments with the Canon Credit Card. Ask for details at participating Canon dealers and retailers. Available only in U.S.

For more information, call toll free 1-800-OK CANON. Or write Canon U.S.A., Inc., P.O. Box 5023, Clifton, N.J. 07015. © 1988 Canon U.S.A., Inc.

**NOW WE CAN
SHOW YOU
HOW NATIONAL CAN TAKE A
BIG BITE OUT OF YOUR
PARTITIONING
AND WORKSTATION COSTS.**



The Innerspace™ Concepts System for office and workstation partitioning and systems furniture is designed for flexibility and economy. Sturdy 3" thick panels in heights to 120"

with full or half glass and pre-hung doors provide complete layout capability. A full line of affordable wall-hung and stand-alone desks, pedestals, storage units and accessories also available.

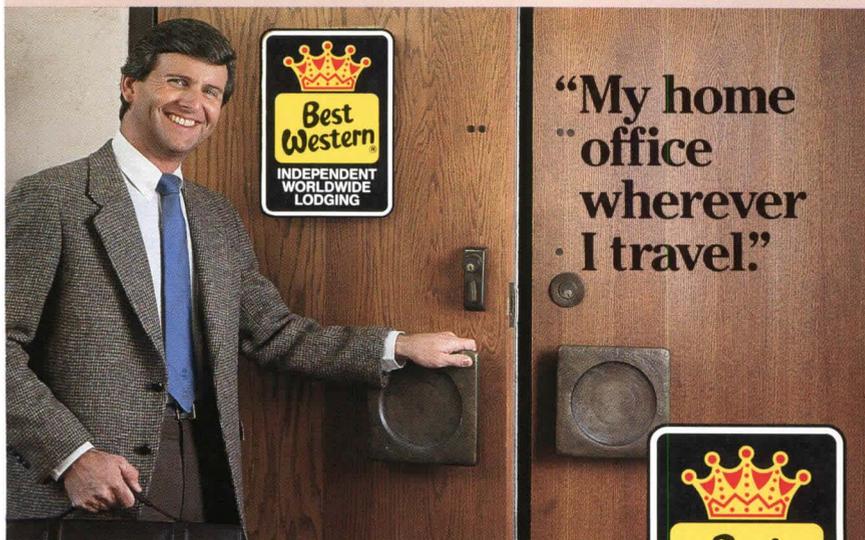


340 W. 78TH RD., HIALEAH, FL 33014

**CALL TOLL-FREE 800-327-3697
FOR OUR NEW VIDEO
"THE PRACTICAL SOLUTION"**

Circle No. 002 on Reader Service Card

What is a Best Western?



**"My home
office
wherever
I travel."**

The right place at the right price.

Make reservations at any Best Western, see your travel agent, or call toll-free
1-800-528-1234



"World's largest chain of independently owned and operated hotels, motor inns and resorts"

Building Materials (cont. from p. 126)

Schlage. Precast treads: Stepstone. Gas-fired wall furnace: Williams.

HELP I, Brooklyn, N.Y. (p. 76).

Architects: Cooper, Robertson + Partners, New York, with Preiss Breismeister Coats, Stamford. Exterior insulation panels: Dryvit. Single-ply EPDM roof: Carlisle. Rigid poured insulation: Dow. Roof drains: Hicks. Chipboard stationary partitions: National Gyp. Interior paint: PPG. Kitchen units: Dwyer. Washers and dryers: General Electric. Plexiglass signage: A.S.I. Fluorescent HID lighting: Bega and Lightolier. Lavatories and water closets: American Standard. Shower bases: Fiat. Showerheads: Valve O Matic.

St. James Social Service, Vancouver (p. 78).

Architects: Davidson/Yuen Partners, Vancouver. Wood frame walls, floors, roof: B.C. Forest Products. Acrylic stucco exterior wall surfacing: Outsulation. Gypsum wall board: Wesroc. Aluminum windows: Wescraft. Pressed metal doors and hardboard wood doors (interior): McGregor Thompson. Resilient carpet: McMahon, Tarkett. Ceiling surface: Synko Spraytex. Built-up roofing: RCABC Tar & Gravel. Batt insulation: Fiberglas Canada. Paint: General Paint. Hinges: Hager. Locks: Schlage. Door closers: LCN. Panic hardware: Von Duprin. Kitchen equipment: General Electric. Steel handrails: Surrey Ironwork. Bathroom accessories: Bobrick, Twin Cee Frost.

Four Sisters Housing Cooperative, Vancouver (p. 78).

Architects: Davidson/Yuen Partners, Vancouver. Concrete reinforced frame, floors, roof: Lafarge. Metal studs: Synko/Wesroc. Brick veneer: Interpace. Metal siding: Alcan Horizontal Siding. Aluminum windows: NAP. Aluminum store fronts: Wescraft. Wood doors (interior): Shanahan. Sectional grill overhead: Richards-Wilcox. Concrete paving: Portland Cement. Carpets: Mahon Carpets. Ceiling surface: Synko Spraytex. Sheet membrane roofing and waterproofing: GRM. Rigid batt insulation: Dow Chemical, Fiberglas Canada. Paint: General Paint. Hinges: Hager. Locks: Schlage. Door closers: LCN. Panic hardware: Von Duprin. Kitchen and laundry equipment: General Electric. Hydraulic elevator: Richmond Elevator. Steel handrails: Surrey Ironwork. Metal toilet stalls: Shanahan. Bath-

Question: How can you save on a subscription to Progressive Architecture?

Answer: Order now for two years and get the second year for half price!

A one-year subscription costs \$30, BUT, a two-year subscription costs you only \$45 — saving you \$15 (50%!) off the second year's cost. Just return the attached card and we'll send you two years' worth of important and informative issues of Progressive Architecture at this money-saving rate. One year subscriptions are also available.

Yes, start my subscription for the term I've checked.

Check here if you are
 Registered Architect
 Architectural Graduate
 Engineer
Student order limited to one year, prepaid.

Allow 6-8 weeks for your first issue.

Yes, start my subscription for the term I've checked.

Check here if you are
 Registered Architect
 Architectural Graduate
 Engineer
Student order limited to one year, prepaid.

Allow 6-8 weeks for your first issue.

- Two years \$45
(Canadian subscribers add \$10)
 One year \$30
(Canadian subscribers add \$5)
 New
 Renewal
 Bill me
 Payment enclosed

Charge my
 Visa
 MasterCard
 American Express

Account # _____

Exp. date _____

Offer valid for professionals in the United States and Canada. Please complete below to qualify:

Name _____

Title/Position _____

Check here if owner

Firm Name _____

Type of Firm _____

Telephone Number _____ / _____

Mailing Address _____

City _____

State _____

Zip _____

- Two years \$45
(Canadian subscribers add \$10)
 One year \$30
(Canadian subscribers add \$5)
 New
 Renewal
 Bill me
 Payment enclosed

Charge my
 Visa
 MasterCard
 American Express

Account # _____

Exp. date _____

Offer valid for professionals in the United States and Canada. Please complete below to qualify:

Name _____

Title/Position _____

Check here if owner

Firm Name _____

Type of Firm _____

Telephone Number _____ / _____

Mailing Address _____

City _____

State _____

Zip _____

Question

Answer

A

Subscription Dept



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 25060 CLEVELAND, OH

POSTAGE WILL BE PAID BY ADDRESSEE

Progressive Architecture
A Penton Publication
1100 SUPERIOR AVENUE
CLEVELAND OH 44197-8120



Subscription Dept



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 25060 CLEVELAND, OH

POSTAGE WILL BE PAID BY ADDRESSEE

Progressive Architecture
A Penton Publication
1100 SUPERIOR AVENUE
CLEVELAND OH 44197-8120



room accessories: Bobrick, Twin Cee Frost. Blinds: Levolor.

Baltic Inn, San Diego (p. 81).
Architect: Rob Wellington Quigley, San Diego. Aluminum windows: WindowMaster. Hydraulic elevator: Otis. Hinges: Hager. Locks: Schlage. Door closers: Royal. Panic hardware: Monarch. Doorstops: Quality. Stainless steel tubs and lavatories: Western Pottery. Porcelain water closets: Murray. Sink faucets: Valley. Stainless steel sinks: Kohler. Boilers: Raypak. Convector radiator units: Dunham Bush.

Back of the Hill, Boston (p. 83).
Architects: William Rawn Associates, Boston. Precast concrete plank: Sanvel. Brick: Webster, Sioux City, Glen Gery, McIvoy, Stone Creek. Clapboard: Clear-tex, Boston Cedar. Wood double-hung windows, awnings and fixed transoms: Malta. Carpet, vinyl flooring: J.P. Stevens, Armstrong. Roofing: Carlisle. Paint: Glidden. Hardware: Schlage, Ives, Stanley, Sargent. Kitchen equipment: General Electric. Prefabricated wood stairs with oak treads and prefabricated wood handrails: Leo Dunskey. Incandescent fixtures: Progress. Tubs and lavatories: Dayton, Owens-Corning. Water closets: Briggs. Plumbing fittings: Symmons. Bathroom accessories: NuTone, Franklin Brass.

Tent City, Boston (p. 84). *Architects: Goody, Clancy & Associates, Boston.* Brick and glazed brick: Boren, U.S. Brick, Endicott, Elgin Butler. Aluminum windows: Graham Architectural. Doors: Built-Rite. Tile floors: Armstrong Sheet Vinyl. Terrazzo: DiPaoli Mosaic. Elastomeric roofing (midrisers): Firestone. Shingles (townhouses): Supra Slate. Waterproofing: W.R. Grace, Tremco, Pecora. Drainage: Benchmark. Gypsum drywall: USG. Retractable partitions: Modernfold. Paint: Hancock, PPG, Sherwin-Williams. Hinges: Stanley. Locks, door closers, panic hardware: Sargent. Kitchen equipment: General Electric. Elevators: Westinghouse. Lighting: Bega (exterior), Lightolier (interior). Tubs and lavatories: Bobrick. Water closets: IFO. Flush valves: Symmons. Waste disposal units: Bison Refuse Wrangler Autopak. Unit heaters: Whalen Fan Coil Systems. Carpets: Stevens Gullistan.

Metal roofs that breathe . . . only from Hickman!

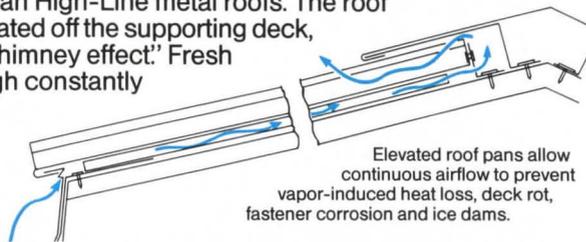


Continuous ventilation pre-engineered underneath the roof surface

With a Hickman High-Line® standing seam metal roof, you get a complete eave-to-ridge breather system . . . built in!

Trapped moisture and condensation sealed under a tight metal roof can have costly effects. Wet insulation continually loses heating and cooling dollars and leads to breakdown of supporting deck material. Corrosion attacks fasteners and the roof surface from below. Ice dams keep eaves constantly wet in winter.

Not with Hickman High-Line metal roofs. The roof panels are elevated off the supporting deck, for a natural "chimney effect." Fresh air flows through constantly to remove moisture and cool the roof. And you can expect to avoid maintenance



Elevated roof pans allow continuous airflow to prevent vapor-induced heat loss, deck rot, fastener corrosion and ice dams.

for many years. Hickman's High-Line roof is finished with a 20-year Kynar 500® color coating on galvanized steel.

Hickman payback is fast and certain. With long-term fuel savings, reduced maintenance . . . and outstanding owner satisfaction. Call your Hickman rep or contact us direct for all the details.

See Sweet's General Building & Renovation 07715/HIC, and ask your Hickman rep for our new PRODUCT/DATA sheets.

Kynar 500® is a reg. TM of Penwalt Corporation.

HICKMAN
construction products

W.P. Hickman Company □ 175 Sweeten Creek Road
P.O. Box 15005 □ Asheville, NC 28813 □ (704) 274-4000 □ FAX (704) 274-4031

© 1988 W.P. Hickman Company

Circle No. 324 on Reader Service Card

You told us only one thing could improve our tough ARP SURFACE® laminates.

Expand the offerings.

Now the exclusive surface that keeps laminates looking new longer is standard on almost all Nevamar stock line laminates. In addition to Textured Finish solid colors and the Matrix series, you'll find Nevamar's ARP SURFACE on most of our Textured Finish woodgrains and patterns, too. Nevamar's patented ARP SURFACE provides three times

the wear resistance of ordinary laminates, so they keep their new appearance longer yet cost no more. There's less damage during fabrication and installation, too. If you haven't seen the difference yet, you should. Ask your

Nevamar distributor for a free Prove-It-Yourself Kit. Or call us: 1-800-638-4380. In Maryland, call 1-800-233-9485. Nevamar Corporation, 8339 Telegraph Road, Odenton, Maryland 21113.



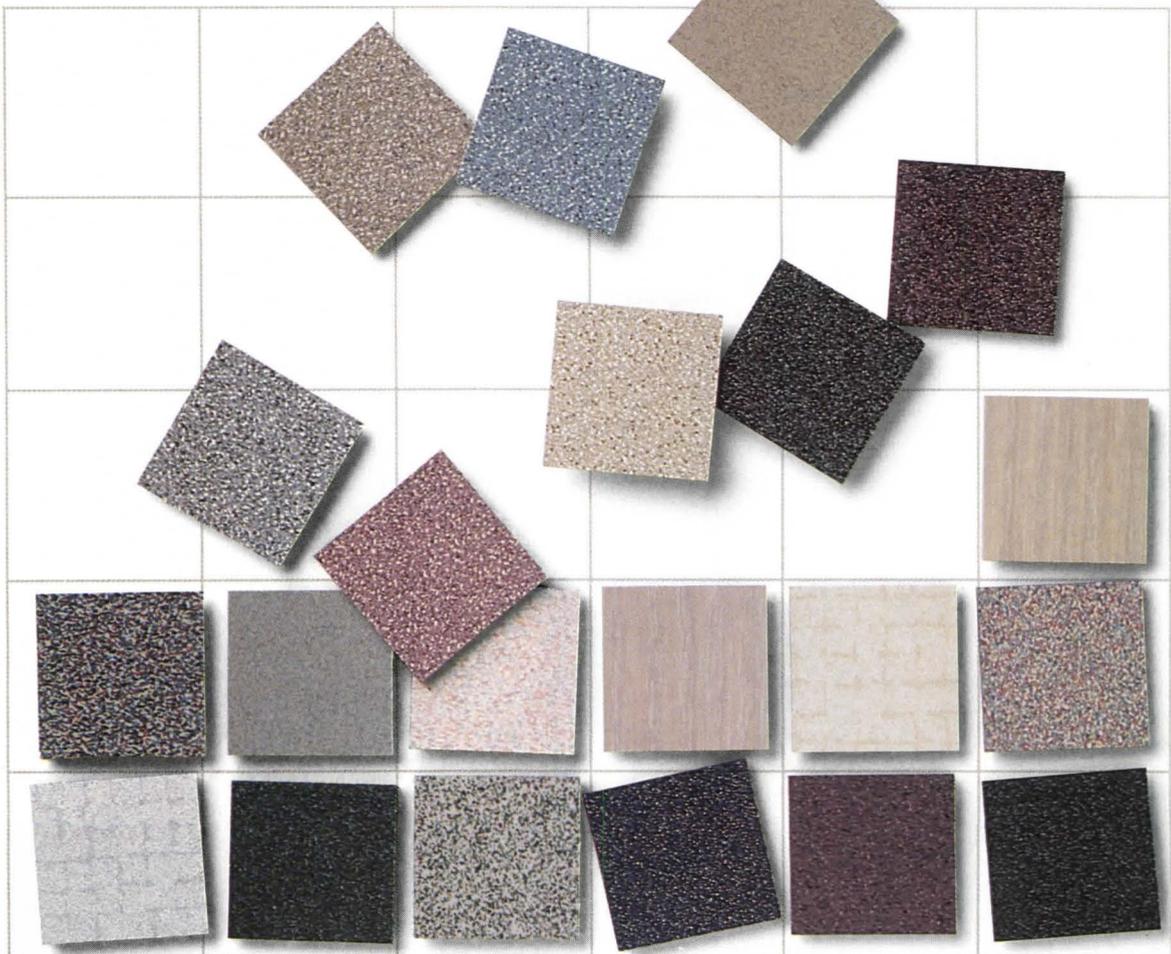
Conventional Surface



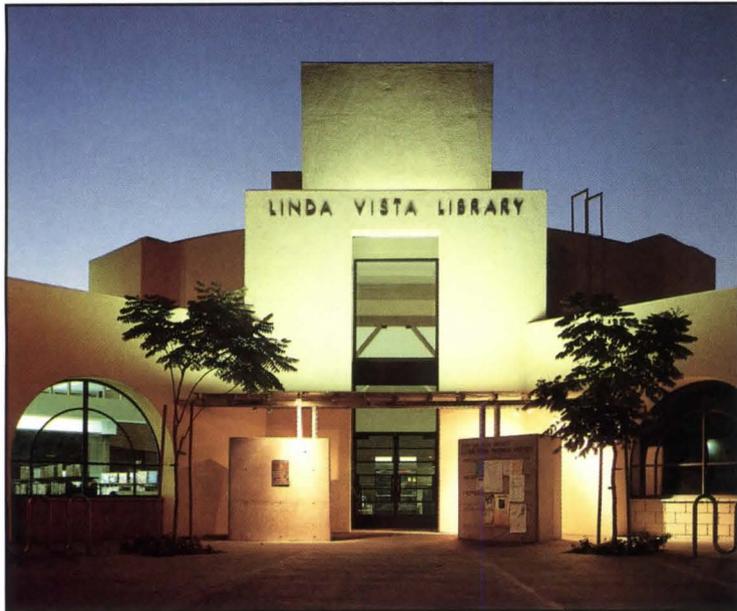
ARP SURFACE



NEVAMAR™
DECORATIVE LAMINATES



Circle No. 335 on Reader Service Card



Evening view of Linda Vista Branch Library by Rob Wellington Quigley.

Museums and Libraries

The November issue will include two museum projects and two new public libraries that differ widely in location and design vocabulary. Hammond Beeby & Babka's Classical addition to the Chicago Art Institute will contrast with the Modernist conservatory by Edward Larrabee Barnes/John M.Y. Lee & Partners next to the Walker Art Center in Minneapolis. Contrasts of materials distinguish the stucco-clad Linda Vista Branch Library in California by Rob Wellington Quigley from the steel-clad Clayton County Library in Georgia by Scogin Elam & Bray.

Also in November

An Inquiry article on the rehabilitation of shopping malls and a Technics article on lighting are some of the issue's other major pieces.

Information Sources Issue

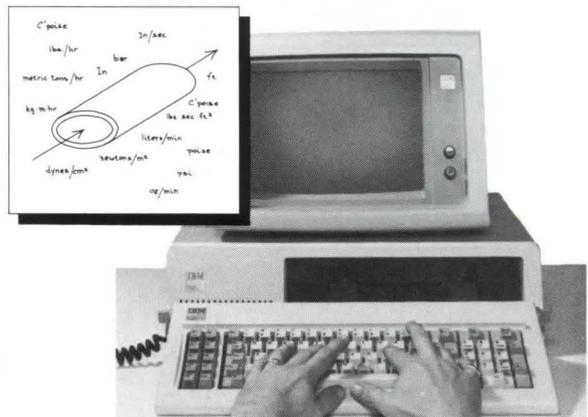
Our North American readers will receive, in mid-October, the third annual Information Sources Issue, with an expanded listing of sources and the largest listing of building product literature in the architectural press.

Solve Pipe & Tube flow problems in seconds on your PC

Wouldn't it be nice if you could solve flow problems without having to convert all of your data to common units? With FLUIDTOOLS, you can do just that! It's easy as A-B-C.

- Just enter your data in whatever units you wish . . .
- Request FLUIDTOOLS to return answers in the units you want . . .
- Press "Calculate" . . .

It's that simple!



FLUIDTOOLS solves parameters for liquid and gas flow problems such as diameter, length, flow rate, pressure, Reynold's numbers, specific gravity of gases at temperature and pressure, viscosity, and flow velocity.

Some of the important features of FLUIDTOOLS —

Automatic unit conversion . . . enter data in unrelated, mixed units and FLUIDTOOLS automatically calculates in the units you want * Friction factors are automatically calculated from Reynold's numbers using internal empirically developed equations, but these factors can be easily overridden * Program data base includes viscosity and specific gravity tables, and pipe schedules * A wide range of common and uncommon metric and English conversion factors are included and are easily expandable to accept user-defined data * Preset friction factors for tube, smooth or rough pipe . . . or program accepts user-defined factors * Program can save all user-defined data * Floating point or numerical entries * Program disk is not copy protected.
FLUIDTOOLS program disk and user manual \$199

SYSTEM REQUIREMENTS:

IBM PC line of computers or 100% compatibles
 MS/PC DOS 2.0 or higher
 256K minimum memory

SATISFACTION GUARANTEED! Try FLUIDTOOLS on your PC. If you're not completely satisfied, just return the program within 30 days for full credit or refund!

Chargecard users order toll-free 800-321-7003 (in Ohio, call 216/696-7000) or send your order to:

Penton Education Division
 1100 Superior Avenue
 Cleveland, Ohio 44114

Situations Open

SR. SPECIFICATION ENGINEER AND SPECIFICATION WRITERS

Buchart-Horn, Inc., a full-service E/A firm, has the following positions available in their York, PA office:

SENIOR SPECIFICATION ENGINEER—BS in Civil or Sanitary engineering with 5 years experience and P.E. registration. Position involves development and maintenance of master specifications, preparation of project specifications for engineering projects and provide technical assistant to design teams. Assist in supervision of specification writers.

SPECIFICATION WRITERS—Positions available for engineering and architectural specification writers. BS in engineering or architecture required. Positions involve development and maintenance of project specifications. Provide technical support to design teams and conduct product research and analysis.

Along with a professional atmosphere and career growth opportunity, we offer excellent compensation and fringe benefits, as well as competitive relocation package.

Send resume to:

BUCHART-HORN, INC.
Personnel Department
P.O. Box M-55
York, PA 17405

Equal Oppty Employer M/F/H/V

Architect/Project Manager

Progressive young Architectural firm in one of the fastest growing regions in the U.S. Devoted to quality design, client service, and profitable business practices. Need qualified personnel to fill growing work load. Resume, references, salary requirements to: **Gora/McGahey Associates in Architecture, 43 Barkley Circle, Ft. Myers, FL 33907.**

UNIVERSITY OF CINCINNATI, College of Design, Architecture, Art and Planning:

Searching for outstanding leader in architecture and/or interior design to be administrative head and educational leader of the School. Reports to the Dean of the College. Tenured appointment at full professor level. A master's or doctorate degree, teaching and administrative experience, and professional accomplishment in an architecture or interior design discipline are required. Deadline for completed applications is December 1, 1988. Search will continue until a suitable candidate is found. Position is available September 1, 1989. Send letter of application, curriculum vitae, samples of work and names of three referees to: Charles E. Ellison, Acting Associate Dean, Search Committee for SAID Director, College of Design, Architecture, Art and Planning, University of Cincinnati, Cincinnati, Ohio 45221-0016. Affirmative Action, Equal Opportunity Employer.

ARCHITECT

Fox-Morris recruits architectural talent on an exclusive basis for several nationally recognized A/E firms. Our most critical assignments are:

- **PROJECT MANAGER**, to \$46,000. Will handle clients, budgeting, and direction of multiple large-scale commercial projects. 8-10 years experience sought in increasingly responsible project roles. Outstanding benefits and advancement potential.

- **JOB CAPTAIN/PROJECT ARCHITECT**, to \$37,000. Project responsibility from design development through CD's on medium/large commercial projects. 3-8 years experience preferred.

These positions require a degree, registration a strong plus. All fees paid by client firms. For information on these and other East Coast opportunities, reply in confidence to Chip Saltsman.

FOX-MORRIS
409 Washington Ave., Suite 704
Baltimore, MD 21204
(301) 296-4500

CHAIR Division of Architecture Temple University

The Division of Architecture (DOA) searches for a senior faculty member to provide academic leadership as Chair.

The profoundly urban program serves 350 students in four year B.Sc. and five year B. Arch. Curricula. The full-time faculty of eleven is complemented by a part-time faculty of 20.

The successful candidate will be qualified for appointment to a senior position through scholarly or professional achievement and a strong record of administrative and teaching experience.

As the CEO of the DOA, the Chair is responsible for all aspects of its administration and will work directly with the Dean in financial matters.

The chair will be expected both to continue effective implementation of existing initiatives, such as the newly reorganized curriculum, and to develop new programs, as, for example, in graduate education. The Chair will represent the program to both inside and outside constituencies and will engage in fund raising and other forms of development.

Please respond with a letter of interest, curriculum vitae, and the names of three references to:

Chair Search Committee
Division of Architecture (084-53)
Temple University
Philadelphia, PA 19122

Screening will commence November 1, 1988 and continue until an appointment is made.

Temple University is an equal opportunity/affirmative action employer.

THE AQUARIUM AND SCIENCE PARK OF THE PALM BEACHES, INC.,

a non-profit organization, is requesting letters of interest from an experienced team of planning, architectural and fund raising consultants to provide a feasibility study for a Major Aquarium to be located in Palm Beach County, Florida. For a copy of the request for qualifications, interested parties should write to: Technical Committee, 2000 Palm Beach Lakes Boulevard, 8th Floor, West Palm Beach, FL 33409.

DIRECTOR OF MANAGEMENT SERVICES

This position represents a unique opportunity to join the senior management team of a world renowned Philadelphia architectural firm. Responsibilities of the position will be to oversee firm-wide financial management including project accounting and contract negotiation as well as management of all other administration functions and support of project operations.

The ideal candidate will be an architect with financial management experience or a manager with architectural experience. Sensitivity to the firm's primary interest in design and the ability to function successfully in a sophisticated, dynamic architectural environment essential. Candidates should send resumes in confidence to:

THE COXE GROUP
Two Mellon Bank Center
Philadelphia, PA 19102-2310

Equal Oppty Employer M/F/H/V

ARCHITECTS

Dynamic A/E firm seeks the following positions:

PROJECT ARCHITECT: Five years registered experience required, including two years supervisory management. Experience in educational facilities preferred. Direct and control all aspects of architectural services; provide primary assistance to Profit Center Managers.

GRADUATE ARCHITECT: Experience required in construction document production, design, building evaluation and data compilation; act as project manager on small/medium sized projects.

We offer career growth opportunity with excellent fringe benefits and competitive compensation. Send resume in confidence to:

BASCO ASSOCIATES
Attention: Harry Rutledge
P.O. Box M-55
York, PA 17405
EOE: M/F/H/V

ARCHITECTURAL SPECIFIER

Perform product and systems research and prepare project specifications. Knowledge of materials, construction technology and contract documents required. Career opportunity with compensation to suit qualifications. Send resume in confidence to: **Skidmore, Owings & Merrill**, 220 East 42nd Street, New York, N.Y. 10017; Attn.: Alvin D. Skolnik, FCSI.

University of Maine Position: Architect

Full time professional appointment. Bachelor's Degree in Architecture or Architectural Engineering. Working knowledge of structural and/or mechanical systems is preferred. Minimum of two years experience as an Architectural Designer. Salary \$30,000-\$34,000. Send letter of application and resume to Merton Wheeler, Associate Director for Operations, Office of Facilities Management, University of Maine, Orono, ME 04469. (Tel: 207-581-2650) Job description will be mailed upon request.

Review of applications will begin on October 31, 1988.

The University of Maine is an Equal Opportunity/Affirmative Action Employer.

PROJECT ARCHITECT

Opportunity to grow with an established Salem, Oregon firm. Bach. of Arch., G.P.A. 3.00 min. Self-starter, non-smoker. Professional appearance. Ten years experience buildings to 5M. Positive mental attitude. Salem - 60 minutes from ocean, 90 minutes from skiing. Clean air, cool summers, mild winters, low humidity - excellent liveability.

Send resume, work experience, salary history and references to Warren Carkin, 595 Leslie St. S.E., Salem, Oregon 97301.

Emilio Ambasz & Associates

Seeks talented individual with minimum 5/7 years experience for design development/production position. Send cv, non-returnable portfolio materials and salary requirements to: 636 Broadway, New York, NY 10012, Attn: Kent Turner.

ARCHITECT NEW YORK, NEW YORK

Must work as architect in interior design firm, and will supervise interior designers. Must draft plans and elevations of projects, design layouts, supervise contractors and serve as professional liaison between contractors and engineers. Must file all architectural plans with the City of New York and Landmarks Commission Office. Salary \$31,000 per year, one year experience as architect required or Masters degree in architecture accepted in lieu of one years experience. Contact: Mark Hampton, 654 Madison Avenue, NY, NY 10021, (212) 753-4110.

Announcement

KRESSCOX ASSOCIATES, P.C.
congratulates its former
Director of Historic Preservation
& Special Services
WM. WARD BUCHER, AIA
on the opening of his new firm
Bucher & Borges
1333 F Street, N.W.
Washington, D.C. 20004
(202) 387-0061

We wish him success in his new venture.

Educational Opportunities

FULLY APPROVED UNIVERSITY DEGREES!! Economical home study for Bachelor's, Master's, Ph.D., fully approved by California State Department of Education. Prestigious faculty counsels for independent study and life experience credits (5,100 enrolled students, 500 faculty). **Free information** — Richard Crews, M.D. (Harvard), President, Columbia Pacific University, Department 2A60, 1415 Third Street, San Rafael, CA 94901. Toll Free: (800) 227-0119; California: (800) 552-5522; or (415) 459-1650.

Proposals Invited

NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

Request for proposals for management consulting services in connection with public sector architecture/engineering design organizations

The New York City Health and Hospitals Corporation, a public benefit corporation operating municipal hospitals, ambulatory health centers and long term care facilities, is seeking proposals from management consulting firms experienced in the analysis of large architecture/engineering design organizations.

Requests for Proposals may be picked up in person or requested by contacting:

Mr. John Barry
Assistant Director
Capital Budget & Contract Cont.
NYC Health & Hospitals Corp.
346 Broadway, Room 522
New York, NY 10013
(212) 566-8859

A Proposer's conference will be held on Tuesday, October 25, 1988 at the NYC Health & Hospitals Corporation, 125 Worth Street, 5th Floor Board Room, Room 520 at 1:00 p.m. All questions about the RFP will be entertained at that time.

All responses to the RFP are due at the above address by 5:00 p.m. on Thursday, November 10, 1988.

Services

ARCHITECTS - \$25,000-85,000 GROUP ONE SEARCH

Executive Architectural Recruiters. Superb positions Nationwide at all levels with Regional and National firms. Confidential. NEVER A FEE. P.O. Box 273210, Tampa, FL 33688. (813) 969-0544

RitaSue Siegel Agency™

A recruiting service to find architects, interior, graphic and industrial designers, marketing and sales support people for consultants and business. Confidential. Nationwide, international.

60 W. 55 St., New York, NY 10019
212/586-4750

ARCHITECTURAL OPPORTUNITIES

We have national openings with well known firms for Architects, Designers and Civil Engineers seeking new career growth and increased income. Call/send resume to: **ACTION EMPLOYMENT AGENCY**, 1913 Sheridan Dr., Buffalo, NY 14223, (716) 876-3193.

Notice

Please address all correspondence to box numbered advertisements as follows:

Progressive Architecture
Job Mart—(Assigned Number)
P.O. Box 1361
600 Summer Street
Stamford, Connecticut 06904

Advertising Rates

Display style \$170 per column inch, per your layout. Maximum 6 inches. Commissionable to recognized advertising agencies. Approximately 35 words per inch. Column width approximately 1 3/4". No charge for use of box number. Situations wanted advertisements: \$65 per column inch. Noncommissionable.

Check or money order should accompany the advertisement and be mailed to Mary Mulach, P/A Classified, 1100 Superior Ave., Cleveland, OH 44114 (Telephone 216/696-7000, Ext. 2584).

Display style advertisements are also available in fractional page units starting at 1/4 page and running to full page.

Insertions will be accepted no later than the 1st of the month preceding month of publication. Copy to be set due seven days earlier.

THE AMERICAN HEART ASSOCIATION MEMORIAL PROGRAM®



WERE FIGHTING FOR
YOUR LIFE

American Heart
Association



This space provided as a public service.

Finally, vinyl siding for people who hate vinyl siding.

RESTORATION COLLECTION®

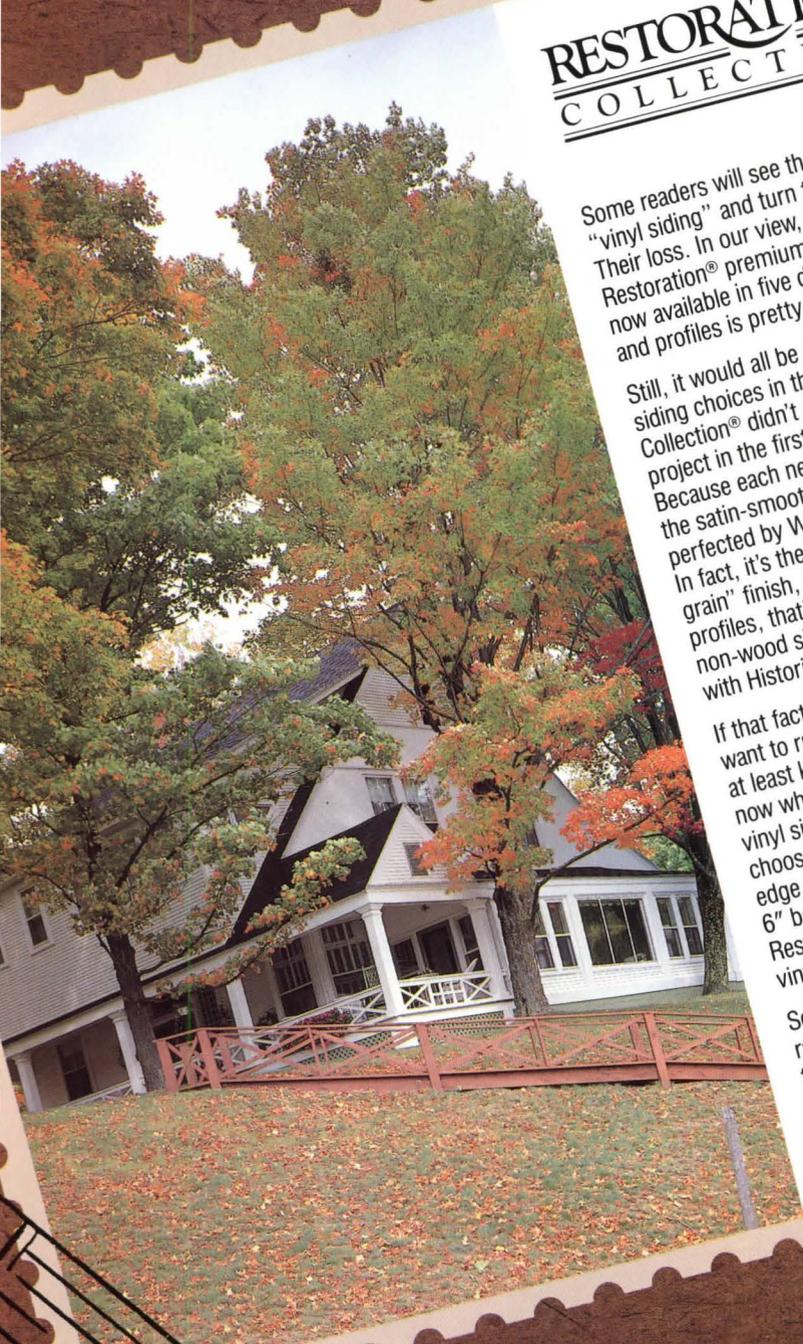
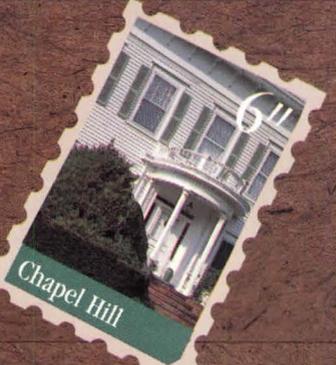
Some readers will see the words "vinyl siding" and turn the page. Their loss. In our view, the news that Restoration® premium vinyl siding is now available in five distinctive styles and profiles is pretty heady stuff.

Still, it would all be academic if the siding choices in the new Restoration Collection® didn't complement your project in the first place. They do. Because each new selection features the satin-smooth, low-gloss finish perfected by Wolverine back in 1983. In fact, it's the same "no fake wood grain" finish, in heritage-inspired profiles, that's made Restoration the non-wood siding of choice—even with Historical Commissions.

If that fact alone doesn't make you want to run out and side something, at least keep us in mind. Because now when you want the best-looking vinyl siding there is, you get to choose among 3" clapboard, rolled edge, 3" or 4½" Dutch Lap, or even 6" beaded styles. They're all in the Restoration Collection. All premium vinyl. All from Wolverine.

So if you'd like more information and rather not use a stamp to get it, call toll-free: **1-800-521-9020**.

Circle No. 352 on Reader Service Card



Wolverine Technologies
A CertainTeed Company



Cambridge
3" Clapboard



Chapel Hill
6" Beaded



Cumberland Mill
3" Dutch Lap



Stockbridge
4½" Dutch Lap

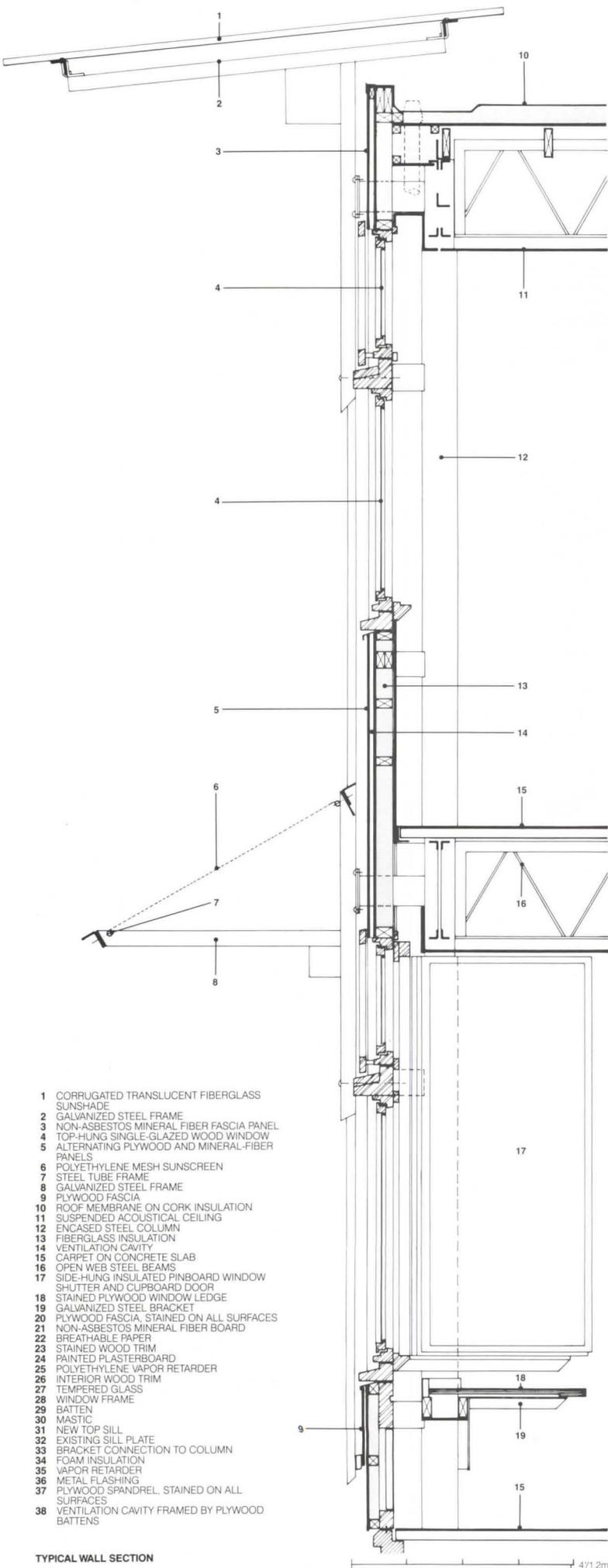


Monterey
3" Rolled Edge

WOLVERINE
FIRST CLASS



Selected Details



- 1 CORRUGATED TRANSLUCENT FIBERGLASS SUNSHADE
- 2 GALVANIZED STEEL FRAME
- 3 NON-ASBESTOS MINERAL FIBER FASCIA PANEL
- 4 TOP-HUNG SINGLE-GLAZED WOOD WINDOW
- 5 ALTERNATING PLYWOOD AND MINERAL-FIBER PANELS
- 6 POLYETHYLENE MESH SUNSCREEN
- 7 STEEL TUBE FRAME
- 8 GALVANIZED STEEL FRAME
- 9 PLYWOOD FASCIA
- 10 ROOF MEMBRANE ON CORK INSULATION
- 11 SUSPENDED ACOUSTICAL CEILING
- 12 ENCASED STEEL COLUMN
- 13 FIBERGLASS INSULATION
- 14 VENTILATION CAVITY
- 15 CARPET ON CONCRETE SLAB
- 16 OPEN WEB STEEL BEAMS
- 17 SIDE-HUNG INSULATED PINBOARD WINDOW SHUTTER AND CUPBOARD DOOR
- 18 STAINED PLYWOOD WINDOW LEDGE
- 19 GALVANIZED STEEL BRACKET
- 20 PLYWOOD FASCIA, STAINED ON ALL SURFACES
- 21 NON-ASBESTOS MINERAL FIBER BOARD
- 22 BREATHABLE PAPER
- 23 STAINED WOOD TRIM
- 24 PAINTED PLASTERBOARD
- 25 POLYETHYLENE VAPOR RETARDER
- 26 INTERIOR WOOD TRIM
- 27 TEMPERED GLASS
- 28 WINDOW FRAME
- 29 BATTEN
- 30 MASTIC
- 31 NEW TOP SILL
- 32 EXISTING SILL PLATE
- 33 BRACKET CONNECTION TO COLUMN
- 34 FOAM INSULATION
- 35 VAPOR RETARDER
- 36 METAL FLASHING
- 37 PLYWOOD SPANDREL, STAINED ON ALL SURFACES
- 38 VENTILATION CAVITY FRAMED BY PLYWOOD BATTENS

TYPICAL WALL SECTION

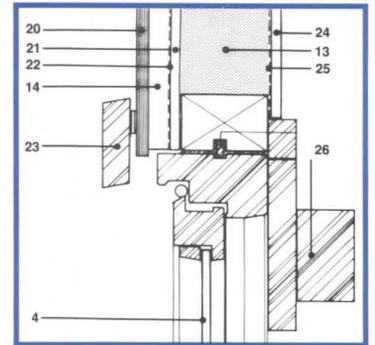


REHABILITATED FACADE OF CROOKHAM JUNIOR SCHOOL

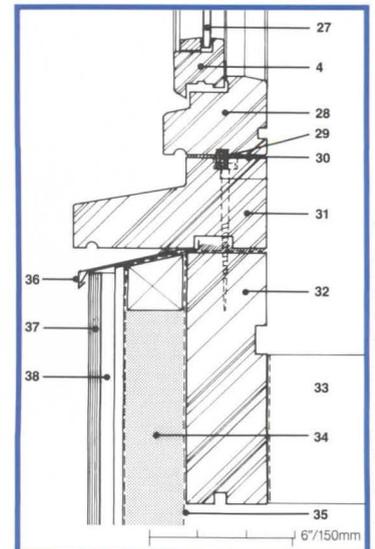
Martin Charles

Façade replacement Crookham Junior School Hampshire, England

Edward Cullinan Architects have designed new façades (as well as new interiors) for this English school that are at once playful and functional. The school, built during the 1960s, had uninsulated exterior walls with excessive amounts of glazing, no sun shading, and rotted wood framing. Cullinan reduced the amount of glazing by one third, insulated the spandrels and fascia panels, and installed sun shades. Supported by galvanized steel angles, the upper sun shades consist of yellow corrugated glass-fiber sheets whose translucency varies with its orientation; the lower shades are made of a polyethylene mesh stretched between steel tubes. The outside wood-framed walls have two layers: an inner wall that is insulated and clad with nonasbestos, mineral-fiber panels and an outer rain-screen wall. What is most striking about these façades is their color: an appropriate treatment for an elementary school, which gives depth and liveliness to flat, low-cost exteriors.



SECTION, TRANSOM WINDOW HEAD



SECTION, WINDOW SILL

Drawings: John Hewitt, courtesy of The Architects' Journal

PA Advertisers' Index

AllianceWall Corp.	4	Peerless Lighting	64
American Device Manufacturing Co.	10	Pittsburgh Corning Corp.	54
American Gas Association	122	Prestressed Concrete Institute	14
Andersen Corp.	19-30	Progressive Architecture China Tour	18
Armstrong World Industries, Inc. C2, 1		Quo Vadis	126
Associated Foam Manufacturers, Inc.	55	Red Cedar Shingle & Handsplit Shake Bureau	56
Avis	46	Sargent/Essex Industries, Inc.	43
Best Lock Corp.	C3	Shaw-Walker	118, 119
Best Western International	128	Steelcase, Inc.	2, 3
C/S Group	32	Sto Industries, Inc.	48, 48A-48R
Canon Color Laser Copier	127	TWA	40
Canon Micrographics	37	Thoro Systems Products	125
Compaq Computer Corp.	62, 63	Viking	56
Conde House	112	Wane Tree Systems	44
D.P.I.C.	50	Wayne-Dalton Corp.	C4
Design Competition—The City of Colton	54	Wolverine Technologies, Inc.	134
Dover Elevator Systems, Inc.	53		
Dow Corning Corp.	57		
Expoconsul International, Inc.	49		
Flexco International Co.	115		
Forms + Surfaces	8		
GE—C&I Lamps	110, 111		
GTE Sylvania	60, 61		
Haworth, Inc.	31		
W.P. Hickman	129		
KDI Paragon, Inc.	44		
Kawneer Co., Inc.	12, 13, 116, 117		
Kim Lighting	39		
Kodansha International	11		
Krueger International	58, 59		
Marble Technics	45		
Marvin Windows	6, 7, 120, 121		
National Golf Center	52		
National Partitions and Interiors, Inc.	128		
Nevamar Corp.	130		

Advertising Sales Offices

Stamford, Connecticut 06904:

600 Summer Street, P.O. Box 1361
203-348-7531 Fax 203 348 4023

Robert J. Osborn
Vice President and Publisher

Richard A. Strachan,
Sales Manager

Francis X. Roberts, James J. O'Brien,
District Managers

Atlanta, Georgia 30326:

3400 Peachtree Road, NE-Suite 811
Lennox Tower

404-237-5528 Fax 404 237 1372

Harmon L. Proctor, Regional Vice President

Ronald L. Miller, District Manager

Boston, Massachusetts:

600 Summer Street, P.O. Box 1361

Stamford, CT 06904 203-348-7531

Richard A. Strachan,

Sales Manager

Chicago, Illinois 60601:

2 Illinois Center Bldg, Suite 1300

312-861-0880 Fax 312 861 0874

Patrick J. Carroll, Brian Keenan

District Managers

Gail Lisac, Sales Service

Cleveland, Ohio 44114:

1100 Superior Ave.

216-696-7000 Fax 216 696 8765

John F. Kelly, Western Sales Manager

Dallas, Texas; St. Louis, Missouri:

2 Illinois Center Bldg, Suite 1300

Chicago, IL 60601

312-861-0880 Fax 312 861 0874

Brian Keenan, District Manager

Denver, Colorado 80222:

4155 East Jewell

Suite 202

303-753-1901

Albert Ross, District Manager

Los Angeles, California 91436:

16255 Ventura Blvd, Suite 300

818-990-9000 Fax 818 905 1206

Ed Sexton, District Manager

New York, New York 10168:

Chanin Building, Suite 900

122 East 42nd Street

212-867-9191 Fax 212 867 5893

James J. O'Brien, District Manager

Philadelphia, Pennsylvania:

600 Summer Street, P.O. Box 1361

Stamford, CT 06904 203-348-7531

Francis X. Roberts, District Manager

Paris, France:

Continental Europe

12 Avenue Franklin-Roosevelt, 75008

Telephone: 43 59 36 06 Telex: 260717,

Fax: 43 59 76 70.

Yvonne Melcher, Manager

Tokyo, Japan 101:

Bancho Media Service

Dai-Ichi Nisawa Bldg, 5th Fl.

3-1 Kanda Tacho 2-chome

Chiyoda-Ku

03-252-2721

Genzo Uchida, President

United Kingdom:

Wood Cottage, Shurlock Row

Reading, RG10 0QE, England

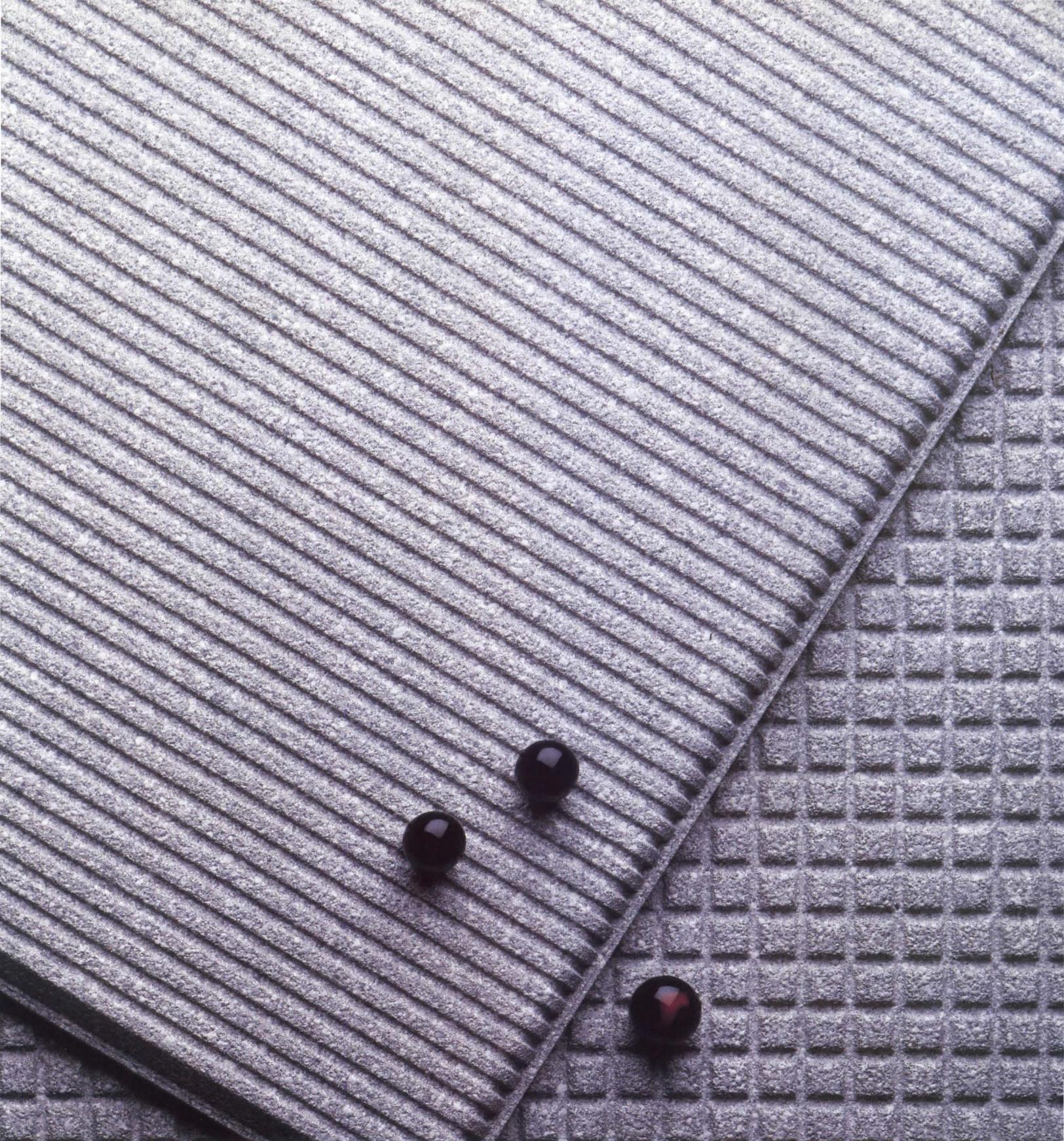
0734-343302

Telex 848800 Techno G

Fax 0-734-343848

Malcolm M. Thiele

Managing Director, U.K.



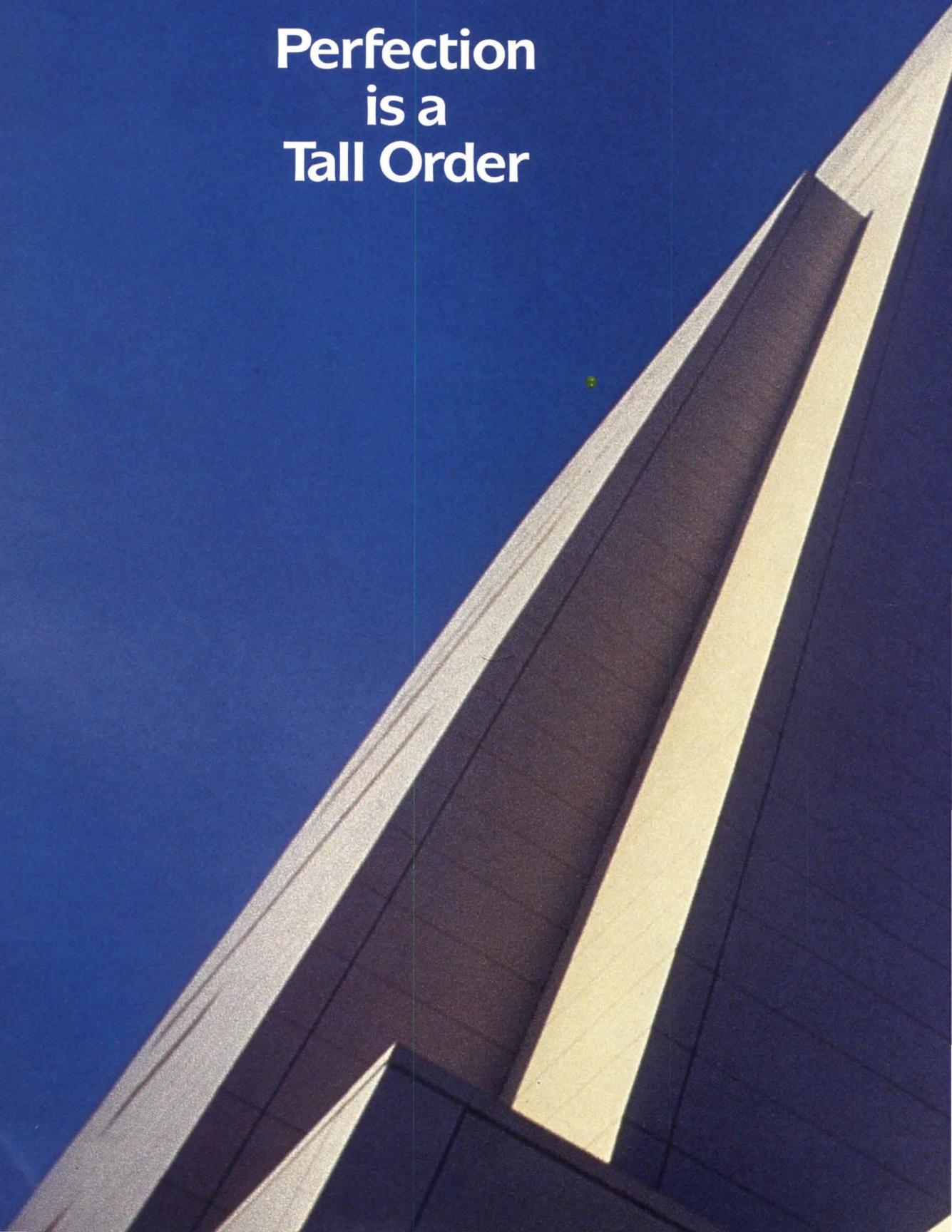
ARMSTRONG CONTRACT INTERIORS

CEILINGS
CARPETS
FLOORS
WALLS

Armstrong

Circle No. 314 on Reader Service Card

**Perfection
is a
Tall Order**



7,000,000 miles in actual use wasn't enough. We subjected the SPEC60™ mid-rise elevator to another 2,000 grueling miles in our 29-story test tower to prove its reliability.

Hour after hour. Mile after mile. The SPEC60 took everything Otis field mechanics and our test tower could dish out. But even before testing started, we knew the SPEC60 was a winner. After all, it had already undergone a punishing 7,000,000 miles of everyday use at more than 3,000 installations worldwide.

Naturally, before introducing the SPEC60 to the demanding U.S. market, we wanted to prove that it was possibly the world's most reliable mid-rise elevator. After more than 1,000 hours of constant ups and downs and starts and stops at our Bristol (Conn.) Research Center, the SPEC60 showed it can take it. And, to ensure that future SPEC60s remain just as reliable as the prototype we tested, we'll keep on testing production models as well.

The new SPEC60 uses the latest generation of the Elevonic® dispatching technology developed by Otis, the world's premier system for fast, responsive traffic handling. And its variable frequency motion control system produces cab acceleration, deceleration, and leveling of unmatched smoothness.

All SPEC60 models are equipped with Otis' unique Lambda 950® infrared entrance protection system. The Lambda 950 has no moving parts. No physical contact is needed to reopen doors. There's virtually nothing to wear out or break down. You'll never again face costly safety shoe repairs.

For more information on what makes the SPEC60 elevator so reliable, call one of our Otis representatives at 1-800-441-OTIS. They'll be glad to tell you, in graphic detail, how the SPEC60 will stand up to your building's tallest orders.



Circle No. 371

COLORFUSION™

Ceramic-On-Steel Melds High-Tech With High Style.

Only AllianceWall makes COLORFUSION™ a unique breed of ceramic-on-steel panels as beautiful as they are functional. By a new, proprietary process, we can fuse a limitless range of colors, patterns or graphics into the wall surface.

AllianceWall's COLORFUSION panels are virtually indestructible. They won't chip, crack, mar or fade, and they are scratch-, heat- and chemical-resistant.

They're easier and less expensive to install than conventional wall surface materials. And they're maintenance-free.

Nice to know that ceramic-on-steel now gives you endless design possibilities. And that it will keep your design intact...a long way into the future. Write or call for more information on American-made COLORFUSION panels.

Ask about our other new metallic, matte and graphic surfaces.

AllianceWall Corporation • Box 920488 • Norcross, Georgia 30092 • (404) 447-5043 • TWX 810-766-0436 • FAX 404-446-5951

 ALLIANCEWALL®



AllianceWall's ceramic-on-steel panels, *left to right*: Exterior, Paragon Building, Houston; Exterior, CIGNA Regional Office Buildings; Interior applications and escalators, Liege Hospital, Belgium; Graffiti-resistant walls, Elevator Manufacturers Worldwide; Exterior and jetways, Cedar Rapids Airport.

Circle No. 307 on Reader Service Card