



ARCHAEOLOGY

NOVEMBER 1984 FIVE DOLLARS

CIRRUS
TRAVERTONE™
CEILING.

Soft. Subtle. Timeless.

Subtlety has enduring appeal. And no ceiling demonstrates that quite like Armstrong Cirrus Travertone.

Softly textured Cirrus is ideal for private offices or expansive commercial spaces. Cirrus creates a relaxed and sophisticated ambiance that no heavily textured or flat-fissured ceiling can match.

It's available in 12"×12" tiles with beveled or channel-cut edges. Or 2'×2' tegular-edged panels which drop slightly below the surface of the grid, adding dimension to room designs.

Either way, you achieve excellent acoustical efficiency and fire retardance without sacrificing esthetics.

A member of the classic Travertone family, Cirrus is the soft and subtle option with timeless appeal.

For complete details, write Armstrong, Dept. 4BNAM, Box 3001, Lancaster, PA 17604.

FROM THE  INDOOR WORLD® OF

Armstrong



CONTENTS

The American Institute of Architects

Officers

George M. Notter Jr., FAIA, *President*
 R. Bruce Patty, FAIA, *First Vice President*
 Gaines B. Hall, FAIA, *Vice President*
 Theodore F. Mariani, FAIA, *Vice President*
 Robert J. von Dohlen, FAIA, *Vice President*
 Harry Harmon, FAIA, *Secretary*
 Henry W. Schirmer, FAIA, *Treasurer*
 Louis L. Marines, *Executive Vice President*

Directors (Year indicates expiration of term)

Harry C. Hallenbeck, FAIA ('84), *California*
 Paul R. Neel, FAIA ('86), *California*
 Robert A. Odermatt, FAIA ('86), *California*
 William E. Patnaude, FAIA ('85), *California*
 John R. Birge, AIA ('85), *Central States*
 Larry K. Edmondson, AIA ('84), *Central States*
 Henry G. Meier, FAIA ('85), *East Central States*
 Howard B. Bochiardy, FAIA ('85), *Florida/Caribbean*
 Ted Pappas, FAIA ('84), *Florida/Caribbean*
 Robert V.M. Harrison, FAIA ('84), *Gulf States*
 William W. Herrin, AIA ('86), *Gulf States*
 Donald J. Hackl, FAIA ('84), *Illinois*
 Almon J. Durkee, FAIA ('86), *Michigan*
 Samuel A. Anderson III, AIA ('84), *Middle Atlantic*
 Leon Bridges, AIA ('86), *Middle Atlantic*
 Kenneth John Filarski, AIA ('85), *New England*
 G.W. Terry Rankine, FAIA ('86), *New England*
 Kenneth D. Wheeler, FAIA ('86), *New Jersey*
 Laszlo Papp, FAIA ('85), *New York*
 Peter Thomson, AIA ('84), *New York*
 David E. Lawson, AIA ('85), *North Central*
 Raymond Crowder Jr., AIA ('86), *Northwest*
 L. Jane Hastings, FAIA ('84), *Northwest*
 A. Notley Alford, AIA ('85), *Ohio*
 Melvin Brecher, FAIA ('84), *Pennsylvania*
 Elizabeth Bobbitt Lee, AIA ('85), *South Atlantic*
 Raymond F. Stainback, FAIA ('86), *South Atlantic*
 Benjamin E. Brewer Jr., FAIA ('85), *Texas*
 James A. Clutts, FAIA ('84), *Texas*
 Allen McCree, AIA ('86), *Texas*
 Phillip Wade Dinsmore, AIA ('84), *Western Mountain*
 William C. Muchow, FAIA ('85), *Western Mountain*
 Thomas Fowler IV, *ex officio, President ASC/AIA*
 Sandra M. Stickney, *ex officio, Chairman, CACE*
 Susan Stamberg, *Public Director*

Headquarters

The American Institute of Architects

Louis L. Marines, *Executive Vice President*
 James A. Scheeler, FAIA, *Group Executive, Program Management, Assistant Treasurer*
 James Vincent Siena, *General Counsel, Group Executive, Government Affairs*
 Fred R. DeLuca, *Controller*
 Susan Allen, *Administrator, Institute Affairs*
 Michael B. Barker, AICP, *Administrator, Design*
 Francis X. Brown, *Administrator, Conventions/Conferences/Special Events*
 Muriel Campaglia, Hon. AIA, *Administrator, Communications*
 Joseph Crane, *Administrator, Government Affairs*
 James E. Ellison, AIA, *Administrator, Membership Services*
 Robert T. Packard, AIA, *Administrator, Practice*

AIA Service Corporation

James P. Cramer, *President/Chief Executive Officer*
 C. Christopher Kelly, *Senior Manager, Business Management*
 John H. Schruben, FAIA, *Senior Executive Manager, Business Development*
 Susan Allen, *Assistant Secretary*
 Fred R. DeLuca, *Assistant Treasurer*
 Deborah A. Diffendal, *Senior Manager, Management Information Services*
 Sandy Dresser, *Senior Manager, Personnel*
 David S. Godfrey, *General Manager, The AIA Press*
 Anna Maria Nuñez, *Senior Manager, Marketing Group*
 Ronald J. Panciera, *Senior Manager, Accounting*
 Robert L. Petterson, *Senior Manager, Professional Systems*

AIA Foundation

Louis L. Marines, *Acting President*
 Earle Kennett, *Administrator, Research Division*
 Susan Stein, *Administrator, Arts and Education Division*

Tulsa Tower Hugs a Landmark 50
 HBT's Mid-Continent building. By Carleton Knight III

Television as a Tool of Urban Design 54
 The renewal of downtown Roanoke, Va. By Michael J. Crosbie

The Challenge of Context in Washington 62
 The Demonet Building, George Washington Law School, Sears House, and 1818 N Street. By Allen Freeman

National Geo: Addition without Connection 69
 SOM builds beside the Stone original. By A.F.

Public Opinions of Contextual Fit 72
 A lay panel reacts to some notable efforts. By Linda Groat

'Fictional History' in Rome 76
 The remarkable Piazza Mincio. By James Stokoe

Kaleidoscope

Savings bank at home in a small Texas town. By David Dillon 80
 New-old library in a Chicago museum. 82

By Nora Richter Greer
 Streamline New York light bulb store. By N.R.G. 83

Witty penetration of a cast iron facade. By N.R.G. 84

Stately library gets an underground addition. By N.R.G. 86

Wartime torpedo plant put to peaceful uses. By N.R.G. 88

Movie palace becomes a sumptuous theater. By N.R.G. 91

Events & Letters	6	Furnishings	118
News	11	Products	123
Books	97	Advertisers	128

Cover: Detail of Gino Coppedè's 1927 apartment building on Piazza Mincio in Rome. Photo by James Stokoe (see page 76).

Donald Canty, Editor in Chief; **Carole J. Palmer**, Art Director; **Andrea Oppenheimer Dean**, Executive Editor; **Allen Freeman**, Managing Editor; **Nora Richter Greer**, Senior Editor; **Mary E. Osman**, Hon. AIA, Senior Editor, Books; **Michael J. Crosbie**, Associate Editor; **Lynn Nesmith**, Director of Research; **Kathleen Vetter**, Design Assistant; **Karen Toulson**, Editorial Assistant; **Robert Campbell**, **David Dillon**, **Carleton Knight III**, **John Pastier**, and **Marguerite Villecco**, Contributing Editors.

Michael J. Hanley, Publisher; **Suzanne Maggi**, Assistant to the Publisher; **George T. Broskey**, National Sales Manager; **David S. Godfrey**, General Manager; **Jesse Sims**, Production and Business Manager; **Anna Maria Nuñez**, Marketing Director.

James P. Cramer, Magazine Group Publisher.

ARCHITECTURE: The AIA Journal, publication number; ISSN0746-0554, official magazine of The American Institute of Architects, is published 12 times yearly by the AIA Service Corporation at 1735 New York Ave. N.W., Washington, D.C. 20006. **Individual Subscriptions:** U.S. and its possessions; \$26 for one year, \$42 for two years, \$58 for three years. Canada: \$32 for one year, \$50 for two years, \$68 for three years. Foreign: \$50 for one year, \$90 for two years. For special library and institutional rates, please contact circulation department. Single copies, \$5 each (except for May and September issues, which are \$10). Publisher reserves the right to refuse unqualified subscriptions. For subscriptions: write circulation department; for change of address: send circulation department both old and new addresses; allow eight weeks. Quotations on reprints of articles available. Microfilm copies available from University Microfilm, 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Referenced in *The Architectural Index*, *Architectural Periodicals Index*, *Art Index*, *Avery Index to Architectural Periodicals*. Second class postage paid at Washington, D.C., and additional mailing offices. © 1984 by The American Institute of Architects. Opinions expressed by the editors and contributors are not necessarily those of AIA. VOL. 73, NO. 11.



category
#3
STO Products & Systems

prefabricated exterior insulation panel systems

M^{echanical} SYSTEM . . . easy assembly

THE BEST OF BOTH WORLDS !

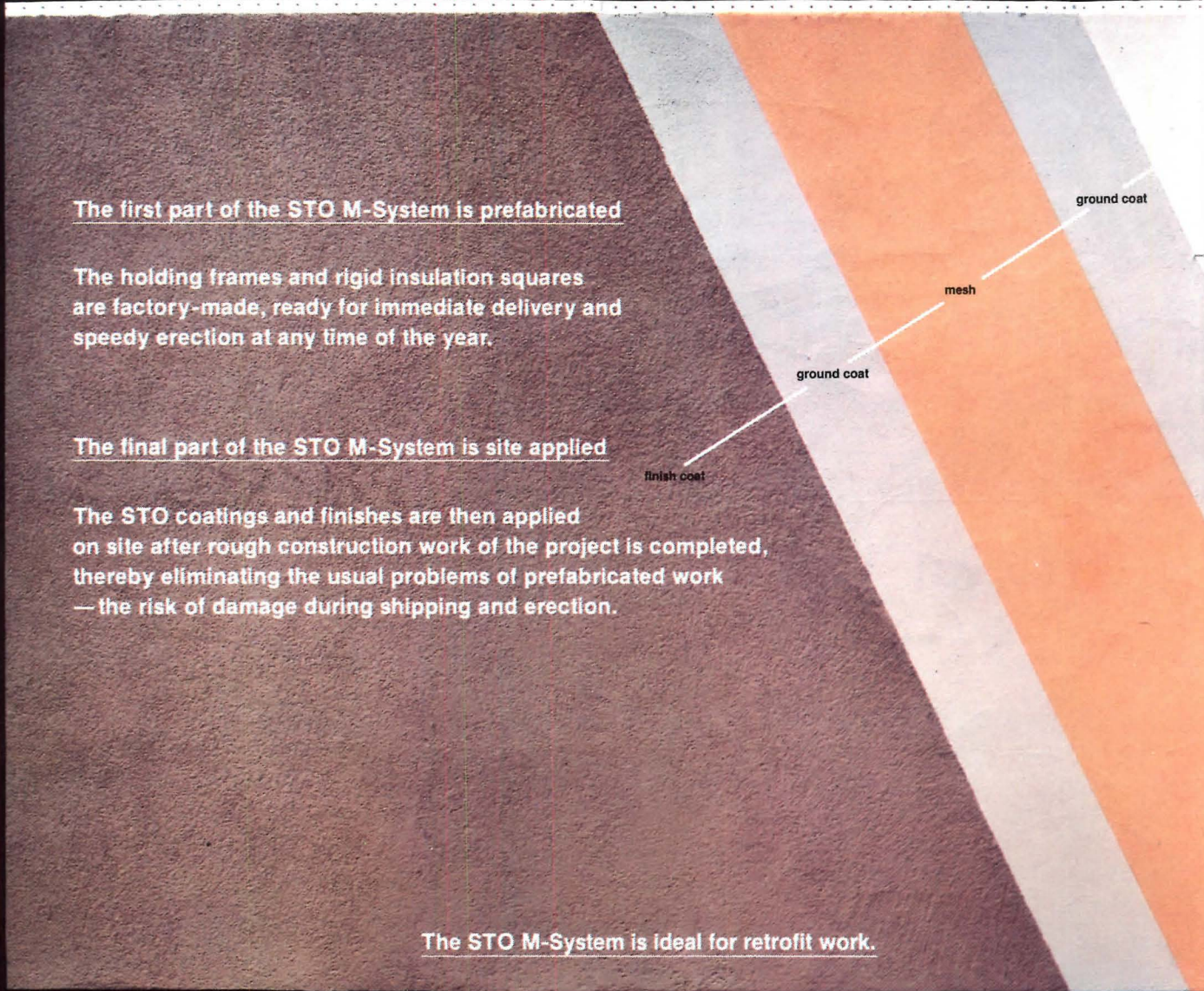
. . . . the beginning is prefabricated,
the end is site applied

The first part of the STO M-System is prefabricated

The holding frames and rigid insulation squares are factory-made, ready for immediate delivery and speedy erection at any time of the year.

The final part of the STO M-System is site applied

The STO coatings and finishes are then applied on site after rough construction work of the project is completed, thereby eliminating the usual problems of prefabricated work — the risk of damage during shipping and erection.



The STO M-System is ideal for retrofit work.

Because the holding frames stand away from irregular substrates — such as shingles, broken masonry, etc. — the system can be used over any type of existing wall material. Furthermore, no surface demolition or preparation is required.

the originator and world's leading producer of synthetic resin coatings and exterior insulation systems

STO INDUSTRIES
INCORPORATED

Quality Lane, Box 219, Rutland, Vermont 05701

802-775-4117

2189 F Flintstone Drive, Tucker, Georgia 30084

404-939-9590

... the **3** prefabricated components :

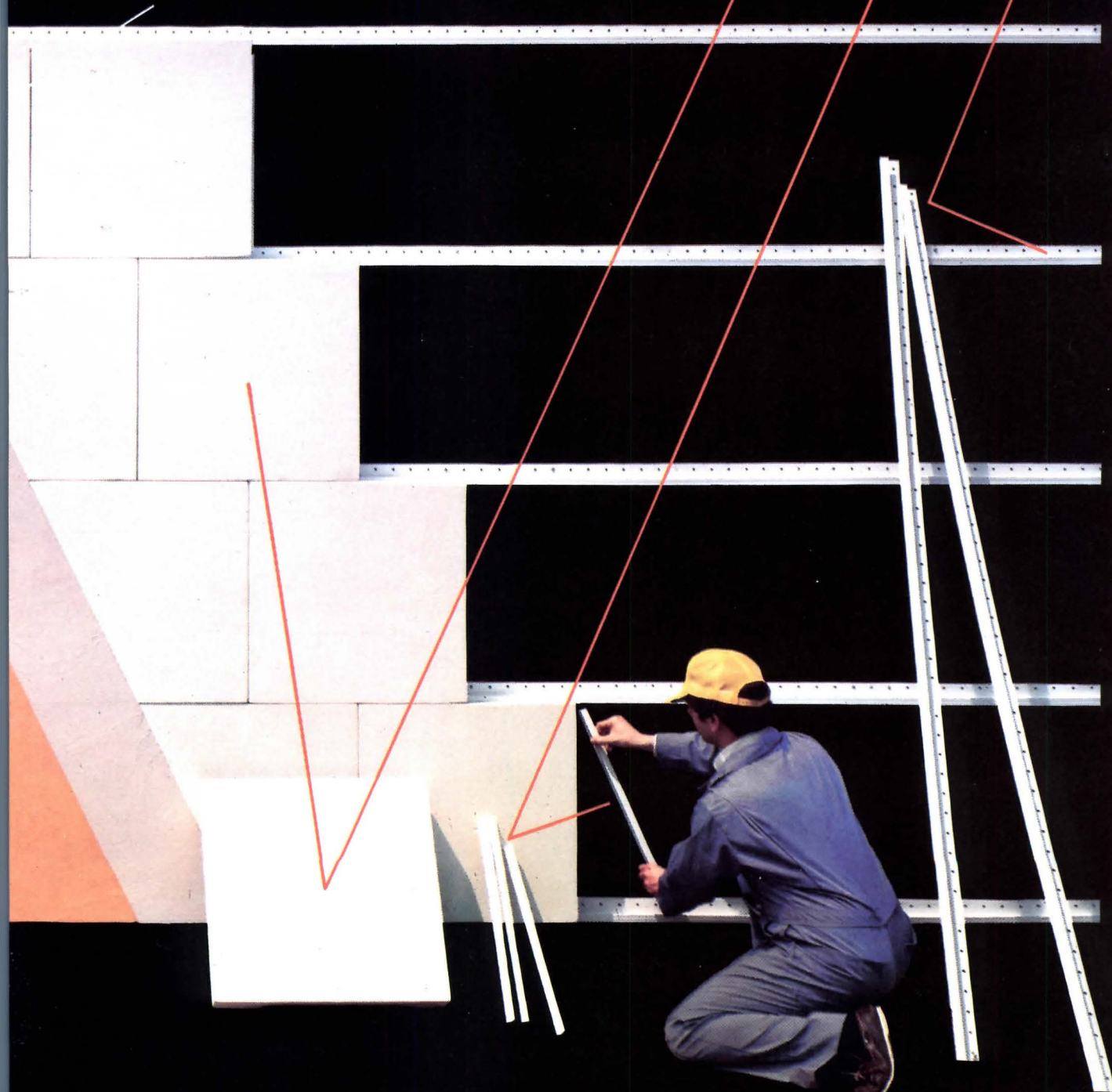
simple parts

... the rigid plastic holding-frame system of 96" long horizontal tracks

and the 22" long vertical splines

are designed to fit into the routed edges of the 24" x 24" rigid insulation squares (with required R-value thickness)
... to give an immediate and tight interlock of all components !

... then on-site completion follows with STO finish coating over glass-fiber reinforcing mesh embedded in STO ground coat .



Damora

EVENTS

Nov. 28-30: Conference on Reusing Old Buildings—Preservation Law and the Development Process, Fort Worth, Tex.

Contact: National Trust for Historic Preservation, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.

Nov. 29: Lecture by Sarah Bradford Landau in conjunction with the Octagon exhibition "Chicago and New York—A Century of Architecture Interaction," Washington, D.C. Contact: Ann Carper at Institute headquarters, (202) 626-7467.

Dec. 2-3: Practice Management Conference on Power, Image, and Compensation, Dallas. Contact: Bill Hooper at Institute headquarters, (202) 626-7532.

Dec. 3-4: Seminar on Superinsulation Design and Construction Techniques, Boston. (Repeat seminars Dec. 5-6, Chicago; Dec. 7-8, Minneapolis; Jan. 7-8, New York City; Jan. 9-10, Cleveland; and Jan. 11-12, Denver.) Contact: Nina Kruschwitz, P.O. Box 716, Back Bay Annex, Boston, Mass. 02117.

Dec. 3-5: Training Course on Asbestos Abatement, Denver. (Repeat course Jan. 14-16, San Diego, Calif.) Contact: Association of the Wall and Ceiling Industries, 25 K St. N.E., Washington, D.C. 20002.

Dec. 4-6: Conference on Plant Engineering & Maintenance, San Francisco. Contact: Plant Engineering & Maintenance Show/West, 999 Summer St., Stamford, Conn. 06905.

Dec. 6-7: Workshop on Creative Financing for Capital Facilities, Atlanta. Contact: Christine Barbetta, American Institute of Certified Planners, 1313 E. 60th St., Chicago, Ill. 60637.

Dec. 6-7: Course on Managing Cogeneration Projects, Palm Springs, Calif. Contact: Registrar, Association of Energy Engineers, 4025 Pleasantdale Road, Suite 340, Atlanta, Ga. 30340.

Dec. 10-11: Seminar on Energy Auditing for Buildings and Industry, Miami. Contact: Registrar, Association of Energy Engineers, 4025 Pleasantdale Road, Suite 340, Atlanta, Ga. 30340.

Dec. 12: Symposium on Design, Selection, Performance, and Implementation of Computer Networking Systems, Gaithersburg, Md. Contact: Robert Rosenthal, National Bureau of Standards, B226 Technology Building, Gaithersburg, Md. 20899.

Dec. 12-13: Conference on Doing Business with the Government—Federal Contracts and Grants in an Age of Changing Technology, Dallas. Contact: Pat Holdsworth, Federal Business Services Corporation, 1015 15th St. N.W., Washington, D.C. 20005.

Dec. 13: Seminar on Wood in Today's Buildings, Birmingham, Ala. Contact: Steve Spencer, Jenkins Brick Sales, 2079 Valleydale Terrace, Birmingham, Ala. 35244.

Jan. 20-24: Congress of the International Union of Architects, Cairo. Contact: Susan Allen at Institute headquarters, (202) 626-7502.

June 9-12: AIA Annual Convention, San Francisco.

LETTERS

Teaching About Built Environment: Your October News article on learning about the built environment (page 36) has plucked a gold chord on my heart-string. And with exuberant joy! Possibly because the topic is one that I, myself, am deeply involved in researching for my architectural thesis project. Possibly because I breathe a sigh of relief that there *are* actually people, architects, who are more concerned with the "quality of life's environment = architecture" than the formalist or rhetorical games or the ego-boosting designs or even the make-a-buck architecture. Sure, arguments can be made for all of the above being a concern for architects in some respect, but what we are as professionals are people who are most concerned with the environments that support life. We, a valuable group of people, are given the opportunity to touch a great many lives, and we can choose to do so with a responsive architecture or ignore the challenge. I am not talking only of the visionaries who are out to make a "better world" but of a more down-to-earth concept of putting people in touch with what is good and pleasant about life as it is today. What better way than to educate the young of the possibilities of a good environment? What better way than to help them to be critical in a more positive way so that they can appreciate what is good and determine what is schlock? What better way than to combine the talents of teachers, who touch your mind, and the talents of designers, who touch your senses, in one complete package? I salute AIA for this step and hope many will take advantage of this opportunity in a search for a "better today."

Gloria Mikolajczyk
Cincinnati

Forensic Engineering: So often we, as architects, think of ourselves as the creative innovators of the design team. Indeed, many times we are, but we don't often view our engineers in the same light.

On Oct. 9, 1984, the New York metropolitan section of the American Society of Consulting Engineers sponsored a seminar entitled "Forensic Engineering—Pile Cap Failure." The speakers were Tom Davisson, consulting engineer, formerly of the University of Illinois, and John Hanson, president of Wiss, Janney, Elstner Associates Inc. in Northbrook, Ill. Each served as expert for opposing parties in

the litigation of this construction failure.

The details of the investigation for this unusual type of foundation failure, located in a portion of a new parking garage, were presented with lively debate. Slides were shown to illustrate pile caps that had failed in shear and the shoring that was necessary to brace the garage floors above. Factors contributing to the problem were the use of small diameter pipe piles, ACI codes that needed revisions at the time the structure was being designed, and construction practices that deviated from the design specifications.

This was not a clear cut case of negligence on anyone's part. The designers decided to provide the shoring design for the structure and outlined the procedures to remedy the deficient piles and pile caps. The contractor carried out the remedial work, and the garage was returned to normal usage. All this was settled through mediation and not in the courts.

This approach to solving problems such as these is not new, but as architects we can learn that the open debate surrounding the investigation of construction problems can be a healthy influence in finding a solution. At times we react defensively to this type of investigation in an effort to protect our professional standing. The key to a successful investigation is to avoid the pitfall of judging ourselves and other design professionals too harshly. The engineers deserve credit for their approach to creative problem solving in this case and for naming it "forensic engineering."

Gary L. Carsten, R.A.
Washington, D.C.

Five Schools: I want to offer my tardy applause and appreciation for the efforts reflected in the August 1984 issue of ARCHITECTURE. The analysis and discussion of the five schools seem to me to reasonably describe the range of concerns, ideas, frustrations, and opportunities that exist in the hundred-odd schools of architecture across the country. It is enlightening for those of us involved in education to witness discussion at this level about architectural education and especially its relationship to the profession.

Again, I congratulate you and urge you to keep up your efforts in this critical area of discussion.

Ron Filson
Dean, School of Architecture
Tulane University
New Orleans

World Architecture: Save the examples from India and England, I found the "Third Annual Review of Recent World Architecture" (September issue) chock to the brim with examples of architects just trying too hard for effect and whimsy without much substance.

E. "Manny" Abraben, AIA, RIBA
Fort Lauderdale, Fla.

Government

In Britain, Princely Opinions Affect Architectural Decisions

Among the guests at the Royal Institute of British Architects' gala evening at Hampton Court earlier this year was Patrick Jenkin, secretary of state for the environment. When His Royal Highness the Prince of Wales described Ahrends Burton & Koralek's design for the National Gallery extension as a "vast municipal fire station with a tower for a siren . . . a monstrous carbuncle on the face of a much loved and elegant friend," and Mies' posthumous City Tower as a "giant glass stump better suited to Chicago" (see September, page 70), Jenkin remarked in a telling aside, "I've just had three big planning decisions made for me." (The third was the redevelopment of the 19th century Grand Buildings which, like the National Gallery, is in Trafalgar Square.)

Well, surprise, surprise, Jenkin did reject the National Gallery extension this September, despite considerable redesign work by ABK. "An unwelcome intrusion" was how the official report described ABK's admittedly bland scheme.

In one sense, the National Gallery fiasco has been good for British architecture: It earned extensive Fleet Street coverage and bore out Oscar Wilde's maxim, "If there is one thing worse than being talked about, it is not being talked about." The British media rarely discuss architecture except when a postwar building is falling down or the Queen is opening a new one—and even then they prefer to comment on the color of her hat.

With the National Gallery out of the way, there is still the daunting specter of Mies van der Rohe to exorcise. Very briefly, the story is this: Property developer Rudolph Palumbo (deceased) was mad on Mies. He commissioned Mies to design a 290-foot, 14-story tower slap bang in the historic weave of the city. In return for having to face a bronze and glass shoebox every rush hour, city workers would be offered a pedestrian plaza and an underground shopping mall.

Back in 1965, when this happened, the city wasn't averse to glass towers, but even then they refused to give Palumbo the go-ahead until he owned all the surrounding property. Nobody expected him to achieve this. But his son, Peter, snapped up the last of the properties a couple of years back and is now demanding his due.

But even the power of big money can't break the back of the city establishment. Its patriotic hackles were up. As far as it was concerned, Mies was out. And, anyway, if these big blocks and rainswept plazas were old hat in the '60s, they were complete anathema in jingoistic Falklands Britain and were flying in the face of the accepted classical vernacular revivals.

First, the Royal Fine Art Commission came out against Palumbo. That was in March '82. The City of London followed in August. Palumbo appealed to the secretary of state for the environment. Since then, of course, the job has gone to Patrick "God bless the Prince of Wales" Jenkin. The public enquiry opened in May, and right on target the prince dropped his convenient bombshell. "Save Britain's Heritage," the influential young fogeny pressure group, commissioned its own camp classical scheme from style monger Terry Farrell, while anti-Mies tracts winged their way across the Atlantic from Arthur Drexler, Henry-Russell Hitchcock, and Philip Johnson (et tu brute?).

Learned articles in the architect's journal, meanwhile, merely demonstrated that Mies' detractors had all the best lines. Geoffrey Broadbent's considered piece tore apart Mies' godless details (he cited amongst others the expensive repairs carried out on Crown Hall in 1977). Little Englanders stood up to be counted, pointing out, forcibly, how Mies' plaza failed to relate to the informal, essentially medieval street pattern. Despite pleas from Richard Rogers, James Stirling, Norman Foster, and Sir John Summerson, Palumbo was at best treading water.

NEWS CONTENTS

Government	
White House restoration	14
The Institute	
Lou Marines: progress report	16
Practice	
Architecture and culture	29
The Arts	
Metal fragments of reality	43

Unless otherwise indicated, the news is gathered and written by Allen Freeman, Nora Richter Greer, Michael J. Crosbie, and Lynn Nesmith.

The public enquiry has since come to a close, and a decision isn't expected until next summer at the earliest. Everyone will be surprised if Palumbo wins.

So, yes, the Prince of Wales has affected the face of contemporary British architecture, carbuncles and all. But, the birth of Prince Harry will take Fleet Street's attention well away from architecture.

JONATHAN GLANCEY

Mr. Glancey is an assistant editor of The Architectural Review in London.

New Planning Head in Boston Quickly Promotes Change

The Boston Redevelopment Authority has a new director. Stephen F. Coyle, who took office in July, is the first BRA director appointed by Mayor Raymond Flynn, who in January became the first new Boston mayor in 16 years after the long mayoral hegemony of Kevin H. White. In Mayor White's later years the BRA, which is supposed to be the city's official planning agency, had little to do except to avoid getting in the mayor's way, but under Flynn and Coyle it appears already to be experiencing a renaissance.

Coyle, 38, comes to Boston from San Francisco, where he was chief executive officer of John Carl Warnecke & Associates. Earlier he was in Washington as executive assistant to the secretary of HUD and then deputy undersecretary of Health and Human Services. He had directed housing authorities in two Boston suburbs.

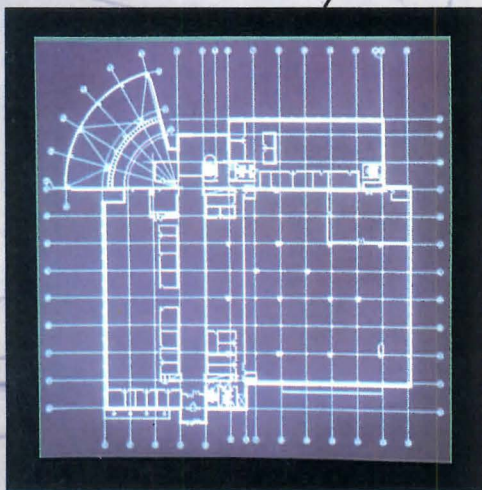
Faced with rising clamor in Boston for some kind of comprehensive plan after years of rapid, chaotic downtown growth under mayoral ad hocism, Coyle has moved with what, for Boston, is stunning speed. Putting his staff on near-impossible deadlines, he produced a preliminary master plan in October for a seven-mile park lining the entire Boston waterfront. He followed up three weeks later with proposed guidelines for developing downtown, guidelines that suggest height limits and mandatory stepped setbacks for new buildings, encourage conversion of older office buildings into apartments, and reward developers of new office buildings for building housing and public improvements in the city's many distressed residential neighborhoods. A plan dealing directly with one such neighborhood, the economically depressed Dudley Station area, is promised for December. Also under consideration is a citywide design review board. ROBERT CAMPBELL

News continued on page 14

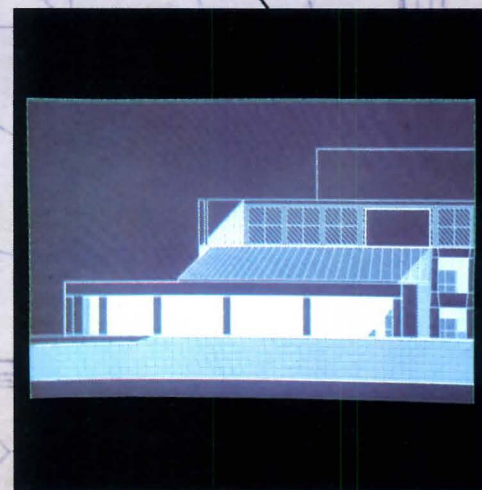
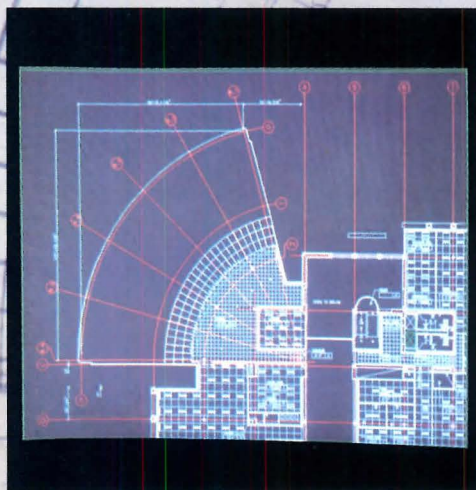
Why so many architects have designs on our systems.

Versatility is the big reason so many architects are making their plans on the Prime® Architectural Design System. Our system lets you do it all.

Generate structural grids rapidly and accurately. Walls, doors, and windows fall right into place in your floor plans.

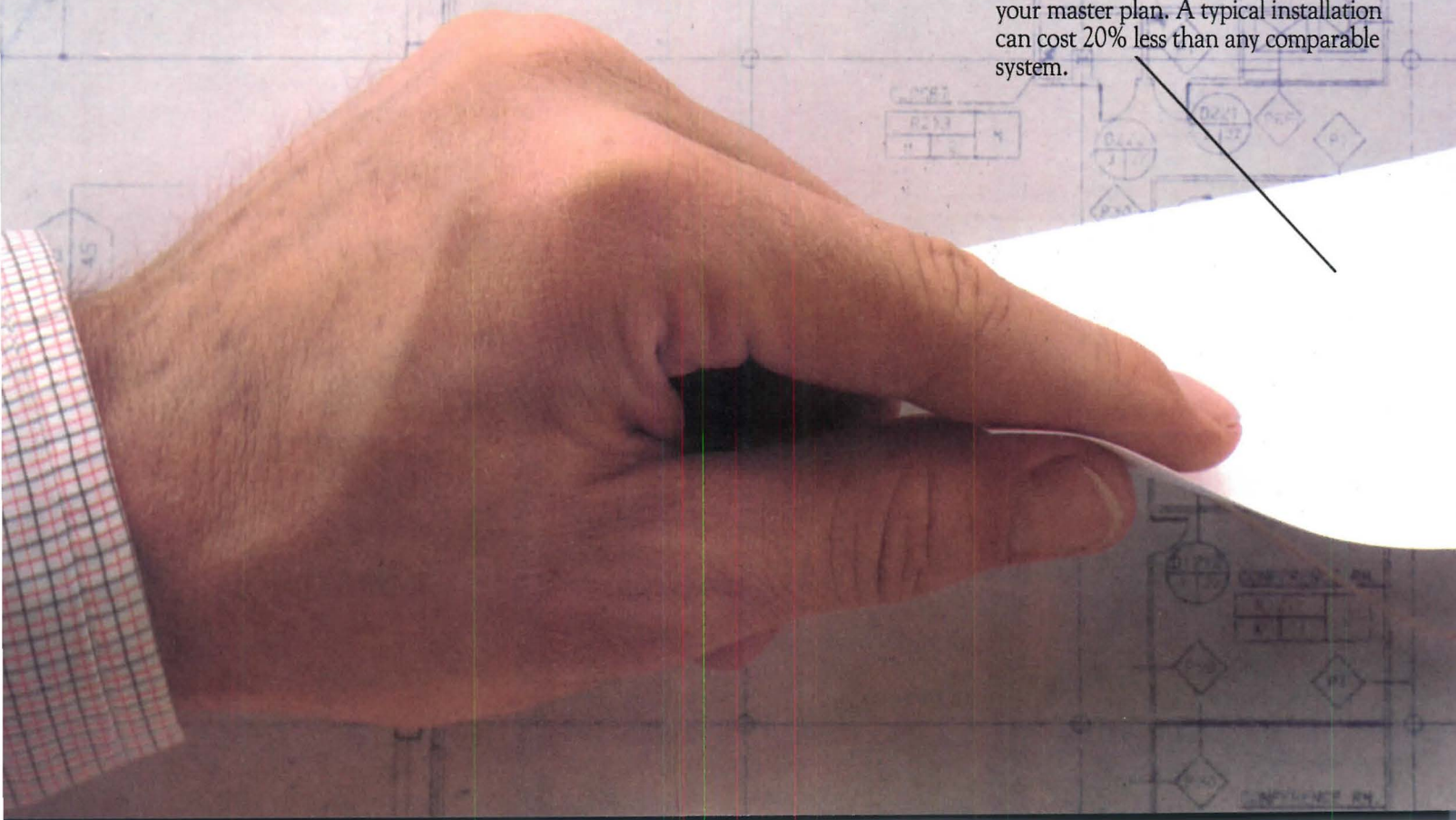


Produce elevations and sections as you need them for contract documents and design presentations.



Complete symbol libraries for every discipline let you create all types of plan drawings in a single file . . . up to 1024 layers!

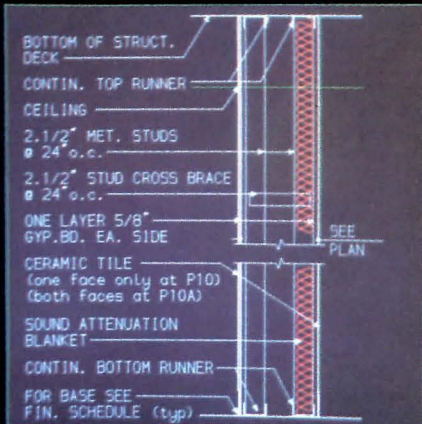
Price is the other reason to put Prime in your master plan. A typical installation can cost 20% less than any comparable system.



PRIME is a registered trademark of Prime Computer, Inc., Natick, Massachusetts. Graphics courtesy of The Grad Partnership, Newark, New Jersey.

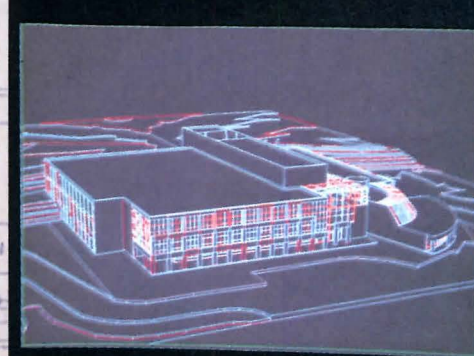
All symbols and standard details are filed in CSI formats, making it easy for you to add to your libraries, and to modify and manipulate them as needed.

Automatically schedule building components, in a flexible format you define yourself.



SCREENSHOT OF A DOOR SCHEDULE TABLE AND A CORRESPONDING FLOOR PLAN DIAGRAM.

NO.	SYMBOL	TYPE	FIN.	MARKING	REMARKS
1	[Symbol]	DOOR	01	101	...
2	[Symbol]	DOOR	01	102	...
3	[Symbol]	DOOR	01	103	...
4	[Symbol]	DOOR	01	104	...
5	[Symbol]	DOOR	01	105	...
6	[Symbol]	DOOR	01	106	...
7	[Symbol]	DOOR	01	107	...
8	[Symbol]	DOOR	01	108	...
9	[Symbol]	DOOR	01	109	...
10	[Symbol]	DOOR	01	110	...



Visualize your entire project from any angle or perspective with Prime's powerful 3-D modeler . . . using easy-to-learn, easy-to-use 2-D drafting techniques.

You can do more with a Prime system. We're a Fortune 500 company with worldwide support. With a family of high-performance computers so compatible, you can interchange hardware and software at will. And with over 1,000 software solutions for every imaginable need.

PRIME
Computer

Find out what you can do with our versatile systems. Call 1 800 343-2540 (in Mass., 1 800 322-2450) or your local office. Or write: Prime Computer, Prime Park, MS 15-60, Natick, MA 01760. In Canada: 416 678-7331; Prime Computer of Canada Ltd., 5945 Airport Road, Mississauga, Ontario, L4V1R9 Canada.

We're versatile, so you can do more.

Circle 7 on information card

Restoration of White House Uncovers Exquisite Carvings

The north portico of the White House has been stripped, revealing the full richness and detail of carvings—berries, cabbage roses, garlands, and geometric forms—that had been progressively hidden under layers of white paint. The removal is part of an on-going restoration project started in 1976 in an effort to overcome paint adherence problems on the 186-year-old structure.

The White House was first whitewashed in 1797 before construction was complete to seal the porous Aquia Creek sandstone used on its exterior walls. The building lost its whitewash coat when it was burned by the British during the War of

1812. Reconstructed between 1814 and 1818, it was painted again, this time with a mixture that proved the most difficult of all the 28 coats to remove during the current restoration.

In the mid-1970s paint was peeling off the building in large sheets, prompting the Park Service (which maintains the building) to conduct a study of how to correct the condition. Research conducted by the National Bureau of Standards on the sandstone led to the development of several paint mixtures that would adhere properly. These were subjected to a battery of tests including performance under accelerated decay conditions at the Illinois Institute of Technology. The coating finally used is made of tung oil, linseed oil, and soya alkyd paint.

Removal of the paint was also subject

to study. The Park Service determined that burning or sandblasting would be too damaging to the soft stone, so a chemical and high velocity water process is being used. Work on the east wall began in 1980 and will proceed a side at a time, with four-year intervals in between so that the paint's performance can be measured.

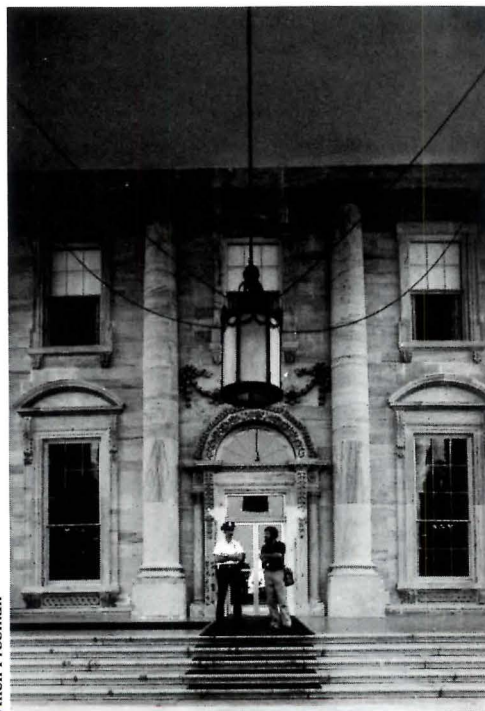
Not part of the White House's original design by Irish architect James Hoban, the north portico, which faces Pennsylvania Avenue, was designed by Benjamin Henry Latrobe and added in 1829. The many layers of paint protected the ornaments from wear. Paint removal also revealed scorch marks around the ornaments and under door and window lintels. Repointing and repair of some of the stone is also being done.

News continued on page 16

Michael J. Crosbie



Allen Freeman



Top, ornament beneath north wall window that bears scorch marks; right, detail of doorway ornament; above, the north wall beneath the portico.

Michael J. Crosbie



Nothing tops a Hi-Tuff[®] roof.

Sweets 7.1/St

STEVENS
Roofing Systems

J. P. Stevens & Co., Inc.
Elastomeric Products Department

Lou Marines; Progress Report After Seven Months as EVP

"Getting the machine to run better" has been the major preoccupation of Louis Marines during his first seven months as AIA's executive vice president. But it is the challenges that lie ahead that really excite Marines: determining new ways in which the Institute can help the profession prosper as well as help precipitate social and environmental change.

Having been a general manager of William Kessler's 25-person architectural firm in Detroit and the much larger New York City firm of Haines Lundberg Waehler, Marines believes he was hired as AIA's in-house leader to "take the Institute in hand, to take the staff in hand, to take the resources in hand, and to help get more mileage from a limited amount of resources" (see March, page 31). By all indications he has begun to do just that.

While feeling uneasy about self-assessments (which he says "seem to have a small bias"), he maintains that AIA is already running smoother. "A lot of people, a lot of members, directors, and staff tell me that they think we are doing more . . . not just things of style but of substance."

Marines acknowledges a few surprises. One is the support he has received from staff and board members: "As far as I can tell, without exception they are not only supportive, but I receive the vibes that they want me to do well and want to help."

Rather than a homogenous, bureaucratic staff, which is how he perceived headquarters from the outside, he has found a "rich diversity of character and culture," people who are "terribly motivated" about their work. "What I add," he says, "is a destination. They didn't have that before in many cases, or it wasn't clear that it was the right one."

Nor did he fully understand the "extent to which average members really did much of the work of the Institute. . . . I never understood that the Institute is only a larger component of the almost 300-odd components and that there is a whole bunch of people out there who are my peers who have the same problems that I do, just on a different scale." Now when speaking to non-Institute groups, Marines worries "I have forgotten about how I thought about the Institute from the outside."

Marines feels that his prior experiences as general manager were relevant: "Because I never have had absolute au-



Allen Freeman

thority in an organization, I have always had to accomplish things by persuading others who have more authority that they should do things because they would help the organization. And I find that is true here: that having the answers is not the answer, that getting others to own the answer and act on it means that things get done."

It is perhaps the recent program and budget process (see page 22) that illustrates best the amount of confidence the board has already placed in Marines' management skills. Marines credits "Bruce Patty and staff" with developing the document, which sets priorities for '85 and beyond, but he does acknowledge that by delegating final approval of the operating budget to Marines, the board has voiced a "significant vote of confidence," in Marines' words. "The confidence is something that I have been cultivating, both because I want that authority for me and the staff, but also because if I can't get that authority I can't free the ex-comm and the board to do the more important things they want to do," Marines says. "Having gone through a reasonably long search to find me and having given me a very important job at a very important time for the profession, they wanted that confidence."

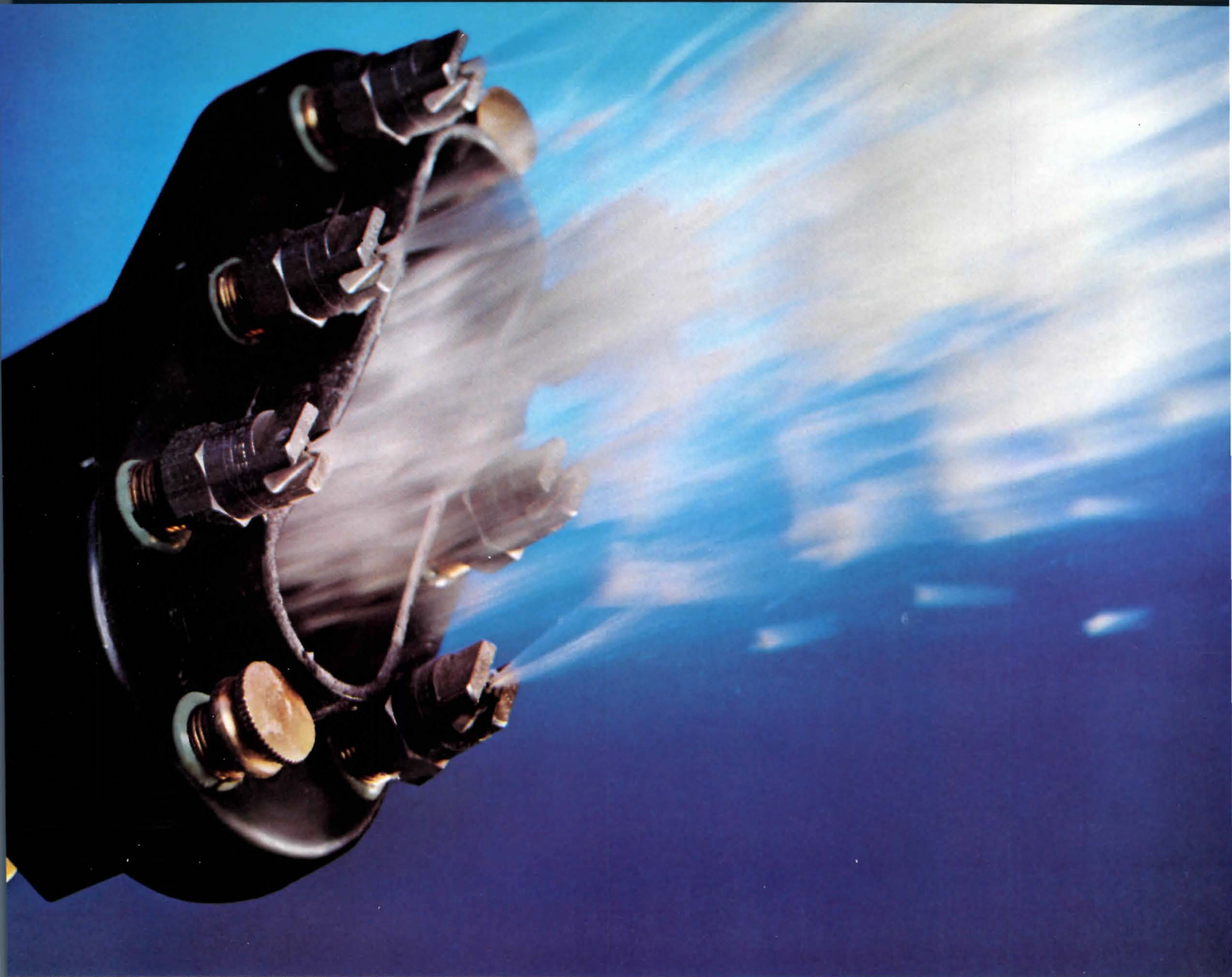
Over the first seven months of his tenure, Marines believes he has acted consistent with his management style. "I get a lot of feedback from members of the board, and I let them know that I am listening and that I care about them and that until proven otherwise their criticisms are worth looking into. And even if I can't give them any answers, I will let them know that I have heard them and that we are working on it."

Another aspect of Marines' management style is that there are "no surprises." He says, "I don't want to be surprised, and I don't want them to be surprised. And in many ways that is the hallmark of a good manager. I spend a lot of time covering the bases, getting people to understand what I have in mind, getting their feedback so that my ideas are refined and therefore more workable and getting everyone to know where I am going. That style of management is not likely to provoke controversy. It is slower, but I think it produces a longer lasting, successful product."

Marines is a self-professed "data gatherer." Even if he has a strong intuition about something, he won't act on it "until I have a fair amount of data to support it. . . . My challenge is gathering the data to let me see if my intuition is correct or if I need to refine my feelings."

One example of how this data gathering works concerns architectural education. "I get a lot of feedback about how practitioners feel about the role of the schools in preparing people for practice. It seems to me that a major challenge of my administration here is going to be to help our members and our leadership and our staff reach out and help the schools do a better job." Before he is ready to advise on that issue, though, he wants to go on an accrediting visit to one of the "best schools" because "I want to see what the longest yardstick is in education."

Since Marines' efforts so far have been mainly educating himself about the administrative side of the Institute, he feels he hasn't yet had time to get into "the issues." After the first of the year, he hopes to be able to "put my feet up and to think or to go and talk to people about more than just the problems of how the Institute is run and how it responds. I would like to talk to them about the problems of the profession and the opportunities and the challenges and where they think the profession is going, compared to where we all think it ought to go, and to see what role the Institute can play in closing that gap. . . . My ultimate fiduciary responsibility here is to make sure that the profession is ready for our society, for our economy, for our environment in the 1990s. I haven't begun to do that yet." *continued on page 22*



CertaSpray[®] spray-on fiber glass lets you insulate up to R-20.

A fiber glass spray insulation for complete design flexibility. Sidewalls on high-rise projects. Ceilings on clear-span structures. Over beams and joists, into cracks, around corners and onto the next area.

CertaSpray[®] has an R-value of R-4 per inch and can be applied up to 5" thick on vertical surfaces, up to 3 1/2" overhead in one application. It covers walls and ceilings completely, without thermal breaks. It's noncombustible and U.L. listed.

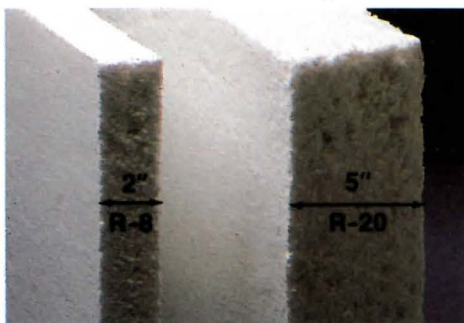
CertaSpray's noise reduction characteristics are outstanding: as little as 2" carry the

highest NRC rating. In addition, Certaspray reflects up to 90% of available light and can help lower lighting requirements.

It won't absorb moisture. It won't corrode pipes. It won't bunch, shift, flake or crack. And it won't disappoint you.

For free information and specifications on Certaspray, write CertainTeed, Dept. A-11, P.O. Box 860, Valley Forge, PA 19482.

4-3816



CertaSpray achieves a 4.0 R-value per inch of thickness.

CertainTeed

See us in Sweet's—Number 7.1 CET.

Circle 9 on information card

The Institute from page 16

One of the first things Marines plans to establish is what the Institute's "role as a primary provider of services to its members" is. Currently, he sees the role of AIA as identifying the "unique cutting edge future needs, to be almost a R&D entity, to tightly define the need and how it can best be served and then create the product in advance of the private sector."

Areas in which he thinks the Institute is not now doing enough include: Computers—"I don't think we are far enough along in helping our members understand how computers can be applied and mak-

ing decisions about which ones to choose and then to improve their ability to use them";

Services to architects in industry, government, and education—"we need to do more in defining unique products and services that help them do a better job in those unique aspects of practice because I suspect those unique aspects of practice are going to be less unique in the future";

Services to architects who are not in management positions in firms;

Promoting the advancement of women and minorities in the profession—"we

have a tremendous responsibility, because we are in many ways a mirror image of society, to do a better job for women and minorities to get them places in the profession where they can contribute the unique perspective and influence that they have."

Marines also believes that architects need to "present more of a united front around the issues that are important to the built environment . . . to reach out and lead . . . to establish the architect's role as a person on the cutting edge of understanding environmental issues."

Acknowledging the "intellectual skills, the emotional ammunition, the professional capabilities, and the humanistic orientation" of architects, Marines believes AIA can effect social change. "For instance," he says, "there are a lot of people in this country who don't have a place to sleep. I think architects are naturals for taking that leadership role. We have the power to design places for people to sleep that are economical, we are humanistic enough to be able to understand better than a lot of other people the psychology of street people, and we are altruistic enough to care. . . . I just know that architects are motivated by a degree of altruism and social concern.

"That is why I'm so anxious to get the administrative mechanics out of the way so that I can get on, first of all to helping the profession survive and prosper. That is my primary responsibility here. They have to be better off. But I really believe that the profession can be better off if the profession can help the world be better off. During my tenure here, I believe we will succeed in making this world a better place to live, and I believe that then the profession will be better off by its emotional and intellectual yardsticks—a greater degree of satisfaction and fulfillment—but also by the more conventional one—prosperity." **NORA RICHTER GREER**

Board Adopts '85 Budget Calling for Dues Increase

At its meeting last month in Quebec, the AIA board of directors adopted a program and budget for '85 that calls for a \$20 annual dues increase, revenues from which will be directed toward: strengthening membership recruitment and retention; increasing the use of computers at staff headquarters; improving assistance to members and components on the selection and use of computers; "sharpening" communications between the Institute and its members; providing better continuity in Institute efforts; increasing the public perception of the value of architecture.

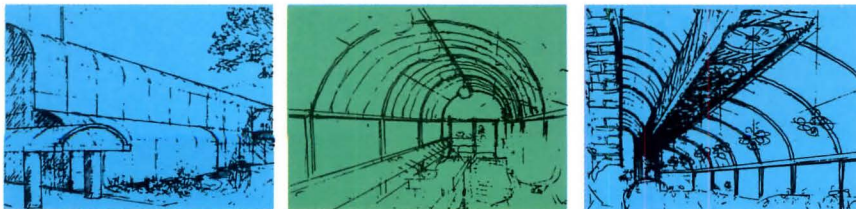
The dues increase will raise the assess-
continued on page 24

KALCURVE™

A MAJOR DEVELOPMENT OF KALWALL®



"For the purity of a true curvilinear surface!"



Unlimited diameters; manufactured to your design.
Design/detailing/engineering assistance is available.
To arrange a personal product presentation, call.

©1984 KALWALL CORPORATION

Kalwall®
CORPORATION

P.O. Box 237, Manchester, New Hampshire 03105
PHONE 800-258-9777

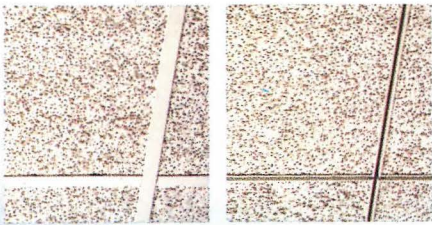
PATENTS PENDING



New two-tone look brings good taste to workaday ceilings.

Auratone[®] Surf Acoustical tiles and panels

Most economy ceilings are made to be ignored. Now comes Surf, a ceiling value with style... a white-over-grey textured look that pleases the eye as it reduces noise. Works well in a small room as well as a supermarket. Available in 12"x12" tiles and 2'x2', 2'x4' and shadowline panels, all 5/8" thick. Call your U.S.G. Representative. Or write to Sound Control Products, 101 S. Wacker Dr., Chicago, IL 60606, Dept. #



Good: Surf Panels enhance standard grid system.

Better: Surf Panels in slender USG[®] Profile Grids.

U.S.G. makes the most elegant ceilings affordable.

© 1984 United States Gypsum

UNITED STATES GYPSUM
BUILDING AMERICA

Circle 11 on information card

The Institute from page 22
 ment for regular members. Associates' or emeritus members' dues will not be affected, nor will there be any increase in supplemental dues paid by architectural firms owned by AIA members.

In explaining the increase R. Bruce Patty, FAIA, president-elect and chairman of the '84 planning committee, said that the board's efforts over the past two years to trim programs and operate within fixed budget limits while operating costs accelerated severely limited the development of new services. "I believe we all realized we could not continue in this direction without diminishing the viability of the organization," Patty said. The dues increase is the first since 1980.

This year the budget process was closely

linked with that of the '84 planning committee. While the budget was being developed, the planning committee with the staff and board established "five purposes" that underlie AIA's programs. These, in turn, were used to evaluate the budget figures. The board delegated the preparation of the '85 operating budget to the executive vice president.

The "fundamental assumption" behind both the planning report and the budget is that the "Institute and the profession exist to foster design excellence. Every activity is justified or understood to the extent that the result leads to providing society with a quality environment."

As stated in the planning report, the Institute's first purpose is "to improve the ability of architects to provide effective

services in their professional activities." Under the first purpose six programs are emphasized. The first is the architects' economics and compensation program, with its goal of improving architects' market share, compensation, and firm profitability. This program was given number one priority overall. The others are: developing new editions of best-selling AIA documents (priority number two); enhancing member participation in Institute affairs by returning committee strength and frequency of meetings to 1983 levels (priority five); increasing annual publication of *Architectural Technology* from three issues to four, while hiring professional writers to prepare articles based on AIA programs, committees, roundtables, and conferences (priority 17); strengthening the architects in industry program (priority 13); and expanding efforts to inform members about the "everchanging developments in computer technology" and to promote communication between computer users (priority 18).

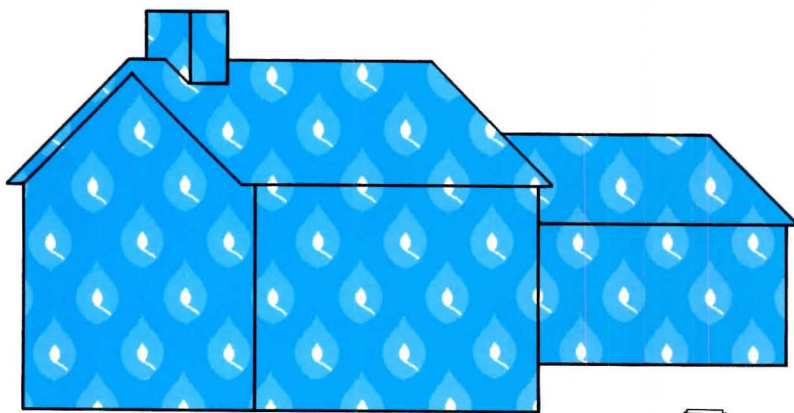
The second purpose is "to persuade policy makers at all levels of government to develop and implement legislation and regulations that will serve the public good and permit architects to perform effectively." Three programs are emphasized: expanding the state and local government clearinghouse (priority 10); establishing a one-day training seminar prior to the national AIA convention on conducting political campaigning, fundraising, etc. (priority 16); and encouraging members of Congress and key federal government officials who regulate the design profession and/or procure design services to join the Forum for Architecture (AIA's public membership program) by sponsoring memberships (priority 23).

"To educate the clients of architecture so that they recognize the range of architects' services and their value" is purpose three. The two programs highlighted in this category are client education/new markets—increasing support for staff and committees already working to influence existing client groups and to undertake new efforts to reach new client groups, particularly in the financial community (priority eight), and the joint-venture client program—a program sponsored by the Urban Land Institute, the National Trust for Historic Preservation, and AIA that teaches architects to be "problem solvers when conflicts between preservationists and developers emerge in complex downtown development projects" (priority 14).

Purpose four is "to increase the general public's awareness and appreciation of architecture to build a demand for a quality environment." In this category emphasis will be placed on increasing public awareness by providing information about the activities of AIA's open com-

continued on page 29

PROPANE GAS. THROUGHOUT THE HOUSE.



AND OUTSIDE, TOO

Propane gas is America's best kept energy secret. It's the clean, efficient energy alternative to electricity—ideal for every home beyond natural gas service. It's the perfect complement to solar. Simple to install. Complete service available everywhere. Abundant. Safe. Reliable. And amazingly versatile. Propane gas.

We think you need to know more about all the propane uses and benefits. A lot more. And about all

the economical, high-efficiency, low maintenance propane gas appliances. Heating systems, hot water heaters, ranges, dryers and outdoor recreation equipment. So we wrote a book just for you. We want to let you in on the secret and show you how, as budget-busting electric rates rise, the propane advantage grows. Why this "most versatile" of all fuels belongs in your plans. Call now for your free, comprehensive *Propane Guide for Architects, Engineers & Builders*.

CALL 1-800-323-6556 ILLINOIS: 1-800-942-6345

PROPANE



PROPANE GAS GIVES YOU MORE FOR YOUR MONEY

NIPGA Copyright 1984

The Institute from page 24
mittee meetings and programs (priority nine); expanding public awareness by increasing the quantity and quality of reporting on architecture in the nation's media (priority 20); and granting honorary AIA members membership in the Forum for Architecture (priority 22).

The last purpose is "to represent the profession's organization as one that relates to other organizations with similar interests in this country and internationally." The two efforts emphasized are enhancing the international program (priority 21) and examining all liaisons maintained by the Institute "in order to achieve maximum benefit from the most important liaisons" (priority 24).

In addition to the five purposes, the planning committee recognized the importance of a "healthy structural base." To strengthen AIA's "base," eight changes are recommended: creating the position of a chief financial officer (priority three); strengthening components' operational and technological capabilities (priority four); funding an ethics task force to develop a model code of professional responsibility (priority six); developing an Institutewide records-management program (priority 11); refining the planning/ program and budget process to "insure continuity and maximum effectiveness" (priority 12); increasing the level of Institute contributions to the National Architectural Accrediting Board, the Council of Architectural Component Executives, and the Association of Student Chapters/ AIA (priority 15); supporting the professional development of Institute staff and providing financial support to staff who need counseling on personal problems (priority 17); and improving the Institute's marketing efforts (priority 19).

In other action the board accepted the report and recommendations of the architects' economics and compensation task

group. As directed by a '84 convention resolution, the task group examined "what is perceived as a diminishing rate of return on an investment for principals in architecture firms and abnormally low salary levels for employees in these firms." The task group's report centers around four goals for which the Institute's efforts should be aimed: increasing within the profession the awareness of business, management, and finance; increasing the knowledge of employee and principal compensation and firm performance; increasing the availability of professional development materials and programs on business management; and increasing the awareness of the nature and value of architecture to its public, clients, and to architects themselves.

Chapter Announces National Architectural Photo Contest

The St. Louis Chapter/AIA is sponsoring a national architectural photography contest open to all AIA members, associate members, and professional affiliates. A maximum of five 2x2-inch, 35mm color slides may be submitted. The subject matter must be architecture or some element of the built environment. Entries will be judged on photographic interpretation of the subject matter.

The winners will be exhibited at the 1985 AIA convention in San Francisco and mounted for a traveling exhibition. A selection of the winning entries will be published in this magazine. Cash prizes of \$1,000, \$700, and \$300 and several honorable mentions will be awarded.

Entries must be postmarked before March 1 and accompanied with a \$10 entry fee. For more information, contact National Photo Contest, St. Louis Chapter/AIA, 919 Olive St., St. Louis, Mo. 63101.

Practice

ACSA Meeting Examines How Architecture Relates to Culture

Exactly what is meant by culture and how architecture is responsive to it was the subject of the Northeast regional meeting of the Association of Collegiate Schools of Architecture, held at McGill University in Montreal.

In his keynote address, cultural anthropologist Amos Rapoport commented on the surge of interest in vernacular architecture in recent years, due in part, he said, to our culture's transition from modernism, whose architecture did little to

respond to anything outside itself. Regionalism and contextualism can be seen as ways in which architects are now attempting to restore the connection to vernacular building that modernism severed.

Rapoport pointed out, however, that what was once the province of vernacular architecture is now the domain of the professional architect, who usually comes from a different cultural background than the people that he or she is designing

continued on page 31

Telephone 617 492-4000
Telex 951650

14 Story Street
Cambridge, Massachusetts 02138

Kroin Architectural Complements

Sitting is Believing

Kroin

your seat and back. Even the tubular steel frame is designed curve for curve. Plus, the thick sintered synthetic coating that protects our seating from the ravages of time and weather acts as a protective layer for you as well.

So, the next time you specify outdoor furniture, choose Kroin. The seating with a softness that's hard to believe.

Circle 75 on information card.

At first glance it's hard to imagine that steel and wire outdoor furniture could be anything other than uncomfortable.

In fact, unless that seating is from the Kroin Series of Park and Garden Furniture, your first impression would be accurate.

But, unlike our competition, we've added some soft touches to an otherwise hard metal. Like anatomically contoured wire mesh in our seat and backs to better fit

Arsenal Market Place/Boston, MA—Sumner Schein/Architects and Engineers



Wollberg/Alvarez/Taracido & Assocs.—Architect & Engineer
Charles Kober Assocs.—Design Architect



The Mall at 163rd St., Miami, FL

WINNERS— LIGHTED BY MCPHILBEN/OMEGA

Lighting for Shopping Centers requires boldness, precision and economy, mcPhilben/Omega are the best qualified to provide optimum lighting for outdoor and indoor environment.

A comprehensive product line, over 70 years of reliability, and the most modern technical center, fully equipped for design research, product modification and service to the specifier.

Consult, specify mcPhilben/Omega, the lighting specialists.

mcPhilben® / **OMEGA**® LIGHTING
EMERSON ELECTRIC CO.



270 LONG ISLAND EXPRESSWAY / MELVILLE, NEW YORK 11747 516-293-8500
In Canada: Emerson Electric Canada Ltd., P.O. Box 150, Markham, Ontario, Canada 416-294-9340

Circle 32 on information card



Summer Olympics Revisited: Located at Loyola Marymount University, the weightlifting pavilion was the first Olympic structure to use scaffolding. Because it was economical and could be used in a variety of ways, scaffolding was to become a major unifying design element among temporary Olympic structures (see Sept., page 51). Designed by John Aleksich Associates, the scaffolding and tented structure added 8,000 square feet to the university's athletic facility. It is basically an 80-foot-diameter drum made of a two-layer space frame. The tent canvases pick up the bright Olympic palette.

Practice from page 29

for. Rapoport postulated that the issue of culturally responsive architecture might be better understood if architects viewed their design of the environment as "the organization of four things: space, time, meaning, and communication." Design, said Rapoport, is the "purposeful change" of any of these four and their expression in built form.

The position that architecture should be culturally responsive, explained Rapoport, is relatively new and still a "minority position." The modernist view that building users should "adapt" is still popular in some circles. Rapoport also pointed out that maximizing users' choice in living environments directly relates to the users' perception that such environments are better, more responsive. He cited evidence that environments chosen by the users were "inherently supportive" as opposed to identical environments that had been imposed. "The fact of having been chosen," stated Rapoport, "may be as important as what is chosen."

Rapoport said that many of the best culturally responsive environments have been designed not by professionals but by lay people themselves, citing spontaneous squatter settlements as an example. "How is it," Rapoport questioned, "that often illiterate people with minimum resources and power design so much better?" This, he countered, was a challenge to the professional designer.

Finally, Rapoport suggested that it was necessary for architectural and public institutions to change if culturally responsive architecture was to move forward. Participatory and open-ended design efforts would remain isolated instances, he said, unless the processes are incorporated into the institutional prescriptions of how design is pursued. "One needs to change the professional culture," offered Rapoport, adding that conferences such as the one he addressed are encouraging for this reason; "maybe our professional culture is changing."

Extensive Research Explores Office Environment's Impact

A six-year research program involving more than 6,000 workers identifies and details 18 major factors of the office environment that influence job performance and satisfaction. It also examines the effects of the workplace environment before and after design changes and determines the economic implications of office design.

The findings have been published in a two-volume book, *Using Office Design to Increase Productivity*, by Michael Brill, president of the Buffalo Organization for Social and Technological Innovations (BOSTI), a nonprofit research and education organization that studies the effects of the designed environment.

The program used a set of criteria, "bottom line measures," to determine an organization's most important environmental issues and provide quantitative information to assist in making facility evaluations and management design decisions.

They are: environmental satisfaction; job satisfaction; job performance as evaluated by the individual worker; supervisory/job performance as evaluated by the worker's supervisor; and ease of communication between workers and supervisors and the utility of information received.

The research was not designed to determine whether an open office is better than a bull pen or whether a private office is better than an open office. Emphasis was placed on the effects of 18 major facets of the physical features of the work environment—enclosures, floor area, layout, furniture, window, temperature and air quality, lighting, noise, privacy, communication, path finding, comfort, display and personalization, status communication, appearance, participation, flexibility, and occupancy. The results are intended to assist with the process of designing and managing office facilities, not to produce simplistic design directives.

continued on page 33

Telephone 617-492-4000
Telex 951650

14 Story Street
Cambridge, Massachusetts 02138

Kroin Architectural Complements

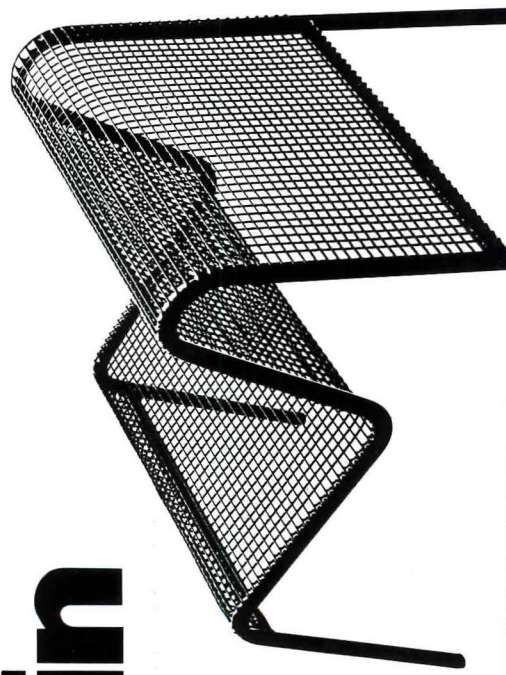
Kroin

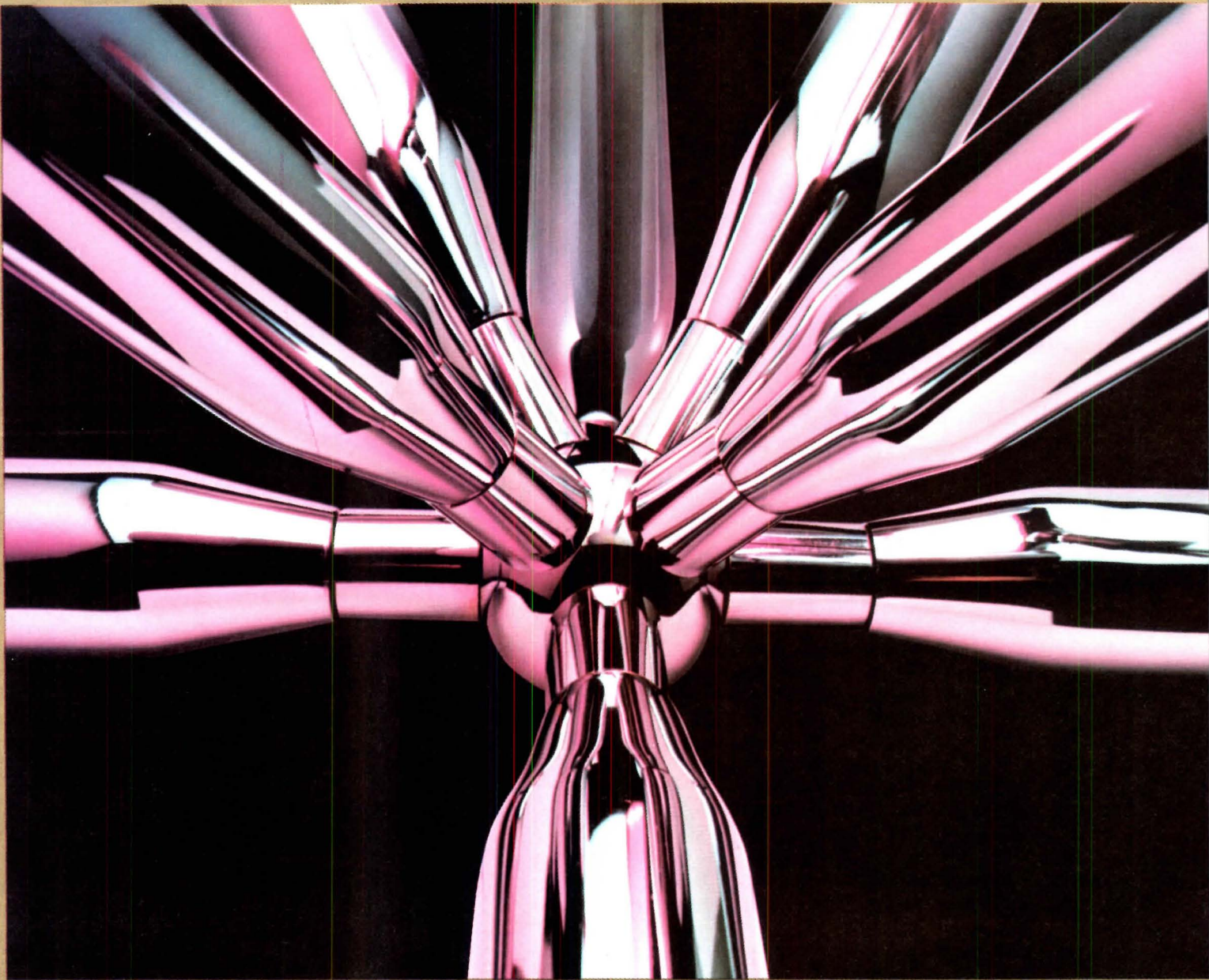
Mobil stationary and moveable outdoor seating is unique in its ability to conform to sharp angles and uneven topography. Unlimited seating arrangements facing inside or out are possible by altering the sequence of the three modules offered in this system. Simultaneous back-to-back seating is possible through the use of 2-sided Seat Bowls.

Anchors and ganging clamps insure configuration integrity and deter vandalism when moveable seating is grouped in sequence.

Mobil is part of a series of Park and Garden Furniture, manufactured in synthetic coated tubular steel and wire mesh, available exclusively from Kroin.

Circle 76 on information card.



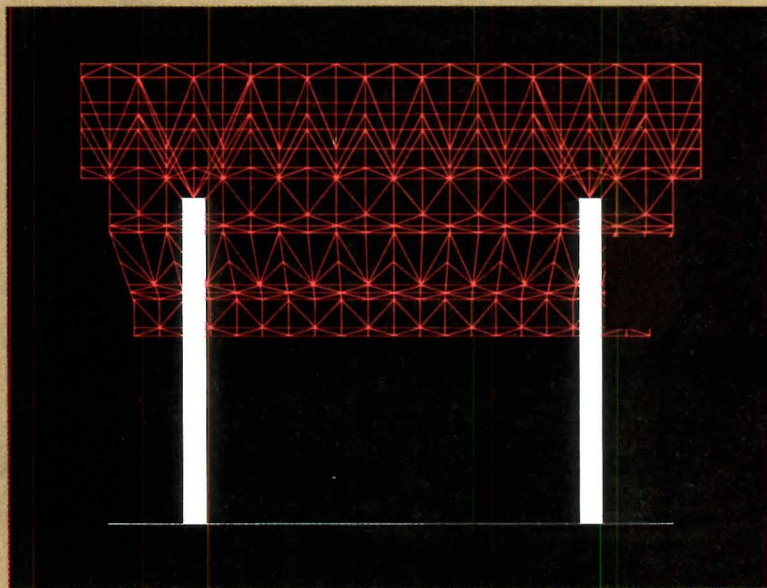


FIRE YOUR IMAGINATION

■ Light, spatial networks spanning an atrium, plaza, or cathedral. Geometric arrays wrapping a building exterior like a taut membrane, providing incredibly strong—yet surprisingly light—support systems for skylights, window lights, deck, sun panels.

■ Inryco Space Frames provide you with an abundant selection of shapes and patterns, colors and forms, to fire your imagination with magnificently intricate design expressions. And our computer design analysis and on-site erection can help make those visions a reality.

■ Send for more information in Catalog 28-2. Write INRYCO, Inc., Suite 4127 P.O. Box 393, Milwaukee, WI 53201. (ITT) 4993931 INRYCO A WMIL.



Inryco
an Inland Steel company

INRYCO SPACE FRAMES

Circle 17 on information card

Practice from page 31

The study discovered that enclosure is one of the two variables that affect job performance. The group also determined an individual work area enclosed on three sides with partitions higher than eye level is the best design for ease of communications. The theory that high enclosures hamper communication was not borne out. During the course of the study (1978-1983), many managers were moved from traditional private offices to open landscapes resulting in a net decrease of enclosure, while both technical and clerical workers had an overall increase in enclosure.

The study found a substantial decrease in job satisfaction only for workers whose office space was reduced by more than 25 percent. A strategy used by some organizations that tries to create an illusion of more floor area by making work stations more open and by visually borrowing surrounding space appeared to be ineffective.

Layout is another factor that affects job performance. Workers' preferences for layout included: a single entrance from in front, two work surfaces, and no other workers seated in the direct line of vision.

BOSTI's research shows that although the amount of work space per workers has decreased over the last three years there has been an overall increase in the number of work surfaces per employee. The number of work surfaces, as well as the width and depth, affect both job and environmental satisfaction.

Although most office workers prefer to be near a window and 60 percent can see one from their work space, having a window exerts no measurable impact on job performance and only a little influence on job and environmental satisfaction.

It is the fluctuation in air temperature rather than any specific temperature that bothers the majority of employees. Frequent fluctuations affect job satisfaction, while hot or cold temperatures do not relate to any bottom line measures. Only 17 percent of all workers had control over temperature in their offices, and they experienced fewer problems with uncomfortable temperatures or fluctuations.

In comparing changes in before and after studies, the research team determined that slight increases and decreases in the quantity of light produced no effects on job satisfaction or performance.

In terms of noises, the most bothersome are ringing phones, people talking, and the hum of ventilation systems, and these noises affect environmental satisfaction. Ease of communication increases as noise levels increase—noisier environments encourage workers to talk to each other and provide a built-in masking sound level that supports privacy in conversations.

Most workers would prefer more privacy to minimize interruptions and limit access. The trend toward open offices

resulted in a decrease in the amount of privacy for managers. Decreases in environmental satisfaction and ease of communications were associated with reduced privacy.

Most workers (60-70 percent) preferred cool, pastel, and warm colors (blues, greens, yellows, and reds) for walls and partitions. About 50 percent chose subdued and neutral colors, while white, grays, and intense colors like Kelly green and fire engine red were clearly rejected. (Some participants listed more than one preference.) The researchers found that performance, job satisfaction, or environmental satisfaction are not affected if a worker likes or dislikes the colors of the office.

Although only 25 percent of the work force participates in the design of their own work space (mainly managers and supervisors), employees who are permitted to participate in the planning of their own work spaces are the most satisfied with their environments and jobs.

BOSTI's study was funded by project contracts and grants from Westinghouse Furniture System, the National Science Foundation, the National Endowment for the Arts/design arts program, Owens-Corning Fiberglas, the Facilities Management Institute, and Bell Northern Research. Brill was assisted by Stephen T. Margulis and Ellen Konar.

Proposed Elevated Highway Vigorously Opposed in Mobile

Local civic groups, citizens' organizations, and the AIA chapter of Mobile, Ala., have raised objections to a proposed elevated, Interstate highway connector that would skirt the city's waterfront and several historic districts. A competition sponsored by the Alabama highway department is now under way for the highway's design.

Among local groups opposed to the highway are the Historic Mobile Preservation Society, Downtown Mobile Unlimited, and the Mobile Historic Development Commission. The highway would extend 1.6 miles from north to south, connecting Interstates 10 and 210. Opponents suggest relocating it to Blakeley Island, a land mass across the Mobile River from the city.

"It's inconceivable," says Kay Marriott, president of the preservation society, that a city like Mobile whose history has been linked to the waterfront would allow such development to take place. Marriott says tourism is increasingly a major factor in the city's economic life and visitors are drawn to the historic districts that might be adversely affected.

Robert Allen, a local attorney and president of the Mobile Historic Development

continued on page 38

Kroin Architectural Complements

14 Story Street
Cambridge, Massachusetts 02138

Telephone 617 492-4000
Telex 951650

Kroin

Can you afford a cheap imitation?

Choosing the right outdoor seating could mean the difference between a sound investment and a costly mistake.

Because, while companies may try to imitate the way our furniture looks, they can't match the way it lasts. And what makes Kroin Park and Garden Furniture stand out is the way it stands up: to the elements, abrasion and even the severest abuse.

That takes reinforced welds at every joint, drawn steel wire mesh in every seat and back, plus a heavy tubular steel frame specially prepared to accept a sintered synthetic coating that actually becomes fused to the surface.

So the next time you specify outdoor furniture choose Kroin. After all, can you afford not to?

Circle 77 on information card.

©1988, Kroin, Inc.

RIXSON *Sets the Mark!*

Rixson sets the mark for dependability with its rugged concealed floor closers for high-traffic areas, unusually large or heavy doors, handicapped access or any situation where control is of the utmost importance.



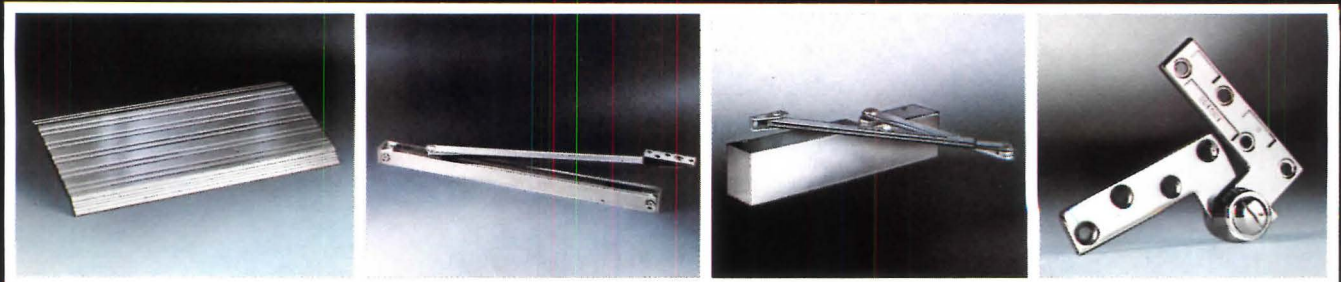
Rixson floor closers are firmly anchored, out of harm's way. Available for offset or center-hung doors weighing up to 1,250 pounds, with fully adjustable, absolute deadstop... back-check and holdopen capabilities.

Rixson floor closers... just one more fine product from Rixson-Firemark's quality line of door control products—including overhead concealed closers, surface closers and pivot sets—plus fire/life safety and security products.

RIXSON-FIREMARK

9100 W Belmont Ave. Franklin Park, IL 60131 Ph. (312) 671-5670

A DIVISION OF
CONRAC
CORPORATION



Circle 18 on information card



© Herman Miller, Inc., Zeeland, Michigan 49464

Circle 20 on information card

 herman miller

Practice from page 33

Commission, says the proposed connector would border three national register historic districts and pass "within a few feet" of other national register properties, including the city hall, which is a national historic landmark. Allen says that if not physically barring access to the waterfront, the highway would present a "psychological barrier" between the historic districts and the state docks.

Allen also says that locating the highway beside the docks would make them undevelopable and would be a detriment to new development already in place, such as a \$40 million hotel complex—considered part of the city's economic revitalization—in front of which the highway would pass. The development commission, the preservation society, and others have banded together to form CARE (Committee Against the Raised Expressway) and anticipate bringing suit against state and federal highway departments and U.S. Transportation Secretary Elizabeth Dole. The suit contends that federal requirements to study the highway's impact on the historic districts have not been satisfied and that alternative locations have not been given sufficient consideration, such as locating the highway on Blakeley Island.

Virginia March, AIA, president of the Mobile Chapter/AIA, says the chapter

has expressed its opposition to the highway. When asked to be involved in the design competition the chapter declined. "We felt that this would be contrariwise to our position," says March. She notes that the chapter supported a 1960s plan to locate the connector on Blakeley Island and still backs that alternative.

Meanwhile, an official with the state highway department says that environmental impact statements have been completed, including a study of the highway's relation to historic districts. "We don't think there'll be an adverse effect on them," says Tom Espy, chief engineer for the highway department. The elevated connector would be located directly above an existing highway, so no new right of way would be needed. Espy points out that locating the connector on Blakeley Island would not allow highway access to the central business district and the state docks. He also says that the bridge now being built over the river to Blakeley is "inappropriate," explaining that the grade of the bridge is "unworkable."

At this stage, Espy reports, design work is under way. The results of the competition will be presented to a governor's advisory committee. Twenty-seven firms are competing; their submissions are due in February 1985. The winning design will then be subject to public review.

Design Plagiarism Suit Settled

A settlement has been reached in the recent case involving design plagiarism of two luxury apartment buildings in New York City.

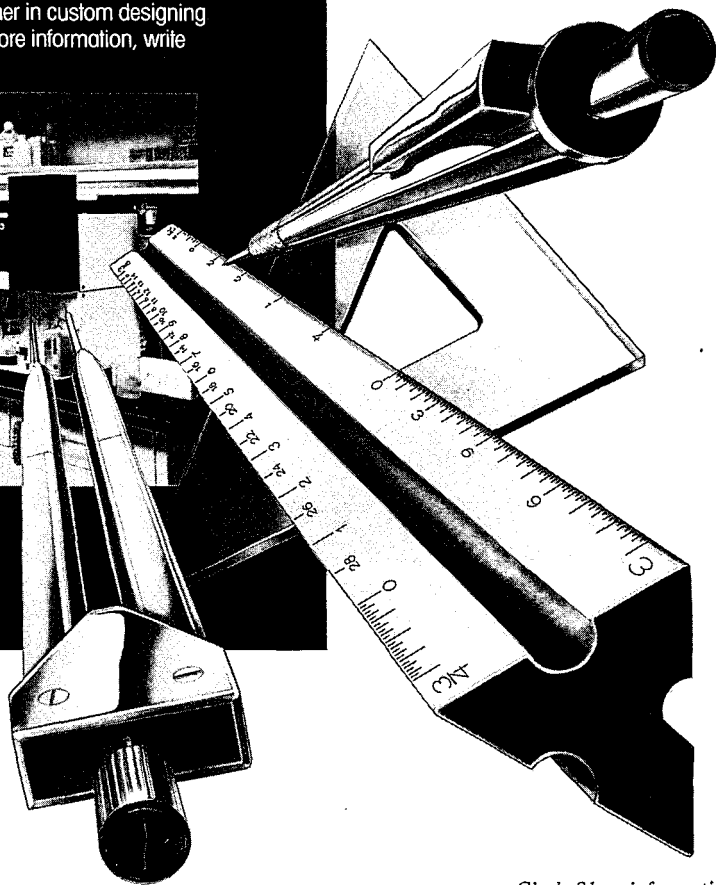
Last spring New York City developer Donald Trump filed suit in New York State Supreme Court against architect Philip Birnbaum and developer Morton L. Olshan charging that they copied the design of Trump's luxury residential and commercial tower located at 61st Street and Third Avenue for their cooperative apartment building that is located diagonally across the street (see Oct., page 21). Trump's tower had also been designed by Philip Birnbaum & Associates.

The recent settlement calls for Olshan to change the design of his apartment building. Specifically, his plan cannot include bronze tinted band glass, limestone, ornamental and decorative brass bands—materials that are the "most distinguishing exterior elements" of Trump's tower, in Trump's words. The court order also requires Olshan to construct an all gray glass residential tower, to change the building's shape, and prohibits him from using a likeness of Trump Plaza in advertising and promotional materials. Under the terms of the settlement, Birnbaum dropped all claims for additional compensation for his work. *News continued on page 110*

Discover St. Charles creativity applied to virtually every institutional situation: schools, nursing homes, laboratories, hospitals. St. Charles is your partner in custom designing work environments that are both beautiful and functional. For more information, write St. Charles Manufacturing Co., Dept. A, St. Charles, IL 60174.



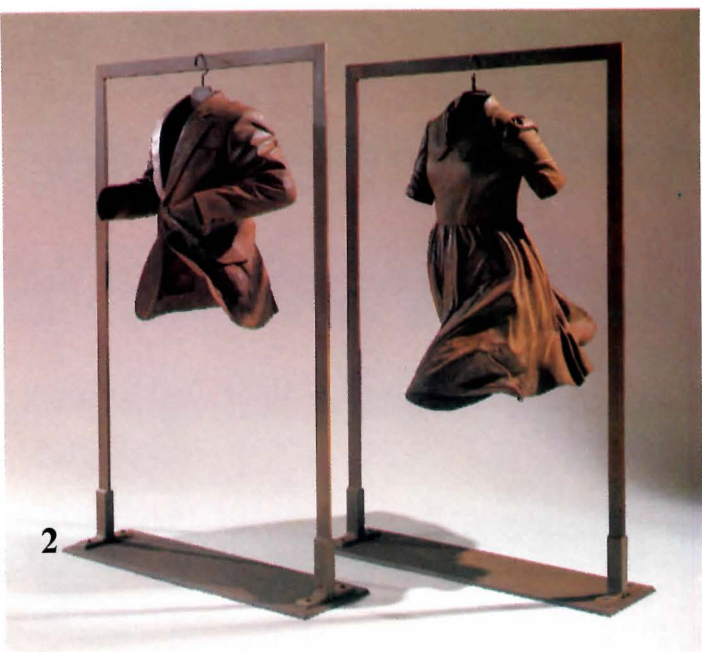
St. Charles Better by design.



Photographs © by Robert Cochen



1



2

The Arts

Metal Fragments Of Reality

Sculptor Kazuma Oshita, a native of Japan who now lives in New York City, creates lyrical yet reserved works through the traditional Japanese craft of metal hammering. Working in steel, rusted steel, brass, bronze, and nickel-plated steel, he aims to capture a temporary "slice of life" frozen in time within the permanent appearance of the metal surfaces.

He is a realist, but with a distinctive twist. There is usually something missing—often part of a support. Oshita's reality is both illusory and fragmentary. His work evokes feelings of anticipation, isolation, or "the presence of an absent spectator."

His 1982 steel sculpture "Still Life with Roses" (1), measuring 60x30x21 inches, is cut away on a diagonal and balanced on one table leg to contrast with the carefully detailed objects making up the delicate composition.

In "Diane and Actaeon" (2), crafted of rusted steel in 1976, the jacket and dress evoke the form of an active, invisible man and woman.

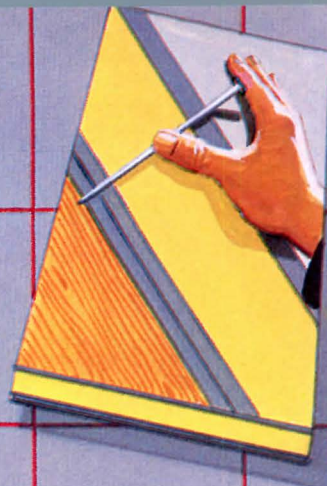
"Still Life with Water Jug" (3), a steel-work measuring 50x30x19 inches, also employs a diagonal cut-away technique to increase the complexity of the work.

LYNN NESMITH

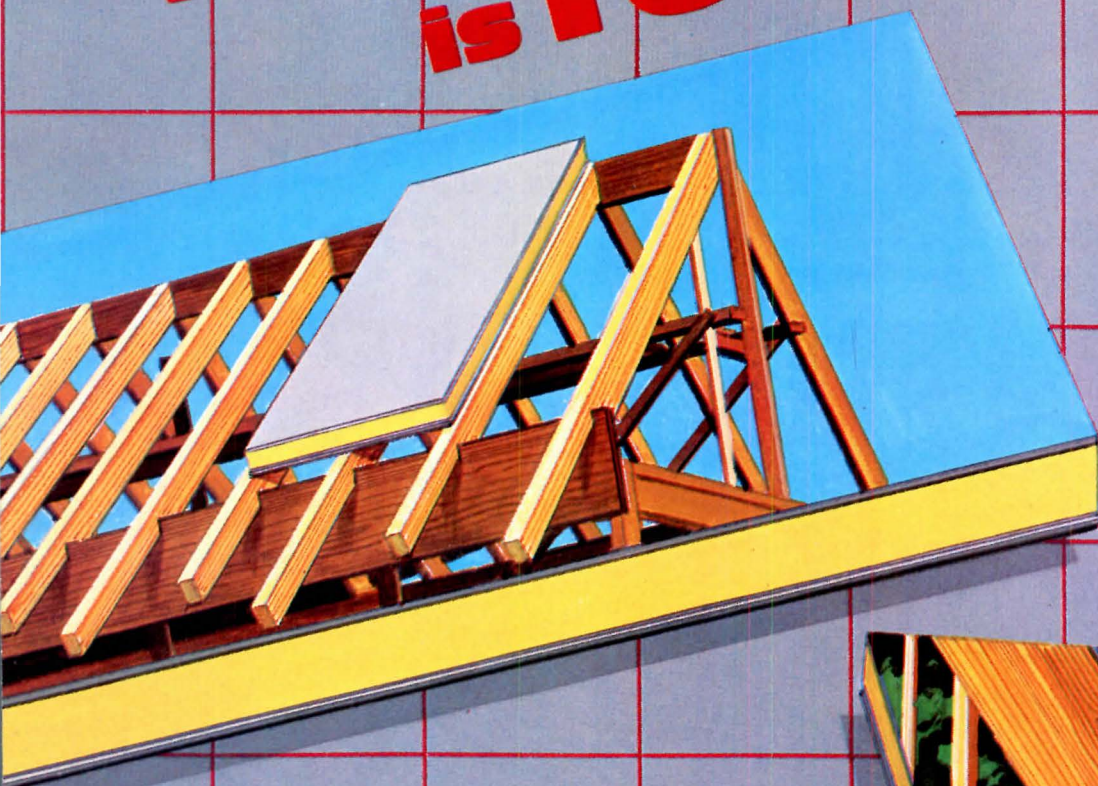


3

TRIPS is TOPS!



Superior Stress-Skin
Sandwich Panels Whose
Built-In Benefits Are More
Than Two Skins Deep.



- R/11 to R/27
- Spans 48"
- A nailable base
- 15 minute thermal barrier

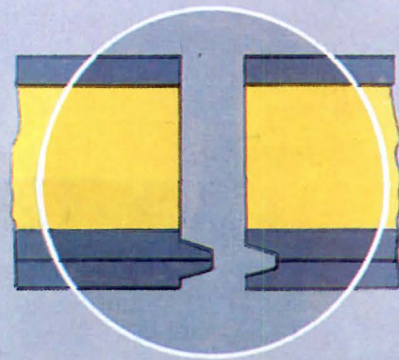
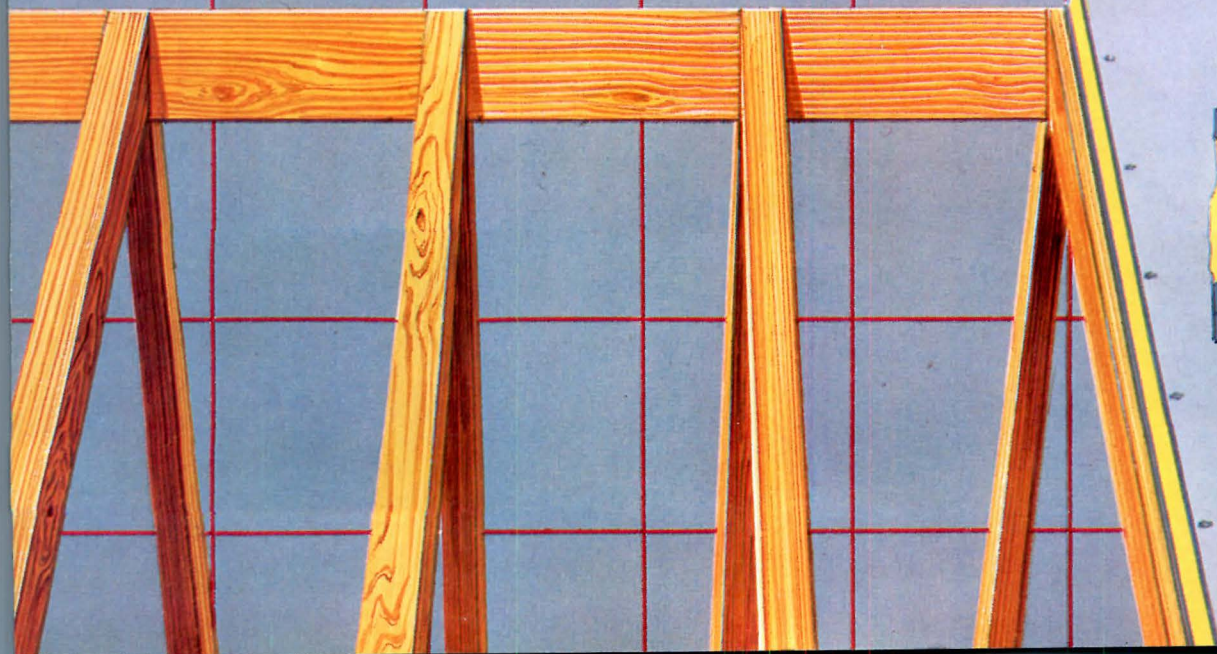
For details, call Technical Department
800-257-9491 (in New Jersey, 609-883-3300)
or use reader service card.



homasote Company
P.O. Box 7240
West Trenton, NJ 08628-0240



Circle 24 on information card





Top Left—DLI-63 Building, Seoul, Korea; Glass: Polarpane Gold Reflective; Architect: C.M. Park; Glazier: Shindong—AH Const. Co. Ltd.; Rep: Engitech Resources, Inc., NY.
Top Right—Mary Kay Glamours Bldg., Dallas, TX; Glass: Polarpane Silver Reflective and Polarpane Gold Reflective; Architect: Foster Meier Architect, Inc.; Glazier: Haley-Greer, Inc.
Center—Kennedy Office Center, Palatine, IL; Glass: Polarpane I/ST Butt Glazing System; Architect: Linden & Linden, Waupauka, WI; Glazier: Harmon Glass & Glazing, Elk Grove Village, IL.
Above—Albuquerque National Bank; Glass: Polarpane Gold Reflective; Architect: Stevens, Mallory, Pearl & Campbell; Glazier: PPG Industries.
Left—Maryville Centre, St. Louis, MO; Glass: Polarpane Silver Reflective and spandrel; Architect: Robert L. Boland & Assoc.; Glazier: Rainbow Glass Co.

Endless Possibilities With Polarpane

Insulating Glass Units And Butt Glazing Systems . . .

By specifying Hordis POLARPANE® Insulating Glass Units you not only get the assurance of proven quality, you gain the freedom of choice. Choice of design, cost, and performance.

With POLARPANE Insulating Glass Units you can choose from low cost tinted glass to pyrolytic reflective and low emissivity coatings, to Reflective Colored, to Silver Reflective, to the highest performance of real 24-karat Gold Reflective with its unmatched aesthetics and environmental control advantages.

In fact, there are over 60 combinations of glass and coatings to choose from.

Circle 25 on information card

But your choices don't stop there. Aside from the standard POLARPANE units, we just introduced our new POLARPANE I/ST Butt Glazing System for Insulating Glass with design advantages found in no other strip window system. Talk about alternatives!

POLARPANE Insulating Glass Units . . . a design alternative for over a quarter of a century. For more information see Sweet's Catalog 8.26a/Ho, or contact: Hordis Brothers, Inc., 825 Hylton Road, Pennsauken, NJ 08110, (609) 662-0400, TWX 710-892-1814.

HORDIS
BROTHERS, INC.

IBM ON TELECOMMUNICATIONS

Q. CAN A CABLING SYSTEM UNTANGLE TELECOMMUNICATIONS?

A. With all the various devices a company uses to process, move and store information, it's easy to lose sight of one important element—the need to connect all these devices together. That's where a uniform, structured cabling system fits in. But are you just substituting one set of wires for another? Here are some questions and answers that might help you better understand the role a cabling system can play both in solving your communications problems today and in protecting your telecommunications investment for tomorrow.

Q. First of all, just what is a cabling system?

A. A cabling system is designed on a "wire-once" concept. Just as electrical wires are run in buildings today, a cabling system is a permanently installed set of wires that connects the computers, terminals, workstations, telephones and PBXs within a large office building or a campus. This cabling system should also be the foundation for local area networks of the future.

Q. Aren't my computers and telephones already hooked up to a cabling system?

A. It's not so much a cabling system as it is a bunch of cables. Look above the drop ceilings in most office buildings, and you'll discover miles and miles of all kinds of cable. And much of it, strangely enough, is unused. The reason for this waste is that few devices (i.e., telephone, terminal, personal computer, etc.) use the same type of cable. Consequently, when a new device is installed or when one is moved from one office to another, it's quicker, easier and cheaper to run a new cable than it is to remove and reroute the old cable.

This is not to suggest, however, that running a new cable is quick, easy or inexpensive. Relocating just one terminal can cost as much as \$1,500. Not to mention a week or two of downtime while the wiring gets done. And when you think about how often office workers move from one workplace to another,

you can see that we're talking about a considerable expense.

Q. How can a cabling system help solve my wiring problem?

A. Once installed, a cabling system can make wiring a new or relocated terminal as easy as moving a plug from one socket to another. The IBM Cabling System calls for the one-time installation of a single cable running from each workplace, inside the walls, and into a central "wiring closet." In the office, that cable terminates in a standard faceplate on the wall, not unlike an electrical outlet. In the wiring closet, the cable terminates in a patch panel that can connect it to any number of devices.

The installation of the IBM Cabling System should be considered if you're adding a number of new workstations, installing a PBX, doing a major renovation or building a new office building. In most cases the "wire-once" benefit will cost-justify the IBM Cabling System in five years.

Q. How do the telephone and the IBM Cabling System work together?

A. The IBM Cabling System can be used for data only or for both data and voice. When the voice capability is used, the voice wires are separated from the single cable in the wiring closet and run to a telephone switching system. Several major PBX manufacturers have tested their PBXs and telephones with the IB

Context and Change

A year ago we looked at various aspects of relating old buildings and new—renewing the old, respect in the new, all from an urban design perspective that regards both as elements of an ever-changing overall composition. We didn't start the year with the intention of returning to these subjects with another special issue, but the material kept building until it filled this issue to overflowing.

Another way to state its theme is with the two words of the headline above. For what we are talking about in nearly every article is some form of contextualism. Likewise they are nearly all about coping with change—in individual buildings and their uses, in neighborhoods and entire communities. The specific examples shown and discussed are diverse in age, character, and location (from Tulsa to Roanoke, Va., to Washington and Rome).

This last kind of diversity is one that we consciously seek. The need to do so was underscored in a recent readership survey, which made clear that our audience doesn't want the magazine to be filled with buildings in a few big cities by a few big name architects. Keeping this from happening was one motivation for our recent installation of the Kaleidoscope section, which will grow as the months go on.

The survey had some other lessons that we will take to heart. One is that there is discernible demand for more drawings, particularly details, in building presentations. Another is that our readers like to know how much buildings cost. In the future we'll include this information whenever it can be reliably obtained. In conclusion, our thanks to all those in the sample of our audience surveyed who took the time and trouble to respond. *D.C.*



Tulsa Tower Hugs a Landmark

Tulsa, Okla., it seems, has come up with a better idea. In an era when more and more facades are being saved in the name of preservation—too often acting as the bases for unsympathetic new buildings—an oil company and an architect have proven that you can have your cake and eat it too.

Reading & Bates Corporation, a diversified energy resources company, and HTB, Inc., an Oklahoma City architectural firm, designed a solution that added 330,000 square feet to a 90,000-square-foot Tudor Gothic building listed in the National Register of Historic Places. But a visitor would be hard-pressed to determine where the old building ends and the new one begins, for the entire new structure is clad in rich, ornamental terra cotta panels that are cast from the original drawings to match the old.

But the task was more than skin deep. Reading & Bates had purchased the Mid-Continent building at an auction in 1977 for \$400,000 and immediately set to work renovating the 1918 building at a cost of more than \$2 million. The oil firm was able to take advantage of the tax incentives that encourage rehabilitation because the building was a National Register property. By 1981, the company wanted to consolidate its office space, then in four locations, and began to consider alternatives. According to Charles E. Thornton, the company president, the firm was committed to remaining at its location in the heart of downtown. He and his partner, Chairman J.W. Bates Jr., are Tulsa natives and find much contemporary architecture monotonous but were uncertain about what direction to take.

The choice was made somewhat easier by the discovery of a period rendering of the building with a matching addition of the same height on an adjoining empty lot. But there were problems. The architects found that the old proposal would not provide enough space. Because the existing building's structural system would not support any additional weight, a tower on

The Mid-Continent building. HTB Inc., architect. By Carleton Knight III

the adjoining 80x100-foot site seemed the answer. However, after working out various designs, such a small tower was found to

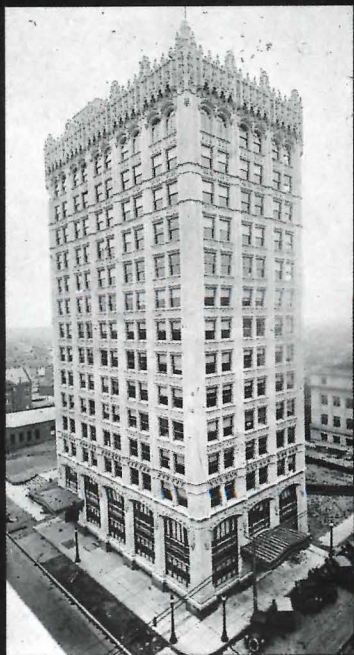
be too inefficient because of the comparatively large amount of area needed for core components—elevators, stairs, and washrooms. What to do?

Borrowing a leaf from Reading & Bates' own operations manual, HTB devised a unique structural answer to the problem. The 530-foot tower could be made efficient, reports HTB Director of Structures Keith Hinchey, if floors were allowed to cantilever, a technique the client understood because of its work with offshore oil rigs. A series of five massive trusses, each two stories high and weighing 200 tons, carries the upper 20 floors of the new structure 40 feet out over the old building, but without touching it. A 10-inch vertical and 6-inch horizontal space separate the buildings to allow for the necessary deflection in high wind, approximately three inches at the top.

While the building is a structural tour de force, it is no less interesting from an esthetic point of view. The center bay on the lower portion of the building is recessed in order to give prominence to the new entry under an arcade, and the tower itself is set back at what used to be the line of the penthouse, creating a 15-floor terrace outside the employees' dining room.

The exterior was nearly as complex to design as the structure. Terra cotta had not been manufactured widely since the 1930s, and it took some searching by the architects to find Gladding McBean & Co. of Lincoln, Calif., the only American firm still in the terra cotta business. The company was small,

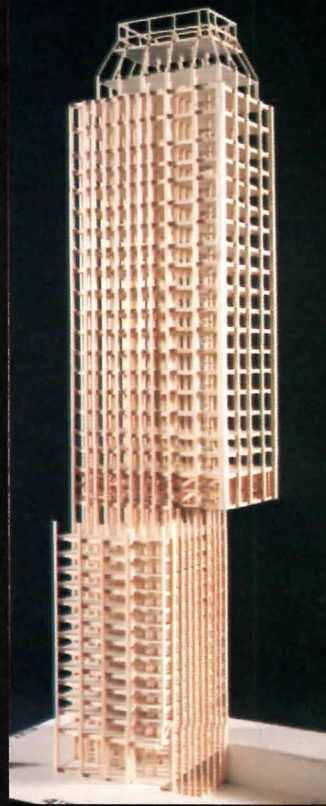
Across page, the new Mid-Continent Tower brings back the tradition of unique rooflines, as seen on the adjoining Philtower building to its left. Below, from left, the Mid-Continent building as constructed in 1918 and as it is today. Structural model shows how tower floors cantilever 40 feet over old building.



Courtesy of the Beryl O. Ford Collection



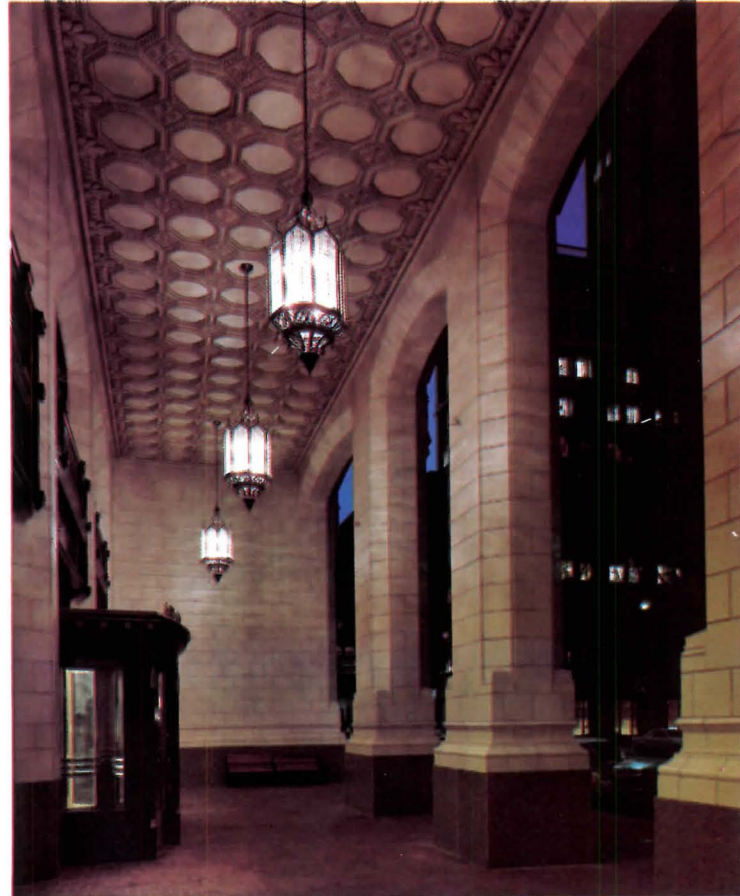
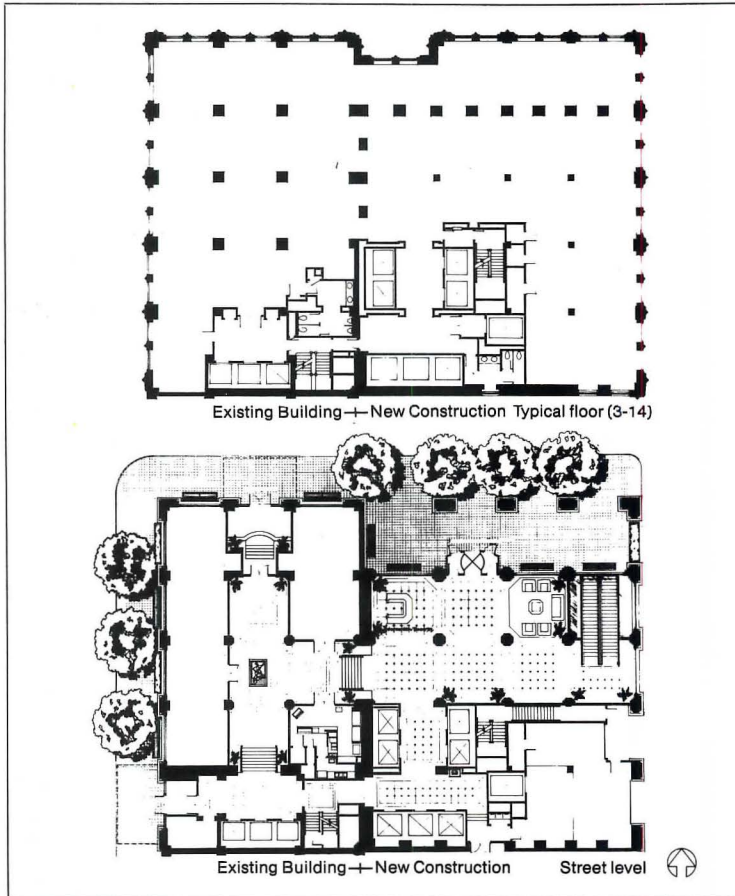
Jon B. Petersen Photography



Courtesy of HTB, Inc.



Left, artful eyebrow dormers on mansard roof serve as air intakes. Below, entry to tower is from colonnade. Bottom, tower lobby reflects design heritage of original adjoining building. Across page, tower is set back at 15th floor to create terrace outside employees' dining room that permits close examination of new terra cotta ornamentation.

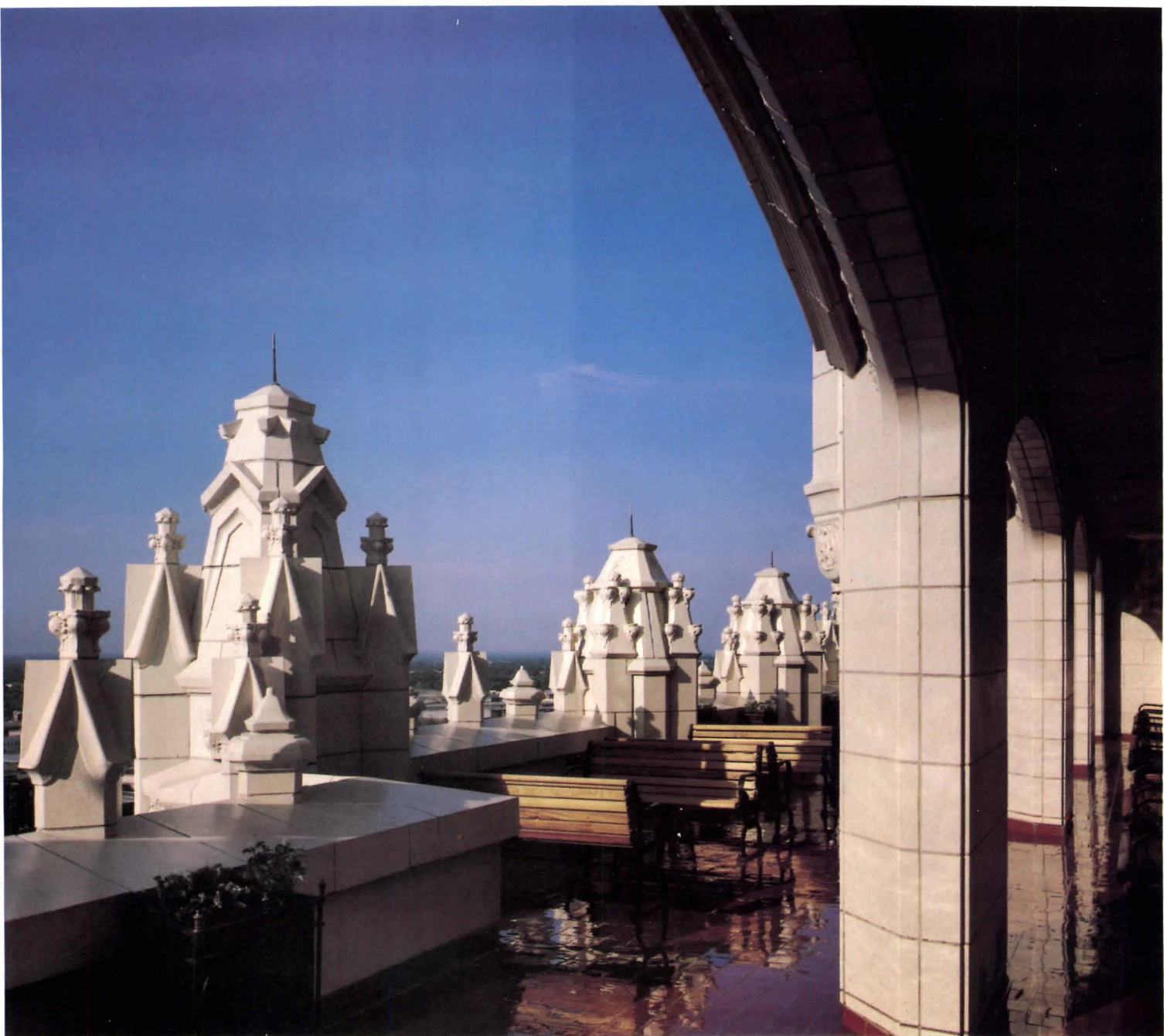


had nearly gone under several years ago, and had never handled an order of this magnitude—some 85,000 individual pieces of terra cotta, of which 13,000 would have to be hand made.

Manufacturing that much terra cotta would be a major undertaking, as would installing it, so HTB and Flintco, Inc., of Tulsa, the general contractor, went to work devising a new method of attaching the decorative cladding to reduce costs. They were able to cut a year off the construction time by having the separate pieces of terra cotta fabricated offsite into panels as large as 13 feet high and five feet wide. At a Tulsa staging yard, the individual clay pieces were placed face down in specially constructed forms and the backs sprayed with a 3/8-inch layer of glass fiber reinforced concrete. Galvanized anchors attached the units to a metal frame. Allowed to set overnight, the framed panel was then lifted up and flipped over where the terra cotta was pointed with mortar. Tucked to the site, the panels were hoisted into place and attached to the frame just like precast concrete panels. This solution also solved an old problem of terra cotta—cracking. With a caulk joint on every floor between the panels, there is expansion room.

HTB's Vic Thompson, director of design for the project, reports that the unique copper-trimmed profile of the top was inspired by *Reading & Bates'* interest in architecture and by





his own visit to the terra cotta-clad Woolworth Building in New York City. Functionally, it hides mechanical units, but esthetically it creates an image for the building and the oil firm in the city. The quick aging was accomplished by painting the copper with a nitrate solution that turned it bright green. Lighted at night, the filligree-topped mansard roof is visible for miles.

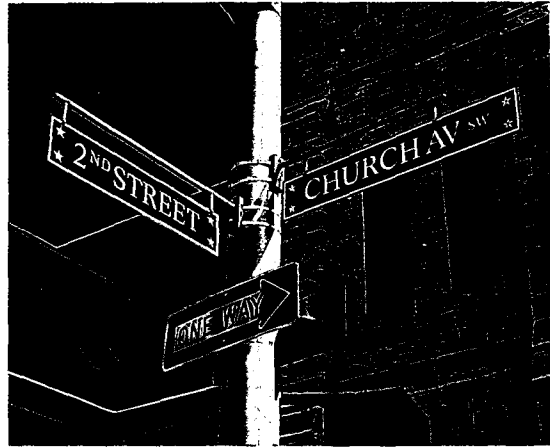
Equal care and concern shows inside, where the architects used the old building as a design resource, copying the rosettes on the coffered ceilings, the chandeliers, the imported marbles, and the newel posts, for example.

Reading & Bates President Thornton reports the firm did not think of itself as "trying to make preservation news" when it renovated the original building. "We just needed to get satisfactory space for our people," he says matter-of-factly. He adds, "We were not shooting to make the best building in Tulsa."

But they did, and it was not cheap. Although the firm declines to say how much the building cost, local estimates are in the area of \$40 million. This collaborative effort of client, architect, and contractor has resulted in an early 20th-century skyscraper built with late 20th-century technology. If only for the lasting impressions the building leaves, it seems eminently worth the effort, for the Mid-Century Tower, completed last May, looks as if it had been there for decades. □

Television As a Tool of Urban Design

*As applied to the renewal
of downtown Roanoke, Va.
By Michael J. Crosbie*



Michael J. Crosbie

Roanoke is an old, mid-sized city of approximately 100,000, located in southwestern Virginia. Its name is an Indian word meaning "wampum" or "beads," and the Blue Ridge Mountains indeed surround the city and the Shenandoah Valley like a necklace. Roanoke started to grow as a trading post in the 1880s, but its greatest expansion occurred in the 1890s when it became a hub of rail transport (the old Norfolk & Western Railroad, now Norfolk-Southern, is still a strong presence). The city's boom continued until the late-1920s with the coming of the Depression. The changeover from steam to electric trains alone cost the city 8,000 jobs. Decline continued through the war years and the 1950s, when shopping malls appeared on the city's periphery. To compound the problems, Roanokers perceived their city as an isolated place, separated by the mountains from the rest of the state. Its history was one of railroads and trade, unglamorous when compared to the colonial heritage of Virginia's eastern cities such as Williamsburg and Charlottesville. By the mid-1970s, with the announcement of yet another super shopping mall to open nearby, Roanoke hit rock bottom.

Today, the city is a much different place. In the last five years Roanoke has transformed itself, with the help of Centerbrook of Essex, Conn. (formally Moore Grover Harper Architects), into a place that sees itself not in competition with other communities or shopping malls, but as a place with a sense of its own unique history. Its redevelopment plan has capitalized on that history and upon the architectural awareness of the city's residents, who were activated by a revolutionary design process. As steam engine technology gave birth to Roanoke's boom years, the technology of telecommunications contributed to the city's rebirth. Live television was used by the architects to involve the citizenry in the redevelopment plan, turning the design process into an electronic town meeting.

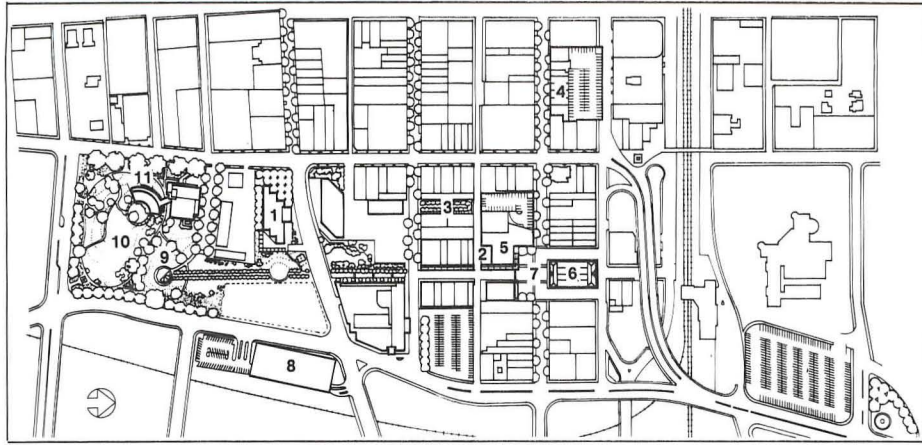
Roanoke began its turnaround in late-1978, when J. P. Chadwick Floyd, AIA, of Centerbrook and his associate Trip Wyeth, AIA, literally moved to the city and set up shop, laying the groundwork for developing the design via television. City Manager Bern Ewert stressed that community consensus was essential in the planning. Floyd opened a storefront office downtown and invited people to come in to give their impressions of what was wrong with Roanoke and how they thought it could be made better. Wyeth sat at a drawing board in the storefront window, sketching ideas that people suggested, while inside large tables with drawing pads, magic markers, and coffee and doughnuts allowed the architects and the townspeople to hash things out in a relaxed atmosphere.

Concurrent with this, Floyd and his staff were working with the local government to understand the city better. Two committees were formed to work with the architects: a 15-member steering committee comprised of business and civic leaders, and a 50-person design workshop that represented the community at this early stage and was a source for ideas. "We got a sense of what everybody's sacred cows were," explains Floyd, "and what the lay of the land was."

The first of four television shows was aired in late-September 1978 on the local CBS affiliate at prime time. It introduced the redevelopment design team, outlined its objectives, and encouraged viewers to call in with their ideas. The "Roanoke Design '79" design-a-thon was something between a game show and a fund raiser: fast paced and audience interactive. The show opened with some banjo-picking music, "down-home," as Floyd describes it, "to give the show a popular and upbeat image." As the show's host, Floyd presented the project area, using a brightly colored map and graphics, which comprised 280 acres in the city's downtown business section, divided into seven districts: the retail core, downtown east, the market district, the governmental district, the industrial district, old Southwest, and the Norfolk & Western district. Each had its own variety of problems: parking, upgrading of infrastructure, rehabilitation of old buildings, design and construction of new ones, and the location of new projects such as a library expansion, a new courthouse, a cultural center, a transportation center, new office buildings, and the development of public, civic spaces, "celebration zones," as Floyd describes them.

As each aspect of the plan was discussed, viewers called a number on the television screen to offer their ideas. Members of the design workshop manned on-camera phones and relayed ideas to Floyd, who discussed them on the air and talked with the viewers live. Meanwhile, other ideas phoned in were posted on large sheets behind Floyd. Techniques were developed to communicate design ideas on the screen. To demonstrate adequate parking facilities, Floyd placed a white plastic ring representing a 350-foot radius around each garage proposed, demonstrating that downtown parking would be adequate with so many parking garages. When someone suggested a shopping mall downtown, Floyd overlaid the plan with a footprint of a typical shopping mall, showing that it would be far too large and economically unfeasible for development. Often, viewers witnessed a short-hand architectural and financial analysis of their ideas. In one instance a caller suggested a dome to create a pedestrian retail mall. As Floyd discussed the idea with him, Charles Moore, FAIA, who sat at a drawing board, began to sketch what the dome might look like, and this image was relayed to the viewers via an overhead camera. Then Floyd conferred with Melvin Levine, a financial consultant to Design '79 from the American City Corporation, about the economic feasibility of such a dome. As other viewers called in about rehabilitating older buildings, a film (called B-roll) showed the area under discussion. And so it went for the hour—local business leaders interviewed on the air, the city manager consulted on the city's role, a few minutes with the design workshop. The end of the show presented a recap of the ideas collected, and Floyd and his staff returned to their design center to consider each one.

Above, new street sign design by Brenda Huffman Graphic Design of Ivorytown, Conn., incorporating Roanoke's star symbol; right center, an overview of Market Square with the farmers' market; bottom, market building's 'celebration zone.'



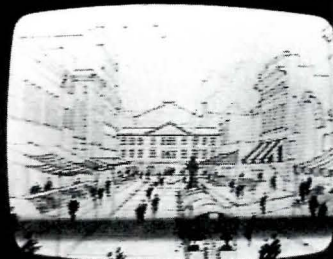
- 1 Blue Cross Blue Shield
- 2 Wertz's County Store
- 3 Century Square
- 4 Campbell Court
- 5 Center-in-the-Square
- 6 Market building
- 7 Market Square
- 8 Parking garage
- 9 Performance stage
- 10 Elmwood Park
- 11 Library expansion



Michael J. Crossbie



J. P. Chadwick Floyd, AIA



The next three shows built on the groundwork laid in the first. The second show, aired a month later, presented development alternatives for the different districts. On the day of the broadcast, these alternatives and a map were printed in the local newspaper. Floyd asked the viewers to vote for their preference as each alternative was explained and then to mail in the newspaper tally sheets or drop them off at the design center. Sketches were prepared to help viewers visualize new projects in their completed form. A current photograph of the project was overlaid with a detailed sketch of the proposal, the photo dissolving into the sketch. Callers suggested how the alternatives might be changed. Another month passed as the plan was refined.

The third show presented the design development in three dimensions. "On TV we wanted to build in model form the structures that would be in the final plan," explains Floyd. As each brightly colored model was placed on the map, Floyd and Moore discussed it in detail. Other parts of the plan were literally unveiled on the air. For example, Blue Cross Blue Shield had considered locating new offices in downtown Roanoke. A top executive of the company was brought on the air to announce that it had decided to do so, just as the architects were discussing the site on which it would be located. This show drew an estimated 90,000 viewers, according to Nielsen ratings.

As the plan moved through its successive stages, the architects continued their work with the steering committee, the city government, and the design workshop. The fourth television show, aired in January 1979, presented the plan in its complete form. Floyd discussed each project area in detail, showing the projects proposed and the public and private investment necessary to complete them. The plan included 59 individual projects requiring \$47.2 million in private investment and \$17.2 million in public investment. Within three years the citizens of Roanoke voted for bond issues to fund all but seven of these projects. To date, total investment includes \$88.9 million in private funds, \$24.7 million in city funds, and \$17.4 million in state and federal funds.

City Manager Ewert believes that the citizens' overwhelming support for the plan was a result of their involvement in the design process. "The television programs and the plan changed attitudes in Roanoke," says Ewert. "Initially they viewed the shows as purely entertaining," he says, but soon large numbers of viewers tuned in, many from surrounding communities. To develop the idea of using television in the planning process and to design the shows themselves, Floyd drew from his background. As an undergraduate at Yale, he explains, "I had done some television production work, but mostly theater work, some screen writing, play writing, directing, acting, and scene design. So it was quite natural for me to think in performance terms."

As the shows progressed Floyd noted the reactions of both the citizenry at large and Roanoke's power base. "Once they started," says Floyd, "the shows took on a power of their own; they became more than simply a forum for discussion. They became an ombudsmanlike power for the whole community in which everyone came clean, and all the normal ways of doing business—normal bureaucracies and normal social structures—were pulled down." The result, says Floyd, was a "rewriting or reorganization of the conventional wisdom of how things happen."

Still, Floyd worries about the Pandora's box he may have opened. "There is a tremendous power here that could be misused by an architect or, even worse, by a mayor who could turn it into a way of selling a city government's program to do any number of things," he says. "You can circumnavigate the press and the public, because the person doing the shows is in total control of the information and the way it's presented. There isn't any middleman."

Because of its development on television, the plan itself took a different form. Rather than a grand, sweeping megasolution that is successful only in its entirety, Roanoke's plan is a prod-



Across page, stages in Roanoke Design '79 television programs including Floyd discussing a sensitive issue with hard-hat and Moore explaining the design in model form; above, refurbished Market Square shop by Architectural Design Group; above right, farmer Wertz in front of his Market Square store by Architectural Design Group; right, festive umbrellas in front of the market building, by Gregory & Associates.





uct of what Floyd calls "situation design." Each piece of the plan is capable of standing on its own, although each relates to the plan as a whole. "You design each project in the plan for a particular situation," explains Floyd. "If it can be done, fine, but if it can't be done, it doesn't blow the whole scheme. That's the way cities are supposed to be—made up of a lot of little things." Floyd believes that this approach is better understood by the lay person, who tends to consider projects individually but in great detail. "It's the things that people can grasp—benches, trees, bollards, signs—that they seem to focus their everyday attention on," says Floyd, and this led to a plan of detailed design.

The "situation design" theme carried over into the plan's implementation as well. Centerbrook presented its redevelopment report to the city in the form of a loose-leaf binder catalog containing a history of the plan's development, all 59 projects, and guidelines for financing each. Floyd describes the catalog as a "shopping list of ideas" that could be pursued individually or collectively. The loose-leaf format allowed the city to remove certain projects if they ultimately proved infeasible or to replace them with updated designs. According to Warner Dalhouse, president of a local bank and a member of the steering committee, "The catalog was like a manual providing all the information needed to realize each project. We couldn't have done the redevelopment plan without it."

The process of choosing architects to design the individual projects was coordinated by Centerbrook and its joint-venture partners Hayes, Seay, Mattern & Mattern (HSMM) of Roanoke and landscape architect Lester Collins of Millbrook, N.Y. The firms assumed the role of a design management team, acting as the city's representative. The projects were divided into three groups: those requiring light management that could be designed without team supervision, those requiring medium management whose design development was checked by the team periodically, and heavy management projects, which required the project architects to design within certain guidelines according to predetermined building footprints, subject to weekly reviews by the team. Timm Jamieson, AIA, of HSMM, who was Floyd's local counterpart on the design management team, says that this process ensured that each project would maintain an appropriate level of design quality according to its role in the overall plan and would be completed under budget, with the entire plan completed within a reasonable time to maintain the momentum of public support.

In general, the built results of the plan so far reflect a comfortable city scale and human scale. This is especially true of the work in the market district and downtown east. The market district has become the heart of Roanoke's rebirth. Five years ago this downtown site was loaded with vagrants and adult bookstores that impinged on its function as a farmers' market. The area now sports the Center-in-the-Square, a multi-use cultural facility by HSMM, located in a rehabilitated warehouse dating from 1914; new stalls for the farmers to sell their produce, designed by Gregory & Associates of Blacksburg, Va.; Century Square, a pocket park south of the center, by the Architectural Design Group of Roanoke with Lester Collins; and the revived market building, a neo-Georgian structure of the 1920s that is being renovated into a retail center for food and specialty shops. The market building occupies a centerpiece site in Market Square and provides the backdrop for many community festivals. The market district's redevelopment has so far been achieved without resorting to the usual brass gewgaw shops, fern bars, and ice cream boutiques that have little or nothing to do with the history of the refurbished structures they occupy. The farmers' market, galleries with arts and crafts by local artists with regional themes, and the Center-in-the-Square are part of Roanoke's his-



Michael J. Crosbie



Michael J. Crosbie



Michael J. Crosbie

Across page, top, exterior of the refurbished Center-in-the-Square, which includes facilities for an art gallery, science museum, and performance theater, and offices for the historical society and arts council, with a parking garage serving all five levels; below, interior stair in the Center-in-the-Square; this page, top, view of the performance stage in Elmwood Park, looking down the reflecting pools toward Market Square with market building in the distance; left, view of connecting spine in Elmwood Park from Market Square; above, the library addition, which links to its 1952 counterpart via a glazed bridge, forms a curved foil to the original with a concave side that forms a public 'celebration zone' facing the park.

tory, an alternative—as many in the city point out—to the homogeneity and placelessness of the typical shopping mall.

The market district is connected to new development to the south by a tree-lined walkway that includes reflecting pools with lily pads. To the east is a new parking garage (by Smithey & Boynton of Roanoke), an IBM office building under construction, and a site still open for hotel development. The walkway delivers you to the foot of a redesigned and refurbished Elmwood Park (by Centerbrook with Lester Collins), complete with new street furniture and an open-air performance stage. The park wraps around the library extension—a curved building that plays against the rectilinear geometry of the original 1952 building—designed by Frantz & Chappellear of Roanoke, who designed the original library. Further west, the Blue Cross Blue Shield building, designed by HSMM, has become a reality, as has a new courthouse and the Roanoke Valley war memorial, both by HSMM. All these projects are set within a context of new streetlights, planters, benches, street signs, and landscaping.

There have been occasional setbacks, such as the Campbell Court transportation station not far from Market Square. The project comprised a row of abandoned, late-19th century storefronts undergoing restoration, behind which would be constructed a retail center and a parking garage/transportation center. Last summer a number of the facades collapsed, and the project has since been put on hold. The city hopes to recreate the facades and proceed with the project.

Although this lowered public morale, the effects were temporary. The Roanoke Design '79 television program and the subsequent success in implementing the plan continues to motivate Roanokers to remain aware of the architectural quality of their city. Jamieson reports that the community has come to expect involvement in other city projects. Their perception of Roanoke as an unsafe, unsavory place doomed to the shopping malls has changed to one in which their city has its own unique history and resources to be celebrated and shared. "Roanoke underwent a mental revitalization," says E. K. Mattern, a steering committee member, "and it changed attitudes." Ewert says that the city is now doing redevelopment in 16 residential neighborhoods at the behest of the residents. "People talk often about architecture, scale, and design," says Ewert, "and they're undertaking improvement on their own." Ezra Wertz, a farmer who has sold his produce at the market for years and has since opened his own store there, notes that shopkeepers are exhibiting a new pride in their storefronts, fixing and painting and planting flowers. "We're quite different than the mall," says Wertz of the large shopping center now being built on the city's outskirts. "And it's going to help Roanoke by bringing more people into the city, which is something different for them to see." □

Below, left and right, Campbell Court facades under restoration and after their collapse; right, Century Square at night. Future development calls for shops and restaurants.



Timm Jamieson, AIA

J. Crosbie



Michael J. Crossbie

Challenge of Context in Washington

As faced, first, on a key downtown corner. By Allen Freeman



Carol M. Highsmith

What becomes a landmark most?

As Washington's commercial core builds to greater density and spreads into historic neighborhoods like Dupont Circle and Foggy Bottom, architects are grappling with contextualism perhaps more than in any other U.S. city. One prevalent solution, as described here last November, is facadism: using old construction, sometimes only one thin wall, to front for new. On this and subsequent pages, we present another cast of colorful Washington building characters, including Victorians and a neo-Georgian, a stalwart former hotel that became a bank and then a liquor store, and finally a 1960s publishing temple. They and their infill suggest a spate of ways to meld old with new.

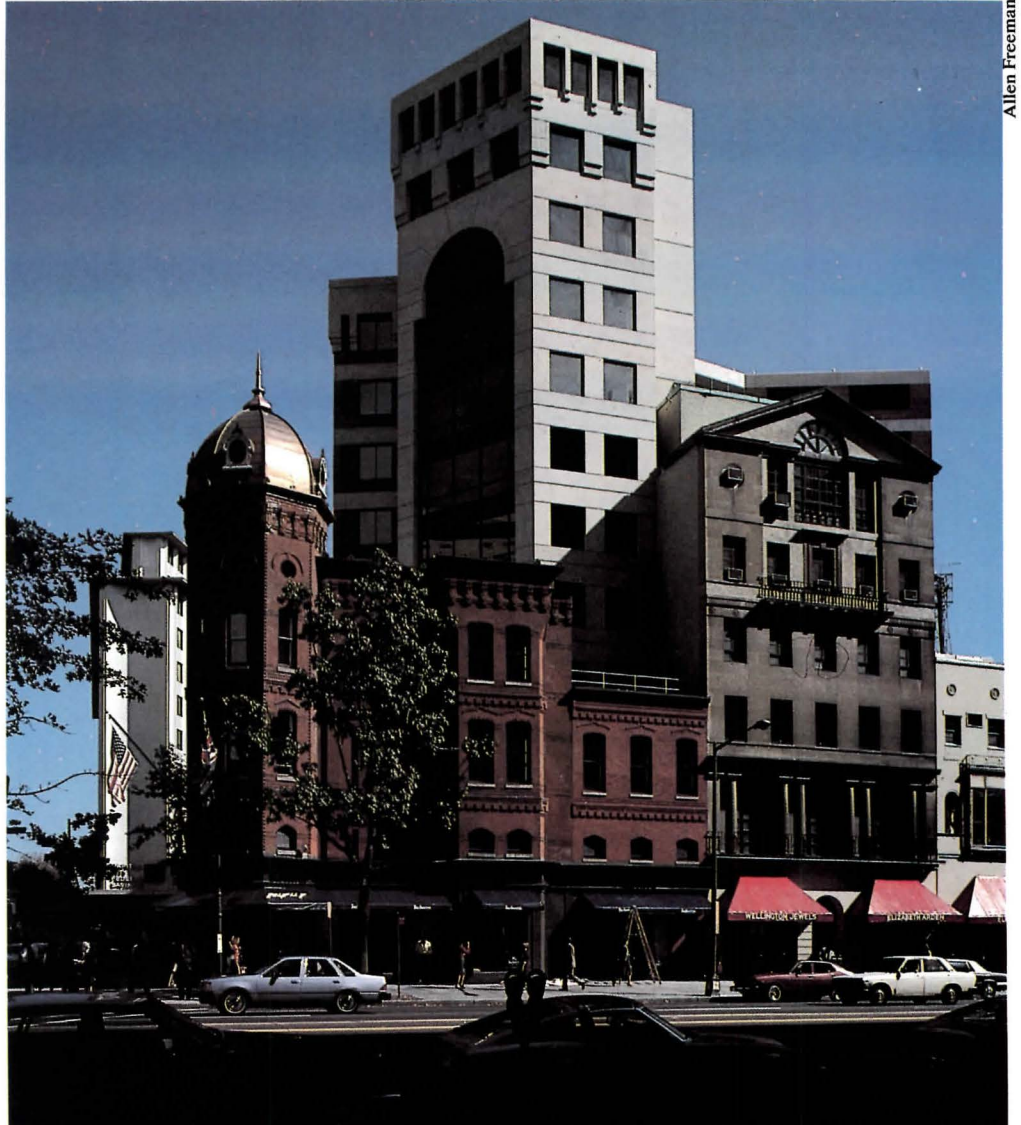
One of the city's most prized little landmarks is the Demonet building of 1880, beloved for the way it animates the acute southeast corner of Connecticut Avenue at M Street with its octagonal turret, ribbed copper dome, elaborate brickwork, and eclectic details. For years it was the home of Demonet Confectioners.

Made a landmark in 1979 after a previous owner proposed demolition and replacement with an office building scaled to the maximum allowable floor area, Demonet and the contiguous lot fronting M Street sold in 1982 at the highest price to that date per square foot in Washington's real estate history.

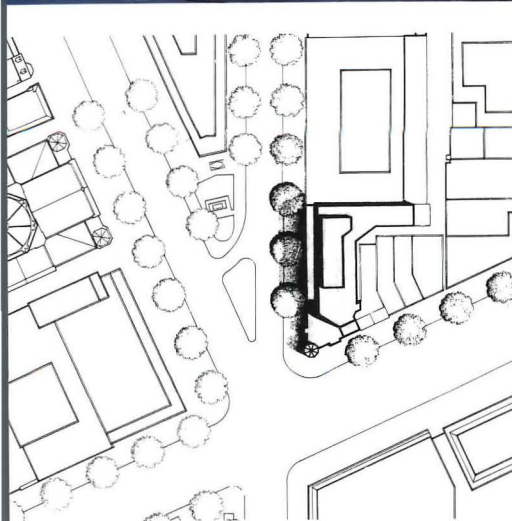
The problem of how to design a 12-story addition compatible with the four-story town house fell to Richard Giegengack, AIA, a partner in Skidmore, Owings & Merrill/Washington. Says Giegengack, "We decided that the way to celebrate the little dome was to compose something behind it that deferred to it either by stylistic suggestion or by presenting a more two-dimensional backdrop." Economics ruled out his first choice of positioning a second dome behind the existing one as viewed from the opposite corner, elevated on a wedding-cake base.

What he settled upon was a dome in section—an arched win-

These pages, Demonet in its unfinished cityscape composition.



Allen Freeman



Allen Freeman

dow hinting at Palladio—on a beveled corner facade set back and running the full 12 stories. On the M Street elevation, a new, four-story historicist section in compatible brick holds Demonet's cornice line, and then the "new" building in glass, brick, and precast strips begins. This rises 10 stories, with the 10th expressed as a mannered cornice that echoes the building's two-story, set-back crown.

The addition's articulation seems a little overexcited, but its stepped massing is satisfying—as far as it goes. For now the view along Connecticut Avenue remains unfinished, with the backside of the new building towering over a row of two-to-six-story neighbors. Giegengack is certain, though, that economics will soon complete his composition as land values fronting the avenue go even higher, creating a financial necessity of filling the permissible building envelope to its full 12 stories.

An Entire Block Reformulated

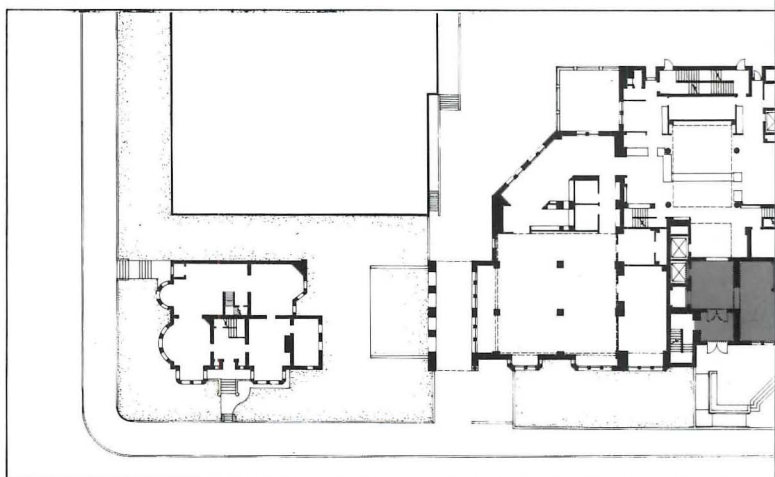
Keyes Condon Flornce of Washington achieved a similar measure of success as SOM with its corner landmark in two less interesting old buildings in an eclectic urban row. In its expansion of George Washington University's law school on the edge of the Foggy Bottom campus, KCF negotiated a sort of visual settlement between a 1922 neo-Georgian academic hall and its neighbor, a 1965 modernist library, then designed additions that playfully employ the Victorian vernacular.

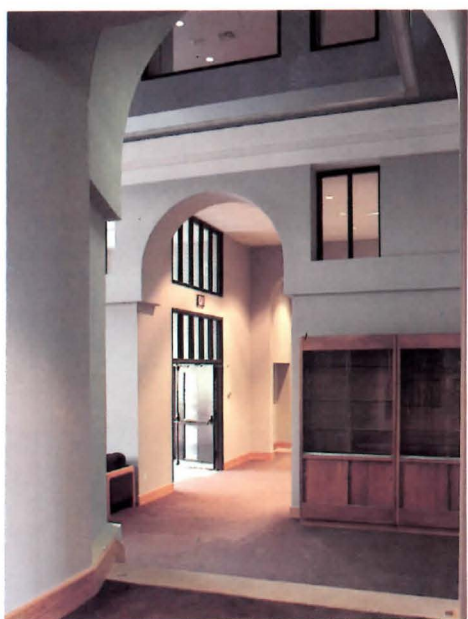
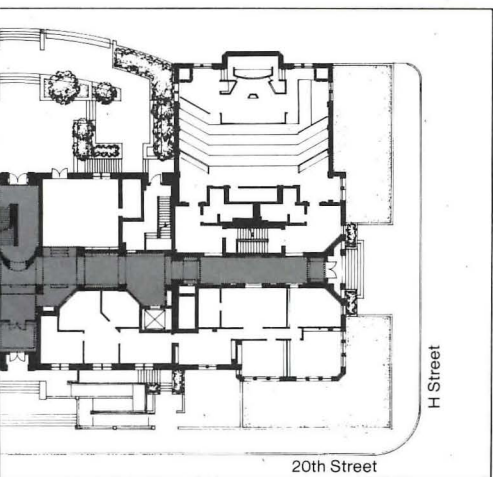
Although the 1922 building, Stockton Hall, lacks landmark distinction, its flat, bland facade was retained because of the building's identification as the law school's first home. The face of the library, with unfenestrated expanses of brick and a heroic, recessed entrance, was considered less valuable. Flanking the incompatible pair were three other buildings: two Victorian town houses next to the library and a 1930s apartment building adjacent to Stockton. After studying the possible reuse of all five buildings, Mark Maves, AIA, and Russell Perry, AIA, of KCF concluded that the best solution given the budget was to pull down and replace the end pieces, gut and redesign Stockton Hall's interior, modify the library, and tie them together internally. That left the thorny problem of stylistic integration.

The architects first considered placing Georgian takeoffs on either end but, as Maves says, found "no way to extend the Georgian and turn the corner or blunt-end it against the street in a way that was either honest to the style or had suitable proportions." So they looked to the south end of the block for contextual elements, to a corner brick house that once terminated a Victorian row but is now freestanding.

As designed by KCF and built, the row first picks up elements of the corner house, restating them with certain exaggerations and incongruities. Continuing north, the Victorian treatment sweeps in front of the library as a sort of applique and then begins to erode. Here the facade is least successful because, though the new windows help to break down the scale, they fail to disguise the chunky massing of the pre-existing library. In a less strained transition at the northern edge of the Stockton Hall facade, KCF's ambiguous corner building first assumes the Georgian scale and then shifts gears and erodes into Victoriana. The row takes the corner with a little obliquely angled punctuation mark above the third story and then releases in a lively entrance facade facing H Street.

Although not a solution likely to appeal to functional purists or dogmatic preservationists, the law row is a much happier blending of old and new than another George Washington University project, Red Lion Row (see Nov. 1983, page 69). There, a banal speculative office building looms menacingly behind a Victorian row facing Pennsylvania Avenue. Meanwhile, a quite different contextual building has been completed farther east on the avenue, within sight of the Capitol.



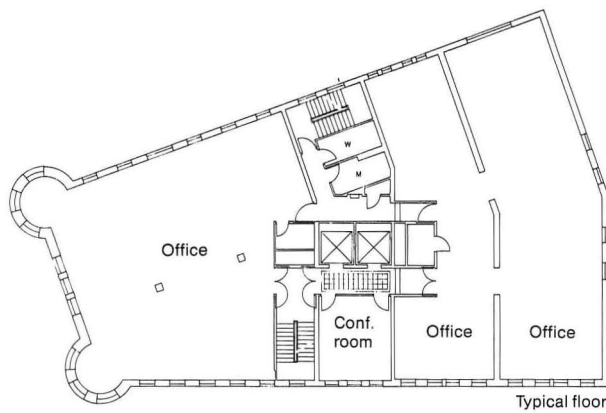


Elevation and plan show entire block of 20th Street, starting at left with a freestanding town house that is not part of the law school project; neo-Victorian infill followed by reworked 1965 library; 1920s Georgian Stockton Hall; and finally the Georgian-Victorian transitional end piece. Left, before and after views of the corner at 20th and H; above and right, the new entrance to the library; and above right, the H Street entrance.



Photographs by Gary Fleming





Typical floor



Landmark Linked to Neighbors

Six thirty-three Pennsylvania Avenue is a small building on a prominent site. A lively survivor of the late 19th century when the avenue between the White House and Capitol was a bustling commercial strip, it stands today as welcome counterpoint to the large-scale, monolithic Federal Triangle buildings on the opposite side.

It was built in the late 1850s as a hotel, but its conical-roofed twin turrets, which made it more than routine, weren't added to its west end until about 1890 (by Alfred Mullett, architect of the exuberant Second Empire Old Executive Office Building next to the White House). Adapted, it housed a bank until the 1940s when it became Apex Liquor Store. The two smaller, stuccoed storefront buildings at 625 and 627 are architecturally less distinctive but historically interesting: One housed Civil War photographer Matthew Brady's portrait studio and the other was Washington's longest existing drug store, Gilman's, from 1843 through 1965.

After standing derelict for some years, the Apex has been joined to the dissimilar pair by means of a sympathetic infill building and transformed into Sears House, Sears, Roebuck's Washington corporate offices and affiliates. Hartman Cox Architects, with restoration consultant John Milner Associates, provided the design concept; Geier Brown Renfrow Architects later took over the project.

On the Pennsylvania Avenue elevation (across page, above), the infill building is the central vertical element that terminates the Apex's facade and balances Mullett's turrets. Its classical entrance seems to be borrowed from the small monument to the west (photo at left); a belt above the fifth floor continues the Apex cornice line; and a gabled sixth story conceals elevator equipment. To mask other mechanical equipment at this level, a sixth, recessed story was added to the Apex. Skin on the infill building is cast stone with horizontal coursing that aligns with the extensively repaired sandstone courses of the Apex. There are no vertical courses—a curious, somewhat awkward attempt to hint that the infill is a latter addition. (Hartman Cox recommended that the masonry units on the infill go up slightly in scale to visually tie it to the turrets.)

The infill building essentially provides the service core for the little complex: a small lobby, a pair of elevators, rest rooms, and circulation between the Apex and Brady buildings. The interiors, reworked extensively by Geier Brown Renfrow, Leo A. Daly, and Sears' in-house designers, are not everywhere sympathetic with the meticulous restorations. But several strong features of the Apex are preserved, including cast-iron columns, shallow barrel ceiling vaults on the first floor, and a relocated stairway. The stairs, which originally connected the first and

Pennsylvania Avenue elevation, facing page, and Apex interiors, above, showing second floor offices and a relocated staircase.



second floors, now open the ground floor to the basement. Its glass risers were uncovered from layers of paint and are newly lit from behind; marble treads are new.

The importance of Sears House lies not in its interior appointments but rather in its prominence on a revitalized Pennsylvania Avenue. It stands in virtual isolation on the north side of the avenue, but eventually will be adjoined by a redesigned Market Square to the west and a nine-story mixed-use development by Eisenman/Robertson and Leo A. Daly to the east.

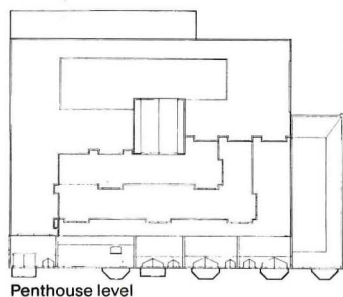
Finally, Facadism with Finesse

In a very different Washington neighborhood, the much more densely built Dupont Circle area, another old-and-new project, 1818 N Street N.W., first described here while in construction last November, recently has been finished. The architect, David M. Schwarz, preserved only the facades of five row houses but created the illusion from the street of also preserving their footprints. This he achieved by stepping back the floors of the eight-story building over all except the end house, where the new pulls forward somewhat, partially masking a neighboring high-rise party wall. Further, what little is seen of the dark, irregularly massed "background" building recedes. In intriguing ambiguity, it is difficult to tell in just which planes the new facades lie relative to the old. Finally, the new is in harmony with the old. The mid-block element's brick, broken massing and occasional pediments echo the flavor if not the exact look of the houses.

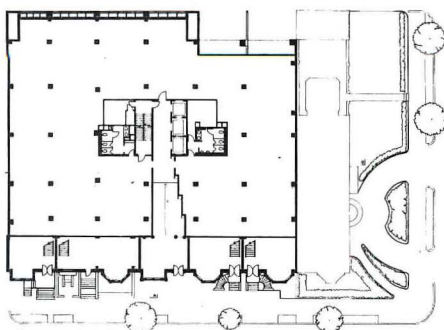
The contextual success of 1818 N Street is twofold: The new fits with the old within the project, and the ensemble fits into the neighborhood. Schwarz here was concerned not with strict building preservation or with adaptive renovation but rather with preservation of the spirit and *apparent* scale of the neighborhood. His building would be out of place on Pennsylvania Avenue, but it works with finesse near Dupont Circle.

The challenge of context is not new to architecture. But what is evermore apparent is the pitfall of reverting to dogmatic approaches and standard solutions. There are as many solutions as there are contexts. □

This page, 1818 N Street N.W., near Dupont Circle. Anchoring end house prominent in top photo is not part of the project.



Penthouse level



Ground level

National Geo: Addition Without Connection

SOM builds beside the Stone original. By A.F.



The National Geographic Society's 1964 headquarters building is a prime example of Edward Durell Stone's late oeuvre. It is an overscaled, marble-pinstriped temple pretending to sit in isolated splendor yet crammed tooth-by-jowl into dense, commercial, downtown Washington, D.C. Stone's statement heavily handedly holds down the corner at M and 17th streets, unequally balanced at the end of the block at 16th by the original Geographic Society headquarters, a much smaller, classically detailed building in limestone.

Flanking this 1903 building, Hubbard Hall, is a modest Beaux-Arts addition of 1913. The two comprise the kind of background suitable to 16th Street, a major axis leading to the White House four blocks south. But this appropriateness was lost on several members of the Geographic's board who reportedly wanted to level all except Stone's building and exactly replicate it on 16th Street, forming gigantic bookends for a parking lot.

Fortunately, Skidmore, Owings & Merrill finally was given the much more difficult task of mediating between Hubbard Hall and Stone's building in a mid-block addition that should esthetically and functionally complement both. David Childs, FAIA, head of SOM/Washington, found Stone's temple virtually unattachable—a building so pristine that it precluded even a loading dock—and so became resigned to the fact that it had to stand free. The building he designed lets Stone be Stone.

With a polyhedral footprint resembling a boomerang and seven floors that progressively diminish from above the second, SOM's addition respects the 1964 building yet emphatically holds its own. It counters the older building's thin vertical stripes with

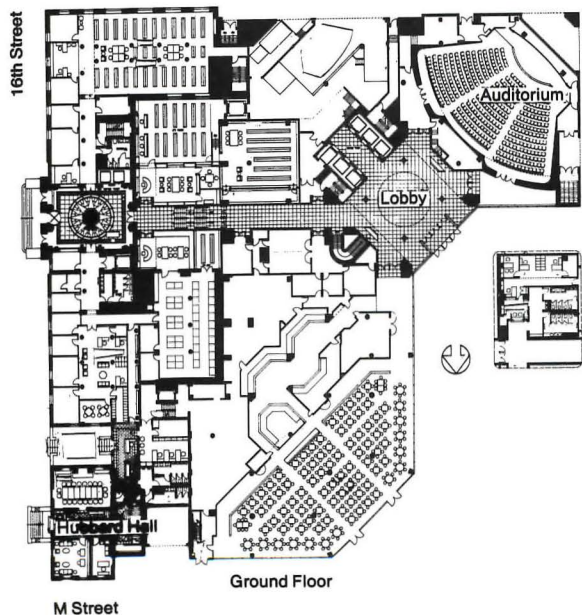
horizontal bands of clear ribbon windows and pinkish granite, softened by rows of dwarf yews in cantilevered planters. The receding profile reduces its apparent mass and opens the interstice to the sky.

This plaza, defined by the east elevation of Stone's building and the crook of the addition, serves both buildings handsomely, providing the former with the space it seems to demand while embracing the latter through use of crisply detailed granite, its dominant material. A U-shaped driveway encloses a tiny stand of Bradford pear trees, and, farther from M Street, a sculpture by Elyn Zimmerman in rough and polished stone punctuates a long, narrow pool. Granite, greenery, water, and sky combine in a calm oasis, just what is needed in this part of the city.

It is a special place that would have been even better had Childs been able to bring the addition 30 feet or so closer to Stone's building, perhaps in a chamfered edge that would maintain the full view of Stone's east elevation while diminishing the view into the adjacent alley. Zoning restrictions precluded the tighter fit; as built, the addition stops cold in a party-wall elevation of rough granite subtly set off by strips of polished granite.

At the opposite corner, where SOM's building closely meets the much smaller Hubbard Hall along M Street, the receding floors minimize the disparity in size between the two buildings, and the granite has a warm affinity with the 1903 building's limestone. In the view of the ensemble from farther back, across M Street, the new building seems a timeless link between two period pieces. □





Allen Freeman

Seen from high above M Street, top, the new building opens a plaza in densely built downtown Washington yet holds the street line. Sixteenth Street (left in photo) forms a dominant axis terminated by the White House; beyond are the Washington Monument and Jefferson Memorial. Above right, SOM's new building from the porch of Edward Stone's, with a sculpture by Elyn Zimmerman, also shown on page 69.

Public Opinions Of Contextual Fit

In interviews a group of laymen tell what they like and don't like about some notable efforts. By Linda Groat

Contextualism has been an increasingly important topic of architectural discourse in recent years. But it has been discussed primarily from the architect's or critic's point of view and rarely, if ever, from the public's point of view.

What makes a layperson say of a new building placed among older ones that it is "a good fit"—or alternatively, "totally out of place?" In other words, what specific design features influence people's perceptions of how well a building fits its context?

In search of answers to these and related questions I undertook a two-year research study, interviewing 73 nonarchitects about the contextual compatibility of 25 buildings, some of them well known for their efforts to achieve it. The interviews took place in three cities in the upper Midwest, each containing one of the subject buildings. The interviewees were shown color photos of the other buildings. The following are several examples of the results.

Of the 25 contextual relationships represented in the study, the East Cambridge Savings Bank addition was by far the most well liked. Indeed, many of the respondents were quite enthusiastic about the project. Comments such as "it all looks like it belongs together" and "it's a continuous flow" were typical of the reactions elicited.

When asked to be specific about the features they felt linked the two building segments together, most people mentioned several specific aspects of the facade design, the most frequently

Ms. Groat is an assistant professor in the architecture department at the University of Wisconsin-Milwaukee. The research study described in this article is partially funded from a grant from the National Endowment for the Arts.

mentioned features being: the arched-form windows, the use of a consistent stonework, the decorative frieze, and the similarity of overall style.

These reactions to the East Cambridge bank are in many ways typical of the respondents' reactions to other buildings in the study as well. They illustrate two of the most important findings (verified by complex statistical procedures): (1) that the physical features that seem to contribute most significantly to the perception of compatibility have to do with facade design, as opposed to either site organization or massing; and (2) that the most preferred contextual relationships are those that embody a relatively high degree of replication.

This latter point is not meant to imply that *complete* replication is necessary for the perception of contextual compatibility. Fortunately for the designer, most people seem to appreciate, and in fact prefer, a mixture of traditional and contemporary qualities, so long as some significant design elements, particularly facade design features, have been replicated.

The example of the East Cambridge bank illustrates this point well. The respondents' comments clearly indicated that they appreciated not only the replicative features of the recycled wall segment but also the contemporary qualities of the glass link. For example, one respondent observed that the link helps to emphasize the two different eras of the building while simultaneously bringing them together.

Another contextual relationship that also illustrates the respondents' overall preference for a moderately high degree of replication is the alumni center at University of Michigan in Ann Arbor. The Michigan campus was one of the three case study sites at which interviews were conducted with building users and nearby neighbors.

In general, the comments from the respondents, both in Ann Arbor and the other two case study sites, suggest that the alumni center is seen as blending successfully with the adjacent campus buildings. Moreover, the Ann Arbor respondents were particularly enthusiastic about the building, and their comments reflected their evaluation of the center in its larger campus context:

"It is both its own building and of the campus."

"It looks as if it belongs on a campus."

"It looks like it has been here forever."

"It's the best unifying building on the whole campus."

In fact, the alumni center is considered so well-suited to the campus as a whole that when asked to name specific buildings with which the center is particularly compatible, the local respondents cited a total of 11 different campus buildings. Some

Patricia Gill



users and neighbors even suggested that the center helped create a visual link between previously unrelated buildings; in at least one instance it was credited with softening the negative impact of a disliked neighboring building.

What then are the specific design features that contribute to this perceived compatibility? Again, as in the case of the East Cambridge bank, most of the specific features mentioned have to do with facade design. Of these, the most important were: the use of brick, including the limestone banding; the overall style; the mix of new and traditional facade elements; and the windows. In addition to these facade design features, two aspects of the massing were frequently mentioned: the gabled roofline and the overall shape.

Among the local respondents, however, one feature in particular—the four massive chimneys—was especially controversial. The architect's intent was to use them as a device for exaggerating the scale of the building so that it would stand up to its large neighbors. But while some local respondents actually liked the chimneys and appreciated the building for its feeling of largeness, others thought the chimneys inappropriate and outlandish.

Another generally liked contextual relationship is illustrated by the Beacon Street apartments. This building is slightly less replicative than the previous two examples, and interestingly, the respondents are slightly less enthusiastic in their opinion of its contextual compatibility.

Although several important design features—such as the use of brick and the vertical bay—contributed to the generally favorable response, other features—such as the rectilinear forms and the fenestration—were more controversial. More specifically, respondents who liked the building appreciated the counterpoint of rectilinear and curvilinear bay forms, while those who disliked the building found the contrast objectionable. In addition, some respondents appreciated the size and similarity of window placement, while others objected to the difference in their stylistic quality.

Across page, East Cambridge Savings Bank addition in Cambridge, Mass., by Hilgenhurst & Associates of Boston, which was the best liked of the 25 contextual relationships presented in the study; below, alumni center at the University of Michigan in Ann Arbor, by Hugh Newell Jacobsen, FAIA, of Washington, D.C., which users and visitors felt related well to the campus as a whole; right, Beacon Street apartments in Boston by James McNeely, AIA, of Boston, to which some respondents in the study object to the contrast of rectilinear and curvilinear forms.



William W. Owens Jr.



Robert Lautman

This mixed response to several of the key design features of the apartment is significant because it illustrates just how delicate a balance of replication and contrast is required in contextually sensitive design. In this case, the use of rectilinear forms and clearly modern fenestration represented a degree of contrast that some respondents were unwilling to accept.

The potential difficulties of balancing replicative and contrasting design features are also well illustrated by the addition to the Farmers' and Merchants' Union Bank in Columbus, Wis., another of the case study sites. In this instance, the bank addition represented such a degree of contrast—particularly in terms of its facade design—that the vast majority of the respondents from the other sites found it both unappealing and contextually inappropriate. This generally negative response was elicited in spite of the addition's moderately replicative site organization and massing. The two most frequently cited features contributing to the perceived mismatch were the lack of brick and the "starkness" of the facade.

Another intriguing facet of the response to the Columbus bank addition is the difference between the attitudes of the local and the nonlocal respondents. In general, the local residents and users were decidedly more favorable in their evaluations of the addition's contextual compatibility. In fact, a clear majority found the addition's relationship to the Sullivan bank acceptable, although their comments in no way conveyed a positive enthusiasm about it.

What accounts for this difference between the local and nonlocal respondents? Obviously, the Columbus residents were reacting not just to an isolated esthetic object but to a building they've done business in and experienced as an integral part of a larger context. And in these respects, there are reasons for the addition to be valued. First, the office space provided by the addition is open, airy, and light. And second, the addition is considered an improvement to the street, preferable to the "dilapidated" turn-of-the-century buildings that line the two-block core of the town.

An interesting example of a generally disliked contextual relationship is represented by the addition to the Allen Memorial Art Museum at Oberlin College. The consistently negative response to this building is particularly significant in view of the fact that the contextual design strategy for it has been so well articulated and defended by the architects and some architectural critics. According to the various descriptions in the architectural press, the architect's intention was to create a plain, modest "back" in counterpoint to the fancy "front." Unfortunately, the intended effect is not in any way appreciated by the respondents in this study.

The checkerboard pattern was the one feature most commonly mentioned as detracting from the contextual compatibility of the building. In particular, the high visibility of the color pattern seemed to negate the intended replication of color and materials; several respondents commented that the colors of the new addition were "too different" from the original. Moreover, the power of negative associations not imagined or intended by the architects was also evident in the comments of one respondent who immediately labeled the building "Ralston Purina" and referred to it as such throughout the interview.

Taken together, these several examples—as well as the research study as a whole—suggest three conclusions about how best to achieve contextual compatibility among buildings:

Architects must first be willing to adopt an evolutionary—rather than revolutionary—stance toward architectural design. As the examples described in this article illustrate, the most preferred infill designs generally embody a moderately high degree of replication. And, while people do, in fact, express an appreciation for the counterpoint established by mixing traditional and new elements together, most people find radical contrast to be objectionable. The challenge, then, is to find ways of achieving the appropriate balance between contrast and replication. In some circumstances, even a moderately contrasting design strategy can be perceived as contextually compatible. For example, in the design of the Salem Five Cents Savings Bank addition, a creative use of one or two key design features seems to be enough to create a perceived link; the arched arcade, set prominently in front of the stark glass facade, maintains an appealing enough image that most respondents found it to be contextually compatible.

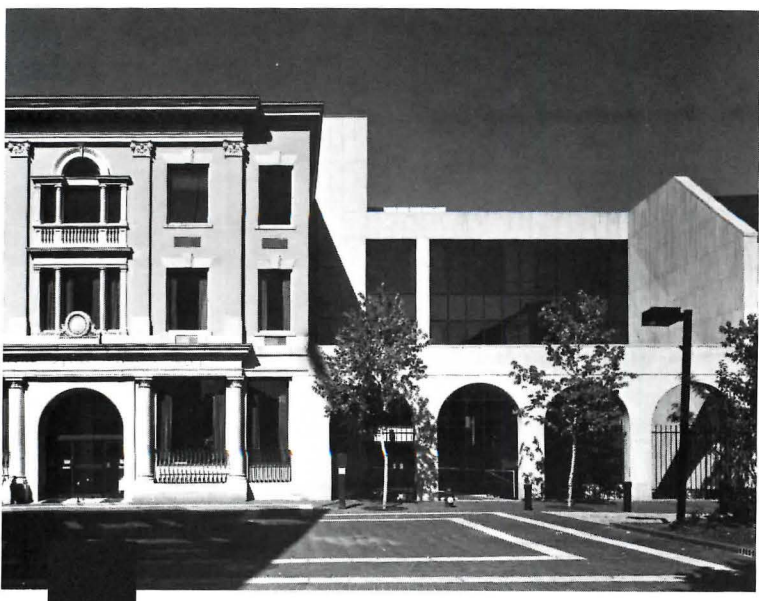
Facade design is more important than either site organization or massing in linking new to old. Buildings that only replicate site organization and massing patterns—but not facade design features—are usually not seen as contextually compatible. This is not only the case with the addition to the Farmer's and Merchants' Union Bank but also with a number of other buildings in the study. This does not mean, however, that indiscriminate mimicry of facade design features is necessary for compatibility. Rather, as the examples of the East Cambridge bank and the Michigan alumni center suggest, innovative features and imaginative re-interpretations of traditional facade elements can be blended together in ways that truly appeal to nondesigners. In other words, nondesigners seem actually to prefer buildings that express a character of their own to those that are seen merely as pale or undistinguished imitations of the original(s).

Architects must seek new strategies for achieving the richness of detail typical of older buildings. Not surprisingly, the results of the study do confirm that nondesigners generally find the starkness of modernist architecture to be incompatible with premodernist architecture more typical of infill settings. But more important, the study also reveals that the respondents' desire for moderation in the degree of facade detail is just as clearly manifested in their dislike of "busy" and "garish" features. Thus, those nonmodernist designs that embody an eclectic collage of formal vocabularies, especially when expressed in bold and colorful patterning effects, are frequently perceived as busy, confusing, and therefore inappropriate to their surroundings. This is the case not only with the addition to the Allen Memorial Museum but with other buildings in the study as well.

These three conclusions, then, offer to the practitioner insights into nondesigners' interpretations of contextual compatibility. Quite purposefully, they have *not* been presented as prescriptive guidelines. Truly imaginative contextual design is more likely to merge from an intuitive sensibility of the nature of lay perceptions than from following form-giving rules. Thus, the conclusions stated above are presented in the hopes of fostering innovative contextual design that successfully combines artistic expression and popular values. □



Skot Weidemann Photography



Across page, addition to Louis Sullivan's Farmers' and Merchants' Union Bank in Columbus, Wis., by Gornet & Shearman of St. Louis, which Columbus residents found more contextually appropriate than study respondents; above, Allen Memorial Art Museum addition at Oberlin College in Oberlin, Ohio, by Venturi, Rauch & Scott Brown of Philadelphia, which drew a negative response because of its checkerboard pattern; left, the Salem Five Cents Savings Bank in Salem, Mass., by Padjen Architects of Topsfield, Mass., which was considered compatible by many respondents, despite its contrast.

'Fictional History' in Rome

The remarkable Piazza Mincio. By James Stokoe

A special group of apartment buildings at Piazza Mincio in a northern quarter of Rome was completed in 1927. The apartments, with floor plans and features that represented the latest inventions, were offered for sale in an innovative manner, possibly making them the first speculative condominiums in that city. The architect was the Florentine Gino Coppedè (1866-1927), who, because of the eclecticism of his designs, has been labeled by modern historians as being out of step with the trends of his day.

In today's context Coppedè's buildings at Piazza Mincio are a powerful example of how a new urban fabric can be created with a richness of surface that rivals the older parts of the city. When cities grew at a much slower pace and materials were used that were sympathetic to change, facades were sensitive recorders of urban history. Coppedè, establishing the center of a new quarter of the city overnight, gave his facades a fictional history. Partly with massing but principally with ornament and decoration, he created a collage of imagery that seems to suggest that even when just completed, the buildings would have appeared new, but also remarkably familiar.

Coppedè borrowed imagery from the older parts of the city. The important Barberini family's bee symbol was used throughout the project. Other elements such as the giant heads that appear over the great arches, original inventions of Coppedè, make less specific references. Their scale and bold design point to the large fragments of antiquity such as the head of Constantine

Mr. Stokoe, a practicing architect in Washington, D.C., was a fellow at the American Academy in Rome in 1978 and is author of *Decorative and Ornamental Brickwork* (Dover, 1982).

the Great in the Palazzo dei Conservatori. There are vignettes composed of elements one might find in the excavations around the Roman Forum.

Different sections of Rome are recalled by the range of colors. Rich combinations of stone and stucco ornaments recall the palazzi of the Renaissance and baroque periods. Coppedè created a linkage with the romanticized medieval past of the city, using images of a then familiar popular mythology.

Part of Coppedè's genius was that he created this fiction yet avoided producing surfaces that had the appearance of the unreality of a stage set. The direct copying of a period or style, even when done with great care, cannot avoid suspicion. Comparisons to the genuine are inevitably made. Coppedè collaged together elements from various periods in history. He intertwined differing scales, sources, and building techniques. He used traditional materials and skilled craftsmen. There is a great deal of depth in the facades, both from the ample recessing of windows and from the dramatic projection of bays. The feeling is of great substance with no attempt at visual trickery.

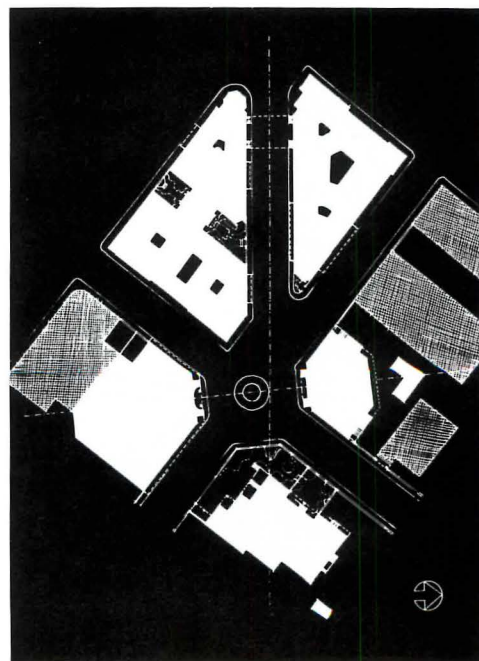
The elements with which Coppedè fabricates his fictional history

can also be read as a source book of ornamental techniques. He created an open-air demonstration of the various ways people have cared to decorate their city surfaces. Starting with simple treatments, there are golden yellows, pale yellows, and faded oranges of stucco work enhanced with incised patterns, or projected areas with decorative edges. In some locations incised



Left, the view looking north and west across Piazza Mincio.

Below, left, view from the Via Po toward the arch over Via Dora. Facing the page, the Villa Tower to the east of the Piazza.







Left, the inventive detailing of a balcony. Below left, architect Gino Coppedè's interpretation of the column. Facing page, details in stucco and stone.



Photographs by James Stokoe

lines delineate classical scenes embellished with specific coloring. There are also medieval scenes done as frescos.

There are flat designs, decorative patterns in color executed as the banding or edging for architectural elements. The influence of the arts and crafts movement is clear, yet the painted decoration also seems to represent the fragments of color imagery and pattern that can surprise the eye in an Italian city.

There is a very simple use of decorative brickwork involving herringbone and diagonal patterns. Often the brick is only exposed in small areas, as if the stucco finish had come off in an artful way. In Rome, the vast majority of brickwork visible was in fact made so by the gradual loss of the stucco finish.

In contrast to his use of brickwork, Coppedè's wrought iron designs are complex and varied. They are free adaptations of medieval Italian forms and wonderful original inventions. He used wrought iron for bars on windows, for railings, for finials and weather vanes, for hanging lamps and plant holders, for fences and gates, and for brackets and downspout decorations. Although not as freely creative, his work can be favorably compared to that of Gaudí or Guimard.

The carved stone elements play key roles. They are large rusticated blocks, wonderfully carved keystones, pieces of great arches, or elements of large overscaled projecting brackets. Stone is also carved for columns and capitals or panels with inscriptions. The massive ornaments recall the scale and grandeur of the classical ruins in Rome. In his fiction, he has fleshed out what might just remain of an excavated brick substructure.

Finally, the majority of ornamental forms are cast stucco. They are molded in a diverse imagery crucial to the richness of the fiction. They are trims, moldings, figures, human and animal heads, balusters and friezes, swags and capitals, or grotesques and masks. There are repeated uses of the elements on each structure. The repetition is a unifying force that makes the complexity of Coppedè's creation comprehensible and also more feasible. In a few cases Coppedè plays games with the repeated element, using it in different roles. He treats the Barberini bee in such a manner. It occurs in an alternating pattern with rustication, as a keystone element, as a repeated motif surrounding an arch, and as part of a column capital. In a slightly larger version, it becomes decoration for a bracket.

A bull's head, which on one of the apartments appears as an integral part of a bracket, is used on the villa as to look like a found fragment placed on a contrasting stucco wall. To get the most out of his ornamental designs, Coppedè has elements live simultaneously as new construction and ruin fragments. The carved stone rusticated block with a lion's head that bands the large archway over the Via Dora is discovered as a fragment in a small pool. The lion's mouth is the water source.

The layout of the diagonal street and the piazza was designed by Coppedè. He organized the surrounding three apartment buildings and the villa asymmetrically. This made it easier to collage together the diverse elements of his fiction. But there were other useful aspects to this composition. Asymmetry allowed him to make one end of an apartment building respond appropriately to the piazza and its fountain and allowed the other end to respond differently to the next building.

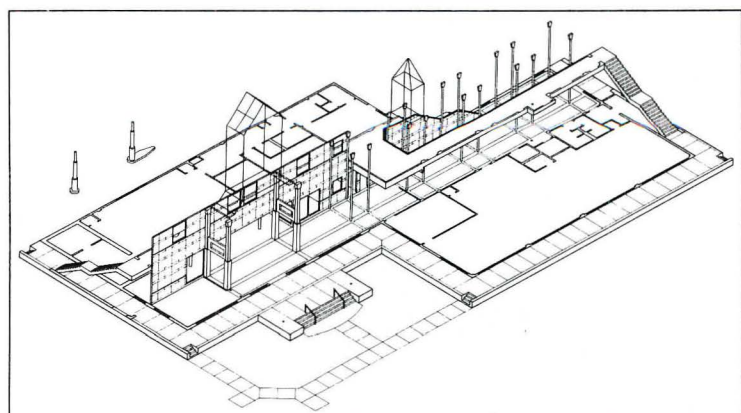
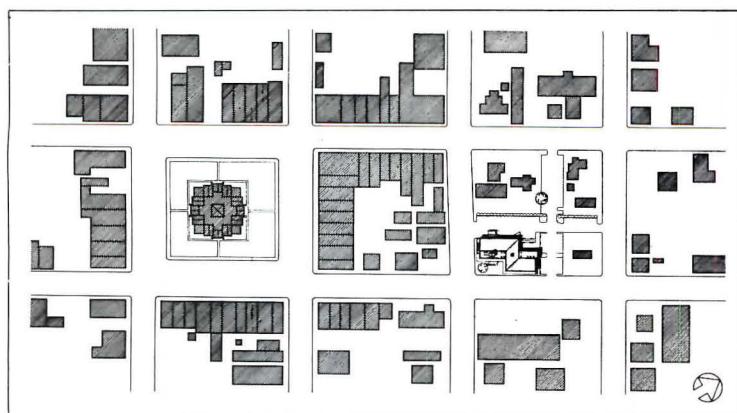
Coppedè's asymmetry has the ability to break down the scale of his large building into traditional limits. For him, the placement of ornaments and massing work together to set up localized themes around the building perimeter. In less skillful hands, Coppedè's approach might easily result in an eclectic disaster. Still, we need to study examples like Piazza Mincio, and we need to develop design strategies to make what we build less alienating, less divorced from the qualities we find pleasing and reassuring in our cities. □



Kaleidoscope



Paul Hester



Small Town Bank Is a 'Collage Of Indigenous Details'

The most famous vernacular building in La Grange was a small farmhouse called the Chicken Ranch, better known to the world at large as "The Best Little Whorehouse in Texas," which an overzealous Houston newscaster got shut down.

Fortunately, La Grange has hundreds of sturdy vernacular buildings still in use, the newest of which is the Fayette Savings Association on state highway 71, midway between Austin and Houston. Designed by William T. Cannady & Associates of Houston, the bank building is a skillful collage of indigenous architectural details: elevated sidewalks and storefront canopies, stair-step end walls, ornamental brickwork. Without trying to look like a period piece, the building fits unobtrusively into a downtown that has changed remarkably little over the last 75 years.

"Fitting in" was an important marketing consideration for Lee Mueller, Fayette Savings' president and chairman of the board. The bank is barely six years old, while the competing banks in town are both over 100. "Since we can't be 100 years old, we at least wanted to look solid and permanent, as though we could be around that long," Mueller explains.

William T. Cannady, FAIA, owns a ranch 12 miles from La Grange, so he was already familiar with local building traditions as well as local biases. La Grange is a small German and Czech community (population 3,768), with a strong crafts tradition and little interest in knife edges and Corbu curves. Cannady and Mueller spent numerous weekends walking the town in search of details that they might find appropriate for the new bank.

"Very little invention came from our Houston workshop," Cannady insists. "All the basic elements were here already." As in most Texas towns, the square is dominated by a courthouse, in this case a grand Richardsonian Romanesque pile designed in 1891 by James Riely Gordon, the dean of Texas courthouse architects. While not so extravagant as his romantic wedding cake in Waxahachie, Tex., it is packed with arresting details that cry out for plagiarism.

The red brick and tan building on the exterior of the Fayette Savings Association is simply the courthouse color scheme reversed. The clock tower and weather vane are unapologetic, if strained, borrowings from Riely's design, although the bank's tower has been kept respectfully lower than that of the courthouse. Gordon's checkerboard stonework is repeated on the clock tower, while the segmented semicircular arch that surrounds the bank clock is patterned after the voussoirs on the courthouse. Most other details on the bank were taken directly from the small commercial buildings on the town square. Here are cafes, saddleries, hardware stores, and several groceries advertising Weimer sausage and Czech noodles. Only a video parlor and a Mr. Gattis restaurant intrude to remind us that the year is 1984. Few buildings are taller than two stories, and virtually all have canopies or arcades that extend over the sidewalks, the latter

continued on page 106

The bank's design borrows local architectural details, as seen across page in the substantial vernacular buildings of La Grange, Tex. This page, the building's front entrance with clock tower (top), east elevation (middle), and two-story, rear lobby with two rows of marble-clad columns (bottom).



William T. Cannady

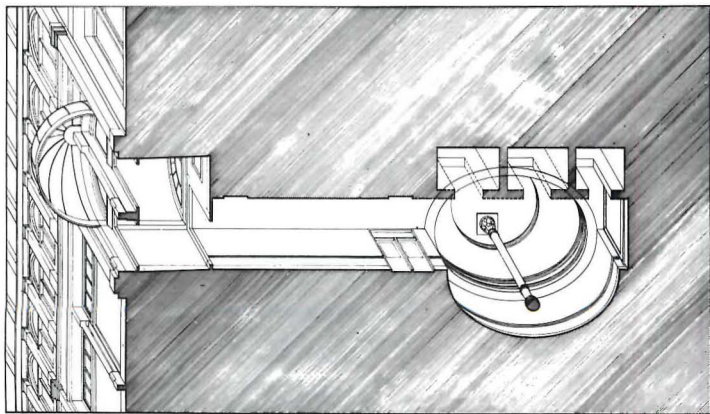


Paul Hester



William T. Cannady

*New Entry a Wink on an
Elegant Cast-Iron Facade*



New entrance to the upper-floor offices is at the west end of the building and is marked by a glazed canopy, lower right in photo across page. Above, the entrance canopy with cast-iron decoration. Above right, as seen from the entrance, a long hallway leads to an elevator lobby. Right, the lobby's organizing element is a column that rises to a brightly lit dome.



Photographs © Paul Warchol

Once a department store and then a manufacturing plant, the cast-iron Victorian structure at 40 West 23rd Street in New York City was converted into offices with retail space to occupy the first floor in the future. One major challenge facing Rothzeit Kaiserman Thomson & Bee of New York City was to provide an entrance to the offices without disrupting either the retail space or the building's Victorian character.

The solution was to place a small entrance lobby along the west end of the building. From the exterior it is quietly marked by a glazed canopy with pressed metal supports that echo the ornamentation of the original facade (lower right in photo above). From the entrance a hallway runs the length of the building, terminating at an elevator lobby. Here the "design motif," in the architect's words, was provided by a single, original column, which "generated the circular and elliptical domes that tie the

column to the elevator bank." While artificially lit, the domed space is meant to "capture the volume" of the building's original central atrium. In the building's renovation a new skylit atrium is being constructed from the existing 36x42-foot courtyard located at the heart of the building. The atrium will provide natural light to the offices.

Called one of the largest cast-iron facades in the world, the building's elegant, Victorian face was badly tarnished. Exterior renovation included removal by wet sandblasting of over 100 years of paint accumulation, which revealed hidden detailing. New pressed cornice ornamentation was made by a local manufacturer to replace pieces that had disappeared, and the facade was repainted. All windows were replaced with double-glazed aluminum windows, and a new sidewalk with Victorian street-lighting was installed. **NORA RICHTER GREER**

Remodeling Reintroduces Deco To a Chicago Museum's Interior



© Howard N. Kaplan

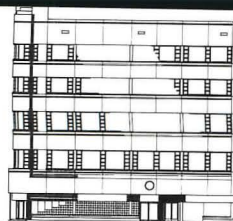


© Howard N. Kaplan

Originally built as a temporary structure for the 1893 World's Columbian Exposition in Chicago, the Museum of Science and Industry re-opened as a permanent building in 1935. While the exterior retained its Beaux-Arts appearance, the interior had a streamline deco look. Today only remnants of the original deco remain, although the streamline has been re-introduced in the museum's new Kresge Library/Science Education Center.

Designed by the in-house interiors group of O'Donnell Wicklund Pigozzi of Northbrook, Ill., the center occupies the U-shaped space of a former gallery and the museum's old library. To create a deco image the center has metallic plastic laminate panels that look like stainless steel, black rubber tile flooring that is to give the appearance of Bakelite, and ornamental lath and plaster trim at the bases and tops of columns. Circular and streamline forms predominate; colors are muted, and lighting is indirect. Brass light fixtures from the original library were polished, rewired, and repositioned in several rooms, and simulated ventilator covers hide unused ducts. N.R.G.

Above, the adult reading room. Left, the youth section is divided by a free-standing minitheater and play area.



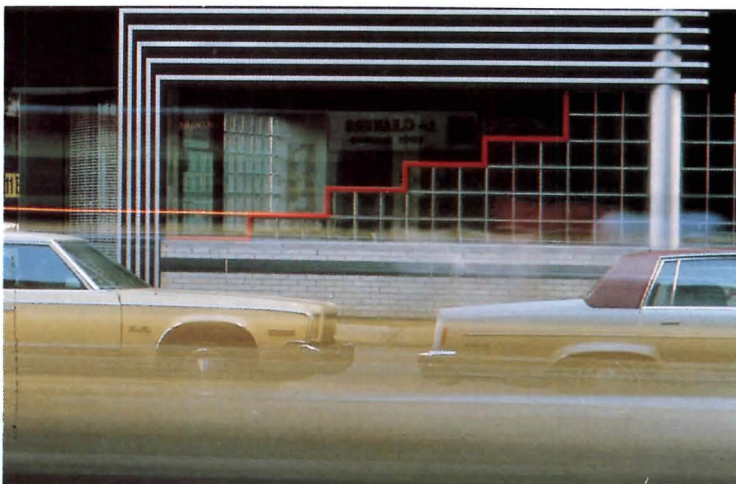
Streamline Corner on a Renovated New York Loft



In the 1930s Eli Jacques Kahn transformed a late-19th century Brooks Brothers men's clothing store at the corner of 22nd and Broadway in New York City into a more flashy, modernistic building. It is the spirit of Kahn's renovation that Conklin Rossant of New York City sought to recapture in a 1980s edition.

In the early '80s the rundown loft building was bought by Superior Lamp Co. for its offices and warehouse. Renovation started with the first floor, which was to house the company's retail outlet, Just Bulbs. To create a "heightened art deco or modernistic style, true to the original building but with a 1980s vision," in the words of James Rossant, FAIA, art deco materials and forms were re-introduced: glass block windows, aluminum columns and decoration, ziggurat lines. A streamlined look was created by running aluminum strips as window trim (and eventually running the strips up the entire facade). A new corner entrance was established, which is designed to "salute" the Flatiron building located directly across the street. N.R.G.

Aluminum trim, glass block windows, and ziggurat lines recall art deco style. Above, the new corner entrance.



Thomas Anderson

Mansion-Like Library Redone, Expanded Underground



Photographs © Richard S. Mandelkorn

Located in a four-acre park in Danvers, Mass., the neoclassical Peabody Institute Library looks more like a luxurious mansion than a town library. Originally endowed by George Peabody and designed by Little, Brown & Moore in 1891, it had recently become grossly overcrowded and functionally obsolete, requiring off-site storage of part of its 85,000-volume collection.

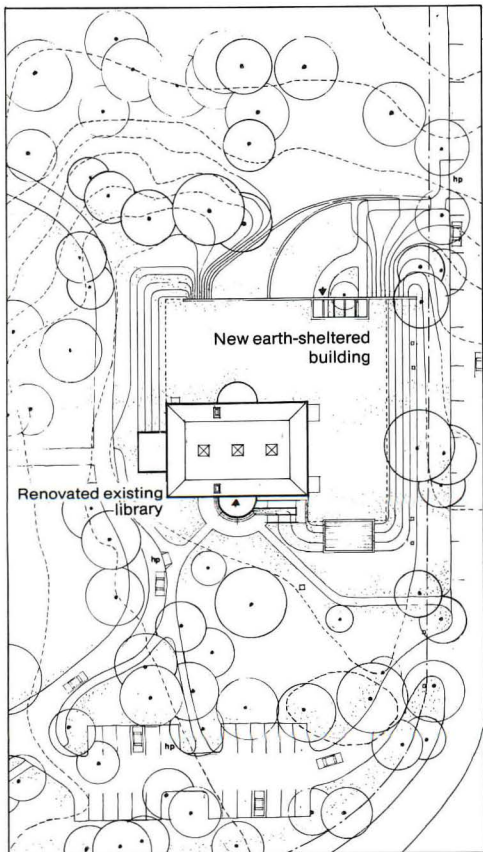
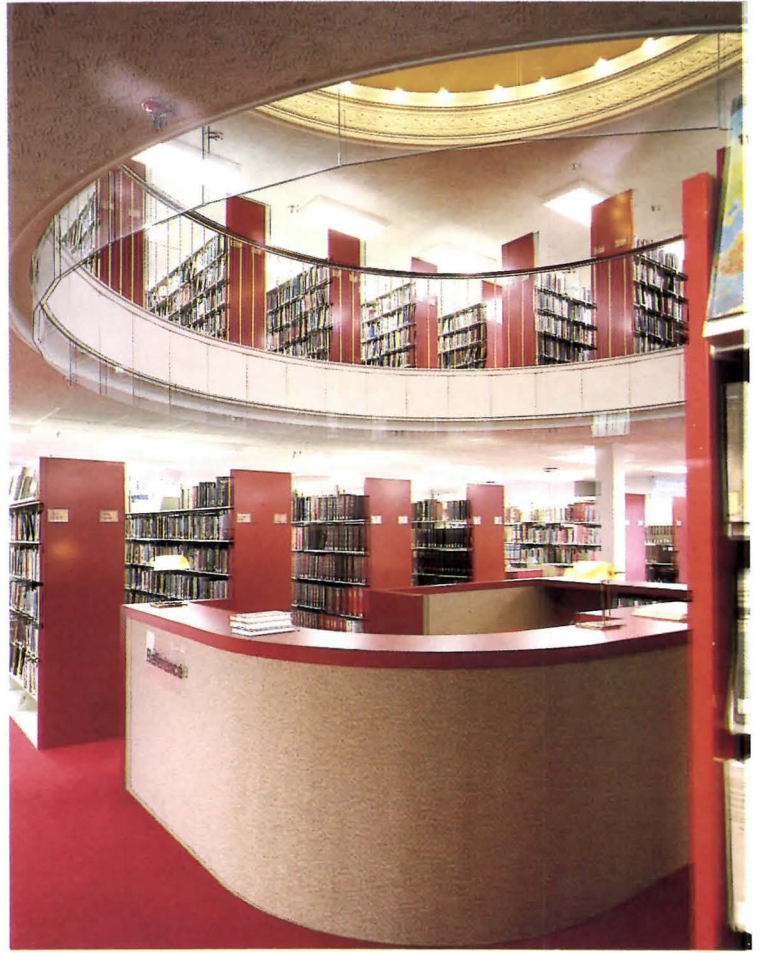
In designing the addition Padjen Architects of Topsfield, Mass., concluded that "any new building or above-grade addition to the existing building would deny the special character of this historic landmark, usurp an important green space, and effect a major change in the character of the neighborhood." What was needed was an addition that was as unobtrusive as possible, with conservation of energy, economic, natural, and historic resources of utmost importance. The obvious solution was to go underground, a decision that was locally considered "somewhat daring and controversial in 1974," in the architect's words.

The earth-sheltered addition contains 12,000 square feet, compared to 18,000 square feet in the original building. To create a south-facing entrance, a gently sloping hill was carved out of the park. The addition's facade is very low key, made of con-

Above, the neoclassical library juxtaposed against the earth-sheltered addition. Across page: upper left, traditional regional colors decorate a first floor hallway; upper right, reference desk and stacks occupy the original building's former auditorium; lower right, the children's reading room in the underground addition.

crete slabs and dark-tinted glass windows, and has a linear appearance. A railing that runs the length of the facade marks the top of the addition. The entrance leads directly into the children's library, which is basically a rectangular-shaped room with chairs and tables, bookshelves, control desk, and glass-enclosed office. To the west, running the length of the building, is the multipurpose room and the town's archives. Directly behind the children's room the addition links up with the original building's basement level, an area used predominantly for storage.

The renovation of the existing library included the modification of interior spaces: One floor was added in what was a two-story-high auditorium; a new reading room was created in the previously unused porte-cochere east entrance; staff offices were added at each level to provide better supervision. N.R.G.



Former Waterfront Eyesore Given Colorful Refurbishing

Gary Fleming

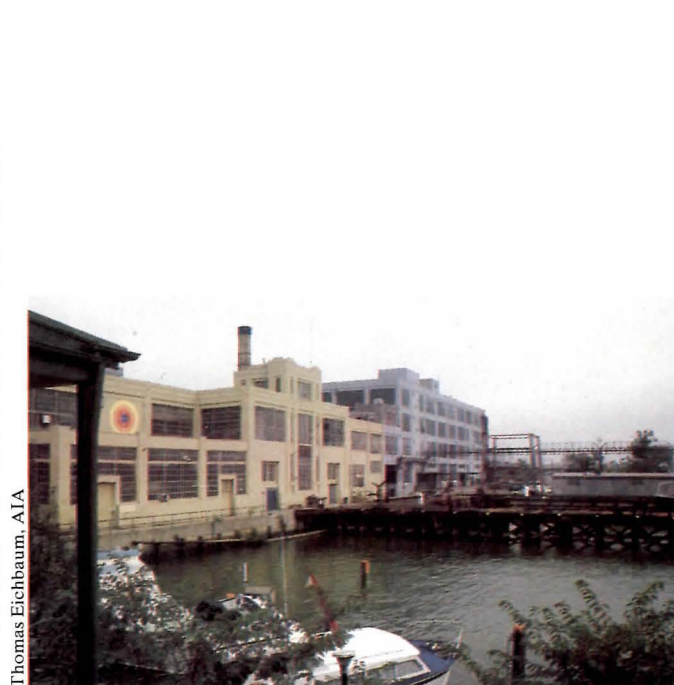


In the past the waterfront of Old Town in Alexandria, Va., signaled a nitty-gritty, industrial rivertown rather than the quaint, historic village the district had become. The main eyesore was a former Navy munitions factory complex located on the banks of the Potomac River that over the years had become quite dilapidated and seemingly out of context. The complex's only redeeming element was that one building—the 1918 torpedo factory—had become a very popular center for local artists.

In 1978 the City of Alexandria announced a design competition for the redevelopment of the factory complex. The win-

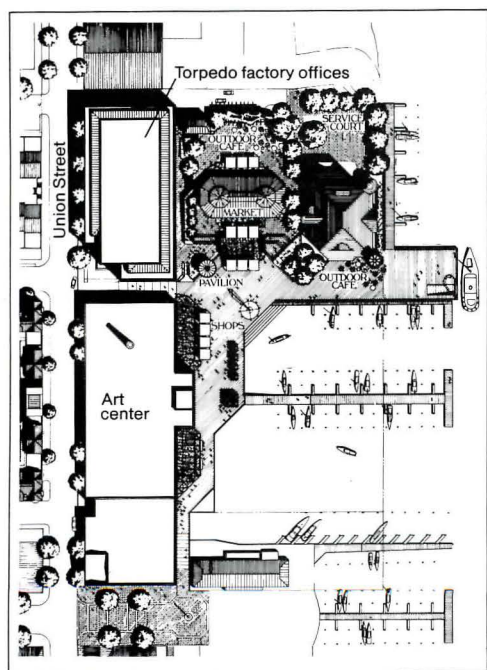
ning scheme calls for a new art center, space for retail shops, an office building, garage, residences, a boat club/restaurant, and a new, lively waterfront complete with kiosks, benches, outdoor cafes. Metcalf & Associates of Washington, D.C., designed the garage and residential portion (100 new town houses), with Keyes Condon Florance, also of Washington, doing the remainder.

In the renovation of the 1918 torpedo factory, KCF gutted the interior and added a new mezzanine level. To create a factory image, mechanical, electrical, and structural elements were left exposed. Studio partitions are of standard galvanized metal

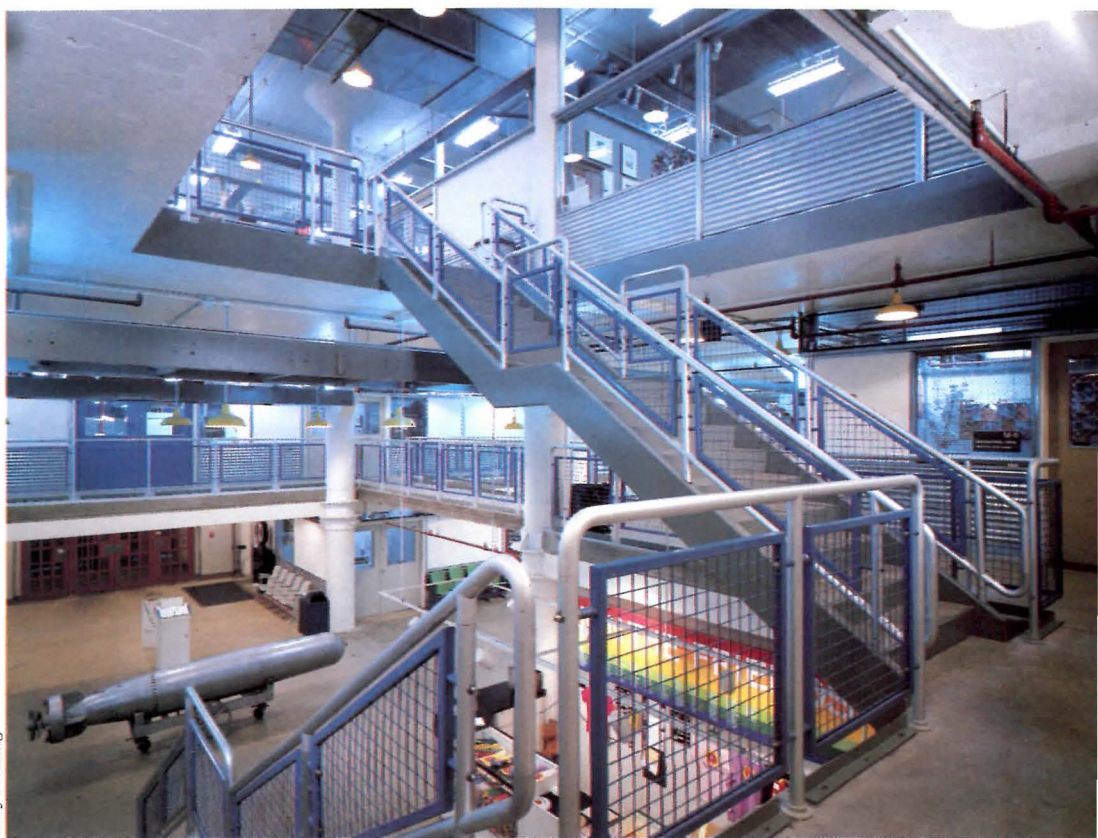


Thomas Eichbaum, AIA

Two renovated munitions factories: the gray-colored arts center and the brick office building, left and above. The former, gritty industrial complex, above right. Art center's interior, right.



Gary Fleming



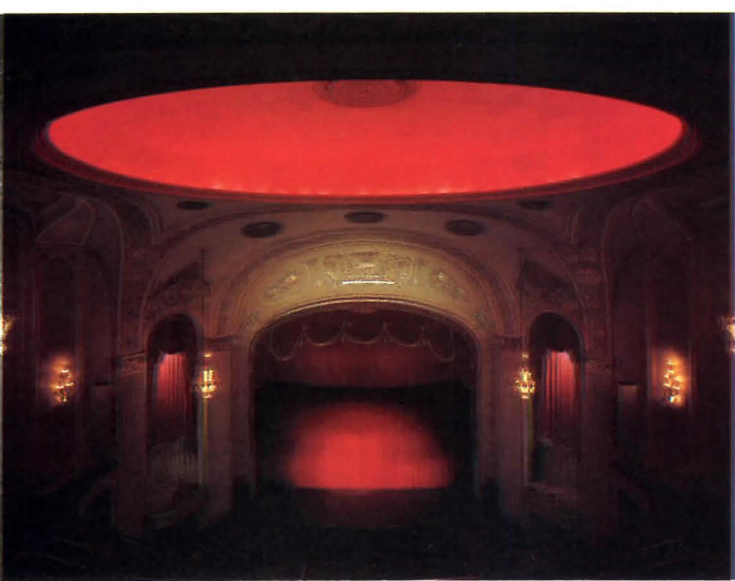
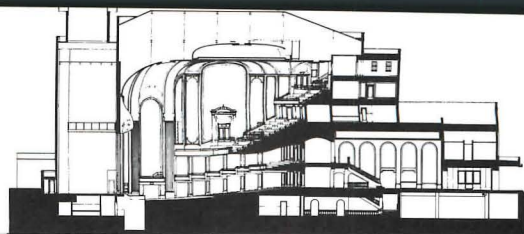
with glass "vision" panels. The gray exterior was enlivened with polychromatic accents.

The 1943 naval munitions plant sitting north of the torpedo factory was transformed by KFC from a reinforced concrete industrial building into a red brick, limestone-based, five-story office building. The new facade is decorated with patterns of 8x8-inch glazed brick that echo the torpedo factory's ornaments. A green standing-seam metal roof is meant to recall those of the surrounding smaller scale buildings. The interior centers around a highly decorative two-story "grand" lobby. N.R.G.



The 1943 munitions factory's concrete facade was covered with brick and limestone. Ornamentation echoes that of the older torpedo factory to the south. Left, the two-story, highly decorative lobby.

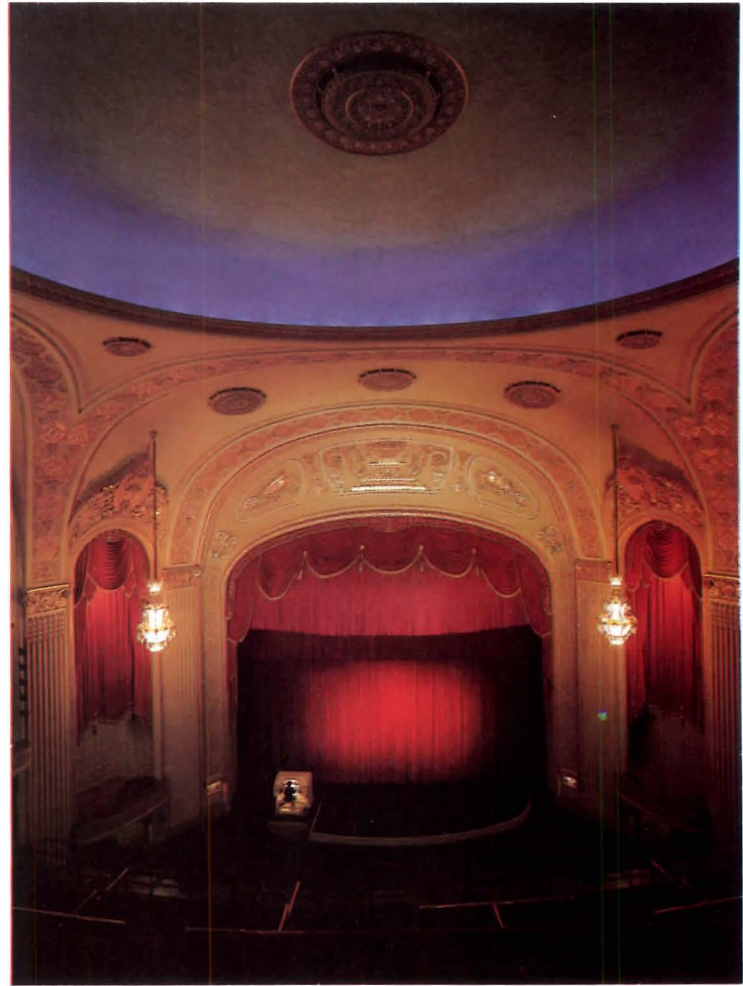
*Former Movie Palace
Becomes a Sumptuous Theater*



Designed by Chicago architects George Rapp and C.W. Rapp and completed in 1928, the lavish Orpheum Theater was quickly regarded as Memphis' grandest movie palace. However, by the '70s the theater had crumbling seats, primitive plumbing, a decrepit sound system, a leaky roof, antiquated lighting, rigging, and dressing rooms, and a half-century-old layer of soot and popcorn grease. In 1978 the theater was closed and threatened with demolition.

With funding from the City of Memphis, the State of Tennessee, and the nonprofit Memphis Development Foundation, the restoration of the Orpheum, completed in December 1983, became the cornerstone of the ongoing renaissance of downtown Memphis. Chosen to design the restoration, renovation, and new construction needed to return the original grandeur to the Orpheum were two Memphis firms—James Williamson/Carl Awsumb/Architects and Awsumb/Wage/Watson, with James Williams, AIA, project architect.

Above, the Orpheum's exterior with original marquee. Left, the theater's lavish main auditorium.



Restoration involved redecorating the relief ornaments in the main auditorium and grand lobby using 23 carat gold leaf. The 2,600 seats were either restored, or replicas were made. The original chandeliers and sconces were cleaned and received new wiring. And the silk-screened wall covering, velour draperies, and carpet were custom manufactured in the "spirit" of the originals. The exterior was cleaned and restored, and the marquee and upright sign returned to their original configurations.

Because the original lobby was quite small, a new "parlor" was created in the commercial space directly south of the lobby. It contains bar facilities, a box office, and restrooms and, although designed for a "contemporary look," picks up the terrazzo floor and plaster ceiling coves of the original theater.

The most striking transformation was backstage where three floors of dressing rooms were demolished to provide badly needed wing space. New dressing rooms were created below the stage. New backstage crossover, loading dock, and stage entrance were built, with the orchestra pit expanded. Airconditioning, heating, electrical, and plumbing systems were redone. Wherever feasible, original equipment was repaired and brought up to modern codes. For example, the 1928 terra cotta drinking fountains were saved, as were the original exits and aisle lights. N.R.G.

Above, the main lobby with regilded gold leaf reliefs, silk-screened wall covering, velour curtains. Above right, the auditorium as seen from an upper balcony, with its central ceiling cove highlighted by blue lights. Right, the first balcony's lobby overlooks the main lobby. Across page, the theater's main auditorium before a performance as seen from the stage.





HOW TO CURE STERILITY.



To appreciate what Western Wood can do for today's architecture, one need only consider the human side.

People trust wood. They're comfortable with its natural warmth, its genuinely honest character. But it doesn't just soothe the psyche—wood also incites the imagination.

Innovative designs thrive within the workable grains of this timeless building material.

With little more than basic skills and tools, evocative solutions easily become reality. And the most utilitarian of buildings become anything but boring.

Here, too, is a veritable, endless realm of engineering possibilities. With

beams, girders, arches and trusses. Planks, posts, sheathing, timbers. Indeed, wood frame construction works at every conceivable level.

And if that's not miracle enough, consider how much wood does for so little. For its strength, its thermal efficiency, its resiliency—even under extreme loading conditions—no other structural material performs like wood. So happily, on the human scale, wood buildings are a solid investment for your clients.

To see how you can shape your dreams and your clients' desires with Western Wood, send for our free brochures.

After looking them over, feel free to come up with some potent creations of your own.



Dear WWPA:

I'm all for curing commercial sterility. Please send me the following publications, no charge.

- "Miracles by Design," a portfolio filled with effective, commercial architecture. All in wood. Every one in color.
- "Wood Frame Design for Commercial/Multi-Family Construction," a somewhat sterile but enlightening treatise detailing the structural aspects of wood frame construction.

NAME _____

FIRM _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

WESTERN WOOD PRODUCTS ASSOCIATION
Dept. A-11/84 Yeon Building, Portland, OR 97204

Circle 28 on information card

Goodhue: Architect of His Time



Bertram Grosvenor Goodhue. Richard Oliver. (The Architectural History Foundation and MIT Press, \$30.)

The biography is a fascinating literary form. Novels or science fiction or mysteries we might read for enlightenment or pleasure or just to pass the time, but we pick up a biography almost always because we are curious about the person. Sometimes it is only the person we are interested in. We want to know why he or she did what they did, to the extent that we expect the story to feel like a well-plotted novel: "It had to happen that way." Other times, though, we want also to know the ways in which the acts of that person shaped and changed the times through which he or she passed. *Bertram Grosvenor Goodhue* is a biography of this second sort. And if we turn the last page without that novelistic certitude, in compensation we come away with a sure sense of what this man hoped to achieve, how he set about to accomplish it, and the extent to which his time was changed by it.

In Bertram Goodhue's time, architectural thinking was dominated by the group that has been called "the class of '70." These were architects born in the years around 1870—Lutyens, Wright, Eliel Saarinen, and Goodhue himself among them—who, for all their stylistic diversity, shared

Above, Goodhue's state capitol against the Nebraska landscape; right, the architect's competition-winning presentation.

certain ideas about what architecture should be like.

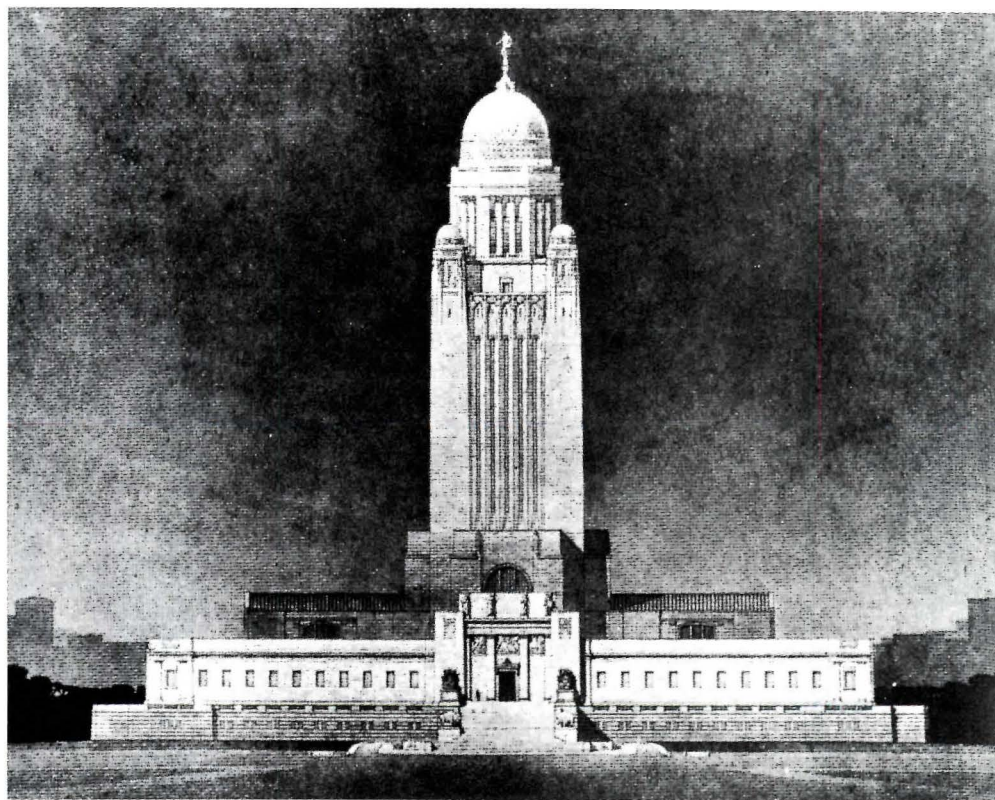
One of those ideas was that the experience of a building should be a sensual experience. One example of that sensuality is the way in which their buildings are shaped as if to catch the sunlight and to use the resulting shadows to make the forms vivid and tangible to us. Another

example is the ways that their buildings seem to stand before us and hold themselves up and out in the ways our bodies do. Goodhue's buildings have both of these qualities, and that sensuality is well conveyed in this book—by the exquisite sketches so well reproduced, but more by the author's descriptions of the visual feel of the forms. In Goodhue's buildings for the San Diego fair, and again in later work, where sculpted figures grow up out of blank pylons, we feel the way that shadows thrust these shapes and figures out into tangible relief. And in Goodhue's Gothic churches, we can feel the ways in which the tendonlike ribs of the vaulting divest their forces to the piers into which they feather.

Through these descriptions we sense these buildings with our bodies and thus sense too the ways in which Goodhue tried to produce a modern version of that body-centered "architecture of humanism" advocated by Geoffrey Scott—a central influence, the author tells us, on the architects of Goodhue's generation.

But that generation was linked in more than their approach to form-making. They shared a belief in the possibility of a culture vivified by shared civic ideals. In Goodhue's work, especially in his civic buildings immediately before and after World War I, we can feel the Wilsonian hope for such a new culture. At that moment

continued on page 98



Books from page 97

America alone seemed virile and clear-eyed as Europe gave itself over by turns to bickering or slaughter or despair. One can feel, in American writings of that time, a certainty that we would pick up the torch that Europe had let fall. One reads in those writings of a "march of culture," which had begun in the Near East and had then moved on to Greece and then Italy, then France, then England. That culture was now going to cross the ocean to America. And though our American version of that culture would be distinctly ours, it would also be recognizably like those others. This culture, this "great culture," would be a continuation of those others. It would carry into the new century revived versions of ancient ideals.

For many of Goodhue's generation, the central distinguishing characteristic of this "great culture" would be a ceremonious civic life. Their belief was that, despite our individuality—indeed, because of our individualism—we Americans had evolved certain civic values that we could now, as a whole people, uphold and indeed celebrate. Architecture, and civic art, would be the vehicles by which we would articulate to ourselves those values and the civic concord they represented.

Goodhue's belief in the nobility of civic life comes through most clearly in his

grand civic gestures—his Kansas City Liberty Memorial project, his capitol at Lincoln, Neb., and his Los Angeles Central Library. These buildings, in their symbolism, attempt to articulate for all of us the values that would comprise that hoped-for civic concord.

But what truly strikes the visitor to these buildings, even more than their size and their spaces, is the way we feel ourselves moving through them. These buildings seem made for the movement of great crowds of people, and in the actual or imagined flow of such crowds we are brought to feel the potential nobility of civic life. And this is as Goodhue intended: In our concourse in and through them, we would see ourselves and our fellows enacting the processes of civic life and thus feel ourselves living as a people. By our actions in these buildings we would produce to ourselves concrete instances of a civic concord. We would act ourselves into belief.

Goodhue died in 1924, in the midst of this period of hope, before the times of serious doubt and then, in the Depression, the times of crushing counter-evidence. In the decade after his death the central image of the American people *en masse* came to be not the flow of free citizens through temples of democracy but the stasis of the breadline. And when we

next saw ourselves engaged in common action, in action symbolized by the NRA parades, the belief we were trying to act ourselves into was a belief in ourselves as survivors. Nothing to fear but fear. The ideal of a "great culture" had lost its force, and worse, its point.

That sense of a lost possibility gives special poignancy to the concluding chapter of this life of Goodhue. In the premature death of the man we feel not just the loss of buildings never built. We feel the premature (unnecessary?) death of a grand, shared civic life. Through the story of Goodhue's aspirations and buildings we glimpse an America not yet infected by cynicism or defeatism or special pleading. And we wonder, "What if . . . ?" That feeling of loss, though not described in the author's words, is nevertheless there in the story he tells and in the images he provides.

One wonders, though, if the author sensed the potential in a biography of Goodhue for just a sinking into wistful nostalgia. For by choosing to focus our attentions and our thoughts on Goodhue the public man, he has provided the counter to that tendency. In this book we are invited to see Goodhue as an embodiment of and vehicle for certain ideas in the air of his time. Because we are given

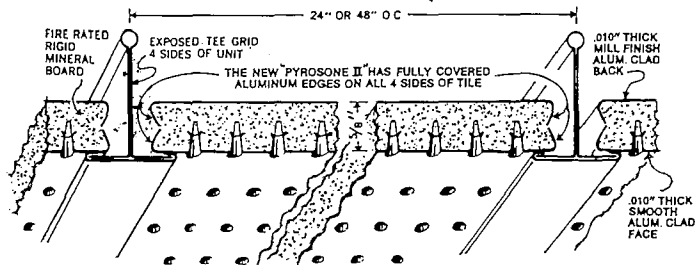
continued on page 101

PYROSONE® II

Qualifies for 2 hour fire-rating

**ALUMINUM TILE,
COVERED FACE, BACK
AND ALL FOUR EDGES**

Thick (.010") aluminum shell with non-combustible rigid mineral board core. EASY MAINTENANCE, GOOD ACOUSTICAL AND SOUND ATTENUATION RATING.



Easy installation—edge tiles can be field-cut with a knife.

LOW COST LARGE MODULE UNITS

Can be repeatedly washed for easy maintenance

TILE IS REVERSIBLE IF BAKED WHITE ENAMEL FINISH IS USED ON FRONT & REAR SURFACES

For sizes, finishes or prices, call or write

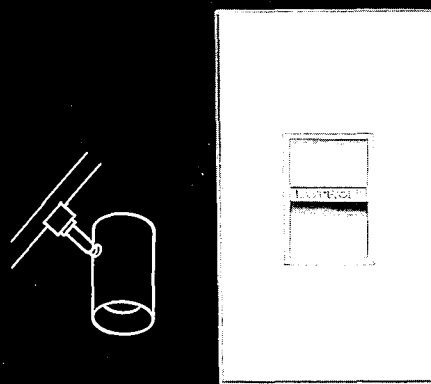
SIMPLEX CEILING CORP. Refer to SWEET'S Section 9.1/SI

50 HARRISON ST., HOBOKEN, N.J. 07030 • PHONES (212) 349-1890, (201) 864-6630

• Sales "Reps" needed—Write to Simplex for information •

NOVA®

Architectural Controls



Nova Architectural Controls are the classic standard in light dimming, switching and fan speed controls. The sleek design incorporates Lutron's exclusive linear slide for human engineered operation. Nova—the complete family of innovative architectural grade lighting controls available from Lutron.

CALL OR WRITE TO LUTRON FOR MORE INFORMATION



LUTRON®

COOPERSBURG PA 18036
PHONE (215) 282-3800

Books from page 98

enough of the life of this man, we are able to see these ideas through a man recognizably like ourselves. We can thus connect those ideas with our own lives and so feel their force.

But more to the point for us as architects: Because we are given concrete instances of the ways in which this man was able to bring those ideas to actual form, we are invited—challenged—to examine the ideas we bring to form and the manner in which we accomplish that task. *Bertram Grosvenor Goodhue* is thus, finally, a usable biography. We come to it in curiosity but leave it impelled—to reflection, then comparison, and then to action. WILLIAM HUBBARD, AIA

Mr. Hubbard is director of architecture of the Urban Innovations Group in Los Angeles and assistant professor at UCLA's graduate school of architecture and urban planning.

Mizner's Florida: American Resort Architecture. Donald W. Curl. (Architectural History Foundation and MIT Press, \$30.)

Addison Cairns Mizner (1872-1933) is praised by James Marston Fitch in this book's foreword for his "freewheeling virtuosity" in Venetian, Spanish, and Latin American architectural styles that "gave his work a grace and skill unmatched by any of his eclectic contemporaries." Nonetheless, Mizner was denigrated—or ignored—for 50 years after his death. He simply "was submerged in the rising tide of modern architecture," says Fitch.

Nor did his biographer Alva Johnston, who wrote a series of colorful articles about Mizner for *The New Yorker* that became the book *The Legendary Mizners* (1953), add to his reputation as a qualified architect. According to Donald W. Curl, author of this attention-holding reassessment of Mizner's contributions, Johnston's writings—"a deliberate compound of half-truths and fiction"—were but a reflection of "cocktail gossip" picked up in Palm Beach bars, with each gossip trying to out-tell the other one. Certainly, the results of Curl's in-depth research presented in this book will correct the errors and decodify the myths about Mizner.

Curl takes the "society architect" Mizner through his first years of practice in New York City and on to his productive career in south Florida which began in 1918. Mizner went to Florida to recover from an accident, at the suggestion of Paris Singer, the sewing machine heir and international playboy. They stayed on and collaborated on building the grandiose Everglades Club in Palm Beach, a design in the Spanish style that served to help establish a new architectural mode for

south Florida; it also established Mizner, who soon became the architect of lavish mansions for the rich.

Curl describes these houses and Mizner's life style, giving accounts of the architect's afternoons-at-home when butlers served cocktails in antique silver mugs to guests while they listened to string quartets or to Mizner's vivid tales of life beyond Palm Beach. Curl is quick to point out that Mizner's architecture was not directed solely to luxurious rooms and patios. He designed for the Florida climate. He took advantage of prevailing winds and provided rooms with double and triple exposures, shutters and tinted glass, high ceilings, and other means to cool a structure in the days before airconditioning. "A master of proportion," says Curl, "his architecture seemed perfectly suited to locale and climate."

Curl gives detailed attention to Mizner's great dream for "the world's most architecturally beautiful playground" at Boca Raton. Mizner, the architect, now turned city planner, envisioned a completely Spanish city. Backed by the rich and the powerful, the project seemed assured of success, but the collapse of the Florida land boom in 1927 vanquished the dream. Although Mizner's personal fortune was lost with the failure of the Mizner Development Corp., his firm continued to design projects in many areas of the country. But Mizner never regained his Palm Beach success. Financial difficulties beset him. Fitch says that Mizner died "with almost poetic precision" in February 1933, "just as the particular world wealth and fashion, for which he was such an eloquent spokesman, was foundering in the depths of the Great Depression."

The number of houses that Mizner designed in Palm Beach between 1919 and 1926 will probably never be known, Curl says. But his influence "is not dependent on the number of buildings he completed. Mizner set a style." After World War II, little was done to preserve his buildings—they were torn apart to add "modernized" features or torn down for housing projects. In the 1970s, however, various events in south Florida spearheaded a drive to save the area's architectural heritage. It was a long fight to save one of Mizner's last remaining luxurious mansions that led the town council of Boca Raton to adopt a landmarks preservation ordinance. Renewed interest in Mizner's work is also taking place, says Curl, because architects now "bored with utilitarian architecture and willing to experiment with historical styles" are coming to view Mizner's work "with new respect."

This book, whose author is professor of history at Florida Atlantic University, is one in the "American Monograph Series," a combined effort of the Archite-

continued on page 102



**Architects,
Engineers,
Draftsmen,
Contractors...**

Have you ever worked in feet and inches? Think about this.

Over one year in its development, Architectural Data Corporation announces the world's first state of the art Foot-Inch-Fraction-Decimal hand-held calculator, the Data Dimensioner™. It is actually much more than a calculator. You can instantly compute and verify all data required to accurately dimension any room, blueprint, field drawings... anything. The Data Dimensioner™ makes paper and other calculators obsolete. The Data Dimensioner™ solid state integrated circuitry performs all needed computations, even on site calculations, in milliseconds; no more will an entire work crew be held up while the supervisor scratches figures on the back of a field drawing time. The Data Dimensioner™ adds, subtracts, multiplies and divides like any hand-held calculator. It accommodates these functions in feet-inch-fractions (to 1/16) decimal, decimal feet, and metric. It even converts from one mode to the other and back again. Other User-Friendly Data Dimensioner™ features:

- **KEYBOARD**—Simple and easy to use. Foot, inch and fraction of inch keys (to 1/16).
- **DISPLAY**—Will display exactly what you would read or write from a blueprint. Also shows repeat counter and prompts.
- **OPTIONAL DD-84™ PRINTER**—A compact accessory that provides a handy copy of all calculations, including prompts and repeats, even in feet-inch mode (available after 2-1-85).
- **REPEAT KEY AND PROGRAMMABLE MEMORIES**—Six program-mable memory speed calculation of repetitive dimensions.
- **CONSTANT MEMORY**
- **SIX-MONTH LIMITED WARRANTY**
- **TWO-WEEK MONEY-BACK GUARANTEE**
- **DURACELL® BATTERY (6V) INCLUDED**

The Data Dimensioner™ comes complete with a carrying case and an instruction manual for only \$149.
The optional DD-84™ printer is only \$251.
Mastercard and Visa accepted.
Call our toll free numbers to order: 1-800-221-6444, Ext. 900.
In Florida call 305-646-9900, Ext. 900.
Allow 60 days for delivery. Dealer inquiries welcome.

ARCHITECTURAL DATA CORPORATION

Architectural Data Corporation
P. O. Box 40
Prospect, Kentucky 40059
Phone Toll Free 1-800-221-6444 Ext. 900
In Florida call 305-646-9900, Ext. 900.

Please send me _____ units of the Data Dimensioner™ (\$149. ea.)*
Please send me _____ units of the DD-84™ Printer (\$251. ea.)* Available after 2-1-85.
Plus \$3.00 shipping and handling for each unit.
Kentucky residents add 5% sales tax.
Enclosed is my check for \$ _____.

Name _____
Address _____
City _____ State _____ Zip _____
 Check Mastercard Visa Exp. Date _____
Card No. _____
Signature _____

©ARCHITECTURAL DATA CORPORATION 1984

Circle 34 on information card

1819 L Street, Washington, DC
Architects: Smith, Segretti & Tepper;
Washington, DC
Builder: Omni Construction Co.;
Rockville, MD
Owner: Farr-Jewett Co.;
Washington, DC



Granite: Rock of Ages Polished Regal Rose

Granite keeps up appearances

Unmatched in beauty and practicality, nothing comes close to the magical combination of color, texture and finish which is granite. Its weatherability can outlast all other building materials regardless of environmental stress.

No masonry or other stone can equal granite's durability.

For beautiful and durable appearance, long-term ease of maintenance and energy conservation, Rock of Ages Granite is still *the* premium building stone.

For our full color brochure showing our complete range of colors and finishes, for actual samples or for a quote on your next project, write or call today.



ROCK OF AGES CORP. / Architectural Granite
369 North State St., Concord, NH 03301
Call Toll-Free: 1-800-445-7050
In N.H. 1-603-224-5325

Circle 35 on information card

Books from page 101

tural History Foundation and MIT Press whose aim is to fill "the large gaps in our understanding of how our built environment developed and who the often underappreciated architects were who brought this about." Addison Cairns Mizner is clearly an appropriate subject for the series. MARY E. OSMAN, HON. AIA

Time-Saver Standards for Residential Development.

Edited by Joseph De Chiara. (McGraw-Hill, \$75.)

This hefty tome of more than 900 pages contains valuable information for those involved in the field of residential development and design. It has helpful guidelines on an array of topics—from neighborhood organization and site considerations to rehabilitation and historic preservation. Also, there are standards for the individual elements of a dwelling, whether single-family house, apartment building, or mobile home and park, as well as special types of housing for the elderly, the handicapped, students. There is information on all aspects of residential development, such as fire safety principles, building heights, space standards, elevators, community facilities. Hundreds of floor plans, drawings, and tables add to the book's usefulness.

Creating Interiors for Unusual Spaces: 31 Designs from Around the World.

Mirko Mejetta and Simonetta Spada. (Whitney Library of Design, \$32.50.)

Certainly, the spaces presented in this handsomely illustrated book are "unusual." The interiors shown, in full color, reveal what clever, and inspired, interior designers can do to make modern living delightful in an Italian medieval tower, a German windmill, a river barge of 1930s vintage now moored on the Seine, a Manhattan loft, and 27 other difficult spaces.

Design Resources: A Guide to Architecture and Industrial Design Information.

Compiled by Lawrence Von Bamford. (McFarland & Co., Box 611, Jefferson, N.C. 28640, \$39.95 plus \$1.50 shipping/handling.)

Perhaps the word processor has something to do with the spate of bibliographies and bibliographic information guides now appearing in print. This one, at any rate, is somewhat different from the run of the mill, bringing together not only lists of books and articles on architecture and industrial design (dictionaries and glossaries, encyclopedias and handbooks, anthologies and yearbooks, and other printed resources) but also nonprint resources, such as films, slides, audio tapes and video tapes, and microfilms. It also lists special resources and research centers, among them design schools and scholarships, computer data banks, and competitions and awards. □

Andersen® windows in a manufacturing plant?

Welcome to the age of enlightenment.

Factories used to be dark, drafty, depressing places to work. But the Werner-Pfleiderer Corporation found an enlightened alternative for their North American corporate headquarters: Andersen Perma-Shield® windows.

Planting the headquarters and industrial facilities in an old apple orchard, architects proposed a stimulating work environment in keeping with the natural setting.

So Andersen set the mood. Beautifully.

Where closed walls might have been, Andersen Perma-Shield casements reach up and bring sunlight deep into work areas, illuminating employee workloads, brightening human spirits. (Research shows that visual tasks can be performed *three or four times* more effectively under daylight conditions than under artificially lit conditions.)*

Andersen® windows lighten up energy costs, too. In summer they open smoothly, inviting refreshing breezes indoors. Reducing air conditioning demands.

Come winter they close snug, secure against freezing winds. Far more weathertight than industry air infiltration standards (N.W.M.A. 2-80), to help reduce heating costs.

And Andersen windows stay on the job. Our solid wood core is covered with rugged Perma-Shield® vinyl that won't chip, flake or peel. And it doesn't need painting.

In attractive, earthy Terratone color, Andersen windows blend beautifully with most exteriors. Contributing to a comfortable workplace that keeps employees happy and productive all year long.

Welcome your clients to the age of enlightenment with quality Andersen windows, gliding patio doors and the extraordinary new Andersen roof window.

For more details, consult Sweet's File 8.16/An. or look in the Yellow Pages under "Windows" for your local Andersen distributor. Or write the Andersen Corporation, Box 12, Bayport, Minnesota 55003.

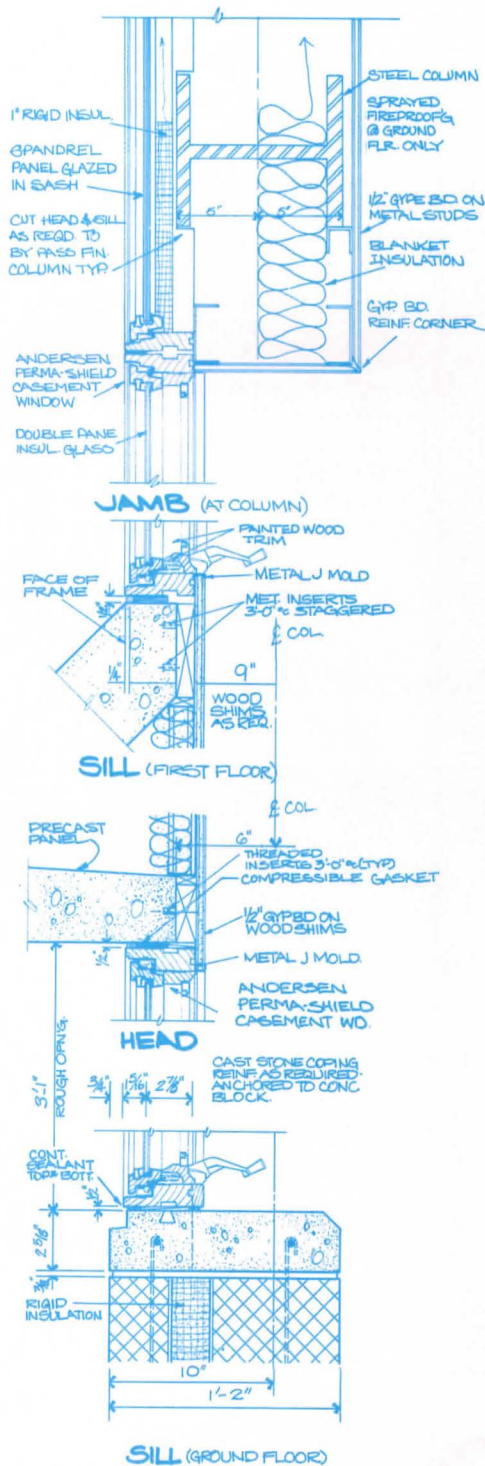
Come
home to
quality.

Come
home to
Andersen.

Andersen Windowalls®
ANDERSEN CORPORATION



BAYPORT, MINNESOTA 55003



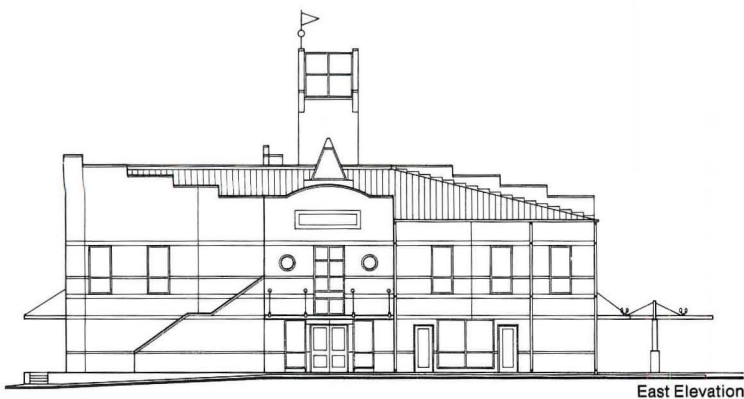
Werner and Pfeleiderer Corporation—
U.S. Headquarters Ramsey, New Jersey.

Architect: Ballou-Levy-Fellgraff
Ridgefield Park, New Jersey

Printing limitations prohibit exact duplication of Terratone color. Use actual sample for building specifications.

*Source: Benefits of Daylighting, Cost and Energy Savings, ASHRAE Technical Paper, J. W. Griffith, 1977.

83134 Copyright © 1983 Andersen Corp., Bayport, MN



La Grange from page 81

elevated to provide some protection from the flooding that often strikes this part of Texas. The buildings hold tight to the street, with ornamental parapets on the upper level and stair-step end walls that conceal sloping metal roofs. Most of the downtown buildings also have clerestories above the canopies to brighten their generally deep, narrow interiors.

Cannady has respected local tradition by pulling the mass of the building out to the street, recessing only the main entrance. The recess gives the entrance a more formal presence, while also allaying the fears of some board members that large trucks rounding the corner onto route 71 might crash into the building. The presence of a flagpole, a tree, and some low plantings make the area seem like a miniature version of the town square two blocks away.

The basketweave brickwork in the bank's front bays is

ubiquitous in La Grange. Cannady's classicizing impulses emerge mainly in the front windows—crisp, squared-up versions of Palladian windows—and in the discreet pilasters that bracket them. The canopy over the drive-up tellers in the rear of the bank, with its girders and steel piers, derives from mainline modernism. From the street, however, this commingling of design vocabularies does not produce visual mishmash. The building appears familiar and up-to-date, what one would hope to find.

The interiors (not entirely by Cannady) are another matter. The foyer with its clerestory and red and tan floor tiles speaks the same design language as the exterior of the building. But the main banking area and the individual offices (approximately 8,000 of the building's 18,000 square feet is lease space) are finished in neutral gray carpet, oak paneling, with wood desks and other conventional expressions of corporate good taste: not terrible, just dull and inconsistent with the inventiveness of the rest of the building. The marble on the interior columns, though traditional in banks, is so busy that it fights everything around it, not to mention looking over-designed for its space.

Since most bank customers arrive by car rather than foot, Cannady had to fight to get all parking located behind the building. As compensation, he designed a formal, double height entrance, linking the parking lot with the bank lobby. This entrance, lined with two rows of marble-clad columns, gives customers a grand sense of arrival while also clearly distinguishing the bank space from the lease space. The column detailing, reminiscent of the rows of cast-iron columns found in several turn-of-the-century stores in La Grange, is less mannered than in the lobby, and therefore truer to the spirit of the buildings as a whole.

DAVID DILLON

GET TWICE THE INSULATION EFFECTIVENESS WITH ENERMASTER™ ROLLING DOORS

Compare for yourself and get:

1. Twice the insulation
2. Insulation 1-1/2 inches deep
3. A 13/16" Thermal break
4. Insulation with the highest (R) resistance factor
5. No gaps or voids inside the slat
6. Two faces of galvanized steel to protect the insulation



Atlas Door Corp.
116 Truman Drive, Edison, New Jersey 08818
(201) 572-5700 Telex No. 710-480-6564

"An excellent design aid for fundamental problems in structure, enclosure, climate services, utility services, lighting, acoustics, and fire safety . . . A most useful tool for developing intuition in architectural engineering for architects, engineers, and builders, alike."—Omer Akin, Department of Architecture, Carnegie-Mellon University

New

Understanding Buildings

A Multidisciplinary Approach

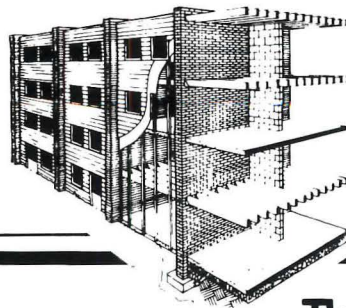
Esmond Reid

Introduction by Albert G. H. Dietz

While there is an extensive literature treating the specialist areas, this is the first multidisciplinary text to provide an overall explanation of building technology in all its main aspects.

Each chapter in *Understanding Buildings* first examines the general theory underlying a particular technology, then

presents one good, typical example of what is done in practice. It is generously illustrated with 400 diagrams, tables, charts, and construction details.
\$25.00



The MIT Press

28 Carleton Street, Cambridge, MA 02142

HOW WILL YOU SPEND THE TIME MASTERSPEC SAVES YOU?



You can spend it designing. Put more time into finding new clients. Keep a closer eye on your current projects. Or, go sailing.

MASTERSPEC cuts your specifying time in half. By listing thousands of products by name or manufacturer, it eliminates many hours of technical writing and research.

And that's not all. For years, MASTERSPEC has helped firms cut down on costly omissions and duplications, avoid contractor substitutions, decrease legal liability exposure and protect their reputations.

MASTERSPEC is endorsed by the AIA, the ACEC and the NSPE/PEPP. It's available in hard copy, and also offers the option of adding automated equipment diskettes. Plus, MASTERSPEC is updated quarterly, so it keeps you current on the latest

technology and standards.

Save time with the only specifying system prepared by qualified professional specifiers and reviewed by an AIA Committee of experts. Complete the coupon below, or call toll-free 800-424-5080.

Mail to: AIA Service Corporation, 1735 New York Avenue, NW, Washington, D.C. 20006

Name _____ Title _____
Firm _____ No. of Employees _____
Address _____ Phone _____
City _____ State _____ Zip _____



FOR THE NAME,
FOR THE KNOWLEDGE.

AIA-11-84

Circle 41 on information card

BRIEFS

Ceiling Design Competition.

Conwed Corporation is sponsoring two designer ceiling competitions to recognize outstanding ceilings that use Conwed ceiling products. Awards will be presented for ceiling concepts and completed commercial and noncommercial projects. Contact Conwed Public Relations department, P.O. Box 64237, St. Paul, Minn. 55164.

Rotch Scholarship Applications.

Winner of the 1985 Rotch Travelling Scholarship will receive a \$13,000 stipend for eight months of foreign travel. Jan. 4, 1985, is the deadline for application requests. For more information, contact

Norman C. Fletcher, Rotch Travelling Scholarship, 46 Brattle St., Cambridge, Mass. 02138.

Photovoltaics Conference Findings.

The New England Solar Energy Association has published the proceedings from the first national conference on photovoltaic application. Also available is an 80-slide set on residential photovoltaics. For more information, write NESEA, P.O. Box 541, Brattleboro, Vt. 05301.

Classical Drawing Courses.

Classical America is offering two weekly courses beginning in January and continuing through May at the National Academy School of Design in New York City:

freehand drawing of composition, perspective, ornament; and buildings and the drafting of the five orders and classical ornament. For more information, contact Classical America, 227 East 50 St., New York, N.Y. 10022.

Call for Papers.

The Department of Energy conference is seeking papers for its first annual energy simulation conference to be held Aug. 21-22, 1985, in Seattle, Wash. Abstracts addressing costs and benefits of energy simulation, marketing energy simulation, microcomputer applications, return on investment, and reducing operating costs should be submitted by Jan. 4 to Edward C. Knipe, Engineering Resources Ltd., P.O. Box 2040, Corvallis, Ore. 97339.

Women's Studies Program Series.

The University of Cincinnati will sponsor a series of lectures, panels, and readings focusing on women's relationship to the urban environment. Work from this series program will appear in the 1986 winter issue of *Urban Resources*. For more information, contact Dr. Lynette Carpenter, Associate Director, Center for Women's Studies, University of Cincinnati, Cincinnati, Ohio 45221-0164.

Revised ACI Building Code.

The American Concrete Institute has published a revised edition of "Building Code Requirements for Reinforced Concrete" that includes metric equivalents. It is available for \$45.95 from the publication department, ACI, P.O. Box 19150, Detroit, Mich. 48219.

Pediatric Health Care Design.

The Association for the Care of Children's Health, in cooperation with MIT's laboratory of architecture and planning, is working on a project to identify examples of excellence in child health care facilities and to produce a documentary film and resource library. Send information, slides, and written material on recent construction, renovations, or project designs to Jill Hall, ACCH, 3615 Wisconsin Ave. N.W., Washington, D.C. 20016.

Urban Environment Publication.

"Lessons from Local Experience," a 146-page federal government publication on urban environmental design administration, is available for \$5.50 prepaid from the Superintendent of Documents, Dept. 36-HB, Washington, D.C. 20402.

Call for Papers.

Mississippi State school of architecture seeks papers for the sixth annual *chau-tauqua* in Mississippi entitled "The Small Town as Utopia." Send one page abstracts

continued on page 113

EDWARDS VALANCE

Heating/Cooling

No competitive air conditioner offers all the features of slim, silent Edwards Valances.



Edwards valances are easy and profitable to install

You don't have to alter or drop ceilings or revise wiring to install Edwards Valances

in new or existing homes, offices or institutions. Two men can install and pipe a 13-foot room in less than three hours.

Edwards Valances save space.

Smaller and lighter in weight than competitive heater/air conditioners, "invisible" Edwards Valances are mounted near the ceiling, hidden from view by decorator panels.

Edwards Valances save energy and money.

Silent Edwards Valances pay for themselves within three years through lower power and maintenance costs.

Complete and mail the coupon.

EDWARDS ENGINEERING CORP.
101 Alexander Ave • Pompton Plains, N.J. 07444
(201) 835-2800 • (800) 526-5201 • Telex: 130-131

EDWARDS ENGINEERING CORP.
101 Alexander Ave • Pompton Plains, N.J. 07444

Please send more information on your lightweight, silent heating/cooling valances. I plan to purchase heating/cooling equipment () within 6 months () between 6-18 months () I need this information for my supplier file.

NAME _____

FIRM _____

ADDRESS _____

CITY/STATE/ZIP _____

PHONE: AREA CODE _____

TITLE _____

NUMBER _____

Briefs from page 110

by April 15 to Michael Fazio, P.O. Drawer AQ, Mississippi State, Miss. 39762.

Student Competition Winner.

Bryan D. Manning of Latham, N.Y., was the first prize winner in the National Institute for Architectural Education's special competition for a "Small Weekend House." He is a senior at New York Institute of Technology.

Foreign Travel Seminars.

International Design Seminars is sponsoring five travel study tours that will explore the art and architecture of Finland, Russia, Germany, and Czechoslovakia. The first seminar, scheduled for Jan. 3-14, will emphasize contemporary and historical interior design of Helsinki and Leningrad in relation to the northern climate and winter light. For more information, contact Kennie L. Lupton, IDS, 4206 38th St. N.W., Washington, D.C. 20016.

Entries Sought for Gold Institute Award.

The Gold Institute has set Dec. 15 as the deadline for submissions in its second award program recognizing important installations of gold-coated glass. For more information, contact the Gold Institute, 1001 Connecticut Ave., N.W., Washington, D.C. 20036.

Michigan Architects Honored.

Gunnar Birkerts & Associates of Birmingham, Mich., and Giffels Associates of Southfield, Mich., are the recipients of the U.S. Army Corps of Engineers' silver castle award for excellence in the design of the chapel and educational facility at Camp Wildflecken in Frankfurt, West Germany.

Architecture Dean Named at Cal Poly.

Gar Day Ding, head of research for the University of Illinois' Building Research Council, has been named dean of architecture and environmental design at California Polytechnic State University.

CREDITS

Mid-Continent Tower, Tulsa, Okla., (page 50).

HTB, Inc., Architects, Tulsa, Okla.
Terra cotta: Gladding McBean. Copper roof: Standard Roofing. Bronze cast railings: Tulsa Steel Manufacturers. Plaster ceilings: Max True Plastering. Marble: Intrepid. Stained glass: McCaa Designs. Elevators: Otis Elevators. Wood and case-work: Southern Mill Manufacturing. Custom lighting: Baldinger and Son. Clock directory: Eslick and Millspough. Brick pavers: Acme Brick. Wall coverings: Victrex, L. E. Carpenter, Wolf Gordon, Koroscal. Office system: Artex. Carpet: Patcraft Mills. Oriental rugs: Stark Carpet. Terra cotta panels: GFRC. Windows: PPG. Steel deck: MAC-PAR.

Sears World Trade Headquarters, Washington, D.C. (page 66). *Geier, Brown, Renfrow, Washington, D.C.* Doors: Cavetown Millwork. Glazing: Fairfax Glass. Elevators: Montgomery Elevator. Interior floors: Standard Art Marble. Roofing: Buckingham-Virginia State Corp. Waterproofing and sealants: Carlisle Tire & Rubber Co. Plumbing fittings: Chicago Faucet Co. Lavatories: American Standard. Paint and stain: Sears Weatherbeater Paint. Stairs and treads: Miscellaneous Metals Co. Exterior wall surfacing: Brisk Waterproofing Co. Windows: Cavetown Millwork, Hagerstown Lumber. Skylights: Storm Weather Products, Janco.

National Geographic Society, Washington, D.C.

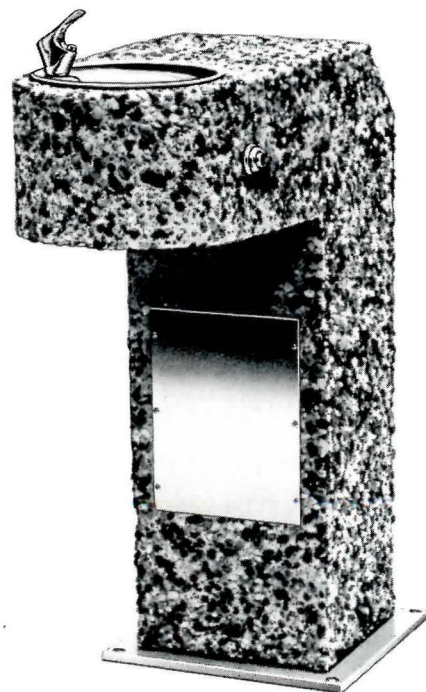
(page 69) *Skidmore, Owings & Merrill, Washington, D.C.* Precast pavers: Honover Priest. Tennessee marble: Candard. Darby white marble: Vermont. Rosso levalato marble: Candard. Granite: Savena Spa, Pietrasanto Italy. Portland cement: Lone Star. Limestone: Woolery Stone. Terrace decking: Wheeling Corrugating. Ornamental metal: AF Jorss Iron Works. Sheet metal: Stromberg Sheet Metal Co. Wood paneling and doors: Eggers Hardwood. Wood veneer: Dean. Fabric panels: McNichols, Tauder, Gilford, Coval, Carnegie, Gretchen Bellinger, Knoll, Maharam, Acoustone, Schumacher. Plastic laminate: Formica. Hardware: Hafeule, Grant, Sargent, Grass, Stanley, Ives, Space Master, Builders Brass Works, Soss, Weber Knapp, Glynn Johnson, Selby Firm Hardware, Carbin, EPCO. Finish hardware: Hager, Rixson-Firemark, Sargent, Adams-Rite, LCN, Grant, Ives, CIPCO, Rockwood, Builders Brass Works, Weber Knapp, Glynn-Johnson, Russwin, Adhaco, Reese. Mineral insulation: Owens-Corning, US Gypsum. Glass and glazing: PPG. Doors and frames: Firedoor Corporation of America. Gypsum drywall systems: National Gypsum, Mason Industries. Acoustical ceilings: Armstrong, Conweb, Donn, Owens-Corning, Gordon Grid Co. Special ceiling system: J. Lertora. Soft wall systems: Jules Edlin. Ceramic tile: American-Olean. Quarry tile: Dal-Tile. Resilient flooring: Armstrong, Forbo, RCA Rubber, Kentile. Vinyl wall coverings: B.F. Goodrich, Fashion. Fabric wall coverings: Carnegie, Eurotex, Maharam. Paints: Pittsburgh Paints, National Coating, Devoe Paint DM, Benjamin-Moore. Carpet tile: Interface. Broadloom: Stratton Industries. Custom furnishings: Miller Kamper. Elevators: Otis. Dimmers: Lutron. Panelboards: Gould. Switches: GE. Underfloor duct systems: H. H. Robertson. Safety switches: Westinghouse. Lighting fixtures: Lightolier, Lutron, Major Control Products, Prescolite, Spring City, Kim, Keene Crescent, Thorn, Stand Century, National Catmode, Forum, Norelco, General Electric, Sylvania, Lite Control, Guth.

Credits continued on page 114

When your client says "High traffic location," this is the one. It's the Survivor.



Stern-Williams rugged outdoor drinking fountain reduces work for maintenance departments, frustrates vandals, and serves wheelchair users as well as the general public. And it's better looking than the competition. We designed it that way. PROOF: outdoor drinking fountains can be rugged and beautiful, too.



Model APF-3501

STERN-WILLIAMS, INC.

P.O. Box 8004 • Shawnee Mission, Kansas 66208

We make drinking fountains.
We deliver dependability.

Circle 45 on information card



The beautiful look in home refrigeration



SUB-ZERO FREEZER CO.
P.O. Box 4130
Madison, WI 53711
608/271-2233

send for colorful brochure

Elegant yet versatile, the all refrigerator and all freezer Sub-Zero models featured above are true built-ins that fit flush with base cabinets. Providing a combined storage capacity of 41 cu. ft., these like all Sub-Zero built-in units will blend with any interior by accepting front and side panels to complement any decor. Other combination models, up to 31 cubic feet, are available including side-by-side, over-n-under in widths of 30" to 48". Sub-Zero also offers several undercounter models and ice-makers. All units are factory tested for total performance. Available in Canada.

Circle 46 on information card

Credits from page 113

Fayette County Savings & Loan Association, LaGrange, Tex., (page 80). Wm. T. Cannady Associates, Houston. Ceiling surfacing system: Conweb. Doors: Tex Steel. Elevators: Dover. Environmental control systems: Lennox. Floor surfacing: Armstrong, Milliken, American Olean. Bar joist: Vulcraft. Handrails: General Supply. Lighting: Prescolite, Lightolier, Keene, Stonco. Roofing: Cranford. Roof drains, brick: Zurn, Henderson Products. Plumbing: American Standard. Plumbing fittings and showerheads: American Standard. Toilet stalls: Knickerbocker. Washroom and bathroom accessories: Bradley. Water closets: American Standard. Water fountains: Halsey Taylor. Kitchen: Acme Unit Kitchen. Security and bank equipment: Diebold Inc., Schuler Wohlt. Signage and flagpole: American. Wall surfacing: Henderson Products, Great Southern Supply. Stairs and treads: General Supply. Windows: Anderson Storey. Skylights: Super Sky Products. Hardware: Schlage. Thresholds: AJ May. Paint and stain: Pratt & Lambert. Clock: Electric Time.

Peabody Institute Library, Danvers, Mass. (page 86). Padjen Architects, Topsfield, Mass.

Ceiling surfacing system: Celotex. Doors: Kawneer, Weyerhaeuser, Custom Millwork. Elevators: Beckwith. Environmental control systems: Barber-Coleman. Interior floor surfacing: Collins & Aikman. Exterior paving: Stiles & Hart. Handrails: Custom Millwork. Foundation: Custom Lynn Sand & Stone. Interior lighting: Keene, Lightolier. Roofing: Dow, Carlisle. Waterproofing and sealants: Tremco. Plumbing: American Standard. Flush valves: Sloan. Plumbing fittings and showerheads: American Standard. Sprinklers: Kidde, GEM, Central. Toilet stalls: Sanymetal. Lavatories: American Standard, Smith Carners. Washroom and bathroom accessories: ASI, Bobrick. Water closets: American Standard. Water fountains: Halsey Taylor. Kitchen: Elkay, In-Sink-Erator, Kenmore. Public seating: Vecta, Lombard, Kinetics, Thonet. Stairs and treads: Musson, Collins & Aikman. Exterior wall surfacing: Glidden Paint, Thoroseal. Interior wall surfacing: U.S. Gypsum. Windows: PPG, Kawneer. Skylights: Wasco. Door closers: LCN. Hinges: Hager. Locksets: Schlage. Panic exit: Kawneer. Paint and stain: Glidden. Partitions: U.S. Gypsum, Modernfold. Fireproofing: Cafco Blaze Shield. Sound insulation: Owens-Corning. Weatherstripping: Pernko. Boiler: Burnman-American. Airconditioning: Carrier. Hot water: RUUD. Sewerage ejector: Federal Pump. Oil tank: Owens-Corning. Thermal insulation: Owens-Corning. Door frames: Steelcraft. Library shelving: Wilson. Office furniture: G.F. Tables: Thonet. □

Are you on the mailing list?

Quarterly newsletter features:

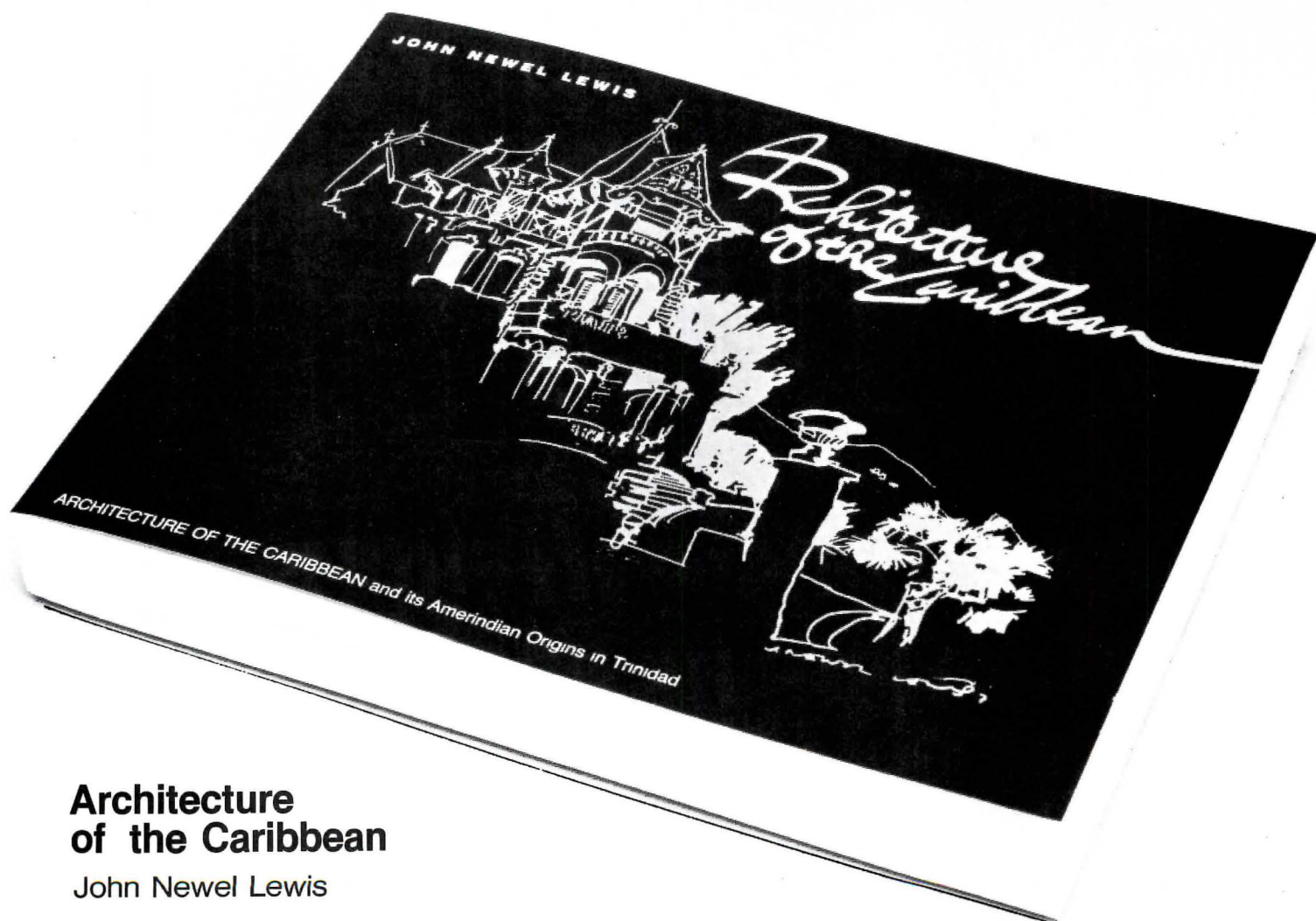
- interviews with people in industry
- articles on new construction
- articles on renovation
- announcements

To receive your copy write:
Morton Chemical Division
Mkt. Comm., Dept. A1A
101 Carnegie Center
Princeton, NJ 08540

MORTON THIOKOL, INC.
Morton Chemical Division



ARCHITECTURE OF THE CARIBBEAN



Architecture of the Caribbean

John Newel Lewis

The AIA Press M686P
\$15.00 (nonmember)
\$14.25 (member)

“Traditional architecture is that which . . . arises naturally and spontaneously through man’s encounter with climate through craft.”
—John Newel Lewis

This new production of the AIA Press is a fascinating historical study of Caribbean architecture and its Amerindian origins in Trinidad. An exhaustive essay on the region, the discussion of technology imposed on the special problems and dangers of the tropical climate has broader applications as well. Numerous

black and white sketches complete this handsome softbound book, sure to hold a unique place in the design library.

Furnishings

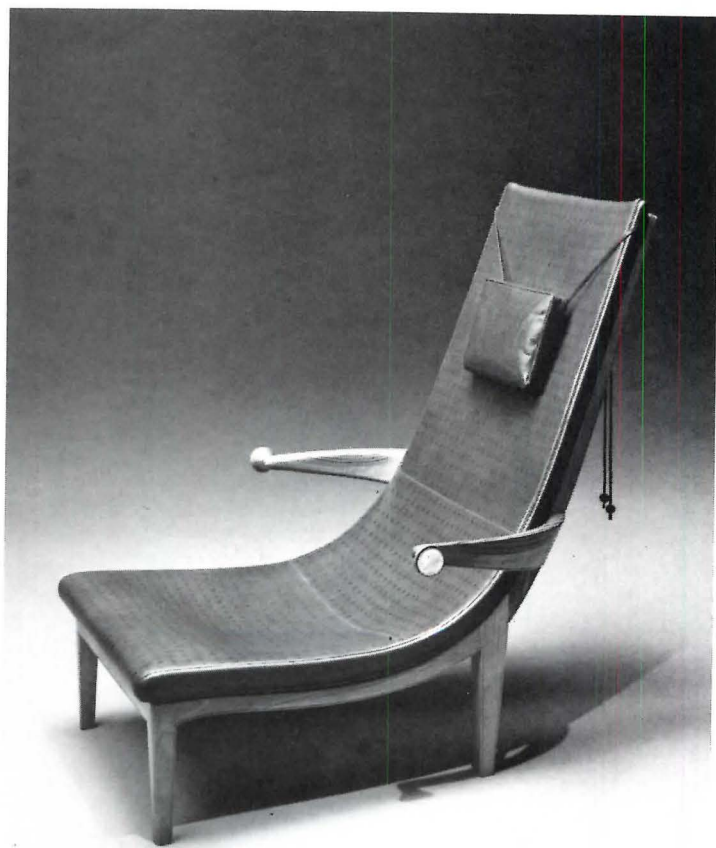
*As resources for design
and objects of design.
By Nora Richter Greer*



1



2



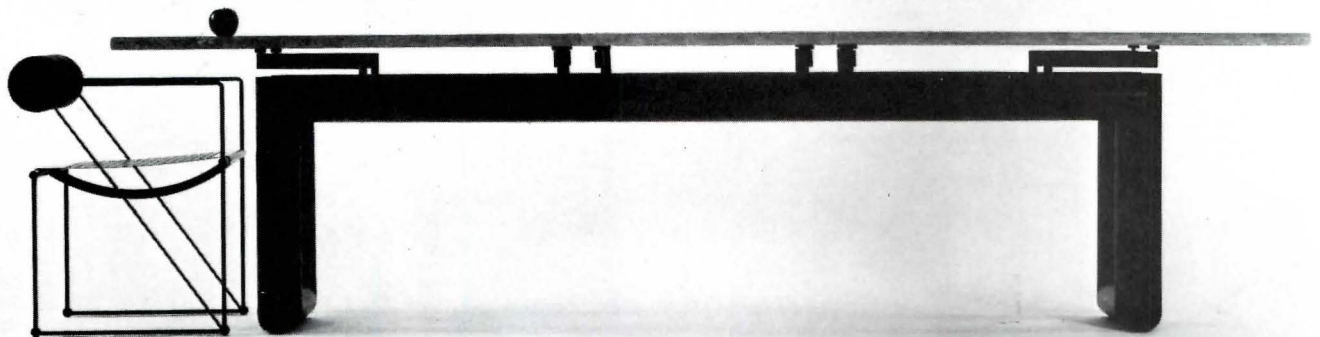
3



4



5

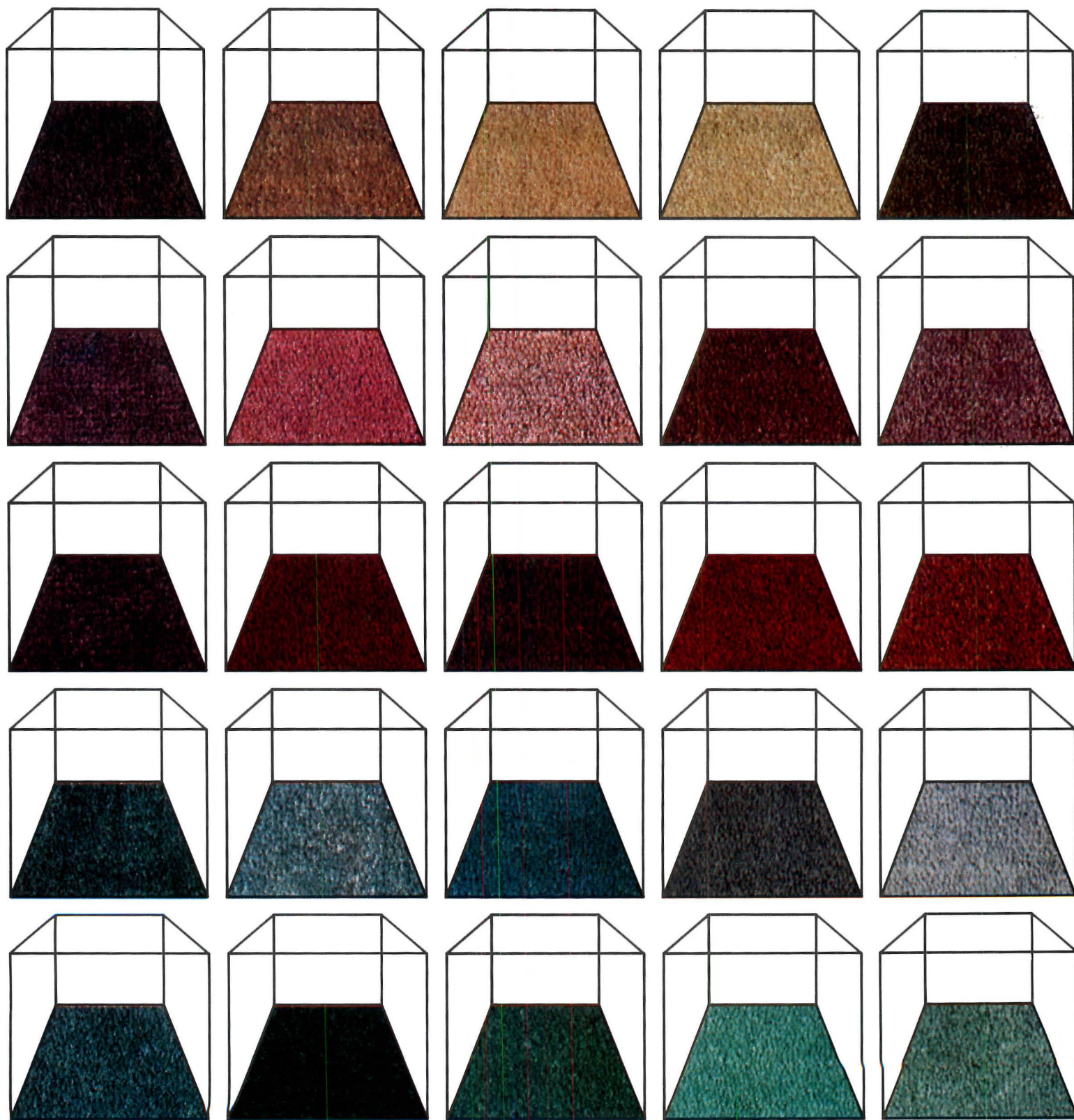


6



Simple geometry distinguishes the Minibasket table lamp (1) and the Basket floor lamp (2). Designed by Davide Mercatale and Paolo Pedrizzetti and manufactured by the Italian firm Eleusi, the lamps have a round base and cylindrical trunk connected by a brightly painted U-shaped metal curve to a conical lamp shade with its apex pointed down. Three furniture designs by the late Swedish architect Erik Gunnar Asplund have been added to the Atelier International/Cassina masters collection, among them the Senna lounge chair (3). Originally designed for the Swedish pavilion at the 1925 Paris exhibition, the lounge chair combines classical Nordic forms with art deco lines. The long curving back is available in red Russian or black leather, with a silk-screened original Asplund pattern. Arms have bas-relief accents, and the headrest is adjustable. The Soley Chair (4) from Harvey Probber, Inc., of New York City, is a study of circles placed within a strict rectilinear grid. Circular seats and half-circle backrests sit in square metal frames that are joined in the center at 90 degree angles. The Ottomana sofas (5), manufactured by B&B Italia, have traditional lines with oversized, floppy arm and back pillows. Bright colors and striped material complete the festive image. Known for his armless and armed chairs, Mario Botta has designed his first table (6), manufactured by ICF. The base has heavy black steel tubing to express "heft," Botta says, while the steel supporting fingers are to give the top an appearance of "floating lightness." □

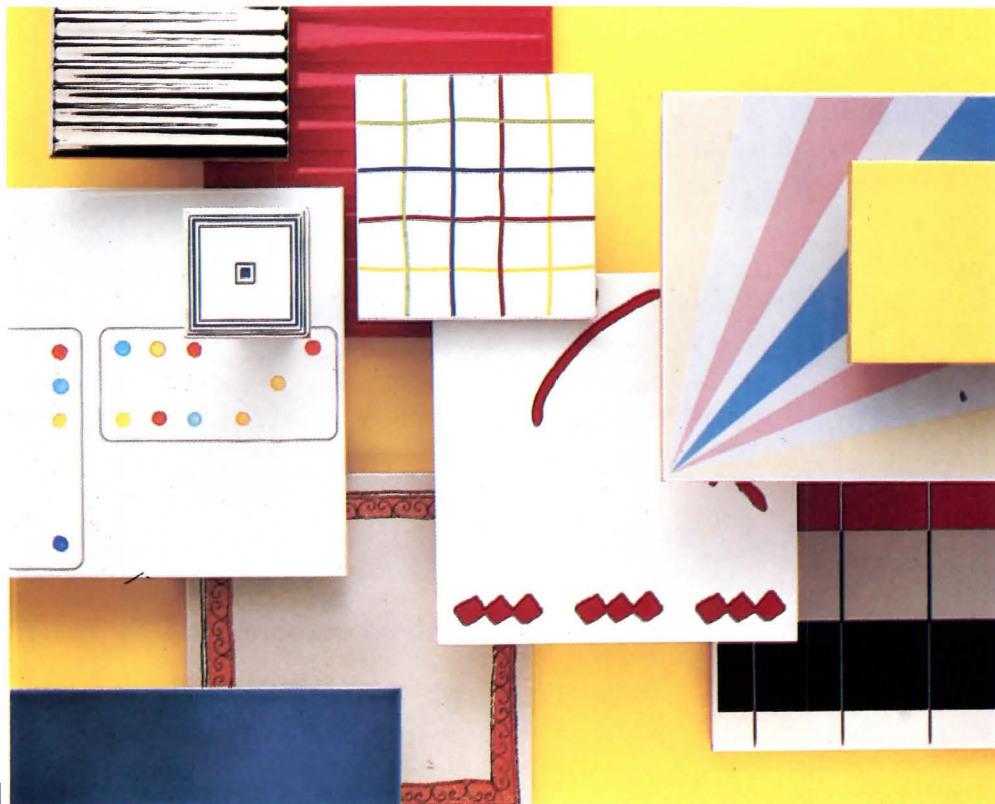
What new directions in color will interiors be following? Karastan offers 50 subtle hints.



Products

A selection of notable offerings and applications.

By Lynn Nesmith 1

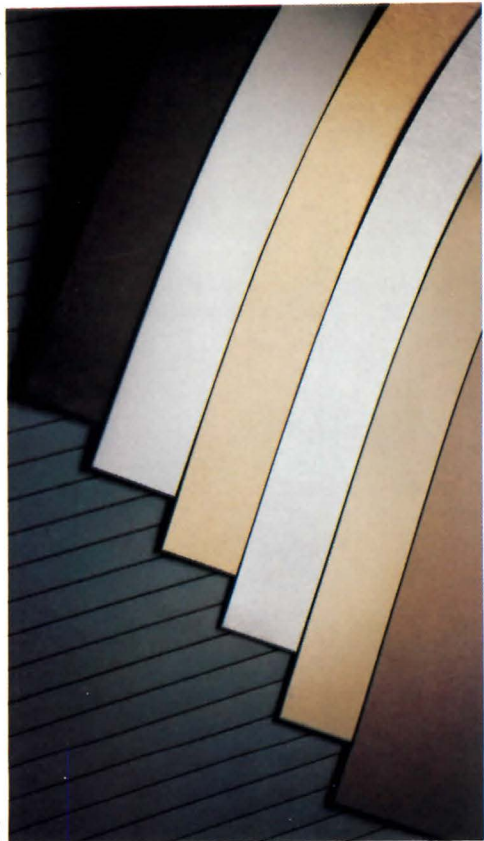


A colorful collection of ceramic wall tiles (1) manufactured by several firms are available from the Italian Tile Center. Designed for use in kitchens, hallways, bedrooms, and baths, the tiles vary in patterns, colors, and sizes ranging from 3x13 inches to eight square inches. (Circle 201 on information card.)

Wilsonart's series of metallic surfacing material (2) is comprised of eight metal surfaces and one metallic laminate. Available in a number of face textures and colors, solid aluminum anodized surfacings are constructed in 4x8-foot sheets

with a clear plastic peel-off coating designed to protect the material during handling. It is designed to accommodate tighter curves to a minimum of a three-inch radius. (Circle 202.)

Toronto architect Zeidler Roberts Partnership designed a brightly-colored, fabric roof structure (3) to provide shelter for the children's play area at Ontario Place. The vinyl-coated polyester roofing material was made by Seaman Corporation and fabricated into the 1½-acre structure by Soper Structures. (Circle 203.) *Products continued on page 124*



Window Awning.

A semi-transparent awning, constructed of tightly woven glass fiber netting, is designed to reduce glare but diffuse light and provide unobstructed views outside. The charcoal coloring is intended to blend with the aluminum flashing of Velux roof windows. (Velux-American, Inc., Greenwood, S.C. Circle 207 on information card.)

Computer Software.

EasyThree, a three-dimensional modeling software package for architects and engineers, utilizes on-screen command structure. The system permits the simultaneous presentations of multiple views through up to nine display windows. Design visualization is provided by a number of iso-

metric and perspective capabilities on the 19-inch color monitor or on a high-speed multicolor plotter. (Bruning CAD, Tulsa, Okla. Circle 211 on information card.)

Ceiling Panels.

Decorative, modular ceiling panels are cast in urethane or noncombustible reinforced glass fiber gypsum and designed to replicate hand carved wooden ceilings. Measuring 2x2 or 2x4 feet, panels are compatible with the Levolor color-T-grid suspension system. Standard finishes are walnut, fruitwood, teak, oak, and white, available in classic and contemporary styles including coffers, squares, octagons, curved frames, grilles, and lattices. (Levolor Lorentzen, Inc., Lyndhurst, N.J. Circle 214 on information card.)

Architectural Panel System.

Sheerwall flush aluminum panels have suppressed horizontal members and a "rain screen" principle of pressure equalization designed to improve weather resistance. Insulated panels with sub-framing are available with either anodized or painted finishes. The lightweight cladding system is designed for both high- and low-rise applications. (Kawneer, Atlanta. Circle 213 on information card.)

Ceiling Panels.

Fabrique acoustical ceiling panels are molded of 1- or 1½-inch-thick glass fiber in 41 colors and three weave patterns. Flush reveal panels are designed for use with modern narrow grid systems, and bold reveal panels are intended for use with traditional grids. Designed for new construction and renovations, panels measure 2x2 feet and custom 5x5 feet. (Donn Corporation, Westlake, Ohio. Circle 229 on information card.)

Acoustical Wall Panels.

Soundsoak Encore wall panels are constructed of textured woven fabrics in 16 standard colors. Designed to blend with most modular furniture systems, factory-edged panels measure 30 inches in height and nine feet in length. (Armstrong, Lancaster, Pa. Circle 231 on information card.)

Modular Window Unit Roofing.

Deco-Roof prefabricated roofing system for angle bay and bow windows is constructed of solid copper or primed steel for commercial and residential installations. The system is available in standard and custom sizes in a "classic" or "contemporary" style. (Stillwater Products, Redding, Calif. Circle 212 on information card.)

Fabric Roof Shelter.

Helios Shade and Shelter Module is constructed of a steel frame with a colorful vinyl membrane covering. It is available in a 22-foot-square configuration or a 22x25-foot hexagon with either an umbrella or inverted tulip configuration. Both have 10-foot ground clearance and are designed to stand alone or in groups. (Helios Industries, Hayward, Calif. Circle 215 on information card.)

Lighting Fixtures.

Ceiling mounted fixtures and floodlights employ a lenticular lens system designed to provide precise beam control and maximum efficiency with low surface brightness. The optical design incorporates a spectacular, parabolic reflector that directs parallel rays from the light source through the lens. Inside the lens is a polished aspherical curved surface positioned to reduce gaps. (Devine, Kansas City, Mo. Circle 223 on information card.)

Extruded Polystyrene Insulation
FOAMULAR®

Specify Foamular, and you specify highly efficient life cycle costing. And more!

Foamular extruded polystyrene insulation offers all the qualities needed for highly efficient life cycle costing in building design:

- An R-value of five per inch of product thickness that lasts and lasts. Even after exposure to moisture, including freeze/thaw cycling, Foamular retains its high R-value and keeps on working.
- Lightweight, rigid foam panels that are easy to handle, cut and install.
- A choice of compressive strengths ranging from 15 to 60 psi that lets you tailor Foamular insulation to your specific needs—without overbuying.

For more details on Foamular insulation, send for our full color, illustrated brochure. UC Industries, 2 Sylvan Way, Parsippany, NJ 07054. Or call (201) 267-1605.

See Foamular insulation in Sweets Catalog.

WARNING: Combustible. This product will ignite if exposed to fire of sufficient heat and intensity.

UC INDUSTRIES



Copper Tile.

The Accents in Copper line of tooled copper tiles (above) is available in 36 hand-painted patterns and mosaic wall murals. Lightweight tiles are designed to be used on walls, ceilings, doors, and cabinets. (Westex Import-Export, Ft. Lauderdale, Fla. Circle 235 on information card.)

Door Hardware.

Marchesi lever door handles and knobs, made of laminated wood and metal, are designed to resemble simple Italian fixtures. The hardware is available in a number of finishes: green, brown, blue, pearl gray, and dark gray with a red accent. Brass portions may be polished, silked, nickel-plated or bronzed. (Forms + Surfaces, Santa Barbara, Calif. Circle 224 on information card.)

Custom Metalwork.

Ornamental metal pieces, constructed of durable castings of bronze, aluminum, or iron, are fabricated for interiors and exteriors. (Architectural Elements Group, RWL Corporation, Madison, Conn. Circle 228 on information card.)

Emergency Signage.

Exit sign has a flashing emergency light and an audible alarm. The extruded aluminum housing is constructed with mitered corners and stainless steel interior bracketry. Custom colors and sizes are available. (Fargo Manufacturing Co., Chicago. Circle 206 on information card.)

Housing Publications.

The Center for Community Development and Preservation is offering a number of publications covering low-income housing projects, nonprofit development, and tax-exempt financing. Contact Center for Community Development, 18 Hamilton Place, Tarrytown, N.Y. 10591.

Table Top Laminate.

Micastat conductive table top laminate is a permanent static control work surface designed to be attached to wood tops

with conventional contact adhesives. It provides zero voltage suppression and is resistant to and unaffected by most solvents. (Charleswater Products, West Newton, Mass. Circle 227 on information card.)

Fluorescent Dimming Switch.

Ampion fluorescent light dimmer has a slide control that provides continuous dimming from four percent to full illumination. The circuitry is designed to compensate for line voltage variation and to suppress radio frequency interference. The fixture has an on/off rocker switch that maintains a preset light level. (Lutron Electronics Co., Coopersburg, Pa. Circle 208 on information card.)

Window Unit.

Malta Thermaclad double hung windows are constructed of solid wood with vinyl-clad exterior frames and sash. Units have 1/2-inch insulated glass in a gray vinyl boot glazing system and a center pivot balance system. Each sash can be rotated for cleaning from the inside and removed for glass replacement. Optional tilt-out screens and rectangular colonial grids are also available. (Philips Industries, Malta, Ohio. Circle 205 on information card.)

Display Case.

Freestanding hexagon showcase has a built-in cam lock, low voltage quartz halogen lighting, and a choice of three mirror finishes. (Magic Glass, San Francisco. Circle 209 on information card.)

Storage System.

High density mobile filing and storage system is designed to increase storage capacity by 90 percent by utilizing space normally reserved for aisles. The entire system can be locked by a single cylinder lock. Vertical sales and top covers are designed to provide protection against fire, water damage, and dirt. (Lista International Corporation, Long Beach, Calif. Circle 210 on information card.)

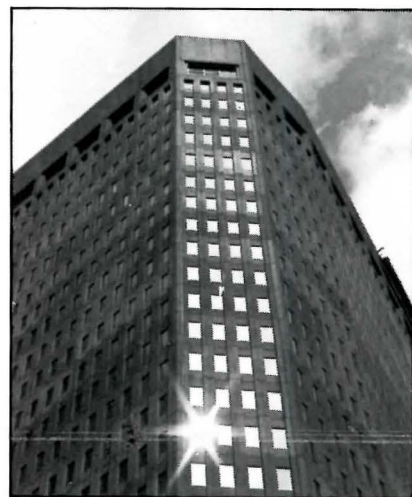
Exterior Lighting Fixture.

Rectangular-beam Taskat fixture is designed for heavy duty exterior installations. The precision optics are designed to provide light distribution in a rectangular pattern. The optical system can be rotated 90 degrees for selective illumination. (GTE Lighting Products, Danvers, Mass. Circle 226 on information card.)

Ceiling Systems.

Deep Profile linear metal ceilings are pre-engineered components designed for simple installation and detailing. Panels measure 1 1/2 inches deep in widths of two, three, five, or seven inches and are available in 58 colors. (Donn Corporation, Westlake, Ohio. Circle 225 on information card.) *Products continued on page 126*

NOW YOU CAN SEAL YOUR BUILDING YEAR ROUND....



EMSEAL DOES IT BETTER

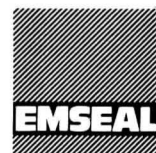
You get a permanently elastic, weathertight seal for any joint from 1/4" to 4" wide with Emseal, the seal that's delivered to your site pre-cut and pre-sized to actual joint dimensions. You just snap it into the joint and watch it expand! No primers are required, and it's non-staining.

Emseal acrylic impregnated polyurethane foam is compatible with urethane and silicone sealants, and is ideal for use with precast, brick, stone, insulated panel and window perimeters.

Best of all, Emseal can be used in both new construction and retrofit projects, so whichever you're working on, Emseal can save you time and money.

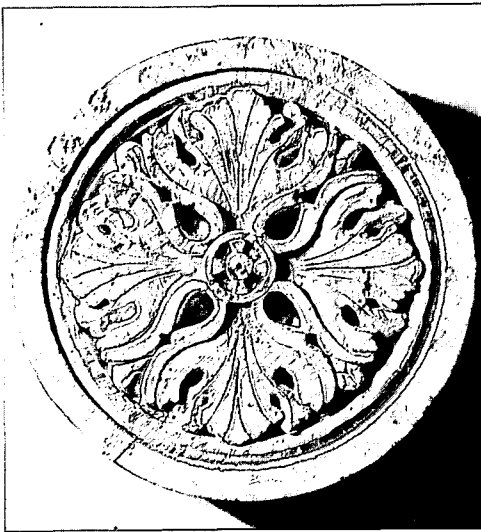
Emseal representatives are located throughout the U.S. and Canada. To find the one nearest you, contact:

EMSEAL U.S.A. Inc.



344 Mill Road
Stamford, CT
06903
(203) 322-3828

**ASK US ABOUT
EMSEAL FOR
ABUTMENT JOINTS TOO!**



Ornamental Molding.

The collection of ornamental details (above), entitled Moldings To Go, is designed to be easily applied in residential and commercial settings. (The Whole Works, New York City. Circle 204 on information card.)

Fluorescent Lighting Fixture.

Energy efficiency fluorescent Troffer/ST lighting fixture has a three-lamp configuration and reversible slim line door designed for maximum lens area. A snap-in

ballast cover is designed to provide maximum heat dissipation. (Keene Lighting Products, Wilmington, Mass. Circle 219 on informaton card.)

Radiant Heating System.

Ceiling heating system has radiant wires embedded in fire-rated conventional dry-wall board and 18-inch nonheating electrical leads. The radiant element is designed to operate at 115 degrees, and each panel produces 15 watts per square foot of heated area. (Panelectric Radiant Heat Ceilings, Irvine, Ky. Circle 220 on information card.)

Fluorescent Lighting Fixture.

The Holophane Percepta II luminaire is constructed of a steel chassis painted white and has an acrylic lens enclosure. It is designed for uniform or level mounting against ceiling surfaces or within a T-bar for coffered styles. Supporting end panels snap lock to fixture housing. (Manville Service Center, Denver. Circle 222 on information card.)

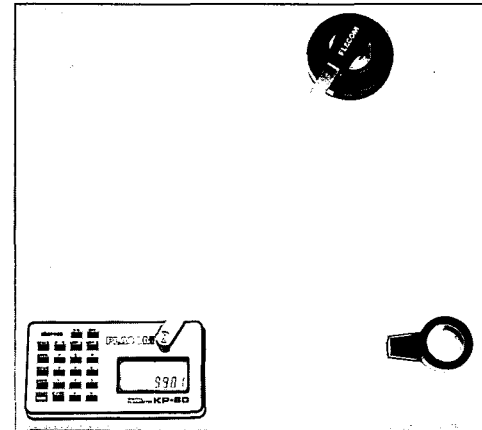
Chain Lock.

Lockwood MC-40 concealed security chain lock has a high tensile steel chain designed to retract into a barrel mounted in the door frame. The red and black safety

switch can be turned off when the door is closed. Available in brass, Florentine bronze, and chrome, it is designed to blend with most standard door hardware and carries an ANSI grade one rating. (Lloyd Matheson, Inc., Charlestown, N.H. Circle 218 on information card.)

Planimeter.

Placom KP-80 digital planimeter (below) is designed to measure areas from maps, blueprints, drawings, and photographs. The liquid crystal digital display reads 8 digits in either English or metric modes. (Charvoz Carsen Corporation, Fairfield, N.J. Circle 236 on information card.) □



Introducing better solutions to building access problems.



Handi-Lift

The Cheney Handi-Lift® Vertical Wheelchair Lift provides safe stairway access and its attractive design complements any surroundings.

- Lifting range of 4 to 12 feet
- Indoor and outdoor applications
- 500 pound load rating, optional 750 pound rating

The Cheney Handi-Enclosure™ is perfect for indoor applications when a hoistway or restrictive access is required.

- ¼" Bronze Plexiglas Panels match any decor
- Rugged steel support framing
- Easily installed at job site



Handi-Enclosure

Both the Handi-Lift and the Handi-Enclosure conform to ANSI A.17.1 and can be installed in public buildings or private residences.

For more information on Cheney products including the Weclator™ Stairway Elevator and the Liberty™ Wheelchair Lifts check your Sweets Catalogue or call Darlene Lewis toll free, 1-800-782-1222.

Helping people help themselves.

The CHENEY Company

P.O. Box 188, Dept. AI New Berlin, WI 53151
1-800-782-1222 (414) 782-1100

U.S. Postal Service Statement of Ownership, Management, and Circulation (Required by 39 U.S.C. 3685)

- Title of publication: Architecture: The AIA Journal. A. Publication No. 009880.
- Date of filing: 9/26/84.
- Frequency of issue: Monthly.
 - No. of issues published annually: 12.
 - Annual subscription price: \$16 (member), \$26 (nonmember).
- Complete mailing address of known office of publication: 1735 New York Avenue, NW, Washington, DC 20006.
- Complete mailing address of the headquarters or general business offices of the publishers: Same.
- Full names and complete mailing address of publisher, editor, and managing editor: Publisher—American Institute of Architects, 1735 New York Avenue, NW, Washington, DC 20006. Editor—Donald Canty (same). Managing editor—Allen Freeman (same).
- Owner: American Institute of Architects, 1735 New York Avenue, NW, Washington, DC 20006.
- Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: N/A (nonprofit membership corporation).
- The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes has not changed during the preceding 12 months.
- Extent and nature of circulation.

	Average No. Copies Each Issue During Preceding 12 Months	Actual No. Copies Of Single Issue Published Nearest to Filing Date
A. Total no. copies	61,917	68,872
B. Paid circulation		
1. Sales through dealers and carriers, street vendors and counter sales	284	385
2. Mail subscription	47,600	49,996
C. Total paid circulation	47,884	50,381
D. Free distribution by mail, carrier or other means; samples complimentary, and other free copies	11,484	16,242
E. Total distribution	59,368	66,623
F. Copies not distributed		
1. Office use, left over, unaccounted, spoiled after printing	2,531	2,249
2. Return from news agents	18	N/A
G. Total	61,917	68,872

11. I certify that the statements made by me above are correct and complete. (Signed) David S. Godfrey, General Manager.

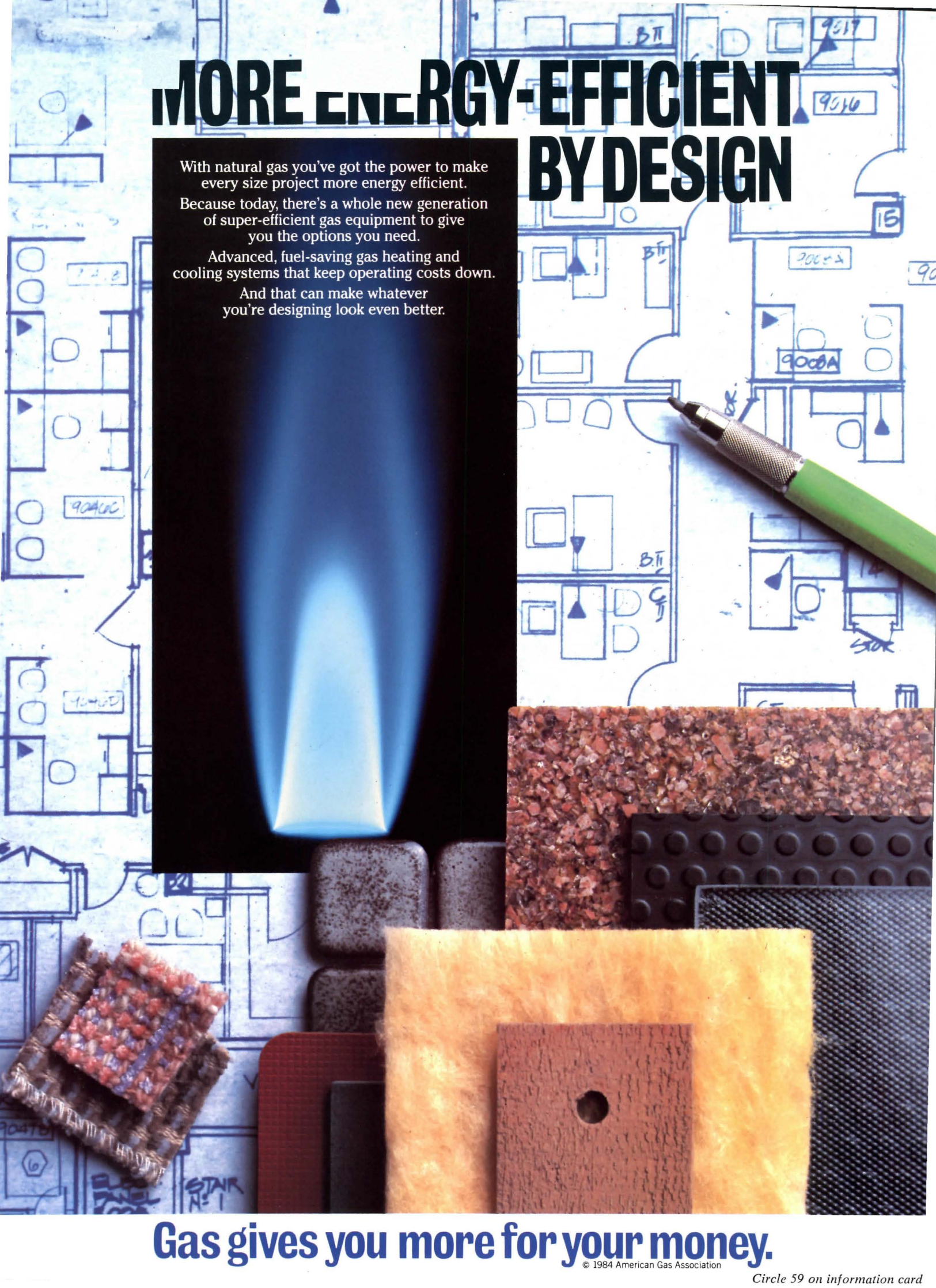
MORE ENERGY-EFFICIENT BY DESIGN

With natural gas you've got the power to make every size project more energy efficient.

Because today, there's a whole new generation of super-efficient gas equipment to give you the options you need.

Advanced, fuel-saving gas heating and cooling systems that keep operating costs down.

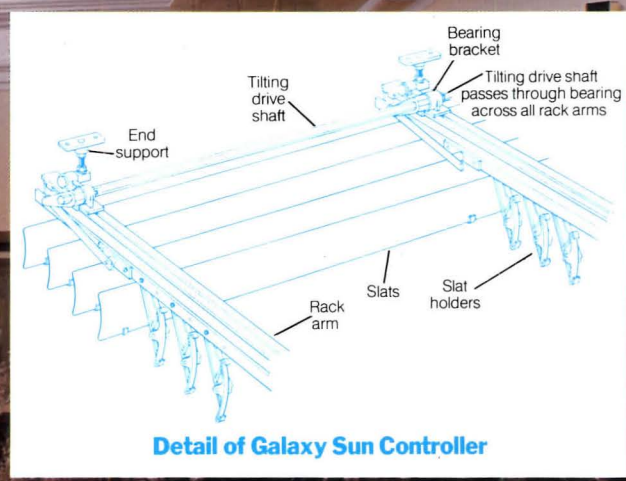
And that can make whatever you're designing look even better.



Gas gives you more for your money.

© 1984 American Gas Association

Circle 59 on information card



Levolor. A beautiful and practical way to control the sun.

The Galaxy[®] Sun Controller by Levolor redirects the sun's rays exactly where you want them with absolute mechanical precision. Available in a variety of widths and configurations, the systems can be operated manually or motorized. Motorized systems can be controlled by button, computer, clock or light-sensitive apparatus. Because of their unique light control capabilities, Galaxy systems are ultra-efficient as an aid to summer cooling and winter heating. They can be used on hard to reach vertical surfaces, inclined windows, horizontal skylights, and greenhouse glass areas of practically any shape. The perfect economical answer to odd-shaped, special lighting and energy control situations. For details, write: Levolor Lorentzen, Inc., 1280 Wall St. West, Lyndhurst, N.J. 07071.

LEVOLOR[®]
Extending your
creative options.