

AAAR BOOK SERIAL



With this system, thermal isolation isn't just a lot of hot air.

The HP-175 Thermal Wall System can increase energy efficiency as much as 50% over other systems. Its interior components are completely shielded from heat and cold transference by non-conductive injection molded clips.

This system can also be inside or outside glazed. And it allows glass to be centered or offset to the interior or exterior.

Plus the HP-175 is available in a wide range of good looking durable finishes including clear anodized, or Enduranodic™ bronze hard coat.



And it's as effective for commercial remodeling applications as for new construction. It can be installed over old buildings without even interrupting the normal work flow of occupants.

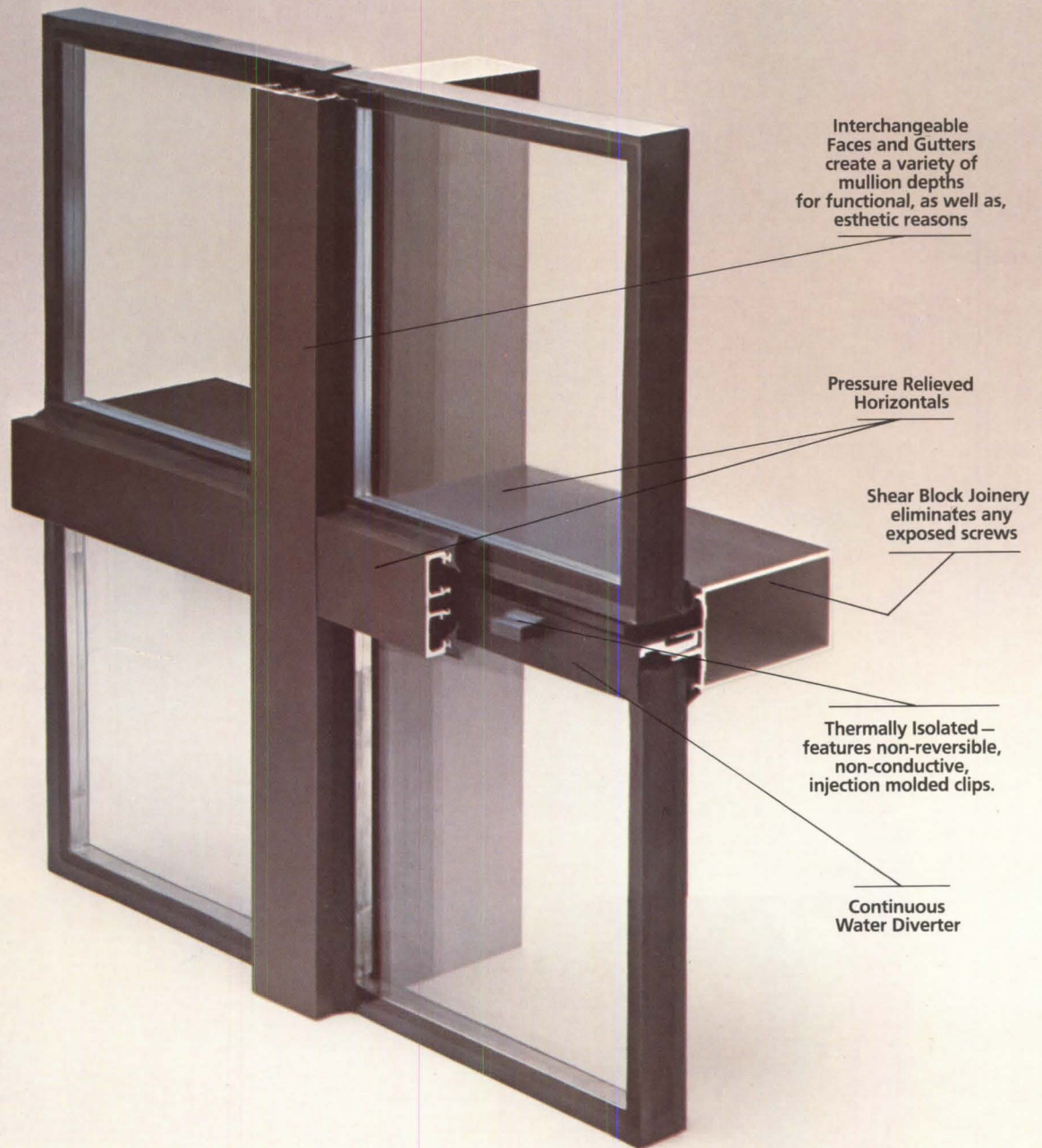
A lot of manufacturers are making impressive claims about their thermal wall systems. But at Howmet, ours aren't just hot air.

For more information, contact Howmet Aluminum Corporation, Architectural Products Division, P.O. Box 629, Terrell, Texas 75160. Or call (214) 563-2624.

Warehouse/Plant locations: Washington, D.C.; Dallas, TX; Atlanta, GA; Houston, TX; San Jose, CA.

Howmet. The name to remember.

HOWMET
ALUMINUM
CORPORATION
A member of the Pechiney Ugine Kuhlmann Group



Circle 1 on information card

Wind and Water Penetration of Vertical Surfaces

A seminar you can't afford to miss.

The University of Illinois at Chicago Circle Campus School of Architecture and Shand, Morahan & Company, a leading underwriter of professional liability insurance, present a seminar on one of the major sources of claims against design professionals: Wind and water penetration of vertical surfaces.

The seminar will help architects and engineers avoid costly design defects and technical failures in this high-problem area. The nation's leading experts have been brought together to focus their combined knowledge and experience on this specific construction problem area. You can benefit from this body of advanced technical data by attending this valuable one-day seminar.

The seminar will take place on Friday, March 27th, 1981 at the University of Illinois at Chicago Circle Campus.

Offered free of charge to Architects and Engineers whose professional liability coverage is written through Shand, Morahan, the day-long seminar fee for non-insureds is \$125.

For more information on this important loss-avoidance learning opportunity, contact your insurance broker or Shand, Morahan & Company.

 **Shand, Morahan
& Company, Inc.**

One American Plaza Evanston, IL 60201
Telephone (312)866-0795

Circle 2 on information card

FORMS + SURFACES



Fire Retardant Bonded Wood

Fire Retardant Bonded Wood + Mirror

Fire Retardant Architectural Tambour

Class I Flame-Spread Classification combined with good looks, versatility and competitive price make these popular wall materials easier than ever to specify. Select from Red Oak, White Oak, Teak, Walnut, and clear or copper mirror. Forms & Surfaces Box 5215 Santa Barbara, California 93108 (805) 969-4767 969-5033.

Circle 3 on information card

CONTENTS

The American Institute of Architects

Officers

R. Randall Vosbeck, FAIA, *President*
Robert M. Lawrence, FAIA, *First Vice President*
Robert Broshar, FAIA, *Vice President*
George M. Notter Jr., FAIA, *Vice President*
Ray K. Parker, AIA, *Vice President*
Harry W. Harmon, FAIA, *Secretary*
J. W. Barnes, FAIA, *Treasurer*
David Olan Meeker Jr., FAIA, *Executive Vice President*

Directors (Year indicates expiration of term)

George A. Bissell, FAIA ('83), *California*
William Blurock, FAIA ('82), *California*
James C. Dodd, AIA ('81), *California*
J. Peter Winkelstein, FAIA ('83), *California*
R. Bruce Patty, FAIA ('82), *Central States*
Henry W. Schirmer, AIA ('81), *Central States*
P. Whitney Webb, AIA ('82), *East Central States*
Ellis W. Bullock Jr., AIA ('81), *Florida/Caribbean*
E. H. McDowell, FAIA ('81), *Florida/Caribbean*
William H. Beaty, AIA ('83), *Gulf States*
Gaines B. Hall, AIA ('81), *Gulf States*
Raymond C. Ovresat, FAIA ('81), *Illinois*
John W. Jickling, FAIA ('83), *Michigan*
Theodore F. Mariani, AIA ('83), *Middle Atlantic*
James R. Nelson, AIA ('81), *Middle Atlantic*
John Avery Carter, AIA ('82), *New England*
Robert J. von Dohlen, AIA ('83), *New England*
Romeo Aybar, AIA ('83), *New Jersey*
Joseph Monticciolo, AIA ('82), *New York*
William A. Rose Jr., AIA ('81), *New York*
Leroy Bean, AIA ('82), *North Central States*
Edwin B. Crittenden, FAIA ('81), *Northwest*
David A. Pugh, FAIA ('83), *Northwest*
Robert Gramann, AIA ('82), *Ohio*
Derek Martin, AIA ('81), *Pennsylvania*
John A. Busby Jr., FAIA ('82), *South Atlantic*
Richard A. McGinty, AIA ('83), *South Atlantic*
William Caudill, FAIA ('82), *Texas*
Theodore S. Maffitt Jr., FAIA ('81), *Texas*
Pat Y. Spillman, FAIA ('81), *Texas*
Thomas B. Muths, AIA ('82), *Western Mountain*
John B. Rogers, FAIA ('81), *Western Mountain*
Robert B. Pease, Hon. AIA, *ex officio, Public Director*
Alex Barberena, *ex officio, President, ASC/AIA*
Ann Stacy, Hon. AIA, *ex officio, Chairwoman, Council of Architectural Component Executives*

Headquarters

David Olan Meeker Jr., FAIA, *Executive Vice President*
James A. Scheeler, FAIA, *Group Executive, Program and Services Management*
Alan B. Stover, AIA, *General Counsel*
James A. Schuping, *Assistant Secretary*
William G. Wolverton, Hon. AIA, *Assistant Treasurer/Controller*
Michael B. Barker, AICP, *Administrator, Design*
Francis X. Brown, *Administrator, Conventions/Conferences/Special Events*
Muriel Campaglia, *Administrator, Public Relations*
James E. Ellison, AIA, *Administrator, Education and Professional Development*
David S. Godfrey, *Administrator, Publications*
Robert T. Packard, AIA *Administrator, Practice*
Ronald Panciera, *Administrator/Assistant Controller*
Arnold J. Prima Jr. AIA, *Administrator, Government Affairs*
John Wilson-Jeronimo, *Administrator, Member/Component Affairs*
David Olan Meeker Jr., FAIA, *President, AIA Corporation*
Jeanne Butler Hodges, *President, AIA Foundation*
Charles R. Ince Jr., *President, AIA Research Corporation*
John H. Schruben, FAIA, *President, Production Systems for Architects and Engineers, Inc.*

40 **Profile: Hardy Holzman Pfeiffer Associates**
Winner of the 1981 AIA architectural firm award.
By Andrea O. Dean

50 **Homage to a Catalanian**
A personal view of AIA gold medalist Josep Lluís Sert. By Robert Campbell

54 **The Company that Design Built**
Herman Miller, Inc., recipient of a 1981 AIA medal. By Stanley Abercrombie, AIA

58 **North Yemen: Land and Buildings**
An exploration of the country's rich indigenous architecture. By Balthazar Korab

68 **The Latest Life of New York's Villard Houses**
They are the forepiece of a hotel tower and an art design center. S.A.

4 **Events & Letters** 78 **Furnishings**
11 **News** 88 **Advertisers**
74 **Books**

Cover: Moonlit photograph in Carina, North Yemen, by Balthazar Korab (see page 58).

Donald Canty, Editor; **Suzy Thomas**, Art Director; **Carole Palmer**, Associate Art Director; **Stanley Abercrombie, AIA**, Senior Editor, Architecture; **Mary E. Osman, Hon. AIA**, Senior Editor, Books; **Andrea O. Dean**, Senior Editor, Articles; **Allen Freeman**, Managing Editor; **Nora Richter Greer**, Associate Editor; **Virginia Dart**, Editorial Assistant; **Michael J. Hanley**, Publisher; **Michael M. Wood**, National Sales Director; **George L. Dant**, Production and Business Manager; **Terry L. Peck**, Circulation Manager; **David S. Godfrey**, General Manager.

The AIA JOURNAL, publication number: ISSN0001-1479, official magazine of The American Institute of Architects, is published 14 times yearly at 1735 New York Ave. N.W., Washington, D.C. 20006. **Subscriptions:** for those who are, by title, architects, architectural employees and to those in architectural education (faculty, schools and students), and to libraries, building construction trade associations and building products manufacturers: base rate \$24 a year in the U.S., its possessions and Canada. For all others: \$30 a year in the U.S., its possessions and Canada. All others outside the U.S., its possessions and Canada: \$40 a year. Single copies, \$3 each. 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 six 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. © 1981 by The American Institute of Architects. Opinions expressed by the editors and contributors are not necessarily those of AIA. VOL. 70, NO. 2.

EVENTS

Feb. 27: Applications deadline, Fourth Annual Summer Seminar (Boston, June 13-July 2) and Sixth Annual Summer School in England (July 5-25). Contact: The Victorian Society in America, E. Washington Square, Philadelphia, Pa. 19106.

Mar. 1-3: Construction Industry National Legislative Conference, Hyatt Regency, Washington, D.C. Contact: National Construction Industry Council, 5530 Wisconsin Ave. N.W., Suite 750, Washington, D.C. 20015.

Mar. 2-3: Course on Earth Sheltered Architecture, University of Wisconsin, Madison.

Mar. 2-4: Course on Construction Estimating and Bidding, East Brunswick, N.J. (Repeat seminar on Mar. 30-Apr. 2.) Contact: The Center for Professional Advancement, Dept. NR, P.O. Box H, East Brunswick, N.J. 08816.

Mar. 6-8: Workshop on Planning and Designing Recreation Facilities, Atlanta. Contact: Richard Van Os Keuls, AIA headquarters, (202) 626-7465.

Mar. 9: Seminar on Marketing Health Care Architecture, Washington, D.C. Contact: Mike Cohn, AIA Headquarters, (202) 626-7366.

Mar. 9-11: Energy Technology Conference and Exposition, Sheraton Hotel, Washington, D.C. Contact: Government Institutes, Inc., P.O. Box 1096, Rockville, Md. 20850.

Mar. 11-12: Course on Built-up Roofing, University of Wisconsin, Madison.

Mar. 13-18: Associated General Contractors of America annual convention, Washington, D.C. Contact: AGC, 1957 E St. N.W., Washington, D.C. 20006.

Mar. 18-22: Workshop on Passive Solar Multifamily Housing, Vail, Colo. (Repeat workshops on Mar. 23-25, Kansas City; Apr. 1-5, St. Louis; Apr. 6-8, Lake Geneva, Wis.; Apr. 20-22, Columbus, Ohio; Apr. 27-29, Lansing, Mich.) Contact: TLH Associates, Inc., 900 Minnesota Building, St. Paul, Minn. 55101.

Mar. 19-20: Seminar on Energy Auditing, Atlanta, Ga. (Repeat seminars on Apr. 30-May 1, Kansas City; June 15-16, Natick, Mass.) Contact: Association of Energy Engineers, 4025 Pleasantdale Road, Suite 340, Atlanta, Ga. 30340.

Mar. 22-25: The Association of Collegiate Schools of Architecture annual convention, Asilomar, Calif. Contact: ACSA, at AIA Headquarters.

Mar. 23-28: Course on Energy Efficient Systems, University of Wisconsin, Madison.

Mar. 26-27: COFPAES annual Federal Programs Conference, Orlando, Fla. Contact: National Society of Professional Engineers, 2029 K St. N.W., Washington, D.C. 20006.

Mar. 26-28: National Solar Conference, Orlando, Fla. Contact: Energy Programs, Jordan College, 360 W. Pine St., Cedar Springs, Mich. 49319.

Mar. 27: Symposium on water and wind penetration of exterior surfaces, sponsored by the Chicago Chapter/AIA, by the University of Illinois at Chicago Circle Campus (where the symposium will be held) and by Shand, Morahan. Contact: Shand, Morahan, (312) 866-2800.

Mar. 28: Seminar on Taliesin West. Contact: Taliesin West, Scottsdale, Ariz. 85258.

Mar. 30-31: Seminar on Designing with Plastics, University of Lowell (Mass.).

Mar. 30-Apr. 3: Course on Energy Design and Analysis, University of Wisconsin, Madison.

Apr. 30: Deadline, Women in Design International Competition '81. Contact: WID International, 530 Howard St., 2nd Floor, San Francisco, Calif. 94105.

May 17-21: AIA convention, Minneapolis.

June 15-21: International Union of Architects World Congress, Warsaw. Contact: Frank Brown, AIA Headquarters (202) 626-7395.

LETTERS

'Outré Accomplishments': Neither energy conservation nor passive solar energy utilization is a uniquely late 20th century concept. Combined, however, they can provide a major reduction in fossil fuel consumption. As a prejudiced participant in the energy conservation drive, I see the architectural profession marching to the wrong drummer; the theme seems to be the Beaux-Arts concept of "the fussier, the better."

Simple and matured ideas are being brushed up and brought out as new discoveries or—even worse—paid no heed. I remember that in 1947 solar heat gain was a controlling criterion in house design; and now I sell the major climate control device used by Europeans and virtually ignored by American architects.

From where I sit, manufacturing and selling exterior rollshutters, and having designed more than 20 years ago what are called solar houses today, I think that energy use reorientation is being used by the profession as an excuse for expensive trendy designs.

Freestanding houses, which in any case are the quintessential energy wasters, can almost always gain enough heat (if there are sufficient tightly constructed glass enclosed areas to build up a greenhouse effect) to keep the furnace off all day, even here in northern New Hampshire. Row houses facing east and west are almost impossible to help in any easy manner. Apartments demand less heat, and modern ones facing south can be enormously

aided by extended glass enclosed areas covering windows and particularly patio doors. These solutions have always worked—and work now.

In all cases, traditional buildings with glass solar traps added or new solar buildings have soaring heat losses at sundown. The critical night-time loss-time problem is either ignored, solved by reversion to fossil fuels or by clumsy curtaining which is never very effective. Or the problem is considered "insoluble with currently available technology." That is because the solution is so simple, is available and does not involve exciting architectural input.

Europeans have wrestled with energy problems and solved them: They use exterior rollshutters. By the billions. These easily operated, high quality, permanent devices not only stop energy loss (or summer gain) in direct conduction, but also effectively stop leakage, seepage, Bernoulli action of winds and penetrating rain and frost. They can be united with any style of architecture with ease. This dramatically effective climate control device does not meet our profession's need for an exciting new direction, however, which will be attractive media hype.

The refusal of architects to use solutions that are immediately at hand is a tragedy. In many projects, daylighting has been eliminated—to save energy loss; buildings have been dug into the ground, increasing total energy demand by increased mechanical ventilation and sparse land utilization. Large glass areas that are securely constructed and properly oriented and protected for nonsolar periods by exterior rollshutters provide a happy, inexpensive and rapid energy solution. In many designs where orientation is limited by urban siting, exterior rollshutters can make an otherwise wasteful solution into a feasible one.

Even a traditional, freestanding colonial style house can be undramatically but effectively energy-improved by many unnoticeable changes: rollshutters added, solar panels on the roof; deep-tone painting (closer to the original house appearance). These are some very effective changes. In all cases, superinsulation along with rollshutters can keep that furnace quiet.

Meanwhile, I expect to read more articles about buildings built within outside shell buildings, huge glass lobbies called sun traps which actually lose more energy in one night than they can gain in a week of January sun and other kinds of outré accomplishments. *William Smull, AIA
Tamworth, N.H.*

Correction: The caption on page 46 of the December 1980 issue reversed identification of the designs of Emilio Ambasz and Peter Eisenman.

1980

OWENS-CORNING ENERGY CONSERVATION AWARD WINNERS.



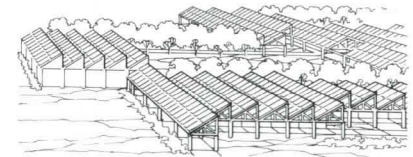
OFFICE



WAREHOUSE



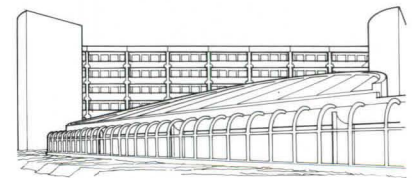
LABORATORY



PRISON



HEADQUARTERS



OFFICE



COLLEGE



• The ninth annual Owens-Corning Energy Conservation Awards honor those who have proved, once again, that there are always new ingenious and elegant ways to conserve energy.

• 1980 Judges:
C. William Brubaker, FAIA, Perkins & Will, Chicago, Ill., Ezra D. Ehrenkrantz, FAIA, The Ehrenkrantz Group, P.C., N.Y., N.Y., Masao Kinoshita, AIA, ASLA, AIP, Ohio State Univ., Columbus, Oh.

William J. Coad, PE, Charles J.R. McClure & Assoc., Inc., St. Louis, Mo., John K. Holton, AIA, PE, Office of Bldgs. Mgmt. GSA-PBS, Washington, D.C., Arthur E. Wheeler, PE, Henry Adams, Inc., Baltimore, Md.



percent. And these are real numbers—not guesses. They used a very efficient light source: high pressure sodium lighting. A 200,000-gallon storage tank saves the excess heat generated during the day to warm the building at night.”

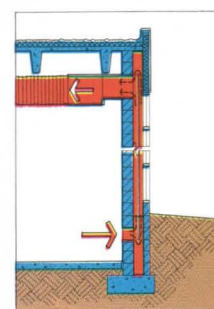
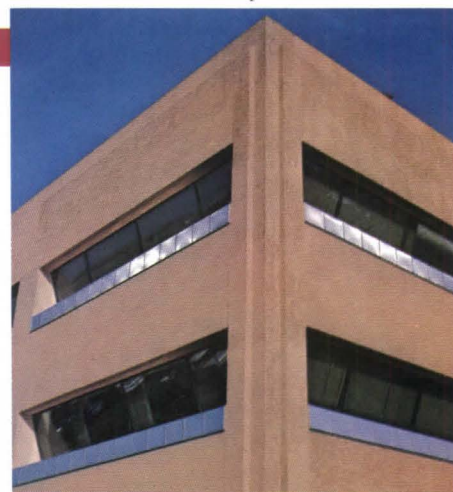
• *Exterior:* Note the angled windows with stainless-steel window sills that reflect diffused light into the building and eliminate the need for artificial lighting within 20 ft. of the perimeter.

WILLOW CREEK OFFICE BLDG./IDAHO FALLS, IDAHO

• *Architect, Engineers and Owner:* Max Flatow, FAIA, Pres., Flatow Moore Bryan and Assoc., Frank Bridgers, PE, Prin., Bridgers & Paxton, Consulting Engineers, Albuquerque, N.M. Ronald W. Kiehn, Gen. Mgr., EG&G, Idaho, Inc.,

Idaho Falls, Id., Joseph Lopez, PE, Prin., Uhl & Lopez Engineers, Inc., Albuquerque, N.M.

• *Judges' comments:* “In moving to a new building twice the size of their old one, they reduced their actual out-of-pocket energy costs by 21.4



• *Cross section of the modified Trombe wall:* Sunlight passing through windowed wall heats stainless-steel collector plate. Ductwork above brings heated air back into building.

SPORT OBERMEYER/ASPEN, COLORADO

• *Architects and Engineer:* Tim Hagman, Prin., Copland Hagman Yaw Ltd, Aspen, Col., Bob Clarke, Prin., Solar Pathways Assoc., Glenwood Springs, Col., Larry Yaw, Prin., Copland Hagman Yaw Ltd, Aspen, Col.

• *Judges' comments:* “What is attractive here is that they took a simple building—

the walls are concrete blocks—and integrated a solar air-heating system: a Trombe wall. It is worked in very well with the overall appearance of the building. It's basically an inexpensive solution. A working, economical use of solar energy for warehouse heating.”

SMITHKLINE PHARMACEUTICAL RESEARCH LAB/UPPER MERION, PENNSYLVANIA

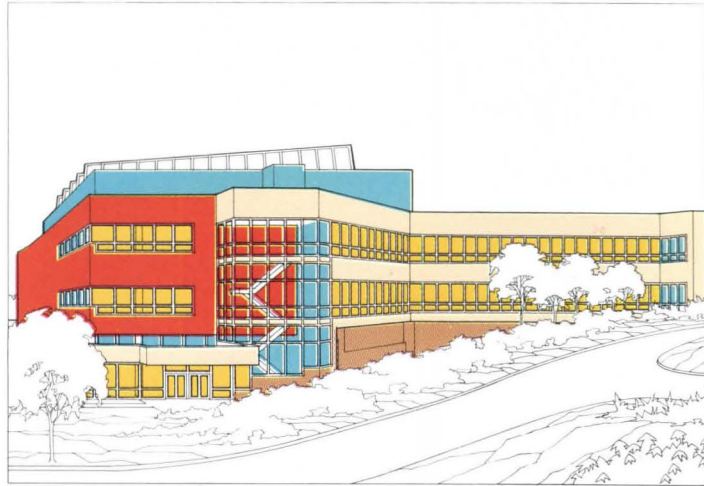
• *Engineer and Architects:* Russell M. Keeler, PE, Dir. Mech. Engineering, Louis deMoll, FAIA, Prin. and John B. DiIlio,

RA, Proj. Designer, Ballinger, Philadelphia, Penna.

• *Judges' comments:* "This is a laboratory with very demanding environmental criteria and intensive energy use. The designers have tried very hard—and succeeded—in recovering much of this energy. They've used special air-conditioning concepts, a high temperature heat pump and active solar

systems. They even have a system for reclaiming the heat from the water they use to wash down the cages. Many designers would have avoided this issue and wasted the heat. But they didn't here."

• *Architect's model:* Note how the glazed corridors light both the hallways and the interior offices. This saves energy by reducing the outside fenestration.



FEDERAL CORRECTIONAL INST./BASTROP, TEXAS



• *Architects and Engineer:* Franklin D. Lawyer, FAIA, Sr. VP, Paul Kennon, FAIA, Pres., E. Bruce Appling, PE, Sr. VP, Caudill Rowlett Scott, Houston, Tex.

• *Judges' comments:* "This building was designed with a full sense that an active solar system was going to be a major part of the design—integrated into the project rather

than being added on./ The solar collectors come out higher than the building next to them. They are used for shading both walkways and buildings./ Even the pipes and ducts are handled in a straightforward way that enhances the design of the building and the atmosphere within it."



• Model (at right) shows the double wall of windows. The site (above) overlooks Niagara Falls. The building (still under construction) can be seen above the Falls.

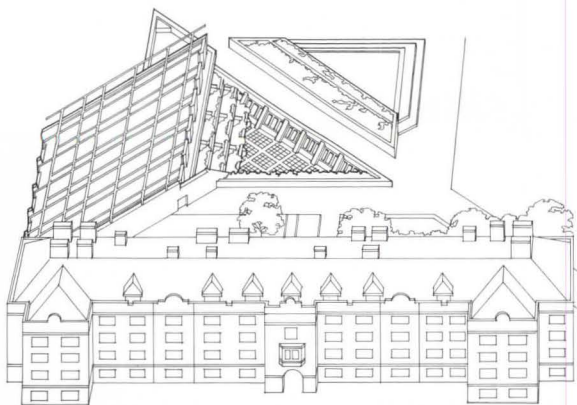


• Owner, Engineer and Architect: Marvin W. Voelker, VP, Hooker Niagara Office Corp., Niagara Falls, N.Y., Alan M. H. Sloan, VP, Engineering and Mark R. Mendell, AIA, Sr. VP, Cannon Design Inc., Grand Island, N.Y.

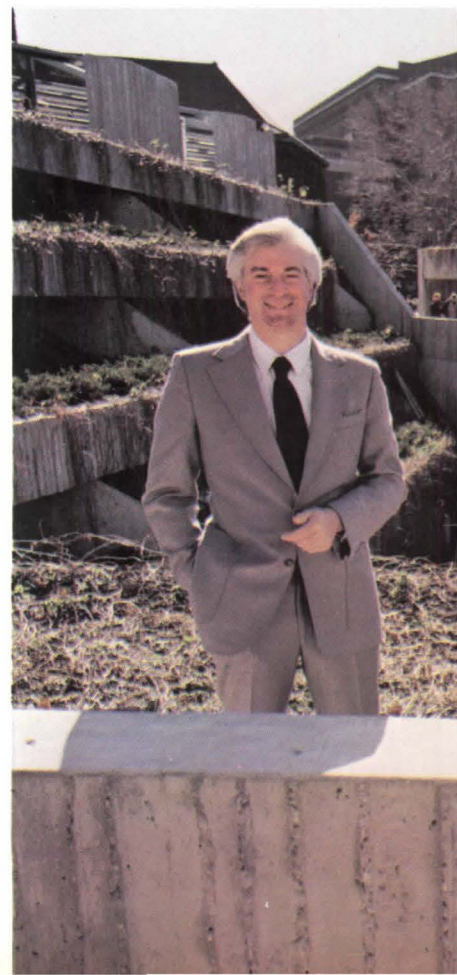
• Judges' comments: "We have here a highly innovative, highly technological solution./ Essentially, it's two walls of glass

four feet apart. In between there are adjustable louvers and moving air, so when the sun moves around the building, goes up and down, or goes behind the clouds, the building adjusts to the changing climate./ The double wall is key to

keeping unwanted heat out and letting wanted heat and light in.
 "One of the things that's very attractive about this building is that in a time when we often find ourselves going to smaller window areas and less glass to save energy, this building has a total glass envelope and is still energy-efficient./ It means one does not have to sacrifice a view, daylight, the interaction between inside and outside space for energy efficiency.
 "One good idea, from an engineering standpoint, is that they've decentralized their domestic hot-water heating system. We've found that if you have a central hot-water heating system in an office building, your efficiency is about five percent. You keep the whole system hot 8,760 hours a year and all you do is occasionally use a little hot water in a washroom. Instead of putting in a central system, they use small hot-water heaters all around the building,

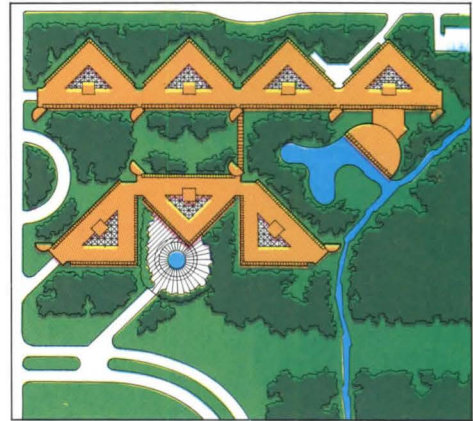


• An energy-efficient building in a crowded area: The right side of Williamson Hall is set into an earth berm. The active solar collector system is at left. A cross-campus walkway forms part of the roof.





SHELL OIL CO. OFFICES/HOUSTON, TEXAS



• *Owner, Architect and Engineer:*
Edmund V. Pearson, General Mgr., Shell Oil Co., James B. Gatton, AIA, Sr. VP and John Kettleman, PE, VP, Caudill Rowlett Scott, Houston, Tex.

• *Judges' comments:*
"The Shell project is extremely interesting in that it was designed with the basic building structure itself acting as a major element in the day lighting system./The mechanical ductwork

enclosures were located on the perimeter wall so they would act as a reflecting element to bounce light back into the rooms./The inside corridors are lit by the office lighting and by daylight bounced off the mechanical enclosure ducts. The result is very efficient lighting —only 1.3 watts per sq. ft. installed, with annual operations projected at less than 1 watt per sq. ft."

• *Triangles and atriums.*
The company needed a large number of small offices. The solution: Closely grouped triangular buildings with central atriums for an efficient combination of light and shade.

WILLIAMSON HALL/UNIVERSITY OF MINNESOTA



• *Architect, Owner and Engineer:*
David J. Bennett, AIA, Prin., Myers and Bennett Architects/BRW, Clinton N. Hewitt, Asst. VP Physical Planning, Univ. of Minnesota, Max Oftedal, PE, Prin., Oftedal, Locke, Broadston & Assoc., Inc., Minneapolis, Minn.

• *Judges' comments:*
"This is a building that is largely underground. It is worked very nicely into an old part of the campus, a crowded area./ The architects recognized what we call the soil temperature. If you go down so far, the earth has a constant temperature. Utilizing that as a base, they organized the design concept to use that temperature for more efficient heating./ This is really tied into the urban environment — into

the many different walkways that cut across the campus./ If you look at it from the side, it's something like a terrace walking into the ground./ They used natural plants in a very imaginative way for external shading—the leaves providing added shade in summer, the bare branches letting in more light in winter."

• *For a free booklet with highlights of this year's winners, write A.W.W. Meeks, Owens-*
Circle 4 on information card

Coming Fiberglas Corp.,
Fiberglas Tower, Toledo,
Ohio 43659
© 1981 O.-C.F. Corp.





A luxurious hotel in Louisville.

ELEVATORS BY DOVER

The 393-room Hyatt Regency Louisville on River City Mall includes the Hyatt hallmark — a soaring atrium-lobby filled with greenery and excitement. The three glass-back, scenic Dover Elevators enable guests to enjoy a breathtaking view while moving smoothly through this 17-story space. Four other Dover Elevators carry passengers and freight between levels of this busy convention-center hotel. For more information on Dover Elevators, write Dover Corporation, Elevator Division, Dept. 673, P.O. Box 2177, Memphis, Tennessee 38101.

Hyatt Regency Louisville, Louisville, Kentucky

Owner: LHR Partnership

Architect: Welton Becket Associates

Contractor: J.A. Jones Construction Co.

Elevators sold and installed by
Dover Elevator Company, Louisville.

DOVER[®]

The elevator innovators.

Government

State, Local A/E Procurement: Some Gains and Some Setbacks

The American Bar Association is developing a model procurement ordinance for small communities. The ordinance, once in final form, is likely to increase local governments' use of the federal government's Brooks bill approach to A/E procurement.

The model ordinance is being developed upon request of the Environmental Protection Agency. A majority of EPA grantees for wastewater construction projects are small communities. EPA has found that these communities have no formal process for procuring services nor are they able to provide the administrative services required by the ABA model procurement code for state and local governments.

The first draft of the ABA ordinance will be published this month. Public hearings will be held, and the ordinance will be tested in pilot jurisdictions before the final document is prepared. The A/E procurement procedures will be based on those found in the state and local procurement code, i.e. the Brooks bill approach.

Localities are taking a variety of approaches to A/E procurement ordinances. Eau Claire, Wis., passed an ordinance based on the ABA state and local code but allows competitive bidding for A/E selection. Rome, Ga., adopted an ordi-

nance requiring price to be taken into account along with competence and technical merits. (Both these ordinances are based on the competitive bidding language found in the commentary section of the ABA code, not the code itself.) Tucson, Ariz., is considering competitive bidding for city contracts. Tucson currently has an ordinance based on the Brooks bill.

Florida's procurement law includes counties and cities. Pinellas County requires bid proposals as part of A/E selection. The Florida Association/AIA has filed a lawsuit alleging that this violates the state's consultants competitive negotiation act.

Also in Florida, Jacksonville (Duval County) is considering a proposal to amend the procurement act to require bid proposals prior to selection. The new system would call for architects and engineers to submit their bid proposals in a sealed envelope when they submit their qualifications. The envelope would be opened at the negotiation stage. However, the Florida Association argues that this would be a violation of the consultants competitive negotiation act.

In other state action, the Virginia legislature last year passed a "mini" Brooks bill calling for competitive negotiation. Last December an administrative procurement law study committee proposed legislation that calls for competitive bidding for all procurement services but allows competitive negotiation, although reasons must be put into writing why the latter process is chosen. Recently, Virginia house and senate subcommittees voted to postpone action on the bill for a year to study the proposal. The Virginia Society/AIA plans to lobby the legislature calling for separate provisions for A/Es based on competitive negotiation.

A/E selection legislation modeled after the Brooks bill and the ABA model procurement code was introduced in the New Jersey legislature. This bill contrasts with

the current New Jersey department of building and construction policy requiring price bidding for A/E contracts. A/E selection legislation will be considered in Georgia and Indiana.

New York and Utah are the most recent states to adopt A/E selection laws, bringing the total to 19. All but one are based on the Brooks bill approach as found in the ABA model procurement code for state and local governments; Maryland is the only state with an A/E procurement law calling for competitive bidding. The Maryland Society/AIA reports continued attempts to modify or repeal the law. (AIA strongly supports the Brooks bill approach.)

GSA's Dibner Sees Momentum For Moynihan Bill This Year

David R. Dibner, FAIA, has been in charge of coordinating design and construction for GSA for the past three years. He recently updated a previous interview (see April '79, p. 11), touching a variety of subjects, including prospects for passage of a public buildings act by the new Congress, use of limited competitions for A/E services and what he learned from the Chinese in a recent trip to the People's Republic.

Concerning failure of the so-called Moynihan bill to pass the 96th Congress (see page 17), Dibner says there is enough impetus to carry a new public buildings act to passage this year. "The logic is there: It is better for taxpayers to own buildings rather than keep paying rent. We are talking about projecting a \$1 billion rent bill annually within a few years. Imagine if that amount went to support our own buildings."

One aspect of the Senate's Moynihan bill that was favorably received by the House concerned time-financing. It allows GSA to act as a developer, borrowing money from the U.S. Treasury and paying it back with interest. GSA therefore would not need "all the money up front, but rather would work with other people's money, as developers do," explains Dibner.

Concerning the Moynihan bill provision that calls for competitions for new projects budgeted between \$2.5 million and \$25 million, both GSA and AIA are against it, he notes. "However, it is a

continued on page 16

Government

<i>Brooks bill approach spreads</i>	(above)
<i>Chances for Moynihan bill</i>	(right)
<i>What's before 97th Congress</i>	17
<i>Smithsonian to build underground</i>	20
<i>Revised energy projections</i>	20
<i>Report on downtowns</i>	20
<i>Massachusetts 'corruption'</i>	24
The Institute	
<i>A new visitation program</i>	28
<i>Honorary members</i>	28
<i>Scholarships listed</i>	32
<i>Justice facilities show</i>	34
<i>Osman continues as books editor;</i>	34
<i>promotions at headquarters</i>	
<i>The regions report their 'health'</i>	36

HELIOS 80

The Project

Design an outdoor theater using a tensioned membrane—for economy of space enclosure, festive color, long life and demountability (optional).

Specify site conditions: sloped or flat; wind loading for the selected location.

Create an original, unpublished design for an enclosure seating 1500 to 3000 persons and a stage of 1500 to 4000 square feet.

The HELIOS 80 jury, convened in November, has premiated these entrants.

HELIOS 80 is sponsored by Helios Tension Products Inc. in conjunction with its affiliate in Japan, Taiyo Kogyo Co. Ltd.



The Jury

Dr. Pietro Belluschi, FAIA, Portland, Oregon. Retired Dean of School of Architecture and Planning, MIT. Currently design consultant on projects throughout the world.

Eduardo Catalano, Cambridge, Massachusetts. Professor of Architecture, MIT. Associated with Dr. Belluschi in design of Julliard School of Music, Lincoln Center, New York.

Dr. Stefan Medwadowski, Consulting Structural Engineer, San Francisco, California. Private practice is devoted to design of structures as consultant to architects.

George Hoover, AIA, Denver, Colorado. Principal in the architecture firm, Hoover Berg Desmond. Designer of major projects in the Denver area.

Dr. Jack Rouse, Cincinnati, Ohio. Head of King Productions. In charge of all creative, theatrical, design and entertainment at Taft Broadcasting theme parks.

Professional Advisor: **Elisabeth Kendall Thompson, FAIA**, Berkeley, California.

Announces the Winners in the Architectural Design Competition



First \$15,000

Mustafa Kanishka, Salt Lake City. Mr. Kanishka is a native of Afghanistan with architecture degrees from Kabul University and the University of Utah. He is an employee of Brixen and Christopher, Salt Lake City architects.



Second \$10,000

Peter H. Frink, Robert J. Beuchat and Stephen R. Mallon of Frink and Beuchat, Philadelphia. Mr. Frink has an M.S. in Architecture, Columbia and an M.F.A. in Theater Engineering, Yale. Mr. Beuchat's M.S. in Architecture is from the University of Chile. Mr. Mallon received his Master of Architecture from the University of Pennsylvania.



Third \$7,500

Susan P. Gill, principal of Abri, Inc., Boston. Ms. Gill received her Master in Architecture from Harvard and is a former student of Buckminster Fuller and Frei Otto.

Circle 5 on information card

Honorable Mention Each \$2,500

Gerald I. Anderson
G.I. Anderson & Associates,
Architects
Knoxville, Tennessee

Eugene L. Hayes, Architect
Houston, Texas

Gary S. Kautzer
Christopher F. Kronser
Belgium, Wisconsin

Joseph P. Larrivee
Green, Nelson, Weaver & Winsor,
Architects, Inc.
Minneapolis, Minnesota

Joe Middleton
Townsend I. Schwab
Shreveport, Louisiana

Guntis Plesums, Architect
Eugene, Oregon

Lyrinda Snyderman
MBT Associates
San Francisco, California

Helios Tension Products Inc.
1602 Tacoma Way
Redwood City CA 94063
415/364-1770



HELIOS TENSION PRODUCTS, INC.
TAIYO KOGYO CO., LTD.
Soft Shell Structures Division



Water table.

Keep this in mind next time you spec a roof:
The water belongs up there. Not down here.

Reason enough to specify Johns-Manville.
Because protecting what's under it is what a
J-M roof does best.

Why? Experience is one reason. Over 100 years
of solving roofing problems. Quality is another.
You can count on it in every one of J-M's
complete line of roofing products. Then there's

expertise. J-M's technical resources are
unmatched in the industry. And don't overlook
the unequalled coverage written into J-M's
Blue Chip guarantee program.

All this adds up to real protection. And that's
what a J-M roof is all about.

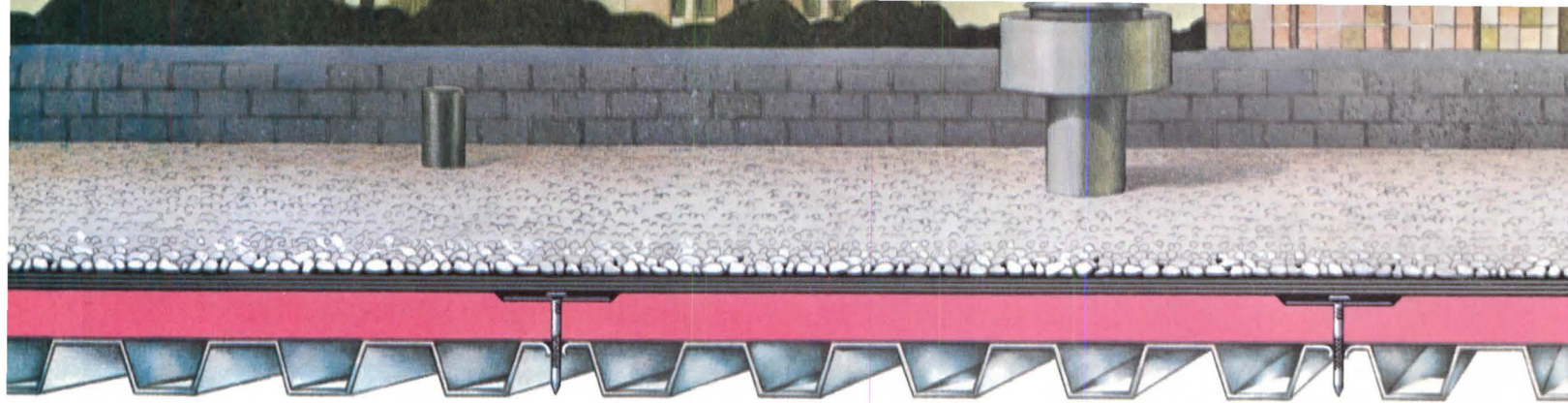
For details, consult Sweet's. Or contact Grant
Edmonds, Johns-Manville, Ken-Caryl Ranch,
Denver, Colorado 80217, 303/979-1000.

**Keeping the water out.
That's what this business is all about.**



Johns-Manville

Circle 6 on information card



WHAT THE BEST INSULATED ROOFS

THE PINK STUFF: Thermax.[®] It is simply the most efficient roof insulation on the market with a Factory Mutual Class I Fire Rating over steel decks. Thermax provides more insulating efficiency per inch than fibrous glass, composite, perlite or fiberboard roof insulations. Since mechanical fastening is the preferred system of attachment to steel decks, use Insulfast rapid fastening nail/disc system – a pneumatic gun and oxide-coated nails for fast, easy, permanent installation of Thermax to steel decks.

Government from page 11

small payment to make for the whole bill. We feel that our selection process has enough built-in competition—focused on past projects—and it is a waste of time and money to go into a [full-scale] competition.”

Because two government buildings, a Social Security Administration building in Jamaica, N.Y., and a Nuclear Regulatory Commission building in Silver Spring, Md., have recently been authorized by Congress with requirements for limited competitions, Dibner has been sounding out private developers with competitions experience, including Citicorp and Federated Department Stores. “I am asking about things like the scope of materials given to competitors and the importance of submittal anonymity. I want to structure our competitions so architects won’t lose their shirts. The limited competition is meant to prove who is the best person for the design job, not to get the design of a project done within the few weeks of the competition.”

Asked what GSA is doing in the current inflationary economy to get the most building for the taxpayer buck, Dibner mentions predesign programming, building evaluations and a new approach to budgeting. “A predesign program is now part of every new construction job we do,” he says. “We are hiring architects as programmers, but ideally, the programmers on a job should not be the designers. I’ve found that if an architect does

the design as he is programming, the program becomes shaped by the design. I want our firm requirements down first and then a design against those requirements. We have also stepped up our post-occupancy evaluation process to learn more about the buildings we’ve already done.”

Concerning budgeting, Dibner explains that until recently GSA used as a basis for a new building the historical average of cost per square foot. “But the nature of public buildings is changing. We don’t need the monumental type buildings of the past. So now we are putting on a private developer’s hat and tailoring our programs to the projected ‘rent’ that the government agency will pay GSA.

“But there are certain required things in our buildings that developers don’t have to provide—more sprinkler protection, more elevators, higher live loads, energy considerations. So we pump in a little more money up front, which in the building’s life cycle will cost less. We cost out what a developer would pay, add in the special initiatives and come up with our own dollar per square foot.” So far, this method has yielded costs below costs using previous methods, Dibner says, adding that he hopes to apply it to major alteration projects as well.

One recent change in the way GSA does business with A/Es is a response to the GSA scandals of recent years. Formerly, contractual aspects of procurement were done within the design and construction

divisions. Now, a separate contracts division does all that work. “As a result, there might appear to be more red tape for the architect, but in the long run, architects will be better off because they will be able to separate the contractual aspects from the technical,” Dibner says.

Dibner offers three suggestions for making presentations for selection by government agencies. First, he says, neatness counts. “We are in a graphic profession. The application is the basis for our selection and suggests how the architect cares about the buildings he designs. A small thing, but it really means something.”

The second area is responsiveness to the client’s needs. “We place carefully considered ads in the *Commerce Business Daily* [to procure A/E services]. The smart architect is the one who analyzes the ad and realizes the implications of every word. If you can’t respond to our ad intelligently, how will you respond to us as a client?”

Dibner also stresses the importance of a requirement to list 10 relevant projects on all federal agency submittals. If an architect doesn’t have 10 relevant projects, or nearly so, there are usually so many other people out there who do that it is not worthwhile spending the money on submittal, he says. “But don’t think that just because we ask for an office building that you have to submit 10 of those.” He suggests isolating the problems represented in the proposal and documenting solutions to similar problems with pre-



ARE WEARING THESE DAYS.

THE GREEN STUFF: Tempchek® It gives you the same high R-values as Thermax, and is used on all types of decks, except directly over steel decks. Tempchek is the only urethane foam roof insulation reinforced with glass fibers. It has greater dimensional stability than the others, so it resists "growth" and ridging. All of which makes Tempchek first choice for any application other than directly over steel. Talk to your Celotex representative about the stuff the best insulated roofs are wearing these days, or call Ed Levin at Celotex, Roofing Products Division: (813) 871-4545.

Celotex

a Jim Walter company

Circle 7 on information card

vious work. "The reviewers have to check against the items listed in the ad. If they can spot those easily, they will be very sympathetic."

Of his recent trip to China to help form a technology exchange program similar to the one with the Soviet Union, Dibner says that although the Chinese are 20 to 30 years behind the U.S. in many facets of construction technology, "we can relearn from them things we have forgotten in our technological acceleration. Things like use of natural insulation from building materials, building configuration to provide more natural light and techniques of historic preservation." One aspect of the exchange program will be to develop a glossary of Chinese-English terms so that architects and developers will have a sounder basis of understanding.

Finally, drawing from his three years' experience away from private practice, the former principal of the Grad Partnership, Newark, expressed a plea for AIA to direct more of its programs toward architects in government and industry. "By being more responsive to the needs of this segment of the profession, AIA would also better serve the majority of its members in private practice," he suggests. With incentive to join AIA, federal, state and municipal architects, who frequently function as client/architects, can provide private practice designers with both new professional contacts and understanding of the problems facing client/architects, Dibner says.

What Architects Have at Stake In Hands of 97th Congress

In its rush to adjournment, the 96th Congress dealt with several pieces of legislation of interest to the architectural profession but it left the two that were perhaps of greatest interest in limbo.

A House/Senate conference committee failed to reach an agreement on provisions of the Public Buildings Act of 1980 before the 96th Congress adjourned. Both the Senate bill and the House amendments to the Public Buildings Act of 1959 would have reduced the government's use of leased space for offices in favor of publicly owned buildings.

The Senate bill would have required GSA to establish one-year and five-year plans listing building projects in order of priority, which was approved by the House conferees. However, the House conferees did not agree to the requirement for an annual authorization bill for government properties. Because of this, the provisions on the use of design competitions, the quota limitations for leases and the accessibility standards for federal buildings were not resolved.

The Senate environment and public works committee is expected to send a similar bill to the full Senate this year, while at this writing there is no word from the House public works and transportation committee.

Although hearings were held by the

Senate, the Service Liability Partial Self-Insurance Act of 1980 was never voted on. The bill would have allowed architectural and engineering firms a limited tax deduction for funds set aside to satisfy professional liability claims and associated expenses. The legislation was reintroduced in the House shortly after the 97th Congress convened; introduction of an identical bill in the Senate is expected.

The Pacific Northwest Electric Power Planning and Conservation Act was passed during the lame-duck session. The act establishes a council (governing Washington, Oregon, Nevada, Montana, Utah, Wyoming and Idaho) that will issue energy conservation standards for both new and existing buildings. The council will be able to charge higher rates for electric power to owners of buildings that do not adopt conservation or renewable resource technologies or do not meet the standards.

The 96th Congress passed a three-year extension of the general revenue sharing program that will provide \$4.6 billion annually for local governments. A \$1 billion program of countercyclical aid for cities with high unemployment was rejected. The \$2.3 billion annual portion of revenue sharing for state governments will be omitted in fiscal year '81, and will be available in FY '82 and '83 only to states willing to give up categorical grant dollars.

The House and Senate failed to come to an agreement on a regulatory reform bill, which would have required agencies

continued on page 20

THE RIGHT GLASS CAN HIDE, HEAT, DRAMATIZE

The right glass.

More than ever, PPG glass is an indispensable tool for architects who wed energy efficiency to aesthetic power.

And one strength these three diverse buildings share—besides recognition of their design excellence by the AIA—is the choice of PPG glass to bring the architects' visions to life.

Look, for example, at the imaginative use of PPG's high-efficiency reflective Solarban® 550-8 (2) glass in the handsome, five-stepped international headquarters of Gelco Corporation outside Minneapolis.


Combined with an ingenious heat recovery system, the insulating power of Solarban glass helps minimize heat loss—and gain— even in the extremes of Minnesota's climate. It's also the right glass to help the building meld with and mirror the peaceful, wooded lakefront landscape.

In warmer Charlotte, North Carolina, "solar belts" using alternating panels of aluminum and PPG clear glass gird Equitable Life's clean-cut regional headquarters. "A slick, brilliant use of glass in a simple but innovatively planned building," said the AIA jury.


The panels combine with a low-velocity fan system to capture and channel hot or cool air to where it's needed most, summer or winter. So energy costs are held down dramatically.

And even in the forward-looking architectural environment of Columbus, Indiana, the high drama created by PPG's reflective Solarcoat Bronze glass helps set Bell of Indiana's switching station apart.

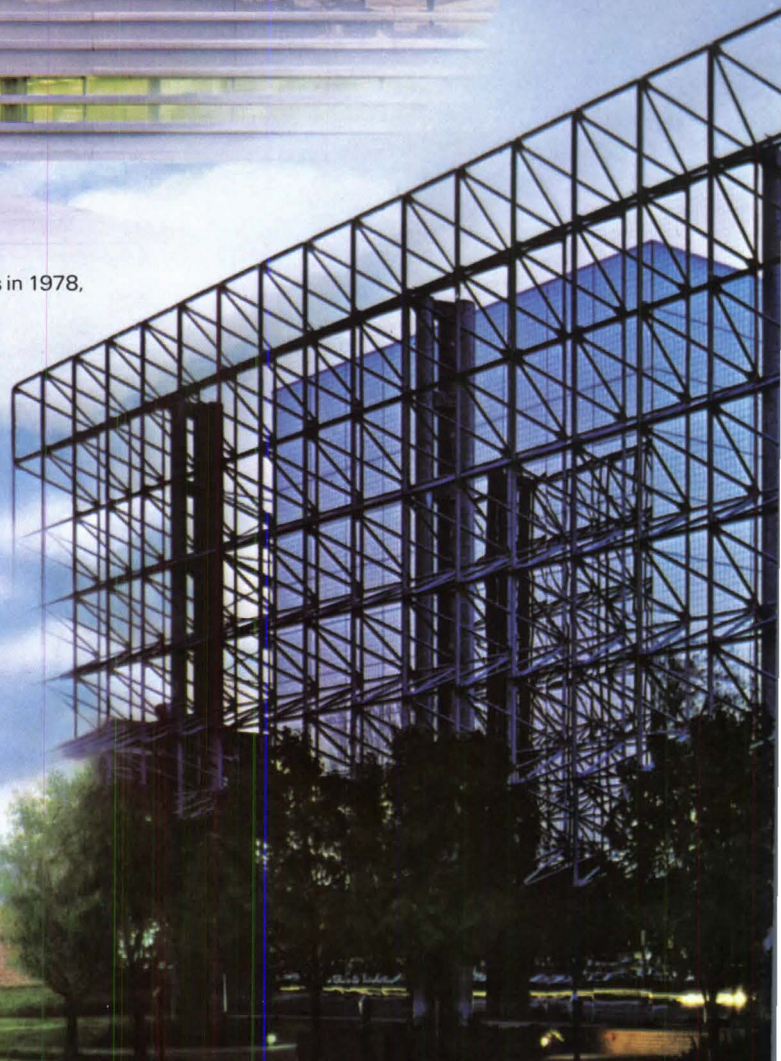
The original building is hidden behind a handsome structural silicone curtain wall system. And the new addition sparkles with a combination of opaque and transparent



Winner, 1980 national AIA Honor Award plus two regional AIA Merit Awards in 1978, Equitable Life's regional headquarters in Charlotte, North Carolina, was designed by Wolf Associates, Charlotte.



Winner, 1978 AIA Component Award, Minnesota Society of Architects, Gelco Corporation's headquarters in Eden Prairie was designed by Parker-Klein Associates, Minneapolis.



AND WIN.

olarcool glass that helps redistribute
at from the switching equipment
th maximum efficiency.

PPG makes just the right glass
bring out the best in your new
signs, too. All you need to prove
is a look at Sweet's 8.26/Pp.

Then write to PPG when it's
ne to choose your glass. We can't
omise you'll win awards. But we
n guarantee you a broad spectrum
intelligent, beautiful choices.

And that one of them will be
e right glass.

PPG Industries, Inc.,
The Gateway Center,
Pittsburgh, PA 15222.

PPG: a Concern
for the Future



Circle 8 on information card

Winner, AIA Honor Award in 1980,
Bell of Indiana's Columbus Switching Station
was designed by Caudill, Rowlett, Scott
of Houston, Texas.



Government from page 17

to conduct an analysis of any proposed major regulation. Also included were provisions streamlining rule making, requiring periodic review of the rules and regulatory programs and calling for a biennial regulatory agenda. Much of the failure to pass the bill was tied to provisions to make it easier to challenge federal regulations in court, to add extra layers of review to the rule making process and to allow a single house of Congress to reject a proposed rule. The issue of regulatory reform is already on the agenda for the 97th Congress, with passage of a bill expected.

Attempts to reduce the effectiveness of the 1977 Strip Mining Control Law failed. While action is again expected this year, it is likely to meet opposition in the House. Rep. Morris K. Udall (D.-Ariz.), chairman of the House interior committee, strongly opposes any attempts to weaken

federal guidelines regarding strip mining.

Congress passed and President Carter signed a bill to provide \$1.6 billion over a five-year period to clean up hazardous waste dump sites and hazardous substance spills. The law does not deal with oil spills. The fund will also be used to pay claims for injury or destruction to natural resources owned or operated by the federal or state governments. The act will be retroactive to Jan. 1, 1978.

The Energy Mobilization Board, which was designed to circumvent state, local and federal regulations inhibiting potential energy projects, was rejected by Congress. It is predicted that a similar bill would not be likely to pass the 97th Congress.

Efforts to create a national energy conservation and development program for cities were stopped when the House defeated the Community and State Energy Planning Assistance Act of 1980.

Congress passed and President Carter

signed a bill allowing state and local governments to issue tax-exempt revenue bonds to provide reduced interest rate funds for residential mortgage loans.

The Fair Housing Act of 1980 was withdrawn from the Senate, although it was passed by the House. The bill would have allowed HUD to file complaints of housing discrimination before administrative law judges appointed by the Justice Department. HUD can now only mediate disputes.

The Surface Transportation Act of 1980, which would have provided \$29.3 billion over five years for mass transit and highways, was killed by a Senate filibuster.

President Carter approved the 1981 appropriations for HUD. The legislation provides \$1.4 billion in contract authority and \$30.9 billion in budget authority for assisted housing, \$3.77 billion for community development block grants and \$675 million for urban development action grants. Also provided is \$70 million for mortgages for single family houses.

DOE and Oil Company Now See Slower Growth in Energy Use

Government and industry energy analysts predict that future U.S. energy consumption will be less than originally forecast due to an increase in energy conservation.

The Department of Energy recently reduced its estimates of the growth in energy demand through 1990 to 1 percent, down from 2.5 percent estimated two years ago. This compares to a 4.3 percent per year growth in energy consumption during the decade before 1973. Exxon Corporation has also predicted a future decline in energy consumption: its estimate for the year 2000 is now five million barrels a day below the prediction last year of 51 million barrels of oil daily.

A 10 percent improvement in energy efficiency last year, DOE says, results from higher prices and lower economic growth due to the recession. Energy savings have also been realized through a reduction in gasoline consumption by automobiles (a 7.7 percent decrease over the first three quarters of 1980). In residential buildings the use of oil for heating has declined by 20 percent from 1972 to 1978; the use of natural gas fell by 18 percent.

Health Reading for Downtowns

Downtown development and revitalization grew in the U.S. last year, as did the use of design standards and design review boards, reports the Downtown Research and Development Center.

Tools for fighting suburban commercial sprawl were "sharpened," says the center, citing tougher zoning concepts, environmental impact assessments and

continued on page 24



Allen Freeman

The National Capital Planning Commission has approved the Smithsonian Institution's plan to build a \$50 million underground museum complex on the Mall in Washington, D.C. The complex will house the Museum of African Art, which is currently located in the Frederick Douglass house and surrounding town houses on Capitol Hill, and an extension of the Smithsonian's Freer Gallery of Art.

The new building will be located on four-acres (above) bordered by Independence Avenue, Renwick's Smithsonian "Castle" building, the Arts and Industries Museum and the Freer Gallery. Preliminary design of the complex by the Boston firm Shepley Bulfinch Richardson & Abbot calls for more than 95 percent of the 460,000-square-foot building to be below ground with two small above-ground pavilions to serve as entrances.

Disagreement still remains over whether the complex should temporarily or permanently house the Museum of African Art. The planning commission, the Joint Committee on Landmarks and the Committee of 100 on the Federal City argue against housing the African Museum underground because, they say, it would not give the museum sufficient prominence. They suggest a location downtown near the National Portrait Gallery and the National Museum of American Art.

However, Warren Robbins, the museum's director, and Smithsonian officials oppose a downtown site because the Mall attracts more visitors and because, they say, the museum "symbolically" belongs there.

The final design must be approved by the planning commission and the Fine Arts Commission. The Smithsonian has pledged \$5 million from foreign nations for the cost of the building and will seek \$25 million from Congress this spring. The remaining \$20 million will be raised from private sources.

ROMANY[®] VINTAGE

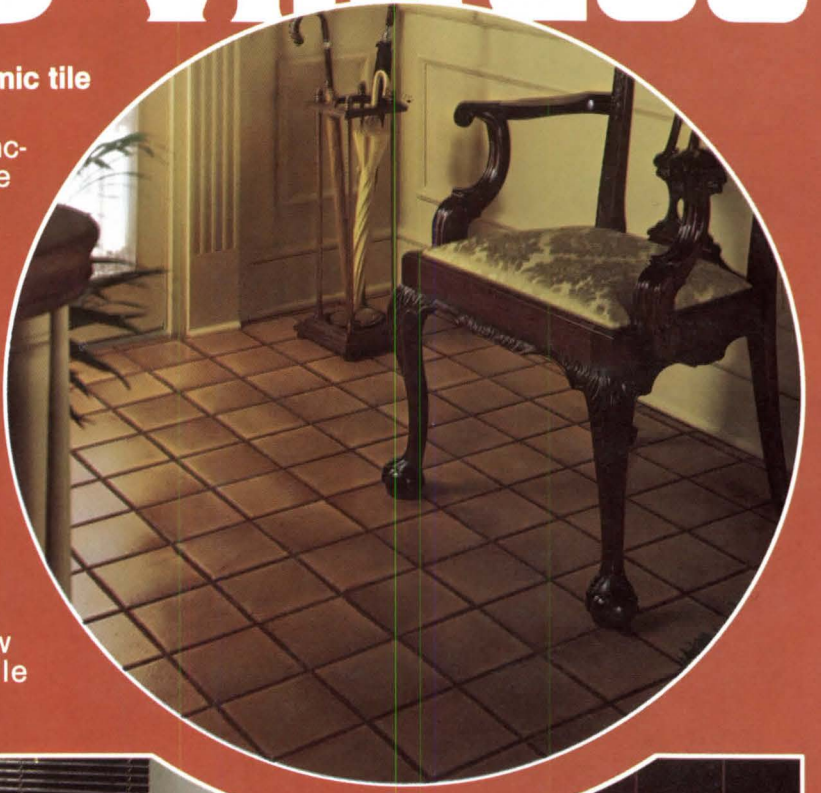
Introducing a new, finely-textured, glazed ceramic tile superbly styled in warm, earthtone colors.

The newest addition to our collection of distinctive ceramic tile designs, Romany Vintage tile provides a soft earthen elegance. For that rich, warm, closer-to-nature look, Romany Vintage colors include walnut, cork, white, butternut and almond.

Ideal for interior residential floors, walls, countertops and back splashes. It can be used in kitchens, baths, entryways, dens and study rooms.

Available in 6" x 6" and 3-5/8" x 7-5/8" sizes, this 3/8" thick glazed tile has a dense body with less than 3% absorption. Romany Vintage may also be installed on exterior wall surfaces.

For details contact your nearest Romany-Spartan stocking distributor in the Yellow Pages. Or write United States Ceramic Tile Company.



United States
Ceramic Tile
Company

Subsidiary of
Spartan[®]
Inc.

1375 Ruff Road, S.W.
Canton, Ohio 44711

Circle 9 on information card

How do you design the

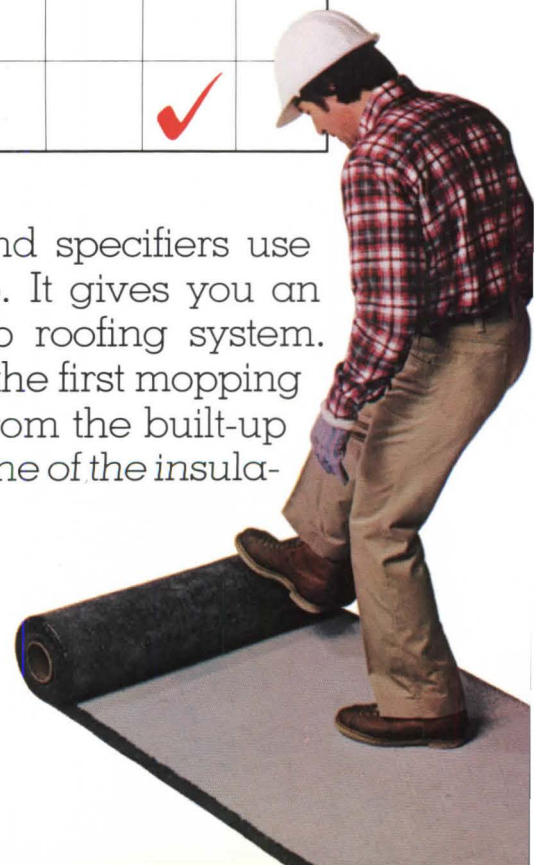
You start with Owens-Corning

Start with Owens-Corning Fiberglas* Roof Insulation. It's the best base for your built-up roof. Check it against all the other bases on the market. Feature by feature, Fiberglas Roof Insulation wins going away. The comparison chart below should be proof enough.



WHY OWENS-CORNING FIBERGLAS ROOF INSULATION IS THE BEST BASE FOR BUILT-UP ROOFING									
Base for BUR	Conforms to minor deck irregularities	Resilience	Ventable	Large sizes up to 4' x 8'	Easy to fabricate (in field)	Not damaged if wet (short term)	Excellent for covering old roofs	Stable "K" factor	Dimensional stability
Owens-Corning Fiberglas Roof Insulation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Owens-Corning Fiberglas Furi®	✓	✓	✓		✓	✓			✓
Perlite								✓	✓
Urethane				✓	✓	✓			
Composites									
Wood Fiber								✓	

Many Owens-Corning customers and specifiers use Fiberglas Roof Tape as the next step. It gives you an even stronger base for your built-up roofing system. Fiberglas Roof Tape is applied before the first mopping of bitumen. It prevents bitumen loss from the built-up roofing and helps control the sheer plane of the insulation base.



Best roofing system? End with Owens-Corning.



Now is the time for Owens-Corning Fiberglas PermaPly-R* membrane. Simply the best built-up roofing felt you can buy. The strong inorganic membrane is the result of Owens-Corning's unique patented continuous glass strand process. The felt lays flat and stays flat. Perma Ply-R felt helps reduce fishmouthing, wrinkling and buckling. It's so dependable that we confidently used it to lift this \$32,000 car.



The next step is Perma Flash*, the new Fiberglas reinforced base flashing system from Owens-Corning. Then surface the entire system with Perma-Cap* mineral surfaced sheet. They are easy to install, and easier to maintain. Both Perma Flash* and Perma-Cap* give outstanding protection to underlying layers of bitumen and felt.

You start with Owens-Corning, you end with Owens-Corning. But that's not where Owens-Corning ends. We are ready with the products and experience to help you design the best roofing system. Contact us today. Or write to A.Q.V. Meeks, Owens-Corning Fiberglas Corp. Fiberglas Tower, Toledo, Ohio 43659.



*T.M. Reg. O.-C.F. Corp. ©O. C.F. Corp. 1979

OWENS-CORNING
FIBERGLAS
TRADEMARK ®

Circle 10 on information card

MARBLSTAL®



WE CAN AFFORD TO BE SPECIFIC ABOUT MARBLSTAL.

Because all it takes is a list of advantages to show you what a natural choice Marblstal is for dressing room and toilet partitions, even shower stalls.

Marblstal is prefabricated. It's available in standard sizes (complete with hardware), from stock. Or we can custom fabricate to your exact specifications.

Marblstal is economical. It resists scratching and the absorption of moisture, odors and contaminants. And that means a long, long life cycle and exceptionally low maintenance and cleaning costs.

Marblstal is versatile. You can find it in many new and remodeled industrial, commercial, recreational, educational and medical buildings.

Marblstal is truly beautiful. After all, it is magnificent Georgia crystalline marble and available in several unique varieties. Add to that your choice of the standard birch veneer door or attractive alternatives in metal or plastic and you can see why Marblstal is so compatible with so many design and color schemes.

Think about it. In terms of cost efficiency, durability and just plain good looks, can you really afford not to find out more about Marblstal? All it takes is a call. Our number is (404) 735-2591.

What could be more natural than Georgia Marble?®

 **georgia marble** company
Structural Division, Nelson, Georgia 30151

a Jim Walter company

Government from page 20

strategies based on optimizing a city's physical condition and market share. And a number of financing and organizational techniques were used: tax increment financing, business improvement districts, zoning incentives, tax abatements and transfer of development rights.

The center also reports as trends:

- the use of "economic realism and market feasibility" as basic criteria for project selection and design, including cost/benefit and economic impact analysis.
- more urban amenities such as malls, plazas, walkways, skywalks.
- crime still a major concern.
- increased revitalization of downtown neighborhoods.

The Report on Massachusetts: Two Decades of Corruption

During the last two decades corruption in awarding design and construction contracts for state and county buildings in Massachusetts was so prevalent that it "became a way of life," a special investigative commission has concluded. So convincing and far-reaching were the commission's allegations that the state legislature last year created, for the first time, a construction management system, even before the final report was issued.

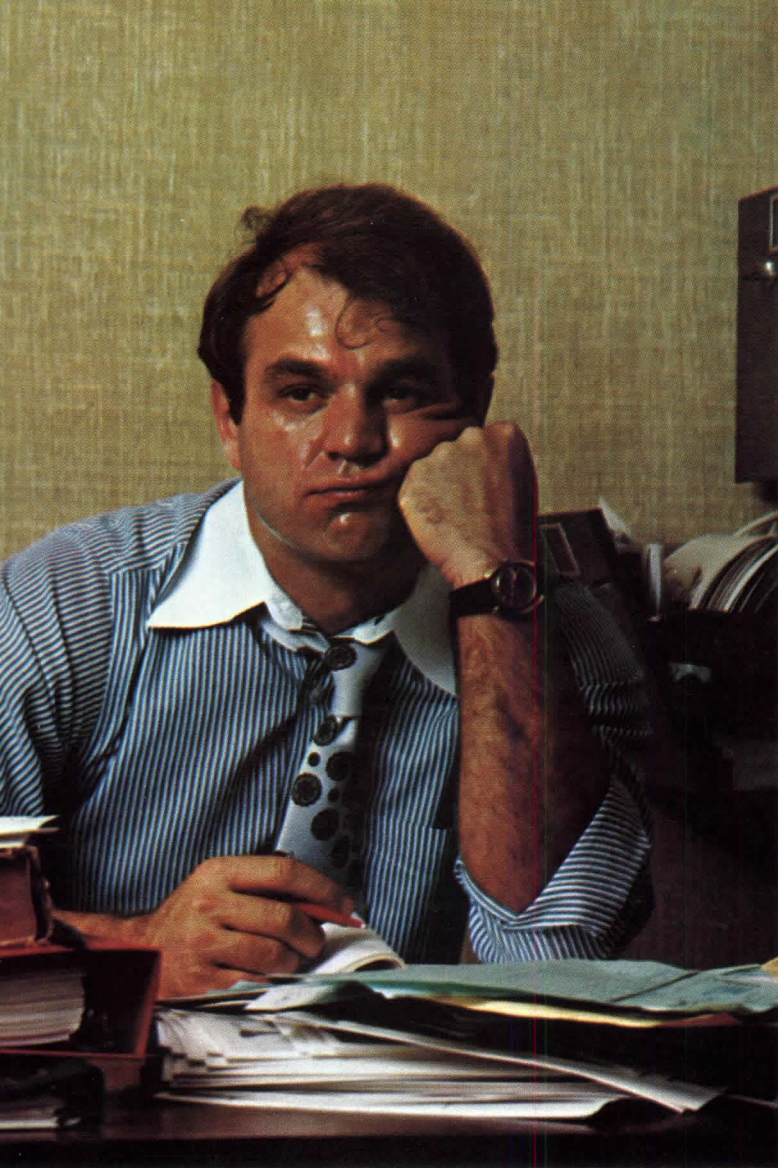
The commission report covers the administrations of former Governors Francis W. Sargent, John A. Volpe and Endicott Peabody and implicates the governors themselves, lieutenant governors, other top state officials, state legislators, construction contractors, architects and engineers. No evidence of corruption was found in the administrations of former Gov. Michael S. Dukakis or the present governor, Edward J. King.

In their final report, the special commission on state and county buildings maintains that political influence, not professional performance, was the prime criterion in doing business with the state. And this led, says the commission, to "shoddy work and debased standards."

Since 1968, the state has appropriated \$17.1 billion for construction projects. Of this, the commission says, \$7.73 billion has been spent on projects with severe defects: failing structural systems; mechanical, electrical and plumbing systems that do not work; water intrusion that causes severe secondary damage, and areas of facilities that are unusable because of inadequate architectural, structural, mechanical, electrical and hydraulic designs. The commission estimates that it will cost \$848 million to repair all buildings it identified, studied or surveyed.

In addition, the commission reports that the state wasted \$1.08 billion on un-

continued on page 27



"Lighting costs were keeping my profits down..."

Saving money on lighting costs is what Watt-Miser II fluorescents from GE are all about. They use less electricity than standard fluorescents; yet give you about the same amount of light. So wattage reduction is immediate... and so is savings.

Watt-Miser II F40 can save you up to 14% on the electricity each lamp consumes when they replace your standard four-foot F40 fluorescent tubes in a typical two-lamp open strip Rapid Start fixture (about 11% in a typical four-lamp recessed Rapid Start fixture).

Watt-Miser II Slimline, rated at 100 lumens-per-watt, can save you up to 20% of the fixture wattage.

High-Output Watt-Miser II lamps use almost 14% less wattage than conventional eight-foot mA Output lamps.

Watt-Miser II Power Groove[®] is an exclusive GE energy-saving lamp that can reduce your fixture wattage by more than 18%, compared with a standard T12 1500mA lamp, in a two-lamp fixture.

For the ultimate combination in efficiency and savings, there's the new Maxi-Miser[™] System from GE.

"Until I put energy-saving Watt-Miser[™] II fluorescents up..."

Two Watt Miser II F40 lamps and the new Maxi-Miser II ballast in a Rapid Start two-lamp fluorescent fixture will average up to 24% more light per watt than standard F40 systems - and use as much as 19% less wattage.

Ask your GE representative to show you how much **you** can save with Watt-Miser II fluorescents. Or contact General Electric Company, Dept. C-921, Nela Park, Cleveland, Ohio 44112. Phone: (800) 321-7170 (In Ohio (800) 362-2750).

Circle 12 on information card

We bring good things to life.

GENERAL  **ELECTRIC**

... For High-Rise Buildings Using Gail Brickplate Panels in Steel Stud Framing!

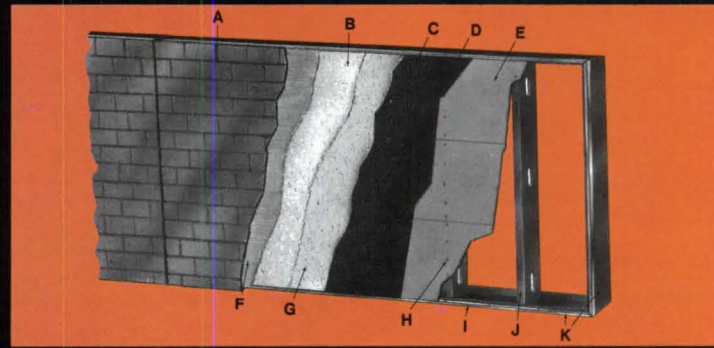
This new prefab system offers "Mercedes-Benz quality at VW prices." Basic elements are shown in the cutaway drawing. Significant advantages are obvious: • Tons of expensive design deadload and structural mass are eliminated since panels weigh 80% less than precast concrete • Significantly less expensive than glass or aluminum curtainwalls • Eliminates costly scaffolding • Provides a chase for pipes and wiring in exterior walls for faster, more economical installation • Virtually maintenance-free—no painting, sandblasting, acid-cleaning • Work proceeds regardless of bad weather

since panels are assembled in an enclosed structure • Excellent insulation values, energy efficient. For the ultimate in architecturally beautiful exterior walls . . . on a tight budget . . . the prefab Gail Brickplate system warrants your interest. Write or call for our new Technical Brochure "Prefab Brickplate Panels."

Gail

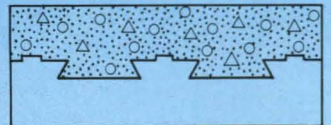
ARCHITECTURAL CERAMICS
1481 North Main Street / Orange, CA 92667 / (714) 997-9383
Sales offices / warehouses in Redwood City, CA; Norcross, GA; Cedar Grove, NJ; Houston, TX. Distributors nationwide.

A. Gail Brickplate Tile (Keyback Design) **B.** 3/8" leveling coat of cement plaster with latex and chopped fiberglass strands **C.** 3.4 lb. self-furred Diamond Mesh Metal Lath (galvanized or painted where rust-resistance is required); secured to studs with self-tapping screws (washers optional) **D.** 15 pound tarred felt stapled to gypsum board **E.** Tongue and groove asphalt impregnated 1/2" thick gypsum plaster board (Installed horizontally, tongue up) **F.** 1/4" latex modified portland cement; scored, toothed, troweled **G.** 3/8" scratch cement plaster **H.** Gypsum board screwed to steel channels **I.** 1 1/4 inch plaster stop, tack screwed to frame 12" on center **J.** 16 gauge steel channels, 16" to 24" on center **K.** 18 gauge welded 2" x 6" steel channel frame



Circle 13 on information card

CERAMIC TILE EXTERIOR - PRE-FAB ECONOMY



Frostproof Gail Brickplate is permanently locked into panels with keyback ridge design

The spectacular new Lincoln Court Building, Denver, Colorado. Architect: McOG Associates (Denver); General Contractor: Turner Construction; Tile Contractor: Ace Tile & Terrazzo (Denver).

Government from page 24

necessary delays in design and construction since 1968 and that \$48.7 million has been wasted on projects that were planned and designed but never built.

The bribery, extortion, tax evasion, illegal campaign contributions and the laundering of money to disguise its origins were due in part to the fact that the state had no consistent construction management system nor an appropriate A/E procurement system, says the commission.

"The process of designer selection made architects and engineers the target of opportunity for elected officials in need of substantial campaign funds," says the report. "This is not to suggest that every designer of a public building won the contract because of political contributions rather than merit."

Before the new A/E selection system went into effect in July 1980, A/Es were ranked by a designer selection board and chosen by the commissioner of administration of the executive office for administration and finance. Yet, the designers were not given specific requirements of the project, nor were they asked to submit their qualifications. As a result, says the commission, "selection . . . was extremely subjective. . . . Designers were sometimes selected who were not well qualified for the particular job for which they were chosen, or, for that matter, for any state project."

And, says the commission, this system allowed the commissioner to easily select the architect or engineer he preferred for the job, regardless of qualifications or lack of them. "If political contributions or bribery or 'simple favoritism' are the determining factor of a firm's success in obtaining state contracts, then members of that firm and all other firms know that they need not perform well on currently held contracts."

Last year, while the commission was finishing its final report, the state legislature adopted three of the commission's four reform recommendations. They are the creation of the construction management system for the state; the closing of lapses and omissions in state laws that have not prohibited commercial bribery and extortion between private companies, and the creation of the position of a state inspector general to prevent and prosecute public corruption. The recommendation calling for tough limits on private campaign contributions and state financing of state campaigns was rejected by the legislature.

The new system for A/E selection is based on the federal government's Brooks bill approach. First of all, requests for applications for the design of state projects must be advertised. The choice of the designer will be made on the basis of information about the proposed project, the

type of services and special characteristics required of the firm, the quality of experience of the firm and the quality of any design proposal that applicants are required to submit.

The names of the three most qualified firms will be submitted by the board to the deputy commissioner of capital planning and operations. The firm ranked first is to be selected subject only to successful negotiation of a reasonable fee.

This process will apply to all county and state agency building projects with an estimated construction cost of \$10,000 or more. Public agencies that serve more than one municipality are required to comply with these procedures, although local governments are not.

The designer selection board will con-

sist of 11 members: four registered architects, four registered engineers, one general contractor and two public members. The executive secretary of the board must be a registered architect or engineer.

Although the commission's mandate extended only to building contracts, John W. Ward, former president of Amherst College and chairman of the commission, said, "Our experience would lead me to believe that a careful investigation into other areas would find the same pattern." Other commission members were Peter Forbes, AIA, engineer Walter J. McCarthy, attorneys Lewis H. Weinstein and Daniel O. Mahoney, public management Prof. Frances Burke and Massachusetts Attorney General Francis Bellotti.

News continued on page 28

FIREFREE
Cedar shakes and shingles.
Before we make them fire resistant,
we make sure they're the best.

FIREFREE uses only Blue Label #1 grade Western Red Cedar shakes and shingles, painstakingly selected by the people at Cedarwood Forest Products, manufacturers of FIREFREE products.

With 45 years of combined experience in the cedar industry of the Pacific Northwest, our buyers know there's a wide variation even in the best grade. And they know you have to start with the very best shakes and shingles to offer the best product.

We do.

After they're selected, FIREFREE shakes and shingles are pressure-treated with the patented Irotherm® chemical treatment to make them fire resistant.

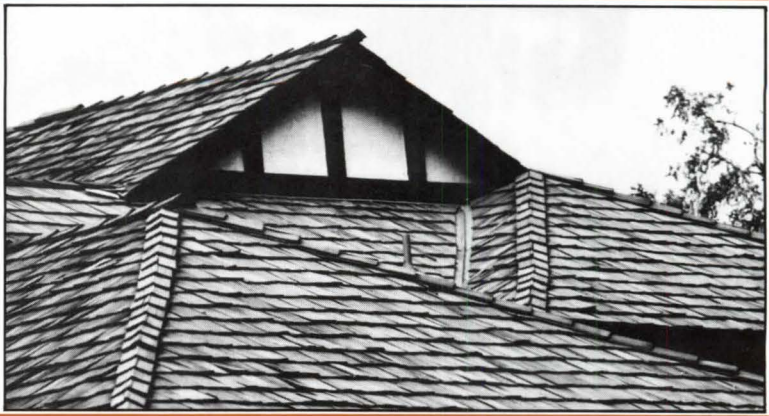
FIREFREE meets Class C or B standards for roof covering, depending on application, and meets the requirements established by all major building codes:

- I.C.B.O. Research Report No. 3591
- S.B.C.C.I. File No. 7953-79

And, FIREFREE shakes and shingles have passed the rigorous ASTM E-108 fire tests for roof coverings. Every shipment is certified fire resistant.

For more information, or the name of your nearest distributor, call us toll free at 800-547-8920.

FIREFREE
Pressure-treated Shakes and Shingles
 Cedarwood Forest Products, Inc. • P.O. Box 10208 • Eugene, OR 97440
 Irotherm® is a product of Iroquois Chemicals Ltd., Ontario, Canada



New Type of Visitation Project Will Open Convention Activities

The first project of a new AIA program designed to promote understanding of quality urban environments has been planned as part of the national AIA convention in Minneapolis this May. The program, called QUEST (Quality Urban Environment Study Team), will produce "R/UDATs in reverse." Regional/Urban Design Assistance Teams are crash programs to help communities that need design assistance on critical urban problems. QUEST visitation teams will be asking

communities for help in understanding local elements of success and how the parts coalesce.

This is how QUEST is designed to work. A team of experts will conduct a three-to-four-day workshop in a selected and cooperating city. AIA members will assist. Teams will be tailored to the characteristics of the particular city, with a typical team including a developer, an elected official, an economist and an urban designer.

The experts will examine devices in the community being used to attract and produce high quality new development and to preserve or restore existing areas. These might include the federal Urban Development Action Grant (UDAG)

program, development bonus incentives, mixed use zoning, urban design controls and tax increment financing. The team will inspect successful areas or projects and discuss the successes with local leaders and citizen groups. With the help of the backup AIA members, the team will present its findings and a summary document to the community at the end of the visit.

"We hope to do a series of case studies on these projects, two or three a year, so we can build a body of knowledge that begins to help AIA members and then spins off into helping communities themselves," according to Ben Cunningham, AIA, national QUEST program director and a partner in the Minneapolis firm of Hodne/Stageberg.

The first project will examine the successes of the Twin Cities. Sessions will take place during the week preceding the opening of the AIA convention, and the team will present its findings on Sunday, May 17, the first day of the convention, at the Walker Art Institute in Minneapolis.

Cunningham says the team will spend one full day on each of the Twin Cities, listening to local leaders in the mornings tell why they think things are working well and looking in the afternoons at particular projects or areas where these policies or factors have come together to produce visible results. On the third day, the team will analyze what they have seen and heard and try to find connections.

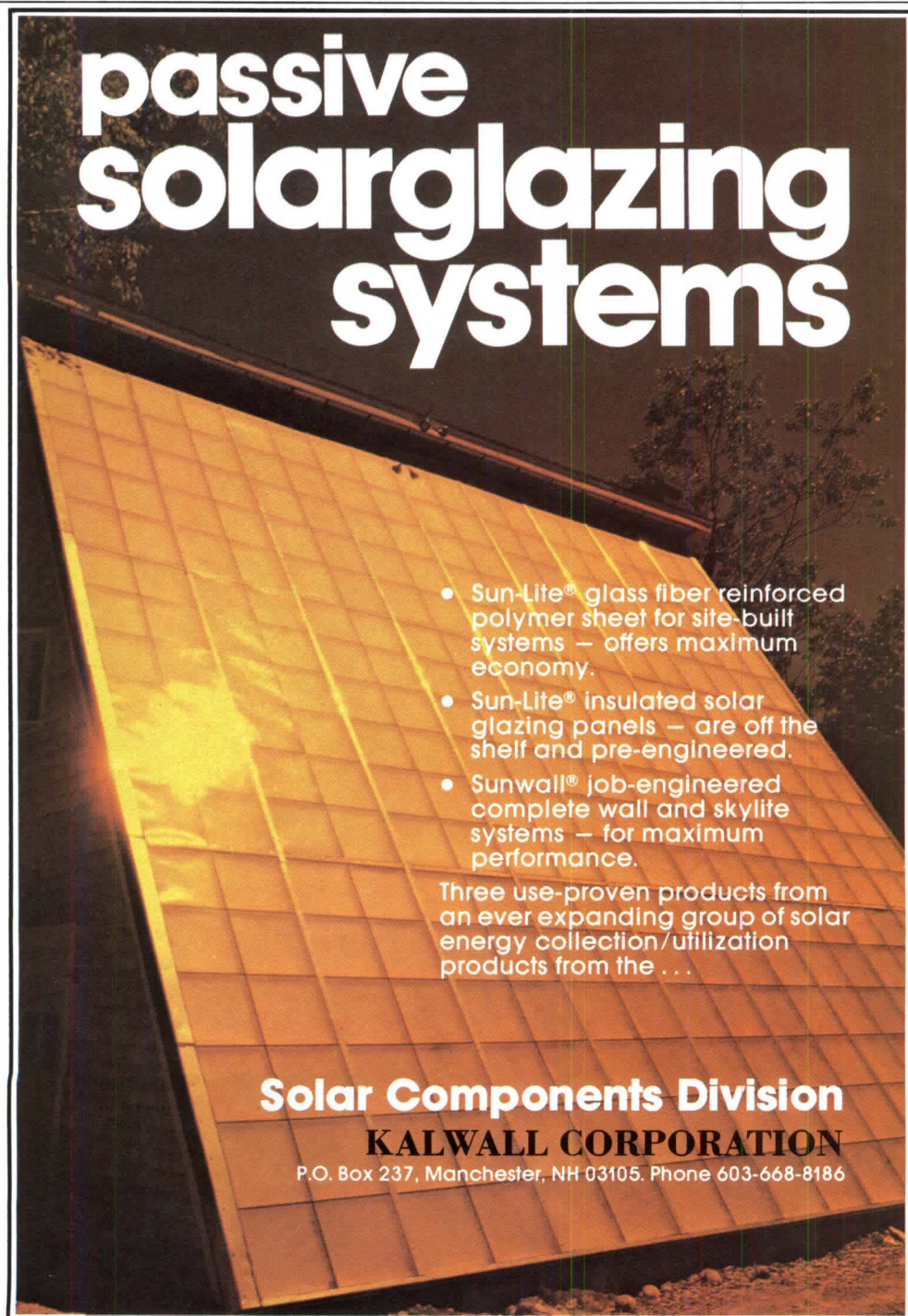
"This will be the important aspect," says Cunningham, "finding the links that make things work together. People may understand the local political structure or how UDAG works or how design controls work, but these are always looked at in an isolated way. We suspect that in most cases it is not just a single program making things happen. You also have the right government structure at the time, an aggressive city development coordinator, some private sector people taking strong leads."

Honorary Members Named

Nine men and women have been selected to receive honorary membership in the AIA during the Institute's annual convention in May. The individuals, chosen by the AIA jury on honorary members for their "distinguished contributions to the architectural profession or its allied arts and sciences," are:

- David Brinkley, television commentator.
- Gordon A. Fleury, attorney, who for the past 20 years has represented the interests of the profession and the California Council/AIA, before the state legislature.
- Doris Chanin Freedman, president of New York City's Municipal Art Society and chairman of its public arts council,

continued on page 32



passive solar glazing systems

- Sun-Lite® glass fiber reinforced polymer sheet for site-built systems — offers maximum economy.
- Sun-Lite® insulated solar glazing panels — are off the shelf and pre-engineered.
- Sunwall® job-engineered complete wall and skylite systems — for maximum performance.

Three use-proven products from an ever expanding group of solar energy collection/utilization products from the . . .

Solar Components Division
KALWALL CORPORATION
P.O. Box 237, Manchester, NH 03105. Phone 603-668-8186

Columbia supertube!

Fluorescent lighting that goes up, ...
over... down... or around corners...
wherever you want it!



Columbia Operation
GTE Products Corporation
T.A. Box 2787
Spokane, WA 99220

Columbia Lighting's versatile aluminum supertube brings flexibility and sparkling colors to architectural lighting. They may be suspended from ceilings or bracket mounted on walls in standard or custom sizes to fit your job. Lamp openings are symmetrically centered and each fixture retains its own "turnability" ... you can aim it. For more information contact your Columbia agent or write us; we have answers to lighting questions you've yet to ask.

Circle 16 on information card

GTE

**Specification
Lighting**

Bilco builds them best...

It takes confidence to say Bilco products are best. Best in design. Best in workmanship. Best in reliability. And you'll find that confidence reflected in the wording of our catalog specifications for every Bilco product.

Proper operation is the most important requirement of a horizontal door. When you specify Bilco, you call for roof scuttles, automatic fire vents, ceiling access doors, sidewalk, floor and pit doors, equipment hatches and basement doors that are *guaranteed* to operate properly. You are also specifying performance proven products that offer long, trouble-free service and complete satisfaction for your clients.

For information, details and specifications, see our catalog in Sweet's Architectural, Industrial Construction and Engineering Files or write for a copy.



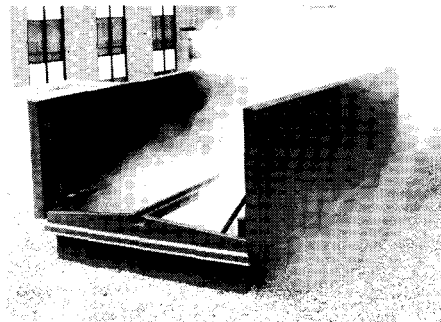
The Bilco Company, Dept. AJ-21
New Haven, Connecticut 06505

from top



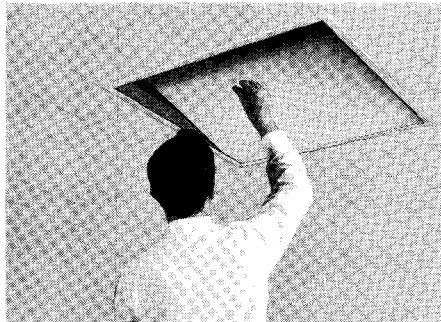
Roof Scuttle

Standard sizes in steel or aluminum for safe, convenient ladder access to the roof. Features floating cover action, automatic lock-open with operating handle for one-hand closing. Weathertight. Also standard sizes for ship stairs or normal stairs, as well as special sizes to order.



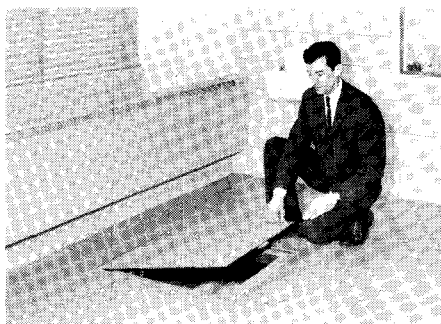
Automatic Fire Vent

Designed and built for complete reliability and long service. Insulated and gasketed for weathertightness. Exclusive Bilco Thermolatch™ mechanism is activated by fusible link or, when specified, by electrical signal from smoke detector or other emergency device. Sixteen standard sizes and types with UL and FM labels. Special sizes available.



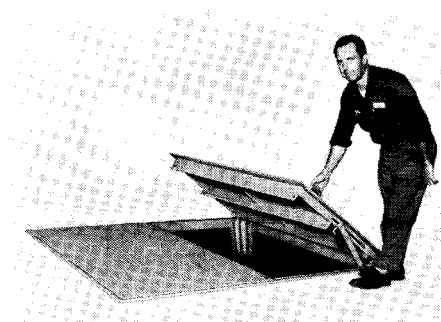
Ceiling Access Door

Two sizes in choice of all steel or steel frame with aluminum door. Typical sturdy Bilco construction. Available in either upward-opening or downward-opening types. Spring lifting levers assist in opening and closing. When specified, provision can be made for application of acoustical tile by others.



Floor Door

Single and double leaf designs for every interior floor access requirement. Built-in torsion rods for easy operation of the steel or aluminum plate doors. Models with diamond pattern surface or to receive carpet or composition floor covering. Available in eight standard sizes and in special sizes.



Vault, Pit or Sidewalk Door

Watertight doors in single or double leaf design, rugged steel or aluminum plate construction. Eight standard sizes or special sizes to order. Tubular compression spring operators afford smooth, easy operation.

to bottom.

hospitals



Aiken Community Hospital Aiken, SC - Architect — Gresham & Smith

When the diagnosis demands a high performance window... the prescription is DISCO.

High performance window systems like DISCO's T-2001 save millions of dollars in heating and cooling costs over the life of the average hospital.

The T-2001 has independently certified U values as low as .42. Its compression seal and positive cam-locking system virtually eliminate air and water infiltration. The operable design of the T-2001 also contributes to substantial savings in maintenance and cleaning costs.

Patients require and expect a peaceful environment. DISCO meets these expectations with STC ratings as high as 45 and shading coefficients as low as .10.

It's no wonder that DISCO windows have been used in hundreds of hospitals. For additional information contact Miles Smith, DISCO Aluminum Products Company, Inc., P.O. Box 1019, Selma, Alabama 36701, telephone 205 875-9283, telecopier 205 875-3577, TWX 810 744-3341.



ALUMINUM PRODUCTS
COMPANY, INC.

Circle 18 on information card

Recent hospital projects:

Alfred I. DuPont Children's
Hospital, Wilmington,
Delaware, Architect —
Saxelbye, Powell, Roberts
& Ponder

Deaconess Hospital
Spokane, Washington
Architect — Brooks,
Hensley & Creager

Oral Roberts University
City of Faith, Tulsa,
Oklahoma, Architect —
Frank W. Wallace

St. Vincent's Hospital
Birmingham, Alabama
Architect — Hansen Lind
Meyer, P.C.

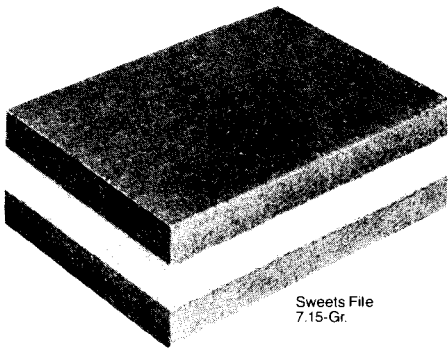
St. Vincent's Hospital
Indianapolis, Indiana
Architect — Klein
Partnership

Veteran's Administration
Hospital, Atlanta, Georgia
Architect — Abreu &
Robeson

 8.15/Di

No other window does a better job of reducing energy waste and life cycle cost.

Write today for free sample of one of world's best roof insulations:



Sweets File
7.15-Gr.

Permalite® Pk Plus perlite/urethane/perlite 3-part composite roof insulation

Specify it when you want long-life insulation having a "C" value of .10 or better for industrial/commercial roofs.

• Permalite Pk Plus is a true sandwich board. The top and bottom perlite layers maintain the efficiency of the polyurethane core by protecting it from the effects of high rooftop temperature changes. The top perlite layer also protects the core from hot asphalt during membrane application. And both perlite layers contribute to the dimensional stability of the insulation panel and help dissipate both heat and moisture during application. SEND FOR FREE SAMPLE.

Permalite®

GREFCO, Inc./Building Products Division
GENERAL OFFICE: 3450 Wilshire Blvd.,
Los Angeles, CA 90010
SALES OFFICE: 2905 Butterfield Road,
Oak Brook, IL 60521 (312) 654-4500



A subsidiary of General Refractories Company

The Institute from page 28

and a former director of the city's department of cultural affairs.

- Arthur A. Hart, architectural historian, preservationist and director of the Idaho Historical Society.
- Mabel Krank, the executive secretary of the Oklahoma Chapter/AIA and Oklahoma City Section.
- Albert Rhoades ("Mike") Marschall, commissioner of GSA's public buildings service, and former commander of the U.S. Naval Facilities Engineering Command.
- Terry B. Morton, vice president of the National Trust for Historic Preservation and editor/publisher of the *Preservation Press*.
- Mary E. Osman, senior editor of the AIA JOURNAL.
- Martin Schaum, legislative counsel to the New York State Association/AIA for the past 10 years.

Institute Lists Student Aid For 1981-82 Academic Year

AIA each year sponsors scholarships and research fellowships for qualifying architectural students in the U.S. and Canada. Here is a rundown of those available for the 1981-82 academic year:

- AIA/AIA Foundation scholarships, available to students in one of the last two years in a first professional degree program and to interns, educators and practitioners for advanced study or research. Awards vary from \$200 to \$2,000.

Awards to first professional degree candidates are based on academic performance, recommendations and need, with application made through the office of the head of an accredited school of architecture or its scholarship committee. Awards to candidates beyond the first professional degree are based on the merits of the proposed program of study or research. Postmark deadline for applications is March 1.

The AIA Foundation scholarships are funded by Blumcraft of Pittsburgh (a \$500 award), Johns-Manville (\$2,000), the National Association of Brick Distributors (\$1,300), Knoll International (\$1,000) and the PPG Industries Foundation (\$900).

- AIA minority disadvantaged scholarships, established to provide aid to students who would not otherwise have the opportunity for architectural study. Awards are available to students who have finished high school (or its equivalent), students in junior college or technical school who are transferring to a professional program or students who during the year of application are enrolled in a first year of professional study.

continued on page 34

EPICORE The Weight Lifter 308 psf

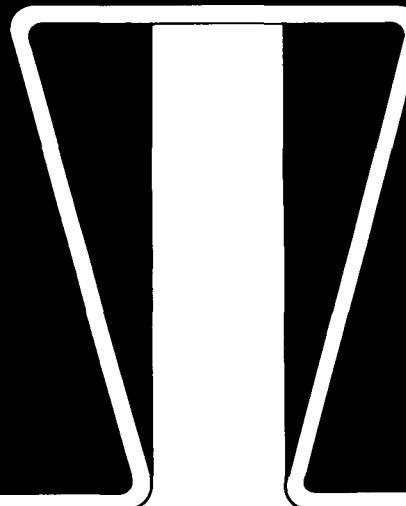
Specifications:

EPICORE® Composite Deck
20 Gage
10' Span
Unshored
Lightweight Concrete
5¼" Total Slab Depth
3-Hour Fire Rating
No Spray-on Fireproofing

Change the gage, the slab depth, the span or the concrete.

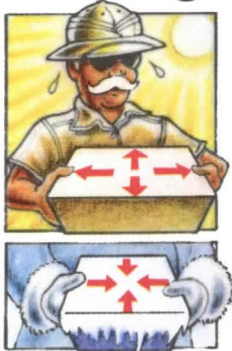
EPICORE still gives the same tough performance. To get the right numbers for your application, get in touch with Bob Ault, Vice President-Engineering, Epic Metals Corporation, Eleven Talbot Avenue, Rankin (Pittsburgh), Pennsylvania 15104 (412) 351-3913

EPIC
METALS CORPORATION



Introducing TAMKO TAM-GLASS™

a new generation of fiberglass built-up roofing products.



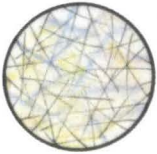
The TAMKO TAM-GLASS Built-Up Roofing System offers all the advantages of conventional fiberglass — plus improved strength and a broader product line.

TAMKO-produced fiberglass mat features improved tensile strength.

Unique steps in our manufacturing process give TAM-GLASS fiberglass added strength in the cross-mat direction. The advantage is extra resistance to extreme stresses of thermal shock. And of course, this exclusive construction meets all requirements of ASTM D-2178-76, Type IV.

TAMKO is unique in offering a broader line of fiberglass built-up products.

Many companies offer only the fiberglass ply sheet, giving you no choice of base or surfacing options. The TAMKO line

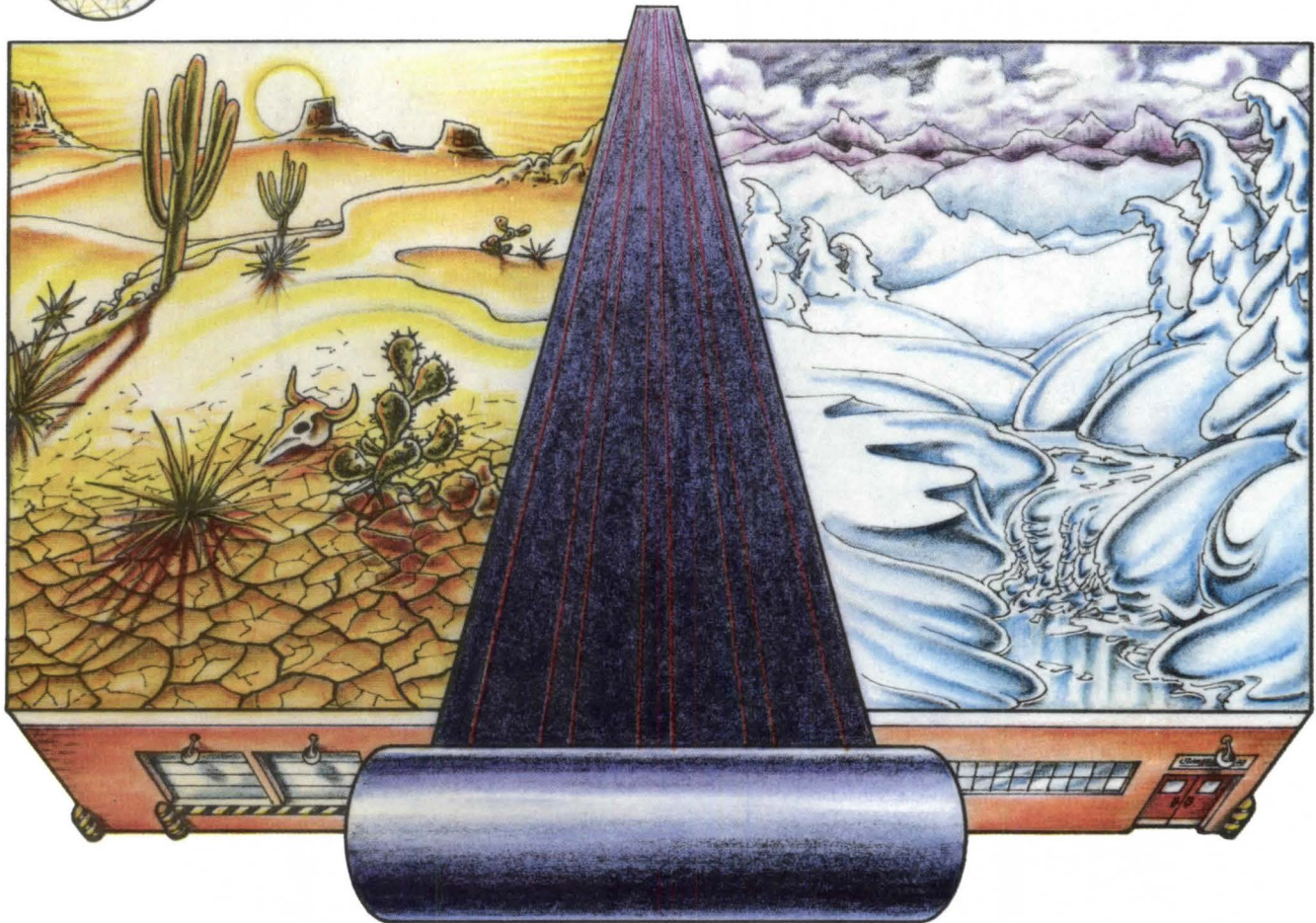
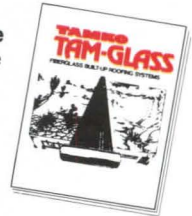


includes two base-sheet types, ply sheet, and mineral-surfaced cap sheet.

Plus all the advantages of inorganic fiberglass construction. Light in weight. Superior resistance to rotting, curling, warping, fishmouthing, wrinkling, buckling, blistering, and weather oxidation. In addition, its porosity permits moderate amounts of air and moisture to escape during application.

Free 8-page brochure available. Call or write for yours today.

TAMKO TAM-GLASS
FIBERGLASS BUILT-UP ROOFING SYSTEMS



TAMKO Asphalt Products, Inc. P.O. Box 1404, Joplin, Missouri 64801 • TWX 910-774-4521 • 1 800 641-4691 (Missouri: 417 624-6644)
Since 1944, the nation's only manufacturer of organic, glass, and polyester base roofing products.

Circle 21 on information card

The Institute from page 32

Students initially must be nominated by one of the following: an individual architect or firm, an AIA component, a community design center, a guidance counselor, the dean or administrative head of an accredited school of architecture or the director of a community or civic organization. Postmark deadline for nominations is April 15.

• The William H. Scheick research fellowship, a \$2,500 award to a graduate student in architecture, for an original investigation into the subject of human needs and requirements in multifamily low-income housing. Proposals must be postmarked no later than March 15.

• AIA Research Communications Fellowship, established in response to the need for better communications between the research community and practicing architects. The annual award of \$3,000 is given to a student enrolled in a graduate-level architectural program during the year of the fellowship. The postmark deadline is March 15.

Applications and information for the above scholarships are available from Scholarship Programs, at AIA headquarters.

• AIA/American Hospital Association fellowship in health facilities design. One or more graduate fellowships are of-

ferred in a total amount not to exceed \$6,000. Applicants must have a professional degree from an accredited school of architecture or be in the final year of undergraduate work. Postmark deadline is March 15. Send inquiries to AHA, Department of Health Facilities & Standards, 840 N. Lake Shore Drive, Chicago, Ill. 60611.

Justice Facilities Show Planned

An exhibition of architecture for justice facilities will be shown this year at the American Correctional Association (ACA) congress in Miami, the International Association of Chiefs of Police convention in New Orleans and possibly other locations. An illustrated directory is also to be published in conjunction with the exhibit.

Exhibit cosponsors, AIA and ACA, have invited all registered architects to submit projects that the designers feel "represent the state of the art in justice facility design." Entries are to be screened by a jury of architects and justice administrators.

Additional information and entry forms are available from Michael Cohn at AIA Headquarters, (202) 626-7366. Completed entry forms are due at AIA by March 31.

Staff Changes at AIA

AIA JOURNAL Senior Editor Mary E. Osman, Hon. AIA, who has worked for the Institute 18 years and for the JOURNAL for the last 10, is leaving Washington to return to her native South Carolina. However, she will continue editing the books section of the JOURNAL.

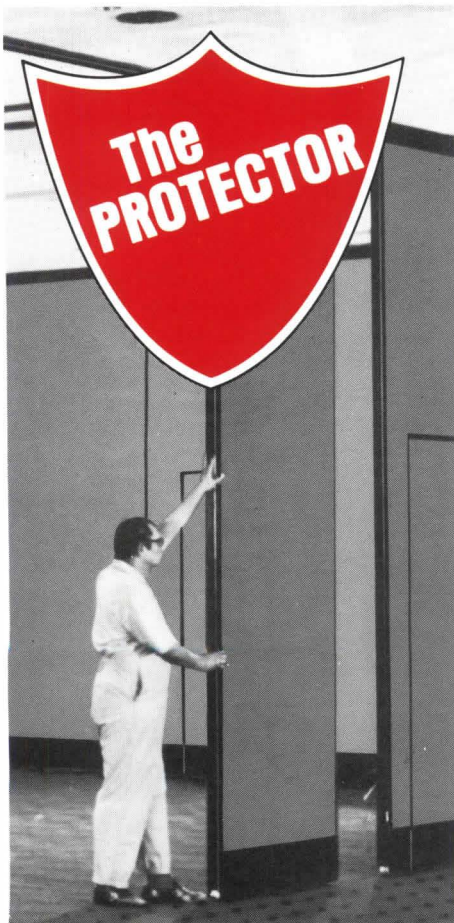
Her new address is 415 Harden St., Columbia, S.C. 29205; she will make selections of books and reviewers from there.

Mrs. Osman was assistant AIA librarian from 1962-1969, and joined the JOURNAL staff in January 1970. She has written countless news stories and book annotations, as well as feature articles. In 1976, she did much of the editing and research for the JOURNAL's 206-page bicentennial issue.

Ronald Panciera has been promoted to administrator/assistant controller of AIA. He joined the Institute as chief accountant in 1963 and became assistant controller in 1968. At that time he was also personnel director of the Institute. Panciera has a B.S. from the University of Rhode Island and has attended Benjamin Franklin University.

Bette R. Callet is now the director of membership/component services. She joined AIA in 1979 as director of special

continued on page 36



**The Operable Wall of tomorrow
... is here today!**

R-W



**2200
SERIES**

R-W has always made the finest operable wall systems in the industry . . . and frankly we're rather proud of our reputation that has featured innovative design, engineering and product knowledge.

We now introduce "The Protector" in our new STEELWALL line—it features both fire and sound ratings! "The Protector" is competitively priced and carries the highest NFPA Class A rating. It also features a (Class G) 48-52 STC sound level rating.

To simply sum this up, "The Protector" is rugged—but beautiful, and its construction assures long dependable life, resists abuse, easy to operate and clean, and requires little maintenance. The STEELWALL line has a full range of hardware with tight perimeter seals at top, bottom and sides of wall.

To obtain more information, return the coupon below—better yet, give a collect call to Jerry Wilcox, our movable wall expert (312/897-6951). Let Jerry give you all the details and a copy of our new catalog A-603. Protect your people with "The Protector" in our new STEELWALL line.

- Have a factory sales-engineer call me.
- Provide me with detailed catalog A-603.

Name _____
Company _____
Address _____
City _____ State _____
Zip _____ Phone _____



Richards-Wilcox

MANUFACTURING COMPANY
174 THIRD STREET • AURORA, ILLINOIS 60507

One of the White Consolidated Industries



NO WOOD SELLS ON SITE LIKE NATURAL REDWOOD

It's a fact: Site-scaping with redwood sells your projects — and keeps on selling them for years afterwards — as no chemically treated wood can.

- Redwood's resistance to warping, checking and splitting is natural. So whatever you design and build will *stay* true to form. Chemical treatments cannot make other woods duplicate this performance.

- All-Heart redwood's natural resistance to insects and decay goes all the way through the wood, protecting sawn ends as well as surfaces.

- And no other wood works as easily. Or takes and holds a finish better. Or needs a finish less. Or ages as gracefully as redwood.

No chemically treated wood can look, perform, or sell your projects like redwood. Because that's the way nature designed it.



California Redwood Association • One Lombard Street, San Francisco, California 94111



REDWOOD

LIVING WITH NATURE

Circle 23 on information card

The Institute from page 34

events promotion in the public relations department. She has a B.A. from the George Washington University and a M.S. from the University of Pennsylvania.

Brian J. Cook is the director of research and policy development, reporting directly to the executive vice president. He joined AIA in 1979 as special assistant to the executive vice president. Prior to that he worked as a program analyst in the office of evaluation at HUD. Cook has a B.A. from the Cleveland State University and is working toward a doctoral degree in political theory and public policy at the University of Maryland.

Dale R. Ellickson, AIA, is the new director of the documents division. He joined the Institute in 1978 as assistant director of the practice division and in 1979 became director of issues and policies, codes and standards division. Ellickson has a B.A. and a B. Arch. from the University of Minnesota and a law degree from the Atlanta Law School.

Linda Vasquez Reilly is the new special assistant to the executive vice president. She joined AIA in 1978 in the public relations department. She has a B.A. from St. Bonaventure University and a M.A. from the University of Virginia.

Regions Report 'Spotty' Health —Except for Booming Texas

The Institute's board of directors reports annually on such matters as the regions' respective economic health, AIA's "health" and government affairs. Reports submitted at the board meeting in December express broad-based concern about rising interest rates, inflation and the recession. Generally, however, economic health depends upon just what part of a specific region is under consideration. For example, in the North Central region, business ranges from being "very depressed" in northeast Minnesota to "extremely good" in the Minneapolis/St. Paul area. In the East Central region, economic conditions are also reported as "spotty."

Also, in the Ohio region, northern cities "seem to be most hard hit," while business in the midsection is "steady" and "above average" in the southern area. The New England region reports larger offices are "busy," but smaller ones not.

There are some happier notes, however. There's always Texas, which is "still healthy economically" and "in a boom period due to migration to the region."

California is also in "generally good" economic health, and in the Northwest region where the "expanding frontier" is volatile, Alaska, Hawaii, Guam and the large metropolitan areas of Portland, Ore., and Seattle "are experiencing greater opportunities for marketing services." In New Jersey, most firms view "future prospects with optimism."

Reports about AIA's health in the various regions are generally favorable. In the Central States region, "components are active," with health "at an all-time high." New Jersey "continues to flourish with a growth in membership"; in the North Central States region, Wisconsin enjoyed a 20 percent growth in membership; in the Northwest region, membership is "solid and growing," and AIA's health in the Ohio region is "very good." Also the South Atlantic region has experienced a "steady but moderate growth in membership"; at the component level, activity is "at an all-time high" in the Gulf States region; California reports a membership increase, and interest in AIA "continues strong with critical inquiry, creative ideas and lively debate." And again there is Texas, "strong in all AIA programs and activities," with all chap-

continued on page 82

We deliver in hours because a lot can happen overnight.

A lot of unnecessary waiting. And worrying. American Airlines Priority Parcel Service doesn't make you wait overnight. We can deliver your small parcels virtually anywhere in hours. *In hours!* To every part of the continental U.S., Hawaii, Canada, Mexico and the Caribbean. And when you call toll-free (800) 638-7320, we'll even provide door-to-door service any time of the day or night.

So call American for delivery today. And rest easy.

**American Airlines
Priority Parcel Service**

Doing what we do best.



With ample knee space from three sides for easy approach and a self-closing feather-touch push-bar valve for easy operation, this compact wall-mounted Haws drinking fountain may be reached with a minimum of positioning and hand movement. Model 1107 in #4 stainless steel satin finish or Model 1107B in stainless steel Sienna Bronze finish readily meet the requirements of Public Law 90.480 which mandates handicapped-accessible facilities in new and some existing public buildings. A remote chiller with grille is available at extra cost. For complete information, contact Haws Drinking Faucet Co., P.O. Box 1999, Berkeley, CA 94701.

Haws

DRINKING FOUNTAINS



Attractive home on Cape Cod, Massachusetts; Architects Bedar & Alpers, Boston, Massachusetts; Wood siding and wood trim treated with Cabot products.

Wood and Cabot's Stains...made for each other

Cabot's STAINS



Here is a wood at its wonderful best. The architect, in specifying a finish for this home, sought beauty and more...a finish that would stand up to summer sun and winter cold, that would require minimum maintenance while protecting the wood for a long, trouble-free life. His choice: Cabot's Stains.

Cabot's Stains, in 87 unique colors, enhance the wood grain, grow old gracefully, never crack, peel, or blister...are ideal for shingles, siding, clapboards, paneling, and decking. In terms of natural beauty, economy, and ease of application, Cabot's Stains

are best for all types of wood, exterior or interior, and all wood surfaces, smooth, striated, or rough-sawn.

Cabot's patented colloidal manufacturing process assures exacting standards of color, deep penetration, and wood preservation. In a world that is constantly shouting "new," Cabot's Stains are very proud to be "old, the original, and still the best."

For color cards and information, write:

Samuel Cabot Inc.

One Union St., Dept. 245, Boston, Massachusetts 02108

"Cabot's Stains, the Original Stains and Standard for the Nation since 1877"

Circle 26 on information card

WHEN A MATERIAL BENDS TO YOUR WILL, YOU CAN THINK WHAT YOU WILL.

ALUCOBOND™ aluminum composite material does the unthinkable. Curve. Around columns, walls, ceilings, gentle corners... around itself, if you like. Offering design freedoms you never had before. And because it offers ease of installation and requires less structural support than less formable metal or plastic laminates, it offers you significant cost benefits as well.

And ALUCOBOND material can also go straight. Lining a hallway. Squaring off a corner. And also, top to bottom. Because no matter how you use ALUCOBOND material, it looks flat and doesn't oil-can. So it can handle all kinds of jobs, from an intimate office lobby to a shopping mall or airport.

And the look is as advanced as its performance. Sleek. Spare. With a surprising richness of color. Choose from six painted and four anodized finishes.

ALUCOBOND material is available in panels of 4' and 5' widths in 8' or 12' lengths, with custom lengths up to 28' and thicknesses of three, four and six millimeters (.118", .157", and .236"). Always consult local building codes before use.

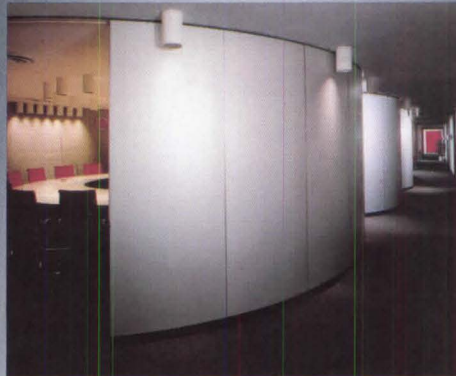
For the name of your local representative, samples, or test results, call Marketing Manager Carla Lane at (314) 851-2346. She can fill you in on amazing ALUCOBOND material. It does what you will.

Circle 27 on information card



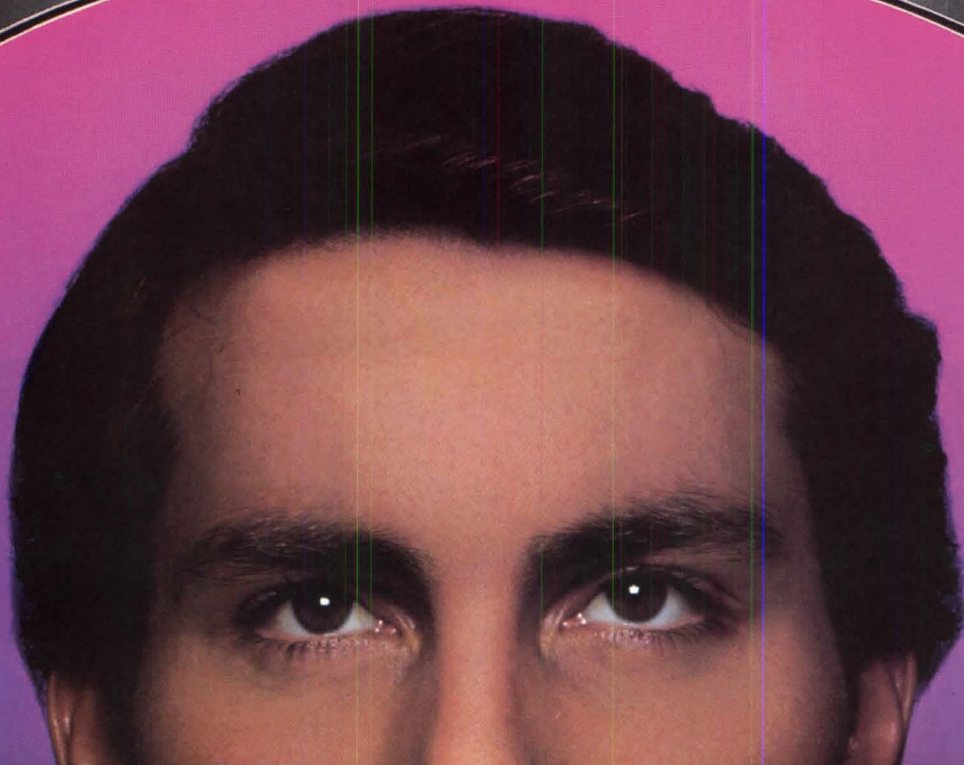
**CONSOLIDATED
ALUMINUM™**

11960 Westline Industrial Drive
St. Louis, Missouri 63141



Corporate headquarters designed in:

ALUCOBOND™
aluminum composite material



A Third Force in Architecture

In this chair one is frequently confronted with the question of what's happening in architecture. These days the short answer is everything at once, this being a period of experimentation and eclecticism.

Yet it is possible to discern certain broad strains and directions. There is, of course, modernism, probably still the mode of a majority of practitioners (if not always in the strict Bauhaus vein). And there is, as you may have heard, postmodernism, hard and soft core. There is also a third major strain that is gathering an increasing number of adherents, that differs essentially from the other two and that until now has not had a banner.

I would like to give it one. Let this third force in today's architecture be known as postformalism.

Modernism and postmodernism, for all of the name-calling between them, have one gut quality in common. They are both basically formalist movements.

Modernists may demur at this characterization, but the record supports it. For all the talk of form following function modernism was and is a movement dedicated mainly to the propagation of a particular esthetic. Those who disagree might try to come up with the name of a modernist hero who was deeply involved in improving techniques of programming, the part of the architectural process where form hopefully engages function.

Postmodernism is unabashedly formalistic. Form is, its hard core adherents maintain, what architecture is all about. (Which, of course, turns the mother of the arts into a kind of slatternly stepsister of sculpture.)

Postformalism was represented in several of the buildings shown in last month's issue on energy. Indeed, as a movement, it had its roots in the energy consciousness growing within architecture. But its concerns go well beyond energy.

It takes functionalism seriously and maintains that buildings should faithfully serve their purposes and their users.

It holds that buildings, as interventions in the environment, should intervene benignly, respecting both the natural and manmade contexts in which they are built.

It holds too that buildings should be economical of resources—in construction, in operation, even in the production of materials of which they are built.

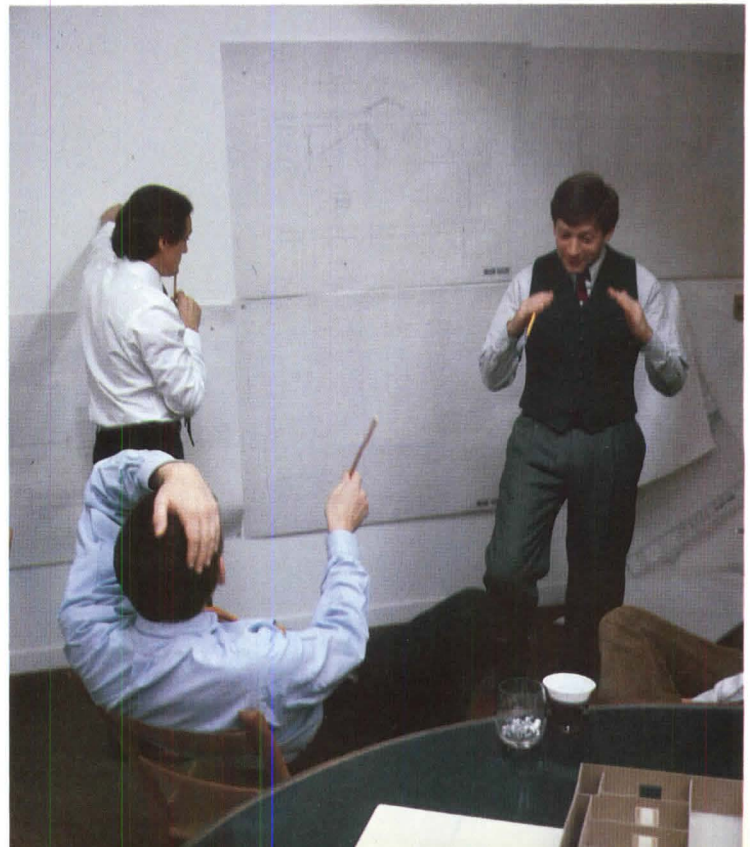
If there is to be a postformalist banner, then, its legend might be "responsiveness, respect and restraint." Anyone for marching beneath it? *D.C.*



The partners in their natural habitat: right, in order of the firm name. Across page, the characteristic plan of their redesigned office.



Photographs by Cervin Robinson



Profile: Hardy Holzman Pfeiffer Associates

Winner of the 1981 AIA architectural firm award. By Andrea O. Dean

The firm of Hardy Holzman Pfeiffer Associates is clearly in the mainstream of postmodernism in renouncing modernism's more puritanical precepts and stripped-down images. HHPA's is a cheerful and fanciful approach that juxtaposes diverse and idiosyncratic elements to create complex, skewed and layered spaces. The firm is unusual, however, among architects who have rejected modernist esthetics in at least two ways. It shows uncommon interest and inventiveness in tailoring buildings to uses and occupants and has completed a very substantial body of built work. HHPA's new buildings and adaptive reuse works are now scattered throughout the U.S. and include 10 theaters (in five states), four arts centers (in three states), five museums, two concert halls (one in the Midwest, another in the West), 11 houses, two schools, two health centers, a condominium complex, a corporate headquarters building and a firemen's training center. And they're working on 12 new projects.

The firm has prospered in part because its partners have refused to align themselves with any ideology or group and despite the fact that they have diligently cultivated the image of professional bad boys. As critic Michael Sorkin puts it, HHPA has become "the designated off-the-wall architect of the respectable middle."

"Hello! What are you doing in a funny place like this?" is Hugh Hardy's greeting, delivered with a good-humored glint in widening blue eyes. In the tones of a cheerful undertaker, he apologizes for delays: "Malcolm (Holzman) had an emergency at home"—it turns out to be an everyday, ho-hum occurrence. "And Norman (Pfeiffer) is trapped in traffic"—he makes an appearance within five minutes. "And I've got to go (mumble mumble); be right back." Welcome, in short, to a place of controlled, almost choreographed chaos.

"The funny place" in which Hardy, Holzman and Pfeiffer preside over an ever-growing staff (61 at this writing) is hardly

your typical, successful architect's sedately sleek-looking office. It is located in an aging building in Manhattan's east 20s, some 30 blocks south of midtown where most of New York's ascendent designers tend to their business in cool, corporate-looking quarters. HHPA's workrooms, where problems are probed and solved by model-making, have been described as looking like the bedroom of a 10-year-old, a place where even an elephant could get lost in litter. The style is frenetically casual. And although the firm's architecture cannot be described by any style as such, most of the features that characterize it are exemplified in small scale in the office itself.

The space, which was gutted and redesigned, is essentially a rectangle through which a diagonal circulation path has been slashed as principal organizing element "to avoid a mechanically stamped out-type plan," in Hardy's words. Along the route, skewed at a 45 degree angle, are three focal points of different sizes and shapes—a reception area, two adjoining crit rooms and, at the end, a conference room. As Sorkin writes in his book, *Hardy Holzman Pfeiffer*, to be published in May by the Whitney Library of Design, "If anything, their refined, non-orthogonal plans should be seen as their signature." Covering the diagonal path and reception area is a flower-patterned carpet from the old Roxy Theater in New York. You might think you were entering grandmother's parlor until looking up. There's a Charles Moore-like cutout framing the reception desk; overhead ducts throughout are exposed and brightly painted; beams are chartreuse; almost every wall is a different color. There is also a moose's head, a neon sign shouting "A Spicier New York is Up to You" and where architectural certificates usually hang are one partner's Army discharge papers and another's elementary school diploma.

The effect is eclectic in the extreme. The office is a collage that achieves dramatic effects with ordinary, common elements, makes use of workaday industrial objects for decoration and embodies a let-it-all-hang-out mentality.

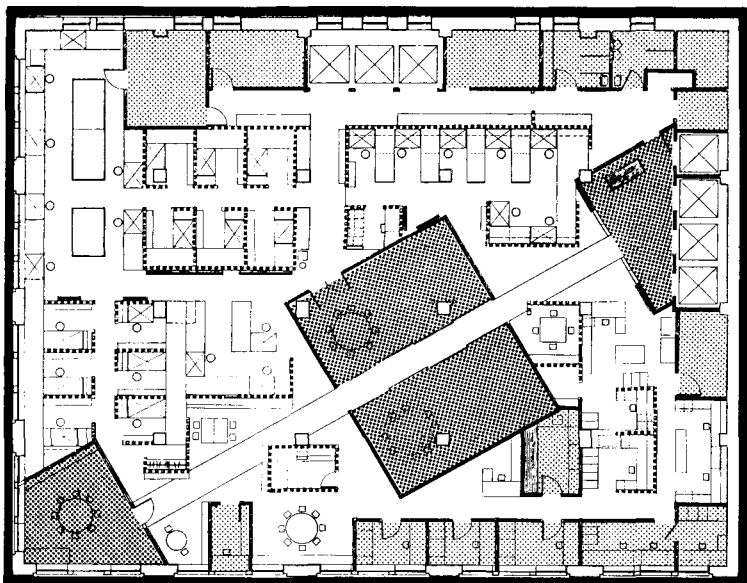
As has been observed by Stuart E. Cohen and others, the firm has an American melting pot approach to design. This is also the partners' view. (Hardy Holzman Pfeiffer of America?) Eclecticism, explains Hardy, "is the way our polyglot people have always expressed themselves in architecture, by sticking disparate things together." In truth, the work of HHPA does celebrate the diverse while attempting to reconcile opposites. It is nonideological, balances whimsy and inventiveness with respect for practicality, occupants' needs, budgets and schedules. It is conservative in creating transformations by artfully rearranging familiar objects as collage, thus altering their context. It is good humored, fashionable and fun.

Fun also, to say nothing of funny, is the way the partners interact. Says Holzman, "Our work is very serious; to describe it as playful isn't sensible. But our attitude is something else. The gaming part of business and life appeals to us."

Hardy: "You ask how we got together. I don't know. It's an impossible question to answer. Norman decided wouldn't it be nice to have an architectural firm."

Pfeiffer: "I was looking for a job in the Yellow Pages."

Holzman: "I met Hugh in the 86th Street BMT subway sta-



Stage design, 'schlock' and Saarinen.

tion's men's room. He was carrying this enormous role of drawings. He was just a wee tad then."

This apparently happened, if at all, 17 years ago. Hardy was 31, Pfeiffer and Holzman, both 23. Today, they work as a triumvirate. Says Hardy, "To an extraordinary degree, we don't have to protect ourselves from each other, which is basically the adult game." Making a logical generalization out of a non sequitur, he adds, "Many firms pay lip service to the idea of teamwork when you know Walter Netsch did the job. It doesn't work that way here." The three share in most decisions, have refused to hire an office manager despite the firm's large size, for fear of becoming too "corporatelike."

For reasons of practicality, however, they have separated responsibilities among themselves into what Hardy calls "certain spheres of ill-administered areas." Holzman is in charge of personnel and scheduling, Pfeiffer handles finances, while Hardy's role is broader and less neatly defined. He deals with requests for information, support staff and tends to be the one to pull loose threads together. He and Holzman do most of the designing, though all three partners can be found scurrying around the design and crit rooms when not traveling. Their offices, all three in a row, are no more than 8x10 feet, intended only for escape from the fray and phone calls. After working together all these years, they can all but read each other's minds, speak in a kind of shorthand and are amazingly in sync in approaches and attitudes, despite the fact that they are remarkably different people.

Hardy is urbane, funny, highly articulate, often theatrical in manner; he's also the most intellectual of the three and appears, pronouncements to the contrary notwithstanding, to be *primus inter pares*. He was born in Spain, spent a fairly peripatetic childhood, studied at Princeton under the Beaux-Arts dean, Jean Labatut, and later worked for scene designer Jo Mielziner. He is still a member of United Scenic Artists, Local 829. Pfeiffer, a transplant from the Northwest, grew up in Seattle and went to the University of Washington before coming east for a master's degree at Columbia. He has acquired the crisp, efficient manner of a businessman and has been described as the man out of *Gentleman's Quarterly* magazine. Holzman is the most reserved of the three and a serious man, despite his "gee, life is a laugh," demeanor. He is from New Jersey, studied at Pratt Institute and worked briefly for a firm that he says "did schlock shopping centers."

Hardy: "You can see that as a major influence on our work."

Holzman: "Oh definitely. I learned to draw cupolas and those things."

Hardy: "The Georgian influence."

To be serious, the principal influences on the firm have been threefold. That of scenic designer Jo Mielziner and Eero Saarinen affected only Hardy directly. The third—a reaction against 1950s architecture—molded all three partners.

Critics have often fastened on the influence of the theater to explain why HHPA's projects are often like little scenes linked together architecturally, why their rehab work—somewhat in the spirit of stage sets—recreates the feeling of the original without reproducing it and why there is a sense of the theatrical in almost all their projects. Hardy feels people focus on his theater experience because "at the moment the theater is something everybody understands. Everything has become theatricalized. Look at Bloomingdale's, shopping centers, the Rouse Co. What I actually learned from Mielziner wasn't about designing scenery, but about light."

Hardy met Saarinen while in Mielziner's employ when the scenic designer and architect were collaborating on the Beaumont Theater. Says Hardy, "Saarinen was absolutely incredible in his mental energy. I have never been in the presence of anybody who was so completely obsessed with the question 'what is architecture?' To me, it was no accident that his brain ate it

self up. After he died, there was no one else I wanted to work for. He wasn't a stylist; his was an American architecture. I believe you could show that everything that followed was predicted by his architecture. I think it was he who undid the knot of the '50s and gave us all the opportunities to do what we're now doing."

Rebellion against 1950s architecture, what Hardy calls, "no-color glass boxes, machine-made imagery and inherently dull order and perfection," marked the firm's explorations from the start. As Pfeiffer puts it, "Architecture by that time had become so tyrannical, because it left very little room for invention. There was something called total design, which said that architecture was measured by the degree to which you had figured out every last detail." Or, as Hardy says, "It seemed as though the wealthiest nation in the world, as we used to be called, could afford to do things more than one way. We also felt that the greatest American architecture was eclectic. What we wanted to do was explore alternatives."

Their explorations led, among many other things, to the renowned exposed and brightly colored ducts. The partners claim it was poverty more than anything else that prompted them to use inexpensive materials and transform unsightly guts into decorative objects. It was also, writes Sorkin, an attempt to use budget materials "against the grain of their cheapness, to direct attention away from the 'true' character. . . . HHPA designs away from the crummy qualities of materials, aiming for alchemy rather than 'honesty.'" In similar spirit, their angled, skewed and layered plans play against and break the confines of the rigid box.

As Venturiesque as some of HHPA's devices may seem, Hardy denies a direct influence: "Bob's *Complexity and Contradiction* is basically an esthetic tract, which is decent and useful, but I dislike learning about architecture without any social purpose at all." Ultimately, he believes, buildings are not supposed to mean anything. "They do things. We are very much the pragmatists. Our only measurement of success is getting buildings built. Now, that causes some criticism about our being commercial and, I suppose, even in the pejorative sense, we are. But buildings that don't get built have no value. They're drawings in drawers."

Peter Eisenman has called HHPA "functionalists in drag," and when asked about the description, all three partners cheerfully shout, "He's right."

Their typically practical approach is evident, for example, in their restoration work. Says Hardy, "Our attitude was new is not better, new is different. Old is not worse, it's just not the same. For some weird reason, we didn't find old buildings shameful or embarrassing or necessarily something to be evangelical about either."

Pfeiffer: "We started practicing at a time when it was still the profession's intention to tear everything down. We countered that with a strong shared interest in the past. We used history as something to relate to, contrast with, hoping to bring old and new together into a new kind of statement. That was as much a part of our work for the first 10 years as the new projects."

Holzman: "Where we were most inventive was not in doing those (pointing to overhead ducts). There were a lot of movements that made technology a part of architecture, the Bauhaus, Mackintosh and others. They didn't have the opportunities we did and could afford better materials. Where we were most creative was in using old buildings, because there was less precedent for it."

HHPA's new work has very obviously been influenced by the firm's work with old buildings. It increased the partner's architectural vocabulary and probably explains why plan and spatial connections, rather than volumetric considerations, tend to serve them as generating principles. It also accounts for their predilection for juxtaposing a hodgepodge of objects and elements in new buildings. As Pfeiffer says, "When we put something new into an old building that had its own personality, it

created a composite of two vocabularies. We now strive to find that same duality in new buildings where we purposely will make one element out of one vocabulary or one material and then quite consciously do something in the same room, right next to it, out of a totally different one. It's that kind of tussle between the two that, I think, gives a dynamic quality."

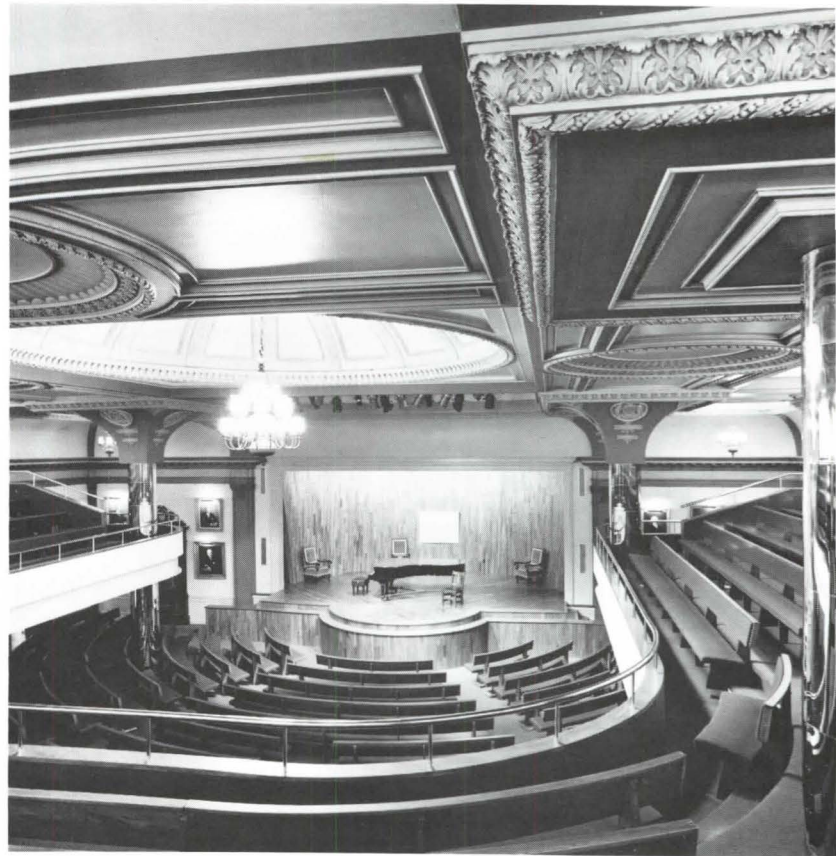
The firm's adaptive reuse work has been criticized as being somewhat overly inventive, to which Hardy counters, "Scientific restoration is physically and conceptually impossible. And it's morally indefensible to think in terms of turning the clock back. It's the spirit of the work that's most important anyway, not the detail."

One of HHPA's early renovations was Exeter Assembly Hall in Exeter, N.H. (1969). It is a restoration that combines old and new and has the firm's hallmark of bright paint, shiny stainless steel column covers and elegant shapes—in this case, the sinuous line of a newly added balcony. Before renovation, the hall was, according to Hardy, "not particularly anyplace, it was nowhere." Today, it is an intimate, elegant space purposely designed to focus attention on just a few people onstage. The architect added a balcony and a wooden backdrop/soundboard, raised the roof around the perimeter behind newly chromed columns, restructured the stage, sloped the orchestra forward, rearranged the seats. Ironically, despite these major changes, many people hardly notice that anything has been done at all, although HHPA's intention was to balance old and new so that neither would prevail. The lesson they learned was that two diverse vocabularies cannot be driven against each other without one winning out. Their subsequent efforts were aimed at transforming such conflict into an altogether new architectural statement.

One year after finishing the assembly hall, the partners completed a new theater on the Exeter campus made of a pre-engineered building system with aluminum and styrofoam panels. Why the oddball materials? "It's the business of saying, 'why can't you make architecture out of anything, out of this stuff too?'" says Hardy. By taking catalog components not previously used in this manner, HHPA attempted to challenge people's tastes in architecture. But, in exposing structure, ductwork and catwalks, the partners were, of course, also heeding the mod-

ernist dictum to express structure. "We had paid attention in school. A building had to be honest in that sense," says Hardy. But as Pfeiffer said at the time, "Standard parts have formed a nonstandard solution."

Unusual also was HHPA's attempt at Exeter (and in subsequent theaters) to relax, if not abolish, traditional divisions between audience and performers. By lengthening the stage and allowing the seating to embrace the end portions, the architect produced the potential for a flexibility in staging productions that could in a sense bring people backstage.

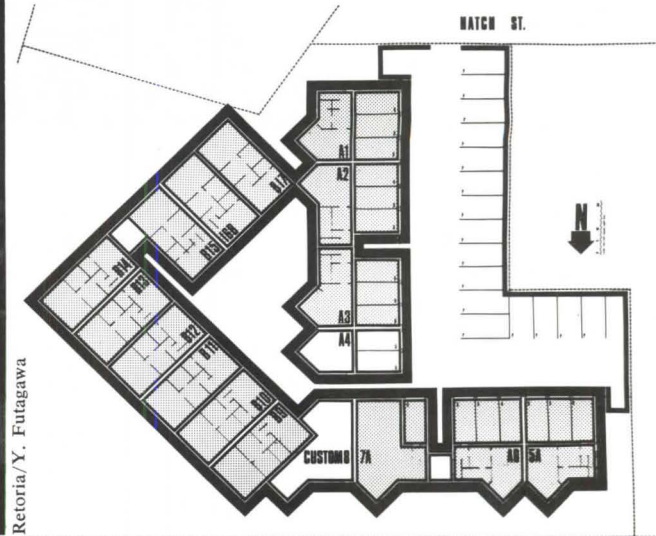


Norman McGrath

The Exeter Assembly Hall (1969), above, was an early HHPA renovation; a year later the firm completed a new theater at Exeter, left.



Norman McGrath



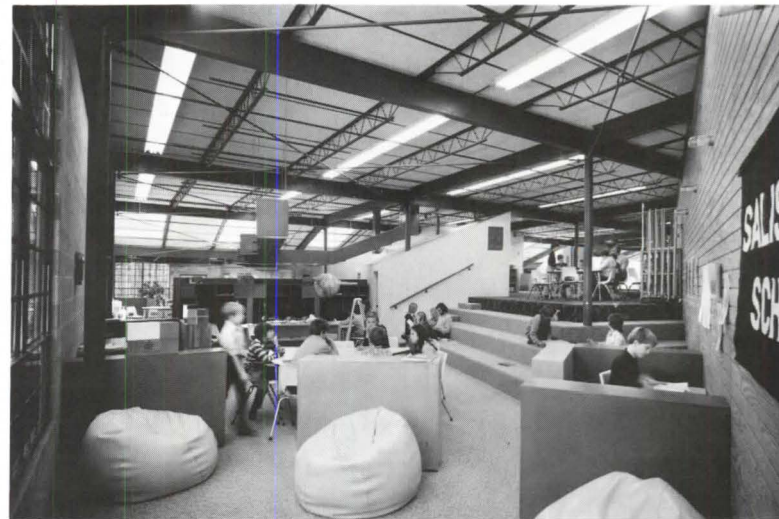
Retoria/Y. Futagawa

Breaking down strictures and conventions.

The Cloisters condominiums in Cincinnati (1970) marked an equally radical departure. Close to downtown, the complex of shingled, pitched roof townhouses clings to a hillside on wood pole structure. It creates an extension of the area's 19th century roofscape. From the outside, it looks composed of small, odd-shaped pieces, angling in and out, windows of different sizes and shapes. The plan runs on the diagonal, creating roomy interiors with differently sized and shaped spaces. Postmodernism well before its time.

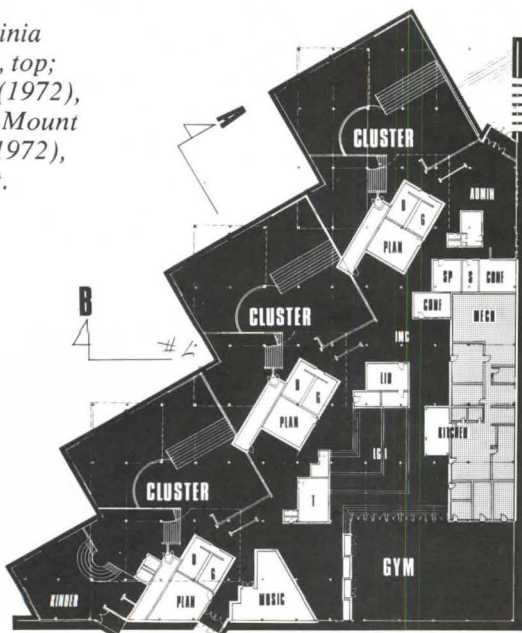
By contrast, the Salisbury School in Salisbury, Md., (1972) is simply a flat-roofed box bisected by a triangular tunnel. It is an update of the one-room schoolhouse. But like the Exeter Theater, its interior is a collage of building materials and products, assembled this time with a sense of spontaneity and irreverence, to better suit its purpose. Its parts are modest and chunky, like children's building blocks. The entire floor area is a multilevel, carpeted seat.

Like the Salisbury School, Mount Healthy School in Columbus, Ind., (1972) achieves spatial and textural variety through use of a careful rotational geometry, well-handled changes in level and neofunctionalist imagery. At a larger scale it conveys the same sense of informality, and in both schools the axial circulation serves as major organizer of space. This orienting spine, which at Mount Healthy is covered with a kitschy, floral carpet, much like the one in HHPA's office, transforms a potentially institutional-looking space into something akin to home.



Norman McGrath

Cloisters condominiums (1970), with plan, top; Salisbury School (1972), just below it, and Mount Healthy School (1972), with plan, at right.



Norman McGrath



Also in Columbus is HHPA's Occupational Health Center (1973). If the firm's theaters attempt to relax the way players and audience interact and their schools try to break down old strictures about pedagogy, their two medical facilities (the other is the 1978 Pennsylvania College of Optometry's Eye Institute) aim to gainsay old myths about medical care by creating a less forbidding environment. The Occupational Health Center is arranged on HHPA's usual diagonal and is largely open plan. The intention is to make activities and systems that support it clearly visible and to demystify the doings of doctors. The central connecting ramp is topped by a skylight to bring in natural light. Hospital white and green are replaced with cheery colors. In contrast to the active interior, the facade is purposely inert. An austere, crisp box is bisected by black, reflective glass that is as-

Below, Occupational Health Center, Columbus, Ind., with its plan of shifting grids; below right, Minneapolis' Orchestra Hall, and at bottom, Artpark.

sembled from off-the-shelf greenhouse parts and juts out to form a portico, hinting at the angled interior arrangement. Explains Hardy, "Although the use of glass curtain wall construction was in itself a well-established corporate cliché by the late '60s, we chose to rework it in a new way."

At Minneapolis' Orchestra Hall (1974), the firm attempted to rework conventional notions of what a concert hall should be. It has none of the traditional symbolism that attaches to "concert hall." Because the clients' principal concern was acoustics, they first hired Cyril Harris and then chose HHPA on his recommendation. At Harris's insistence, the architect physically isolated the concert hall from lobby spaces, treating the latter in duct-and-girder style, while the red brick, windowless hall sits as a large lump surrounded by steel and glass, efficient-looking service spaces.

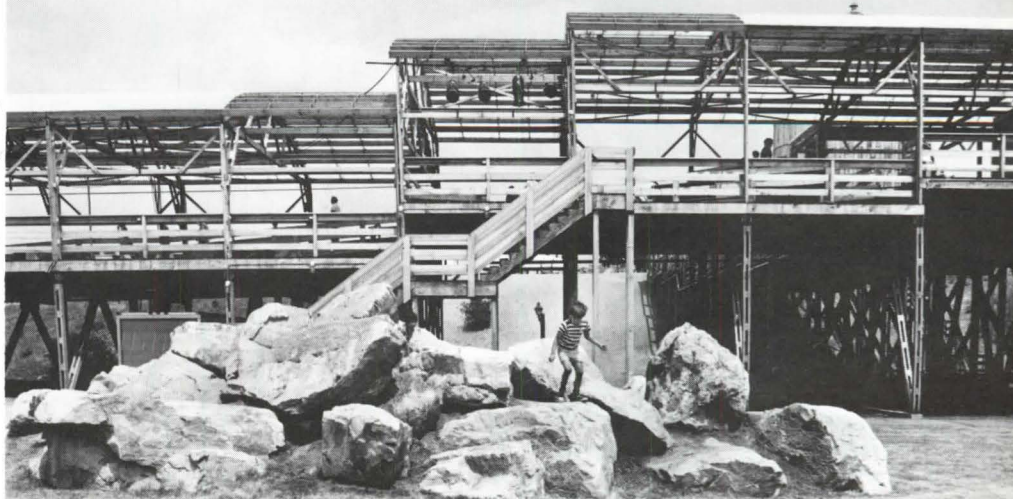
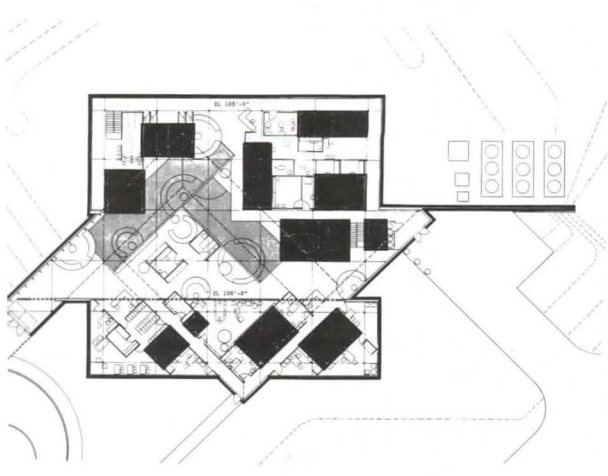
Artpark, in Lewiston, N.Y., (1974) and the Brooklyn Children's Museum (1977) are in many ways a summary of HHPA's compositional proclivities and devices. Artpark is a place where



Norman McGrath



Norman McGrath



Neil Dixon

A new look, and new energy, for institutions.

the public can see artists at work in, among other structures, a highway toll booth and an imitation red brick outhouse. It is a collection of American images, a boardwalk, barns, silos and so on. It is pure collage unrestrained by needs of enclosure. Similarly, the Brooklyn Children's Museum is an assemblage of free-standing urban and rural structures taken out of their usual surroundings. The building itself is buried 40 feet, leaving a rooftop play area. At one corner, a 1907 New York City subway kiosk serves as entry pavilion, while nearby a grain silo is used for a rooftop fire escape. Inside, three main levels are framed with laminated wood beams and timber decking. Four separated sections of corrugated steel culverts bisect the main exhibition floor diagonally to enclose a 180-foot circulation ramp. Near one corner, a small theater is hidden inside an oil storage tank that rises through the building. And so forth. The museum is a large, open space with lots of nooks and crannies that takes advantage of the child's native tendency to explore everything in sight. Like most of HHPA's work, little about it is conventional, much about it is ordinary.

Common to all the work is an attempt to take a new look at what institutions should be and do and give them new energy, usually by tinkering with their component parts and shuffling them about in new ways. It is more than an esthetic exercise. Especially during the late '60s and early '70s, the firm sought new approaches to the way we experience theater, the visual arts, teaching and medical care and extended its efforts into ghetto areas. There was, for instance, a dance theater in Harlem, a community center in Newark. Have they backed away from social commitments?

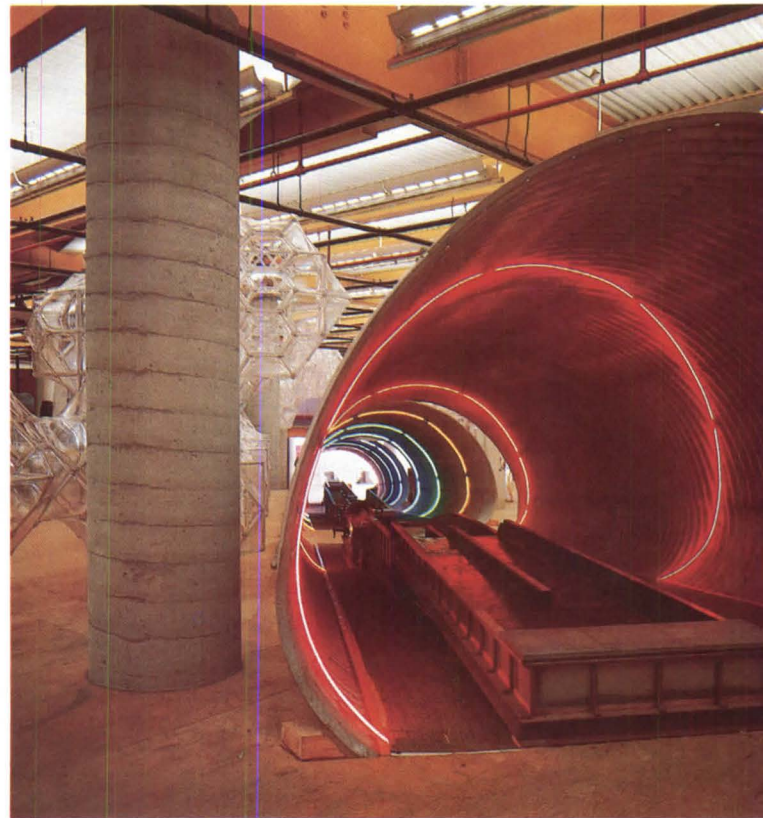
Hardy: "The money for ghetto projects has simply dried up."

Holzman: "We've just finished our first office building, and I think our concern with how people work in that environment was addressed in a similar fashion to the one in which we approached learning environments in the late '60s. But the interest of critics and what they choose to report has changed. They simply no longer focus on social and environmental aspects of architecture. Now it's all esthetics and systems technology and economy per square foot."

True, the times have changed, but so has the work of Hardy Holzman Pfeiffer. For one thing, it is difficult to remain *enfants terribles* in middle age. Quite naturally, perhaps, their work has recently achieved greater maturity. It is more relaxed, its energy less overbearing. The partis are becoming more complex and the firm is abandoning its kit of parts approach. Says Hardy, "We now know how to do more with less—not to get mixed up with that other gentleman. We don't have to do quite so much to accomplish something, which is appropriate to the time we're in. We are in a time of con-ser-va-tion."

A case in point is the renovation of the St. Louis Art Museum (1977) whose overall design is a far cry from the shouting purple pipes and ducts for which the firm is famous. The intention was to give the impression that nothing had actually been done. The overall feel of Cass Gilbert's 1904 museum is now warm, light, dignified, quiet, even sedate. Similarly, in restoring the Cooper-Hewitt Museum in New York City (1976), the architect changed Andrew Carnegie's mansion as little as possible. Teak parquet floors, hand-carved oak ceiling, wrought bronze grillework and quartered oak paneling were left essentially unaltered. An elevator was unobtrusively shoehorned into a space formerly occupied by a pipe organ, ornament was cleaned and restored, jambs and lintels of new openings were carefully matched to original door frames and the basic axial arrangements of the house were respected.

The firm's 1980 transformation of a movie theater and Montgomery Ward store into a new civic center in Madison, Wis., is similarly modest and low key, in keeping with the scale of neighboring buildings. The complex, fortunately for HHPA, is made



Photographs by Norman McGrath



The Brooklyn Children's Museum, top of facing page; beneath it, the St. Louis Art Museum renovation. At left, the Cooper-Hewitt Museum, and below, Madison Civic Center.



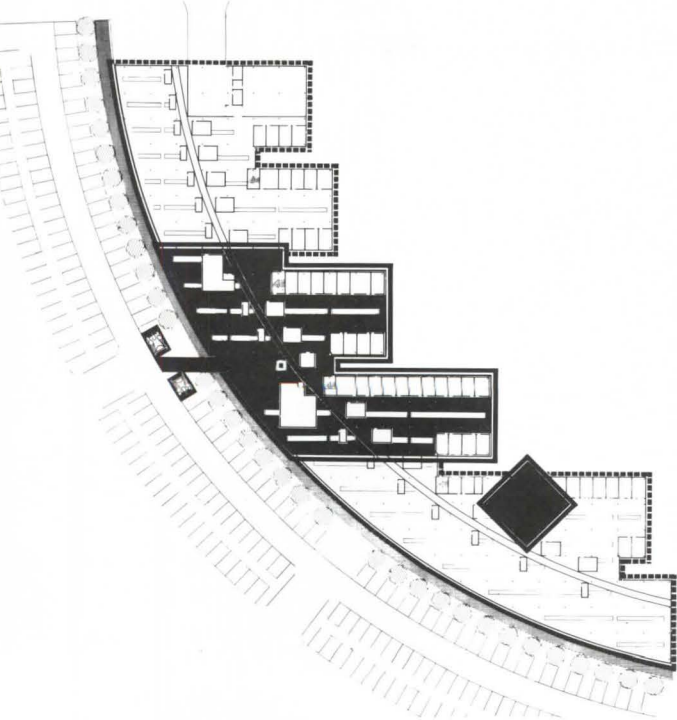


Of geniuses and 'arrogant old bastards.'

up of rotated squares, forming triangles. "This time they were built in," says Holzman.

Compared to Boettcher Concert Hall in Denver (1978), Minneapolis' Orchestra Hall seems downright harsh and shrill. Although Boettcher uses the same kit of parts approach in the lobby, it is softer, less insistent. What is altogether new here for HHPA is the arena-like hall with orchestra in the center and 2,750 seats arrayed around it on all sides.

When looking for emergent directions in the work of Hardy Holzman Pfeiffer, perhaps the best source is the firm's headquarters building for the Best Corporation, in Richmond. The first phase was completed in 1980. It is, first of all, their first office building. It is a first also in presenting a strong, sweeping exterior gesture. There is a curving facade of translucent glass block interspersed with pieces of transparent glass block to form a diamond pattern. The glass block is topped by a turquoise terra cotta cornice. Flanking the front entrance are two 12-foot-high Art Moderne eagles, which once sat atop the now-demolished Airlines Terminal on East 42nd Street in New York City. More characteristic of the firm, the building is designed for the people who work in it. There is plenty of workspace, plenty of privacy and light, windows can be opened, noise is controlled. The central circulation spine follows the curve of the facade. But where much of the recent work looks like toned-down HHPA, Best's interiors still have a frantic, helter-skelter eccentricity. Although Hardy says that the firm has learned to do more with less, here it has done more with more. There is a garish blue and green carpet; a walkway paved in bathroom-like colored tile; massive, heavily molded wood cabinets that reach almost to the ceiling; lithe, modern, steel office furniture; exposed pipes, ducts





Facing page, top, Boettcher Concert Hall, and below it, Best Products Corporate Headquarters. Above, Dance Studio & Music Performance Hall, St. Paul's School, Concord, N.H. (1980); at left, Spirit Square Art Center, Charlotte, N.C. (1980).

and the rest. Critic Paul Goldberger has called it "mature cacophony."

Goldberger has also said that the greatest challenge to the firm is to hold on to its early spirit. Despite valiant attempts to maintain a mom and pop-type office, the firm is now big business, and trying to maintain a small office feeling results in large scale confusion at times. Says Hardy, "I think getting older is an enormous asset. Architecture is an old man's profession. To survive in it is just one of the most pleasant things you can do. It's not like show biz where you can become a monument and have no work. But the price that most architects pay is an enormous one. They may become arrogant old bastards; and we may be well on our way to it. Or they become impenetrable geniuses. The arrogant act or the genius act."

Holzman: "Have you ever seen three geniuses in one office?" □



Homage to a Catalanian

A personal view of AIA gold medalist Josep Lluís Sert. By Robert Campbell

The small, dark-suited figure of Josep Lluís Sert moves through architect-clogged, rather provincial Harvard Square like a saint in a Fra Angelico with a cloud of unseen angels overhead.

The angels are drinking buddies to Sert, but to us who worked for him, they are mythic, Homeric titans: Le Corbusier, Calder, Miró and all the rest. They connected him to an order of being higher than that of expansion-joint details. They made him larger than life.

Sometimes you come across "SERT" in a crossword puzzle, but it's never the architect. (Maybe the AIA gold medal, just announced, will change that?) The definition is always "Spanish painter." That's José Maria Sert, uncle of Josep Lluís, a muralist notorious for accepting Rockefeller gold to paint out a mural by Diego Rivera in Rockefeller Center, because the mural contained a portrait of Lenin.

All that is part of Sert's past, too. It was José Maria who introduced Sert to a fellow painter, a Catalan like the Serts, Pablo Picasso. This in turn led to a collaboration between Sert and Picasso at the Paris World's Fair of 1937. Sert helped design the Spanish Pavilion, and he and Picasso together planned the size and location of a mural Picasso was to paint for it. The mural turned out well. Picasso called it "Guernica." (In photograph above, Picasso, Sert and Miró.)

Mr. Campbell, an architect in Cambridge, Mass., and architecture critic of the *Boston Globe*, was once an associate in the firm of Sert, Jackson & Associates.

"Ah, did you once see Shelley plain,/And did he stop and speak to you?" wrote Browning. Sert saw and spoke to lots of Shelleys. It all seems ordinary enough to him.

"I was just part of a scene, the late '20s in Paris. It was a much smaller world then, with a small minority of people interested in modern art. I met a man like Giacometti because we used to go to the Cafe des Fleurs near the Deux Magots in St. Germain. Miró I knew in Barcelona, Leger I met through Le Corbusier, Calder through Paul Nelson, an American architect in Paris. They were not very difficult people to meet at that time."

Lifelong involvement with the world of art is a basic part of Sert the architect. But it's only one part. The other is the interest in cities, in urbanism.

Probably the best way to understand Sert the architect, in fact, is to see him as two people: a frustrated painter (who never painted) and a frustrated urbanist (who never built cities, though he certainly tried). Eventually, rather late in life, Sert began to create an architecture that expressed both sides of himself.

The painter and the urbanist don't always coexist peaceably in Sert's buildings. But from that tension, his best works are born.

I worked for Sert in 1967-68 and again in 1969-75, which accounts for the past tense of the recollections that follow. Recently I talked with him at length and I've interspersed some of his remarks. Today at 78, Sert is still enormously vital, though now listed as "consultant" to his old firm which continues active.

But to return to the painter and the urbanist. . . . Sert the painter was forever trying to make his buildings—or more spe-

cifically, their elevations—into works of graphic art. He would sit in front of drawings pinned on the wall while assistants tacked up alternate overlays. Often Sert would ask for yellow tracing paper and work out a piece of elevation, or try a different arrangement of windows. He saw an elevation as a pattern in plane. He looked for squares and Golden Sections, and the Modulor and the Corbusian regulating lines were important.

It was through painting that Sert became an architect.

“I came from painting to architecture,” he recalls. “Somebody I suppose told me, well, as a painter nobody makes a living. My father said that’s not a career, and he wanted me to study something. I think it was my uncle the muralist who said: ‘Why don’t you become an architect?’”

Sert the urbanist had a very different set of goals. He was always trying to expand the program, to make a mere building into a miniature town. No building was ever a self-contained object, never anything you could frame in your mind. Instead it reached out, ragged, incomplete, seeking connections, sucking city paths into itself. It was the urbanist in Sert who started the nation’s first degree program in urban design at Harvard. Sert defines urban design succinctly: “city planning as seen by an architect.”

Even for an architect, Sert was a late bloomer, practicing little until the late 1950s. The first complete building that looks Sertian is a marvelous studio in Majorca for the painter Joan Miró, perhaps his closest friend, completed in 1956 when Sert was already 54. A U.S. embassy in Baghdad followed in 1960. Then, finally, came a flood of work, from Harvard and other universities, from Europe, from the New York State Urban Development Corporation. Over the years the firm of Sert, Jackson & Gourley (later Sert, Jackson & Associates), founded in 1957 with Huson Jackson, FAIA, Ronald Gourley, FAIA, and Joseph Zalewski, won four AIA honor awards and, in 1977, the architectural firm award (see May ’77, p. 50).

By the time the work came, Sert had steeped himself in sources. One was Le Corbusier, his mentor and friend, in whose Paris office Sert worked in 1929-30. From Corbusier came the Modulor, sunshades, board-formed concrete, the interest in urbanism and in technology, perhaps some of the Utopianism. Like Corbusier, whom Sert succeeded as president of CIAM (Congres Internationaux d’Architecture Moderne), Sert has never stopped believing in the modernist program of building a new world, a new order of society. Nor has he lost faith in the power of the machine to transform the world for human enjoyment.

A second source, seemingly quite opposite, was something ancient and handwrought. This was the peasant architecture of the Mediterranean, especially of Sert’s native Spanish province of Catalonia. Here white and ochre houses of stucco tumble down bare hillsides toward blue harbors. The houses have small windows and bright accents and courtyards, and they stack up in cubist, additive sculptural volumes.

Sert has always been a Catalan first. In the 1970s he changed his name from the Spanish José Luis to Josep Lluís, the Catalan form. He wrote a book about his fellow Catalan architect Antoni Gaudí, who designed a house for Sert’s cousins, the Guells. Many who worked in Sert’s office thought his finest works were the little-known houses he built for friends in an adaptation of the peasant style on the island of Ibiza, off the coast of Catalonia, where Sert and his wife Moncha have long spent part of each year.

For Sert there never was any conflict between modernism and the Mediterranean. They merged.

“My friends and I at the University of Barcelona were very much influenced by the folk architecture. We found immediately that the new modern architecture that came to us in the German and Dutch and Scandinavian magazines resembled many of our buildings in the Mediterranean. These new buildings started by having flat roofs, the traditional thing. They were all

white like our poorer houses. And they had the same volumetric expression, the simplicity of means. So we found that these things were not really so modern in our country as they appeared in the North.”

In his imagination, Sert’s buildings always stand in a Mediterranean light. A Sert design without sunshine on it can be a gray ghost of itself—sometimes a problem, to be sure, in a Boston January.

As things turned out, Sert was destined to build comparatively little under that sun. In 1939 the dictator Franco came to power in Spain. Sert, Spanish Republican, collaborator with Picasso, could not return to his homeland. Walter Gropius suggested he come to America, and Sert and Moncha did so in June 1939. They planned to stay perhaps six months. Then in September came the world war, and the Serts never moved back. It would be another 20 years of writing, lecturing and working on unexecuted design projects before Sert would again have a chance to build.

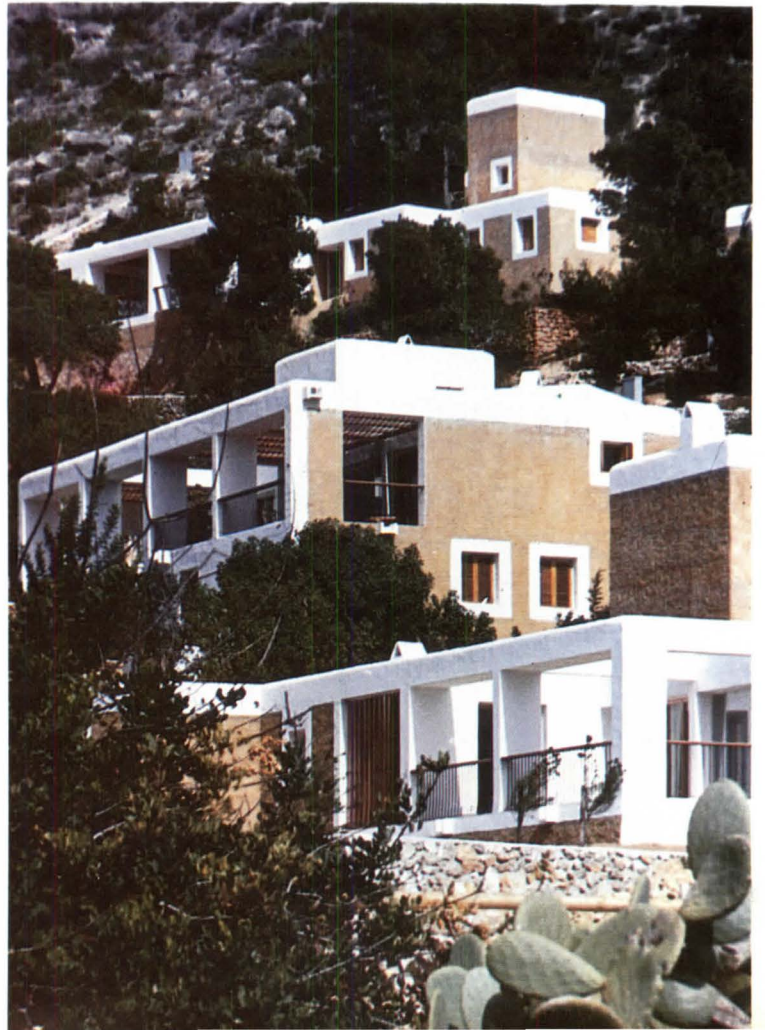
One moment of the early years stands out in Sert’s memory.

“It was 1926 when I first discovered Le Corbusier in a little bookseller that still exists near the Place Vendôme. I hadn’t heard of him. I just saw these books—*Vers une Architecture*, *La Peinture Moderne*, *L’Art Decoratif d’Aujourd’hui*. They intrigued me very much. I brought them back to Barcelona where we were a group of unhappy students in a sort of Beaux-Arts school. We passed them around. We had been looking for some kind of new orientation and opening, different from what the school was teaching us. Well, we found it there.”

In 1927 the students read in the paper that Corbusier would speak in Madrid. They invited him to lecture to them too.

“He came and he became interested in the local Gothic,” Sert recalls. “He discovered Gaudí—for him it was a great discovery—and he stayed a few days. We took him up in an airplane to see Barcelona from above. At the end of the visit we took him to a nightclub in the harbor district where he did little sketches of the stripteasers and flamenco dancers. Then he said, ‘Well

Houses by Sert on the island of Ibiza echo indigenous forms.



Emerging stylistically 'full-blown' late in life.

why don't you, when you finish your studies, come to Paris and work with me?" Of course, he didn't pay anyone except his accountant. The first thing I did when I got there was the second project for the League of Nations."

Thirty years later, Sert repaid the favor by persuading Harvard to offer Corbusier his only American commission, the Carpenter Center for the Visual Arts.

In the meantime, Sert had been spending fruitless years after World War II with a partner, Paul Lester Weiner, producing Corbusian city plans for Latin America. None of them was ever implemented, but they gave Sert a chance to test some of the CIAM ideas, an experience that left him skeptical. He decided that much of CIAM theory was elementary and needed far more study.

In 1953 Sert became dean of Harvard's graduate school of design, succeeding Joseph Hudnut, and also chairman of the department of architecture, succeeding Gropius. In 1956 he added the title of planning consultant to the university. His real career was about to begin.

When Sert the architect finally emerged, he seemed to arrive fullblown with a complete style of his own. The style was a sort of playful marriage of Corbusier and Catalonia. The muscular, integral *brise-soleil* of Corbusier, for example, tended to become, in Sert, something much lighter—festive attachments to the building almost like banners or flags. What Sert now calls the "nude" architecture of early modernism put on bright clothes and something suspiciously like ornament. There was always a functional rationale, but it didn't have to be taken too seriously.

The window, for instance. Sert divided it up into three kinds, one for viewing (transparent), one for lighting (translucent), and one for ventilating (opaque, usually a bright color). This gave him more elements with which to compose his elevations. It allowed him to create window walls that retained, without looking traditional, some of the sense that traditional windows have of being picture frames for people. There was a kind of pseudo-scientific argument about analyzing the window function into its components and assigning each to a perfect type. But everyone knew the real reasons were visual.

"Yes, I was introducing ornament," Sert says. "I always felt that modern architecture when it came into the realm of the city would have to have a vocabulary, and a lot of the things that had been thrown out would have to be carefully picked up.

"When I came to New York, I saw more modern and more bad modern built. I was perfectly convinced that it would be really dull and sad to see whole cities develop on the limited Miesian formula, as much as I liked Mies. It would be like a

whole museum the size of the Louvre filled only with Mondrian and his disciples. It would be a disaster."

In 1958, Sert built a house for himself and Moncha on land Harvard owned. Typically, it wasn't just a house. Sert the urbanist expanded the program, designing a prototype row house with three courtyards. Sert the painter then made it one of the most beautiful houses in America. A living room opening to courtyards on both sides is dominated by a Catalonian altarpiece that fills one end, in visual dialog with a large Miró over the sofa. The Miró and the altarpiece, masterpieces both, are a reminder of Sert's equal love of the present and the past, and, incidentally, of his devout Roman Catholic faith. They exemplify a description he once gave of Miró's painted sculptures: "Across the empty, unpainted spaces they watch one another closely, silently, tensely."

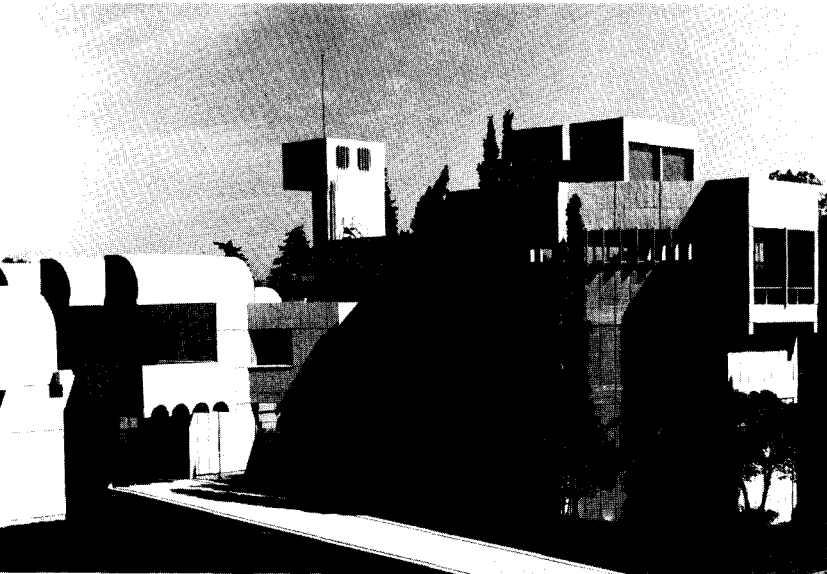
In this house Sert and Moncha—they have no children—live surrounded by art, "in a lucidity and warmth which fills its space and informs its visitors," as Robert Gardner, director of the Carpenter Center, has written. Here also Sert's love of society and delight in repartee are manifest. (See photograph, Jan., p. 13.)

As a dean, Sert was a teacher, not an administrator. The Harvard design school became a reflection of his personality. All of his partners also taught there, most memorably in the case of Joseph Zaleski, a beloved figure who died last year. Sert took the master's class himself and his students remember him as a vital, enthusiastic teacher. He drew students from around the world and sent generations of Sertians back to other nations and throughout the U.S. School and firm were intertwined; the firm grew, at first, by creaming off the graduating students, many of whom recall being plunged with no prior experience into major responsibilities. As Sert's reputation grew his office attracted architects from everywhere. I can recall from my own years Swiss, French, Spanish, Australian, Japanese, Chinese, Korean, Arab, Czech and Indian colleagues.

Sert sorted out this mini-U.N. by a simple if drastic method. He believed firmly that Mediterraneans and Orientals were good designers, Swiss and Germans were terrific at details and Americans could best manage jobs and deal with clients. If you happened to be an American who thought you were better at design than management, you were simply in the wrong office.

Design began with models, little blocks of known scale piled up on a site model. It progressed by bigger, more detailed models, often with elevations pasted on them. Once we modeled a whole Roosevelt Island apartment, full-scale and furnished. Frequently Sert would return from vacation with a breakthrough idea for a building, in a tiny freehand sketch, basic but eloquent, with a little Modulor man on it somewhere and a sun in the corner. Except for those, however, he worked collaboratively, socially and loquaciously. He must often have been annoyed by draftsmen crowding around to listen and watch him and Joseph Zaleski attack a model under design. But he believed in apprenticeship and rarely complained. Sert always did most of the talking, cheerily, and Joseph provided choral responses, gloomily. When Sert drew, which he does beautifully but not often, his buildings always seemed to be made of stucco. His drawing style is like Corbusier's, a heavy line with a controlled shake to it that softens contours and gives a massy, molded quality and a folk-like simplicity and strength.

On the projects in which he took the lead, which include all the best known ones, Sert himself was the principal designer. All who worked with him cherish memories of Sert approaching a problem with a breathtaking sureness. Like anyone, he could be at a loss for long periods, could be tense, even panicky, could diddle endlessly with facades that only got fussier the longer he worked. But those periods weren't the real Sert. At his best he had an ability to sweep aside apparent constraints that were confusing everyone else, move on a problem and simply vaporize it. His aristocratic background, perhaps, gave a special self-



F. Catala Roca



The Miró Museum (across page) and the Maeght Foundation (left).

confidence. Anxiety never froze him. He typically went right on redesigning long into working drawings and even construction.

Most of us in the office thought the European work was the best—the Miró Museum, the Maeght, the sadly unfinished Carmelite convent in France, the Ibiza houses. The well-known American jobs—Harvard's Peabody Terrace apartments, Holyoke Center and Science Center, Boston University's campus, the housing at Roosevelt Island in New York City—were bigger, and the struggle to soften their impact could lead to cluttered forms or bric-a-brac frostings. And doubtless Sert understood American life styles and traditions, American climate and technology less well than European. Still, those are really quibbles. The American work has enormous gusto, optimism and life. Each building points the way, if sometimes by means of metaphor, to a richer visual environment, a more urbane city and a freer, more human use of technology.

Like his house, Sert's private sanctum in the office was a work of art. Folk objects were exquisitely displayed on white shelves set against intense colored backgrounds. The pure white desk was like an altar. Sert would emerge from this demichapel dramatically, a compact figure in dark gray suit with thick horn glasses. Usually, like royalty, he was last to arrive at an important meeting, creating expectancy. The suits were made in Spain and never changed. Sert sometimes wore a turtleneck with them

that gave him a half-Bohemian, half-clerical look. Sert trendy is an image impossible to conjure up.

What is his favorite among his buildings? I ask, and he names first Peabody Terrace, then the Harvard Science Center, the Miró Museum and "parts of the Maeght—it's a building you can continue as a village."

I ask whom he admires. He mentions Brunelleschi, Palladio and the architecture of Venice, Le Corbusier (Chandigarh, Marseilles), Rietvelt and Mart Stam, India and Persia, Aalto. I ask what he thinks of the current scene. "It's an intermezzo," he says. "If I were teaching today I would try to bring people a little closer to what architecture in my mind really is: the shaping of spaces for human enjoyment. Indoor space and city spaces. There's too much talk of a few small buildings without regard for the thousands of horrors that are being built all around all the time.

"We are surrounded by things that clash. In our cities nothing seems to come together. Everything comes apart. It's a process of careful integration of the building itself and disintegration of the environment.

"For me, the 20th century as we've lived it up to now may go down in history as the century that destroyed the urban space."

If it does, that history will need at least a footnote about one gold medalist's efforts in the other direction. □



The Company That Design Built

Herman Miller, Inc., recipient of a 1981 AIA medal. By Stanley Abercrombie, AIA.

It began in 1905 as the Michigan Star furniture company, with Sears Roebuck its chief customer and with something called the Princess dresser its biggest seller. It has changed. Now Herman Miller, Inc., it has 3,200 employees, it did \$230 million worth of business in the last year, and it has just been awarded a special AIA medal as an organization that has "inspired and influenced the architectural profession."

The transformation began in 1909 when D. J. De Pree, fresh from high school, began working at the Michigan Star plant, and the Herman Miller story is very largely the D. J. De Pree story. According to Ralph Caplan's *The Design of Herman Miller* (Whitney Library of Design, 1976), De Pree about the same time "also began reading books by efficiency experts, an activity interesting in the light of Herman Miller, Inc.'s later involvement in the management of office work." He devoted himself to cost control, accounting, time management, and the new complications of the federal income tax, begun in 1913, and by 1923 he was ready to take over Michigan Star. He renamed it for Herman Miller, whose daughter he had married in 1914.

(Miller himself was never active in the company, but he had helped finance De Pree's purchase of it.) For years the business progressed in a modest way. De Pree established new criteria of quality, but a well-built Princess dresser was still a Princess dresser.

A new style of furniture was introduced to De Pree by a freelance designer named Gilbert Rohde, who had begun his career as an illustrator for a Brooklyn department store and who was visiting a number of furniture companies in the Grand Rapids area in the summer of 1930. Rohde had a vision of modern living conditions—in small spaces with low ceilings—and of a simplified furniture appropriate to such conditions. He proposed, for example, a bedroom suite of four plain pieces in place of Herman Miller's then-current suite of seven ornate ones. De Pree liked the new ideas.

Why he liked them has something to do with his religious convictions. Most company biographies can be written very well without reference to the religious beliefs of company executives, but that is not the case with Herman Miller. Outward evidence of these beliefs, such as the absence of alcohol at showroom events, can be overlooked, but their effect on company policy has been—and continues to be—profound. D. J. De Pree, who, in Caplan's words, "is electric with an alert spirituality," was enthusiastic about Rohde's modernism because he perceived it as being consistent with his own ideas of morality and honesty. The old style was ostentatious and pretentious; the new was sincere and direct. Furthermore, its directness precluded opportunities for bad workmanship and was therefore consistent with the firm's standards of quality. "With his simplicity," De Pree has said, "Rohde had taken away our means of covering up. We had to learn new manufacturing techniques, such as how to make mitered joints in a very precise way."

Moral or not, it didn't sell. J. M. Eppinger, De Pree's sales

manager and later founder of his own furniture company, remembers that the new designs were referred to as "orange crates" and that "nobody liked the stuff in the early '30s." Herman Miller, according to Eppinger, was "going nowhere, almost broke." In 1934, given the New York selling territory, Eppinger began programs to train salesmen: To sell the new designs, he realized, they would first have to understand them and their merits. The suggested emphasis was not on design but on practicality, the modularity of Rohde's designs and their space-saving features. Sales didn't soar, but the company got by, and it was noted with interest that a high percentage of customers for the unorthodox designs were architects (who then bought at retail). Finally, in 1939, the New York World's Fair popularized the new style (Rohde was a member of the fair's board of design, along with Walter Dorwin Teague, Norman Bel Geddes, Donald Deskey, Henry Dreyfuss, Raymond Loewy, Russel Wright and others), and the future of modern design seemed secure.

In 1944 Gilbert Rohde died. De Pree called his three chief salesmen—Eppinger, Tom Potter and Harold Herlihy—with a question: Who could replace Rohde? One suggestion was Erich Mendelsohn, who had been living in the U.S. since 1941, following his successful practice in Germany and his collaboration with Serge Chermayeff in London. Another suggestion was industrial designer Russel Wright.

But the absolutely ideal design director for Herman Miller was discovered by De Pree himself in *Life* magazine. The *Life* story was about the Storagewall, a concept developed by George Nelson, FAIA, and his comanaging editor at *Architectural Forum*, Henry Wright. They proposed walls that were not six inches thick and filled with air spaces, but a foot thick and filled with all the multitude of household objects Americans were increasingly acquiring. It was a simple idea, and, in Grand Rapids, home of the case goods industry that such walls could make obsolete, an heretical one. De Pree asked Eppinger to track down the Storagewall authors; Nelson had already planned a trip to Detroit, and so he and De Pree soon met. "I felt obliged to tell him that I really didn't know much about furniture," Nelson has said. "He listened very solemnly, and when I told him to go look for a designer who had been in a furniture factory, he said O.K. and he went." But after six more months of searching and interviewing, De Pree came back to Nelson and repeated his offer of



Facing page, the ubiquitous Eames chairs, descendants of early designs in molded plywood and stamped metal, produced since 1950 by Herman Miller in plastic reinforced with glass fiber. Above, designers Charles Eames and George Nelson. Below, some of Herman Miller's earliest bedroom furniture. Bottom, one of the modern designs introduced by Gilbert Rohde in the '30s.

a job; this time Nelson accepted, and the mature accomplishments of Herman Miller, Inc. are the results.

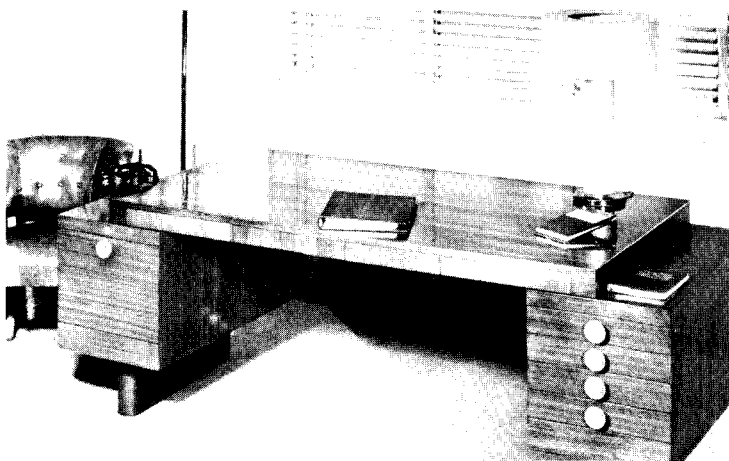
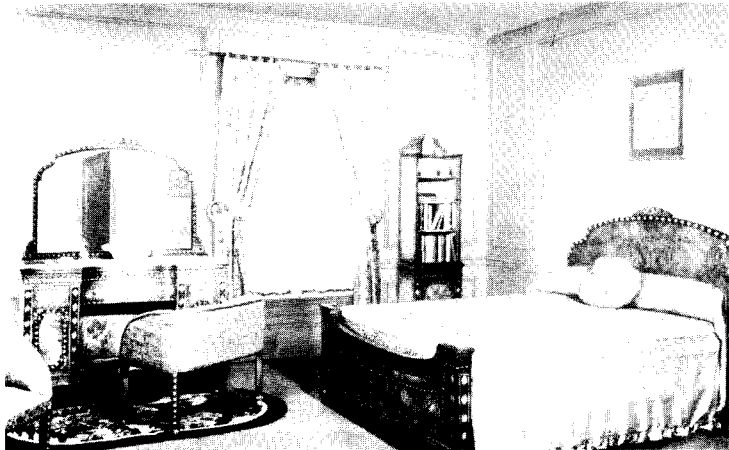
Those accomplishments include not only Nelson's own designs—the slat bench, the sling sofa, the L-shaped desk, the Comprehensive Storage System, the familiar Herman Miller logo, and much more—but also the work of other designers brought by Nelson to Herman Miller.

Prominent among these is Alexander Girard, AIA, described by textile designer Jack Lenor Larsen as "one of the great colorists, pattern givers, environmental and exhibition designers of our time." Girard's colorful fabrics have been Herman Miller staples for a quarter century, and when the company opened Textiles & Objects, a spectacular New York City showroom, in 1961, every item in it was either designed or selected by Girard.

But most prominent of Nelson's "imports" was the late Charles Eames. In the first couple of years of his association with Herman Miller, Nelson had begun telling the company to expect some dramatic changes in furniture technology. One designer then experimenting with molded plywood, for example, was Eames, who, with Eero Saarinen, had won the Museum of Modern Art's 1940 "Organic Design in Home Furnishings" competition. Edgar Kaufmann, jr., Hon. AIA, then director of the museum's industrial design department and of its Good Design program, invited Eames to set up a small display of his work in a room in New York's Barclay Hotel, preparatory to a 1946 one-man show of the work. Nelson saw the molded plywood chairs, realized their potential and effected the match between the California designer and the Michigan manufacturer that changed the history of furniture design.

Important as Herman Miller's specific furniture designs are, the whole story is more than a summation of those designs. The company's *attitude* towards design is fundamental. William W. Caudill, FAIA, chairman of the board of Caudill Rowlett Scott, has been a member of Herman Miller's board of directors for about eight years. "I can relate so easily to Herman Miller," Caudill says, "because of my CRS experience. Herman Miller is innovative and it offers quality products. And isn't that what architects do?" Max De Pree, D. J.'s son and the firm's current chief executive officer, agrees: "Herman Miller as a company is in the environment business," he says.

Within this basic attitude, the last few years have seen a gentle shift of emphasis away from the single object to the system, most prominently to the three systems generated from the research and design of Robert Propst: Action Office, Co/Struc (compatible structures) and, most recently developed, Action Factory. There are also the office work and storage systems de-



Exerting 'a broad influence' on architecture.

signed by Don Chadwick, Bruce Burdick and others. Altogether, handsome as some of them may be, their emphasis is on results, not looks (an Action Office ad says, "It's more than a place to work. It's a way to work better."), and their applicability covers the whole range of white collar to blue collar work situations.

This range, with factory elements receiving just as much design attention as executive elements, is consistent with the Herman Miller attitude toward its own workers. Design is now in process by Heery & Heery for a production/warehouse/office facility near Atlanta that will eventually have a million square feet of area. According to Mack Scogin, AIA, Heery & Heery's design coordinator, a strict requirement of the client was that executive office structures be indistinguishable in materials and quality from all the other structures.

The most striking manifestation of this attitude is Herman Miller's implementation of something called the Scanlon plan, a participative management plan that Herman Miller President Glenn Walters calls "the conscious choice we made about how we run our business." Scanlon rewards worker productivity with bonuses and also provides workers at all levels opportunity to share in the operation of the whole firm. Scanlon is egalitarian, of course, even altruistic, but it also works, both for the employees (last year, earned bonuses averaged 19.6 percent of salaries) and for the company.

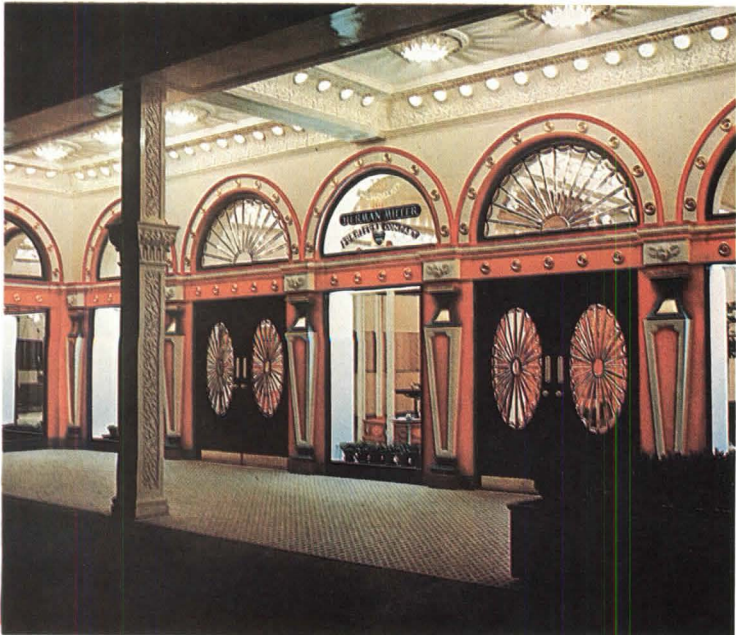
In many ways, Herman Miller is even altruistic toward its customers, providing them not just with products but also with a whole array of software and educational programs to help them use the products more efficiently. As Vice President Joseph N. Schwartz says, "Systems are only as good as the information about using them." (Schwartz, just this month, has replaced Robert Propst as president of the Herman Miller Research Corporation and has been given design responsibility for all new products. This is auspicious, according to George Nelson, still a frequent consultant to the company. Schwartz, he says, has "imagination and nerve" but is also "shrewd about evaluating his own enthusiasms.")

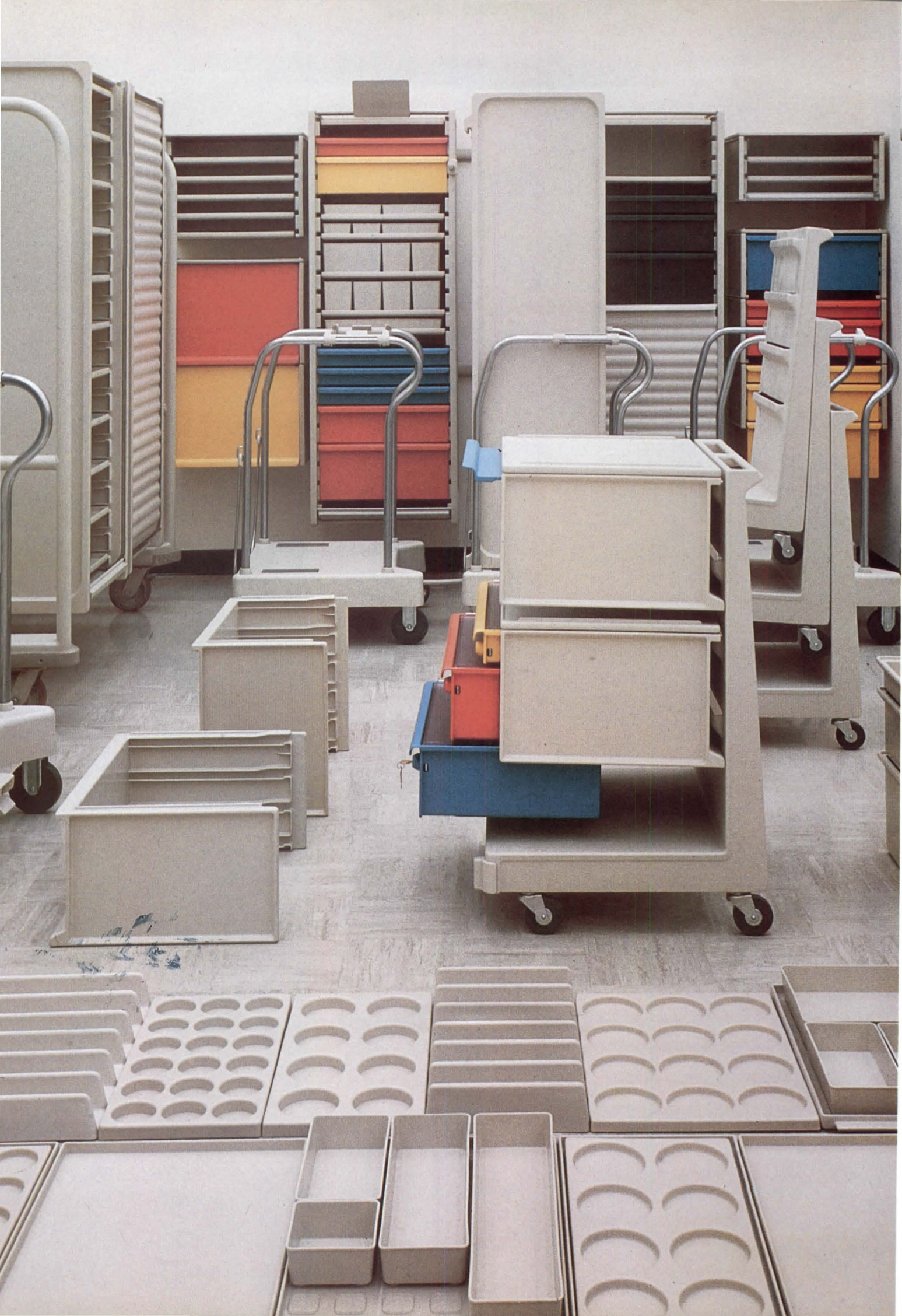
A recent announcement about the company's attitude toward office lighting is typically Herman Miller: Although it will begin to offer some fixtures for local lighting conditions and lighting design consultant services for overall problems, it feels that inclusion of general lighting in its furniture elements would limit their use and restrict future layout changes. Unlike many of its competitors, therefore, it is leaving general room illumination to the architects and the lighting industry. The company's sense of responsibility extends to a reluctance to make any item or system obsolete (although Nelson's Comprehensive Storage System and many of Girard's fabrics are, unfortunately, no longer in production). "How is it going to look 10 years after installation?" Charles Eames used to ask, and Propst has also emphasized the need for making it possible for a customer to use what he bought 10 years ago.

D. J. De Pree's little company has come a long way, with manufacturing or distribution facilities in two dozen locations in this country, Canada, Europe, Australia, South America and Japan, with education facilities in more than a dozen others, and with many local distribution points for its "rapid response" delivery system; yet it has stayed remarkably close to its founder's principles. As the AIA awards jury put it: "The development of concepts, encouraged by Herman Miller, about design and human activities have had a broad influence on the profession and its thinking toward the interior spaces in which we all live and work. The dedication to design excellence at Herman Miller is expressed not only in its furniture, but also in graphics, advertising, film programs, and the exemplary quality of architecture in their showrooms, offices, and manufacturing plants in the U.S. and abroad." Or, as Bill Caudill puts it, a little more succinctly, "It's the darnedest company you've ever seen." □



Top, Eames' 1956 lounge chair and ottoman. Above, Nelson's 1964 sling sofa. Below, Herman Miller's San Francisco showroom, transformed from a turn-of-the-century music hall in 1959 by Alexander Girard. Facing page, one of the company's current furniture systems, the Co/Struc, based on research and design by Robert Propst.









North Yemen: Land and Buildings

Text and photographs by Balthazar Korab

Ever since Bernard Rudofsky's 1964 exhibit "Architecture Without Architects" at the Museum of Modern Art, the pattern of the architectural Grand Tour has shifted to places like Capadocia, Transylvania and the Greek islands. Today, the search for inspiration from the vernacular, the quest for universal values, takes on the added need of a solid reference to sanity at a time when a novelty-obsessed neurosis haunts the profession.

In Yemen, the Arab country at the southern tip of the Saudi peninsula, I found an extraordinary concentration of those admired qualities matured into a great Islamic building tradition. I found answers there to needs both material and spiritual: integrity in expressing purpose, inventiveness, harmonious variation and flexible response to climate, topography and materials.

Besides these properties common in folk architecture, I found in Yemen a unique capacity to express a hierarchy of each building's purpose without a stylistic split. With the exception of cities under some Western influence such as Taiz and Hodeida, there is no dichotomy between formal architecture and folk expression. The elaborate facades of town houses in the capital city of San'a, for example, are in direct kinship with the simple whitewash ornaments of the rural buildings, and the mosques fit into the townscapes in scale and style.

The country is only about the size of Indiana, but since it is divided by mountains over 10,000 feet high and has a mostly nonmigratory tribal population, there has developed a great regional variety in building. But common to all regions is a skill in adapting buildings to the topography. The environment is harmonized through the mastery of building in native materials—adobe and brick on the plains and plateaus, stone in the mountains. Villages silhouette with an austere monumentality, while the richer vernacular of the towns expresses a different life style.

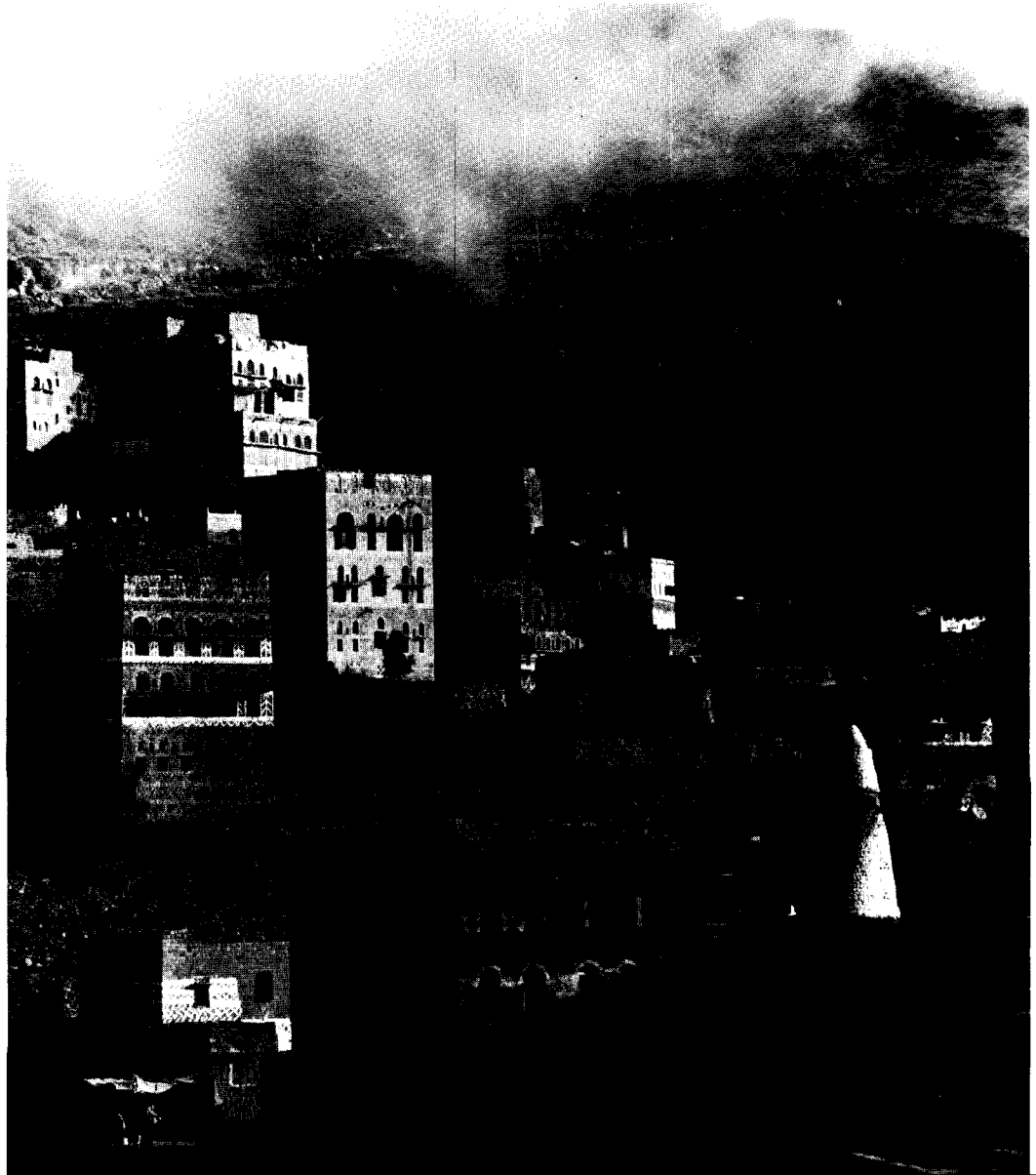
It is around those few towns that alarming changes have appeared. Yemen is historically agrarian, and until the 1960s, its six million people were isolated under the paternalistic religious rule of the Iman. Now Yemen is open to the influences of the 20th century and to the difficult problems confronting all the developing Arab countries. One of great importance to its environment is the sudden rise of per capita income. A million Yeminiis now work in the oil-rich countries, and a result is the abandonment to erosion of land adapted over the centuries to agriculture. Meanwhile, the new income buys food imported in cans, which then litter the countryside. There is also the familiar rush to the cities, some of which are still walled and until recently subject to the medieval curfew. Where the rugged land once made use of the wheel almost impossible, new roads abound with cars, and wrecks lie rusting in ditches.

Sadly, the bulldozer is indiscriminate: What remains in the ancient towns clashes awkwardly with the new. An official of Unesco, Said Zulficar, said in a speech: "From a psychological standpoint, the Islamic countries suffer from some form of inferiority complex with regard to Western standards and values, and they thereby tend to downgrade, disregard and in some extreme cases be ashamed of their heritage." Perhaps these photographs will help to promote a deserved appreciation of a magnificent building heritage.

Mr. Korab, one of the foremost American architectural photographers, is a graduate of the Ecole des Beaux-Arts. He practiced in the offices of Eero Saarinen and others before pursuing a career in photography.



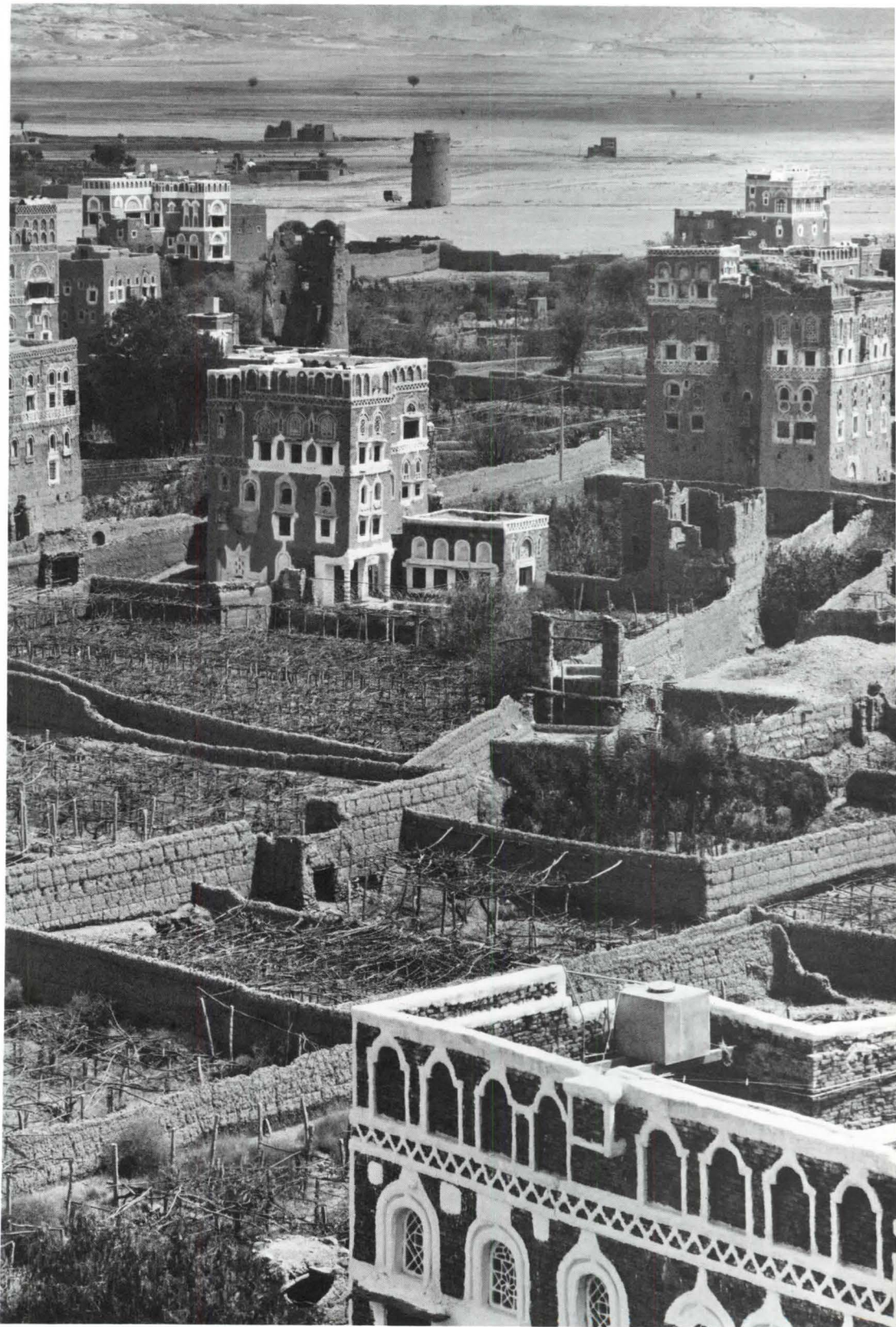
The rugged mountains of North Yemen are painstakingly terraced for cultivation. The buildings rise from the landscape like formations of rocks, yet are rich in decoration and detail.



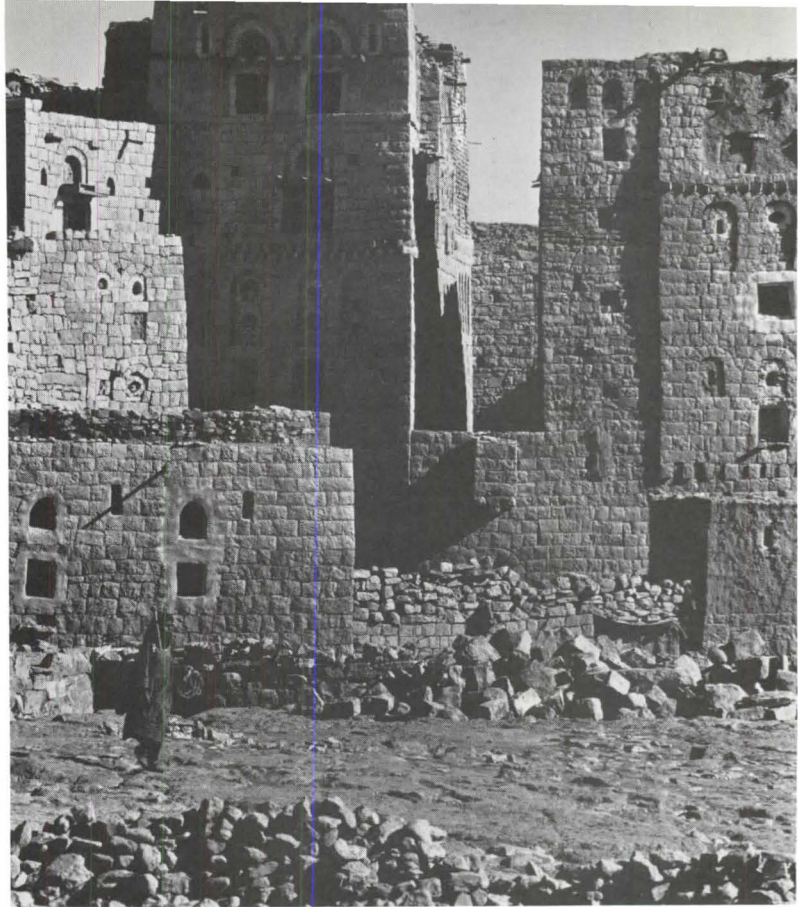


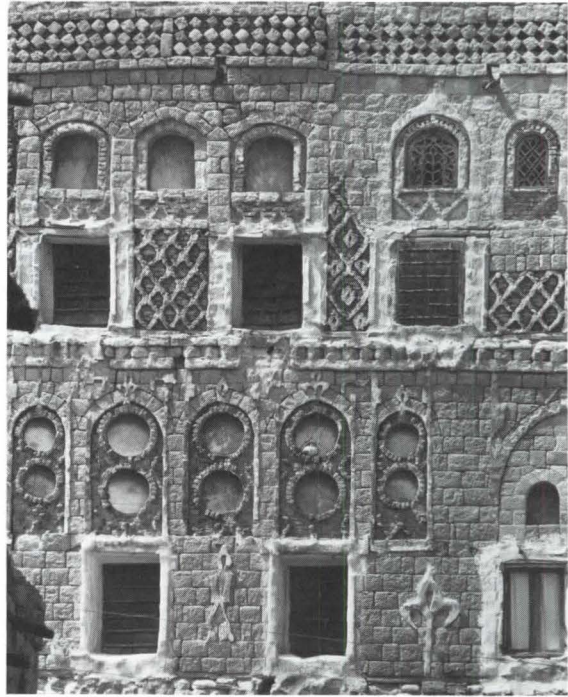
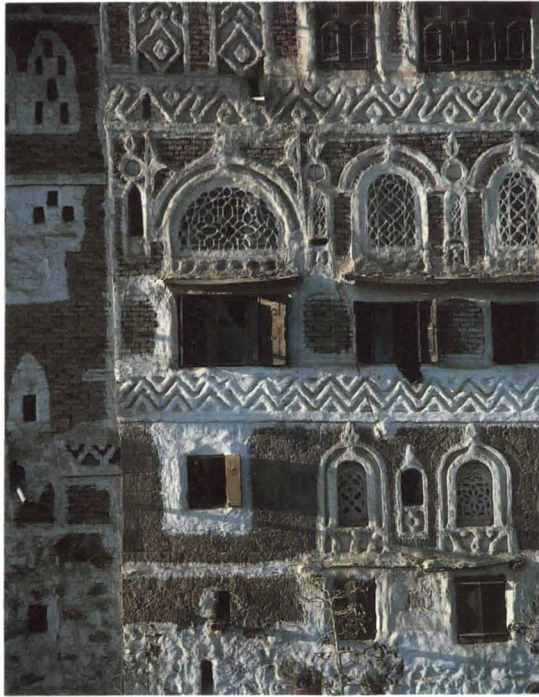
*Below, an almost sculptural composition
of buildings on the flatland near
Amran. At right, the garden city of Rawdah,
a kind of suburb of San'a, the nation's capital.*

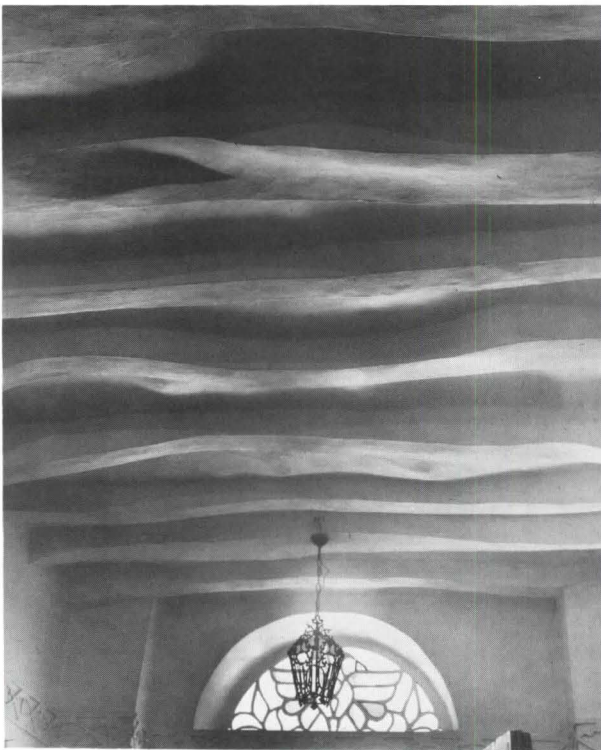
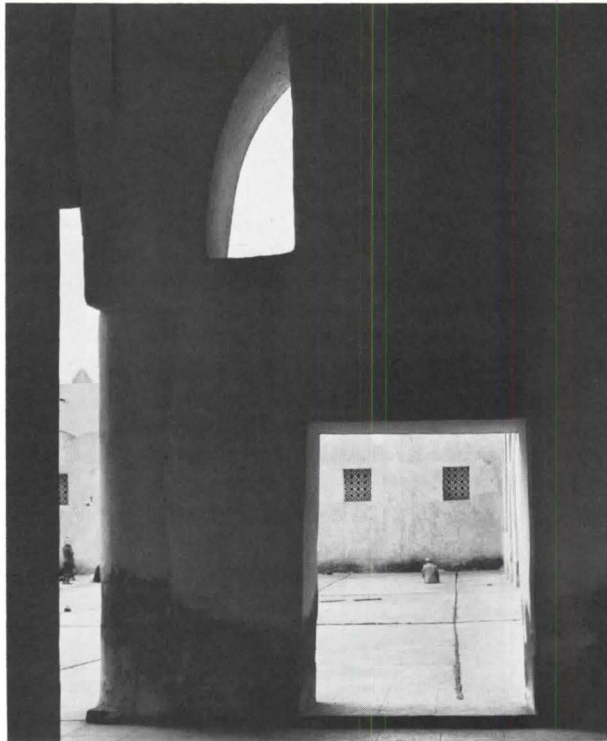




Below, a panoramic view of San'a, with autos symbolizing the coming of prosperity and modernization to a nation that until recently scarcely knew the wheel. At right, three characteristically rich facades, the first in a hamlet; the second, decorated by paint, in San'a; the third, with stone tracery, in Shibam.



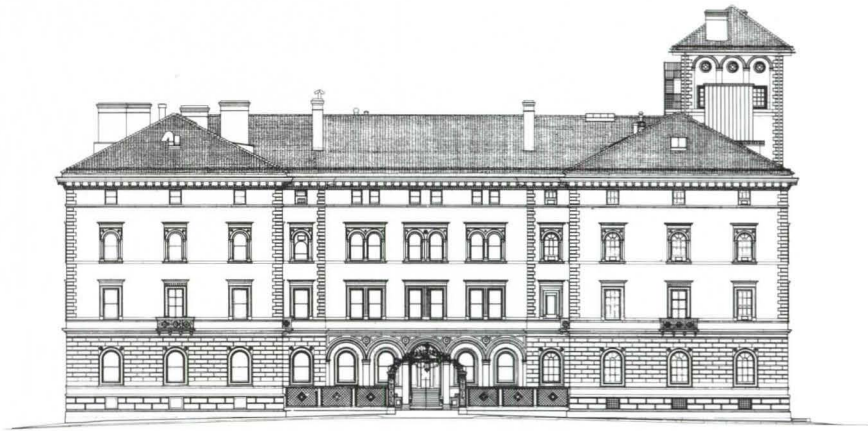




At left, the interiors of traditional North Yemenese buildings draw color from both paint and stained glass. Fenestration is varied, and gnarled limbs and trunks of trees often are used as ceiling beams. Modernization and urbanization are not without their impact in terms of dislocation and loss. The seaport community of Mocha, below, is now all but a ghost town, its handsome heritage of buildings crumbling. □







The Latest Life of the Villard Houses

They are the forepiece of a hotel tower and an art and design center. S.A.

At every phase of its history, the New York City building known as the Villard Houses has been extraordinary. Few buildings are more critically sited in the heart of a city, few have been more influential in establishing a popular architectural style and few have been the subject of such a conspicuous, daring and difficult effort at renovation and expansion. The story of the building is a complicated one. Its ending in our own time, if less than *completely* happy, at least seems to assure the building's future, and it began, as so many stories about architecture do, with a friendship.

In 1867 Miller McKim, a Presbyterian minister and active abolitionist, asked his friend and distant relative Henry Villard for advice about his son's career. Thanking him for the advice, McKim wrote, "What you said was very reasonable and shrewd . . . so that I advised Charley to give up all idea of going to France, to give his attention to the subject of architecture here and to enter an architect's office. . . ." So Charley did—the office was that of Russell Sturgis—but he still longed for the Beaux-Arts training he knew he could get only in Paris. Three months later his father was persuaded, and Charles Follen McKim was off, launched on the academically informed path from which Villard himself would benefit.

It was 15 years later when Villard, having prospered in railroad investments, commissioned the three-year-old New York City firm of McKim, Mead & White to design for him an ensemble of six houses on Madison Avenue between 50th and 51st streets, facing the rear of James Renwick's St. Patrick's Cathedral, built just three years before. McKim and Villard conferred several times that year about the project, but, because of McKim's being busy with work in Boston and Newport, the first design sketches were made by his young partner, Stanford White. When White also was called away for other work, William Mead, left in charge of the office, assigned the job to an assistant, Joseph Morrill Wells. Wells kept the U-shaped plan around a courtyard that had already been developed, yielded the original plans for using a light-colored limestone to the client's insistence on brownstone, and was chiefly responsible for the building's then-novel renaissance details, which, as Paul Goldberger has written, "started both the McKim firm and the rest of late 19th-century New York on a wave of neo-Italian Renaissance building." Rome's Palazzo della Cancelleria has often been cited as the primary source of these details, but the resemblance is obvious only in the courtyard's arcade. *The Villard Houses: Life Story of a Landmark*, an authoritative new book by William Shopsin, AIA, and Moseette Glaser Broderick,



Top of page, Madison Avenue elevation of the houses alone; the tower at right has been demolished. Above and left, the houses with their new 50-floor hotel addition behind them.

suggests two other Roman palaces, the Farnese and the Farnesina, as additional sources. In any case, it was a fresh look for the city, the six-unit scheme was itself unusual (not a freestanding single-family house, but not a typical row house scheme, either) and even the site was unconventional for such a fashionable undertaking. (Fourth Avenue, at the back of the property, was then taken over by railroad tracks; it had yet to become Park Avenue.) Construction was finished in 1885.

The largest and by far the grandest of the six units occupied the whole south wing and was intended as Villard's own residence. For this, Augustus Saint-Gaudens, his brother Louis Saint-Gaudens, Louis C. Tiffany, David Maitland Armstrong, George W. Breck and others were commissioned to design sculptural reliefs, mosaics, glass panels and murals. At the eastern side of the courtyard were two smaller (but still quite sumptuous) units, and in the north wing were three more, one entered from the courtyard and two smaller ones entered from 51st Street, all three of these eventually purchased by Harris C. Fahnestock.

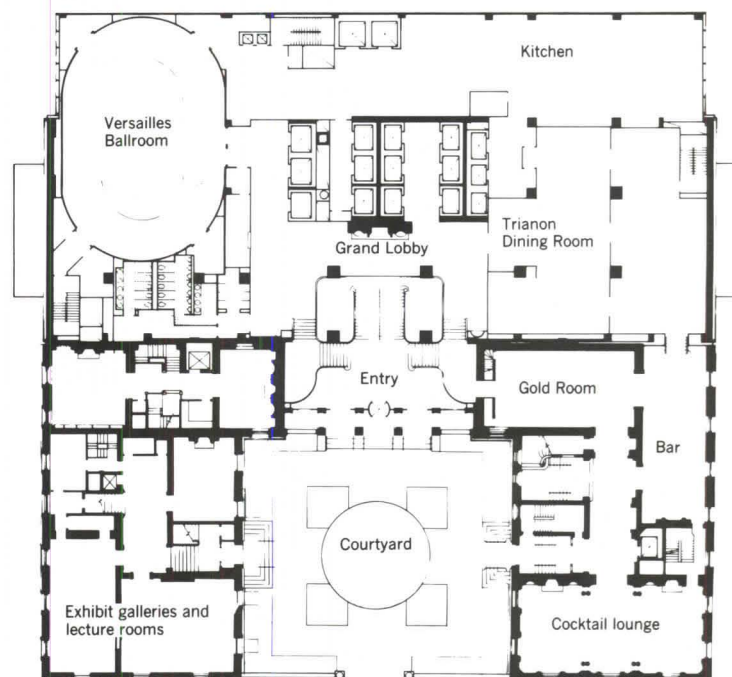
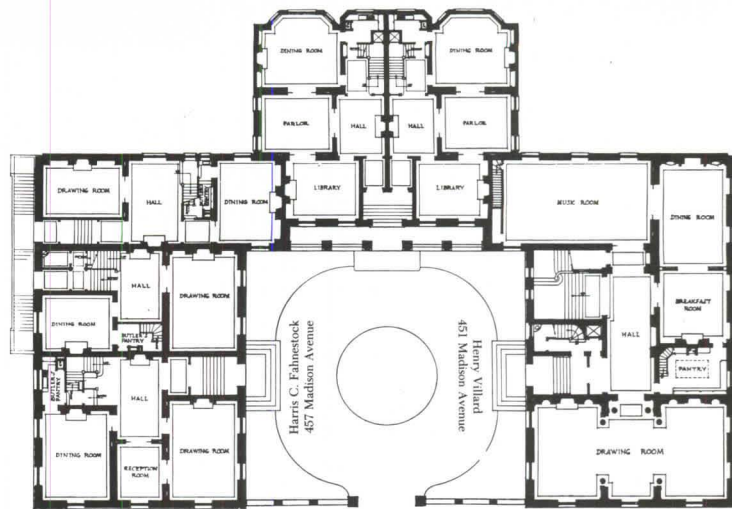
A big change after 90 years of sitting quietly.

Shortly after the building was finished, Villard's railroad enterprises suffered difficulties, and Villard sold his wing to White-law Reid, publisher of the *New York Tribune*. Not content with the wing's size, Reid added a matching extension by McKim, Mead & White to the east (finished in 1892; recently demolished) and some new interior embellishments, including the famous barrel-vaulted Gold Room also by the McKim firm and featuring two murals by John La Farge.

In 1922 two of the three Fahnstock units were combined into one by architect Charles Platt. This north wing was later bought by Joseph P. Kennedy and loaned by him, during World War II, to the Friends of Free France. In 1946 Kennedy sold the wing to the Random House publishing company, which stayed there until 1969. Meanwhile, across the courtyard, the Villard-Reid wing had fallen empty after the war, but was bought in 1948 by the Archbishopric of New York, the corporation charged with conducting real estate transactions for the Roman Catholic archdiocese. Little by little, this church group acquired additional parts of the Villard Houses and some neighboring buildings, and by 1971 it had come to own the whole parcel.

All these early changes of ownership and consequent adaptations were only warm-ups for the big change that was coming. Just by sitting quietly for 90 years, the Villard Houses had come to be at the heart of some of the world's most expensive real estate. "There is no more prime piece of property in New York," Ada Louise Huxtable wrote in an ominous *New York Times* article titled "How to Bankrupt a City at \$400 a Square Foot." So no one was very surprised when it was announced in 1974 that the archbishopric had arranged to lease the assembled properties to developer Harry Helmsley and that Helmsley planned a 1,000-room hotel for the site. He had chosen Emery Roth & Sons as architects for his Park Lane hotel on Central Park South, opened in 1971, and he chose them again for the new hotel. But it wasn't going to be simple: Moving from the announcement to the finished building was to take six years and an awesome amount of controversy and struggle.

No proposal for razing the Villard Houses was ever made public. Even so, some considered the erection of a 50-floor



Original (top) and current ground floor plans. Left, the Gold Room with La Farge murals, now a cocktail lounge. New door leads to hotel lobby. Right, hotel entrance from the courtyard.



tower adjacent to the four-floor residence tantamount to destroying it, and some feared that blasting for the new foundations would in fact shake the older buildings to bits. Further concerns were voiced when the first Roth studies were shown, calling for demolition of the 1892 addition, for demolition of the Gold Room, and for rental of the rest of the old building as commercial space. With new hotels all over the world grasping desperately for ersatz glamour, surely, preservationists argued, some good use could be made of the Villard Houses' authentic glamour. The fight was on.

Active in trying to keep the most important features of the old building intact and, so far as possible, in public use, were the New York City Chapter/AIA, the Municipal Art Society (under the leadership of then-President Doris Freedman, Kent Barwick, Brendan Gill and others), the Landmarks Conservancy (an offshoot of the Municipal Art Society), the Landmarks Preservation Commission (then headed by Beverly Moss Spatt, with Adele Chatfield-Taylor her assistant), Community Planning Board 5 (which set up a special Villard Houses task force headed by James Morgan, AIA) and SAVE ("Society Against Villard's Extinction") organized by Darcy Lewis. Also involved, of course, but with more general concerns, were New York City's planning commission and board of estimate (in effect, the city's board of directors).

It was the Landmarks Preservation Commission that, after the November 1974 presentation, had urged the Roth office to try again. The second Roth presentation, in June 1975, had, in Mrs. Huxtable's opinion, "a new and less offensive tower," but still proposed tearing out the Gold Room. The trouble with the

room, it seemed, was not just that it occupied a critical space next to a natural hotel entrance from the courtyard, but also that, because of grade changes, it was on a level different from that of the main lobby. The room would make an elegant bar, all admitted, but conventional wisdom among hoteliers is that stairs leading to bars spell disaster.

Urged by AIA, the Roth office tried again. In August 1975 a plan was produced that retained and used the Gold Room and the adjacent dining room, although not the rest of the Villard-Reid wing. Another happy development was that the travertine facade shown in the first two schemes (and reportedly favored more by Helmsley than by Roth) was replaced by a more sober facade of dark glass and bronze-anodized aluminum, similar to the one finally built. (This dark skin has been denounced as boring, but there are worse sins than being boring, and the skin's very blandness makes it an ideally reticent backdrop for the old houses, which, since being cleaned, are a much lighter brown.)

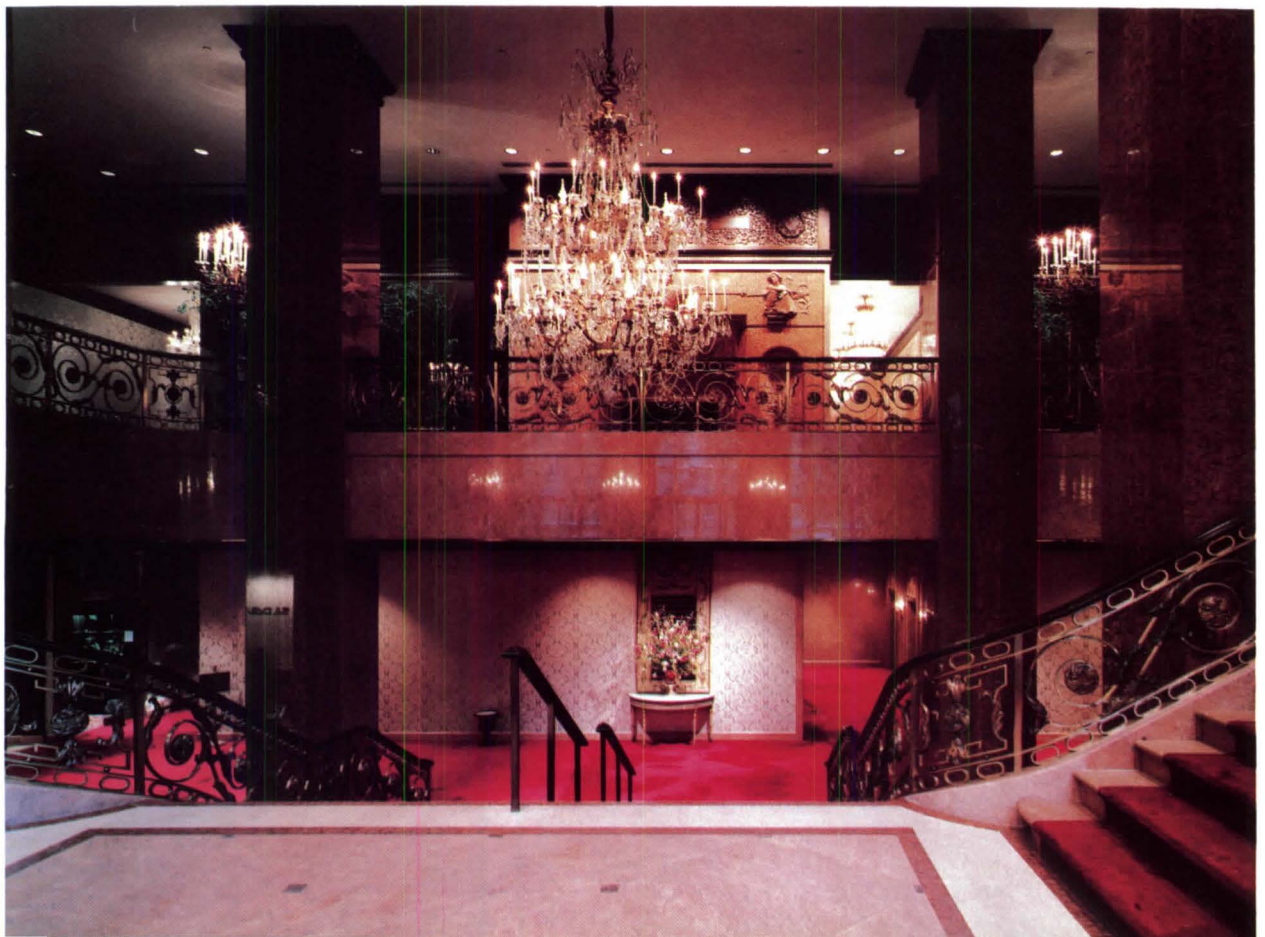
By now it had become clear that the final design solution would be a painstakingly negotiated one. In January 1976 the archdiocese sought expert professional help, hiring preservation architect William Shopsin, AIA, as consultant, charged with preparation of a historic survey of the building and with helping to resolve conflicting interests, and early in 1977 the Roth firm hired as its own consultant James W. Rhodes, AIA, who had served as restoration supervisor for Hardy Holzman Pfeiffer's adaptation of the Carnegie mansion in New York City for use as the Cooper-Hewitt Museum.

The Community Planning Board and its task force were still fighting, demanding that all major rooms be saved, that more of them be used by the hotel or opened to the public, and that there be adequate insurance against damage during construction. Finally a complete preservation plan, including a deed restriction protecting the houses and their interiors well into the next century, was drafted by the legal counsels for the archbishopric, the Landmarks Preservation Commission and the city planning commission. Construction began at last in March 1978, and the hotel opened in September 1980 with *all* the significant rooms of the Villard Houses' south wing in use by the hotel. Not quite "open to the public at all times," as James Morgan's task force had once hoped for, but Morgan himself is well satisfied. "If you put on a tie," he points out, "you can go there."

Many parts of the complex remain unfinished, but most of it is complete. The courtyard, which the archbishopric had used as a parking lot, has been planted and repaved with a central medallion of colored marble and granite. The north and south wings are looking better, outside and in, than they have in years. The central east wing has been partly demolished, its facade, arcade and a row of rooms above the arcade (leased to Capital Cities Communications, Inc.) being all that remains of the original; behind this is the hotel.

It was first christened the Palace, but it soon was discovered that New York City already had a hotel called the Palace—on The Bowery, with quite different accommodations and rates (the new hotel offers singles at \$120 to \$180 a night, a two-bedroom suite for \$900)—so the name was changed to the Helmsley Palace. It can be entered from either of the side streets, but the most dramatic entrance is from the courtyard. Inside, all is aglitter—too much aglitter for some tastes. Stairs lead up to a ballroom and dining room, a landing on the way opening to the Gold Room and other spaces of the south wing. At the head of the stairs, on axis with the entrance, is the relocated dining room fireplace of red Verona marble, flanked by fountain niches with sculptured dolphins, the work of Augustus Saint-Gaudens. It is a magnificent sight, even if the head of the stairs is an odd spot for a fireplace. A central flight of stairs leads down from the courtyard level to the main lobby level. Here, unfortunately, the location of elevator banks and lobbies is unrelated to the strong axially of the courtyard and entrance; a continuation of the established symmetry could have made all the difference here in relating new and old construction. Working around this basic flaw and within the limits of a grandiose "traditional" vocabulary, the respected firm of Tom Lee, Ltd., now headed by Sarah Tomerlin Lee, has done as best it could with the public interiors. (It must be noted, though, that, as the hotel's own publicity release puts it, "Leona"—Mrs. Helmsley—has been "involved in approving architectural design and interior decoration.")

The rooms of the grand south wing, after the complete rehabilitation guided by James Rhodes of the Roth office, look magnificent, particularly the drawing room with its pilasters and columns of pale green marble. The Reids' 1892 extension is gone (although one of its rooms has been reconstructed on the third



There are worse fates than shotgun marriage.

floor of the hotel), but the three major rooms of the main floor are all happily in use and constitute what must be the most splendid hotel cocktail lounge in the country. A few details of decor (such as the upholstery fabric in the former dining room) are jarring, but only a few, and it is to the management's credit that they have allowed the Lee firm to implement a generously spacious seating plan. On the floor above, a paneled library and drawing room are also in use as meeting rooms or private dining rooms.

But perhaps the most intriguing development of all is the new use of the north wing. Here is the perfect manifestation of the process of accommodation and conciliation that has been taking place since 1974, for the wing now houses many of the very institutions that fought for its protection, and one of their former adversaries is now their landlord. The entire wing is now the home of the Urban Center, a group of organizations assembled by the Municipal Art Society and also including the New York City Chapter/AIA, the New York City chapter of the American Society of Landscape Architects, the Parks Council and the

Views of the Urban Center in the north wing, counterclockwise from top: under a mural by Richard Haas, Marita O'Hare presides over the headquarters of the Architectural League; one of the shared lecture and exhibit spaces on the ground floor; the entrance foyer, with a photo of its original appearance. Facing page, looking west from the courtyard toward St. Patrick's.



Architectural League of New York. These organizations share lecture and exhibition space, and there is also an information exchange and a great little bookshop, supported by the J. M. Kaplan Fund, which has a unique selection of current, classic and even out-of-print books about architecture and urban design. The wing as a whole is leased by the Municipal Art Society, which in turn lets space—with restrictions on interior modifications—to the other groups. Margot Wellington, executive director of the society, who bravely orchestrated the move into the Villard Houses, looks on the Urban Center as “a village well for urban design arts.” The center's goals, Wellington says, range from “making the universe aware of good design” to simply “learning how to share a Xerox machine.” So far, the center's participants are in good spirits about its prospects. Despite the interferences of continuing construction, 25,000 visitors have participated in formal activities since the center opened last spring, and at least four times that number are expected in 1981.

Architect for the north wing's restoration was James Stewart Polshek, FAIA. The interiors here have none of the spectacular character of those in the south wing, but they never did, and one had to have seen what Random House had done to the old rooms—dropped ceilings over a maze of crude new partitions—to fully appreciate Polshek's accomplishment. For reasons of budget or perhaps of haste, some details seem to have escaped attention: Brushed aluminum door hardware and white plastic switch plates against dark wood paneling are obvious blemishes. Custom designed lighting fixtures are handsome and cleverly include both indirect lighting on the ceiling and adjustable spotlights for the exhibitions many of the walls will hold, although the light level seems unnecessarily high in some places and even these fixtures look inappropriate in such rooms as the paneled library that is one of AIA's spaces.

AIA itself is still unpacking, but, according to executive director George Lewis, AIA, is making plans for a headquarters of which New York area architects “can be really proud.” The firm of Voorsanger & Mills is now preparing a proposal for further development of the AIA facilities.

To summarize the whole, long Villard Houses story, it seems to show what concerned citizens, with determination, can accomplish: An exemplary effort has saved a remarkable building





from neglect, if not from total destruction, and the formation of the Urban Center is a promising byproduct of that effort. But the story also shows what citizens, with determination, cannot do. For no one should pretend that the new tower is a great building or that *any* tower of such size could be an appropriate extension to an antique town house. For all their successes, what the preservationists have finally accomplished here is really rather close to what they have been fighting so vehemently a few blocks away: the office tower proposed behind the facade of Grand Central Station.

Shopsin and Broderick's book calls the new complex "a creative marriage between preservation and development." If so, it is something of a shotgun marriage, with preservationists in the role of the irate father, the Villard Houses as the violated maiden, and the church and developer out having fun with their big erection. It is certainly not a marriage made in heaven. It is nevertheless a product of admirable human energy and down-to-earth compromise, and—to further belabor the metaphor—it's a much happier event than the architectural funeral most observers would have bet on six years ago. □

BOOKS

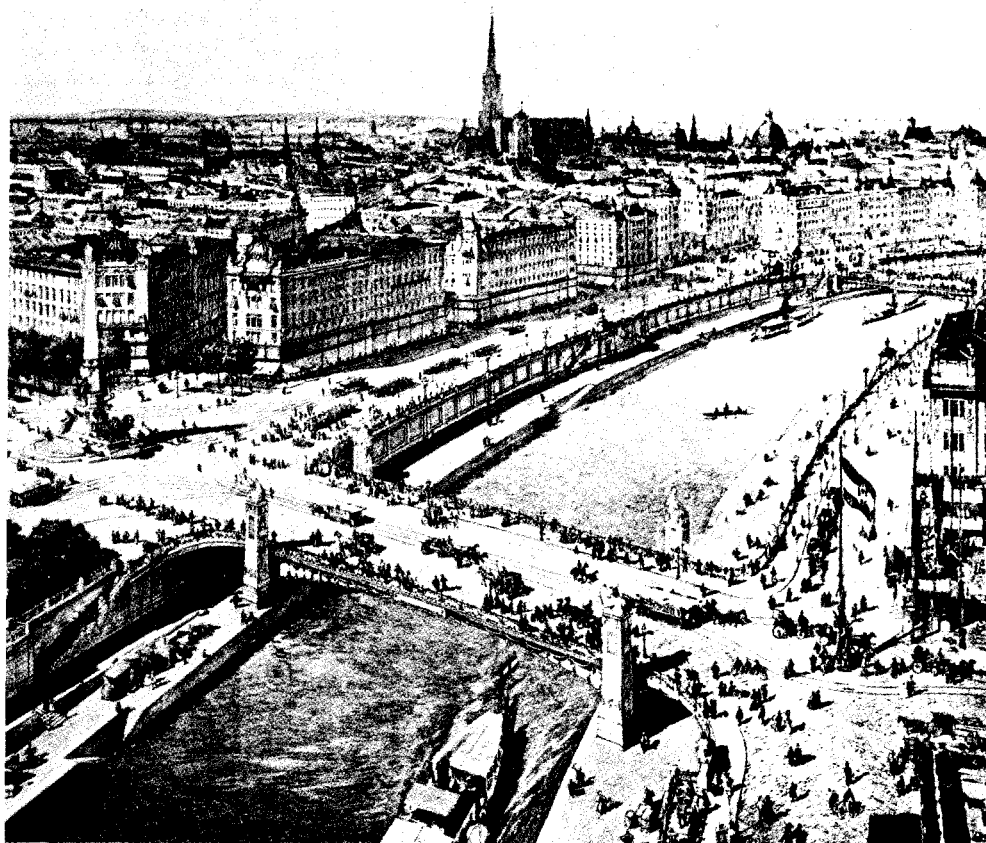
Vienna at Century's End: Seminal Thought, Artistic Ferment

Fin-de-Siècle Vienna, Politics and Culture. Carl E. Schorske. (Knopf, \$15.95.)

The excitement this book generates derives from the analytical perspective it offers—a political rather than an art historical view. Of its seven chapters, that describing the origin and development of the Ringstrasse best illustrates the author's methodology, and will be of greatest interest to architects. This examination extends to the artistic conflict between Camillo Sitte, who may be said to have created modern city planning and urban design, and Otto Wagner, whose *Modern Architecture* (1895), voiced the urban-oriented, antihistorical, profunctional philosophy later incorporated into the modern architectural movement, as well as Josef Olbrich, designer of the House of Secession, and Adolf Loos, whose moral effort to "purify the visual environment—city, housing, dress, furniture—by abolishing all embellishment," has remained a foundation stone of modernism.

Much as he informs the history of modern architecture and illuminates the hitherto neglected Vienna scene, Schorske is a cultural historian, and his interest is equally in such literary figures as Arthur Schnitzler, Hugh von Hofmannsthal and Adalbert Stifter; politicians like Georg von Schonerer, Karl Lueger and Theodor Herzl; the great Sigmund Freud; and the painters Gustav Klimt and Oskar Kokoschka who shook and moved Vienna's art world. His central themes are the rise and fall of liberalism, the fate of Vienna's Jews (including most of the above named), the quintessentially urban concentration, and its associated development, the urban middle classes.

Such powerful ideas of the cultural historian bind together the more specialized concerns of seven chapters composing the book, unifying them in time and place. While this review will discuss further the origin and development of the Ringstrasse, that crucible of modern architecture, it is important at the outset to establish the context of this topic, particularly in its political focus, its historical roots and its generation of architectural and



Otto Wagner's 1897 drawing of the Danube Canal shows quayside installations and the recent canal bridges.

urbanistic forms as they are presented in this important, attractive and rewarding book. In today's period of comparable large urban developments—southwest Washington and Pennsylvania Avenue in the District of Columbia, Baltimore's Inner Harbor, Philadelphia's Society Hill and others of comparable size—it is obviously a significant contribution to understanding what we are doing; and those little interested in history will find equally productive experiences that bear on today's changing architectural philosophies.

In mid-19th century Vienna, the availability of hundreds of acres of land surrounding the inner city was the consequence of the long-deferred removal of the fortifications that had held back the Turks and a still further period in which the Austrian army retained this open space as a field of fire—a *glacis*—to defend the capital against the suburban pro-

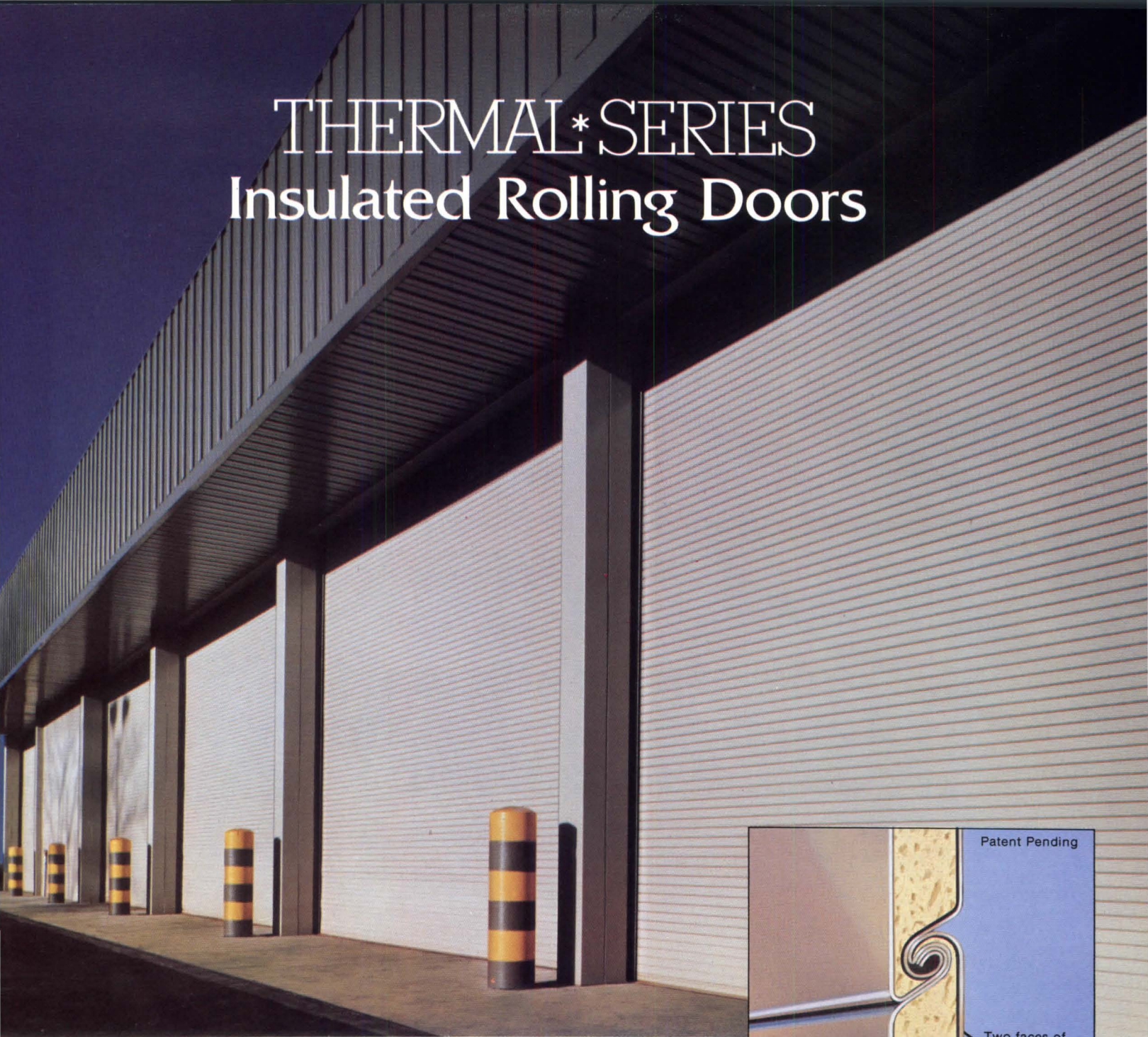
letariat. Not until 1860 was the hegemony of Vienna affirmed and the city began to reshape itself in the liberal image. The medievalism of local government was swept aside; the suburbs were integrated with the central city; imperial government was abolished and municipal self-government achieved.

What emerged as the Ringstrasse developed was a deliberately planned distinctive part of the city, realized in a defined historical period and in the architectural style of that period. Once achieved, by the end of the century, the Ringstrasse and all that it implied then became the object of critical reaction and the launch platform of modern art and architecture, the explicit context for the opposing views of Sitte and Wagner.

In the first period of Ringstrasse development, the major public services of

continued on page 77

THERMAL* SERIES Insulated Rolling Doors



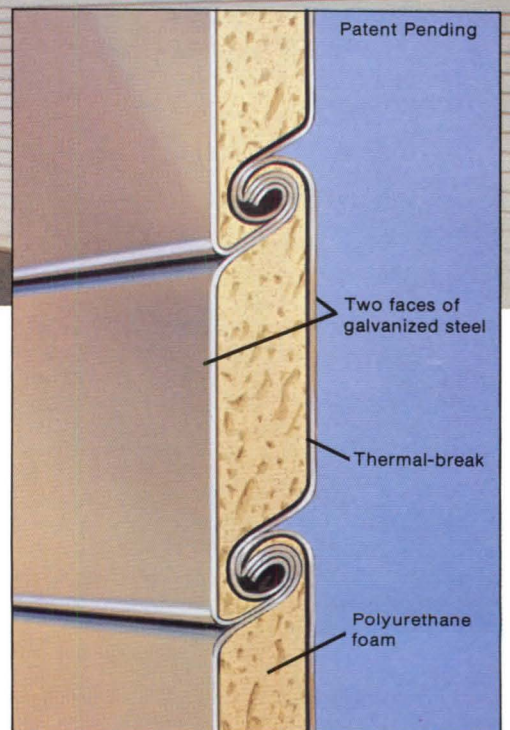
The Creative Challenge of Today

To design a building that's energy efficient you've got to use every means to conserve energy. That's why Atlas has developed a series of insulated rolling doors that cuts wasted energy due to heat flow through and around the door curtain.

The door slat is uniquely constructed so that polyurethane foam is sandwiched between two faces of 22-gauge galvanized steel. The door frames are weather-stripped on all sides, to make

them the logical solution for the temperature-weather control problems that occur at large door locations. Whether used at exterior or interior openings, whether motor or chain operation, our Thermal-Series is the best bet when you have to meet the challenge of today.

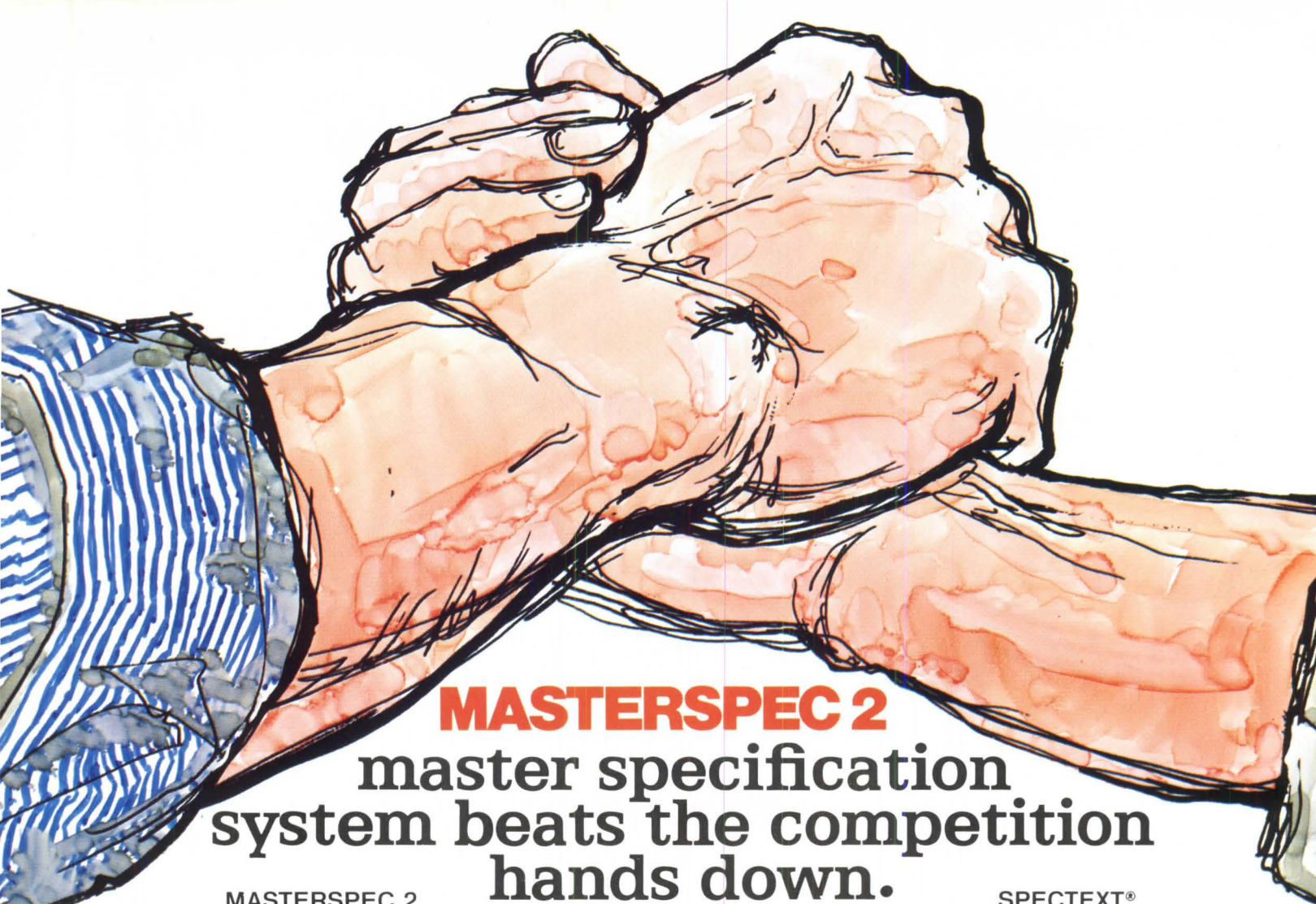
If you'd like more information on our Thermal-Series call or write Atlas Door Corporation (201) 572-5700. Because we're committed.



Atlas Door Corp.
110 Truman Drive
Edison, N. J. 08817
201-572-5700

Meeting the challenge of today...

Circle 28 on information card



MASTERSPEC 2 master specification system beats the competition hands down.

MASTERSPEC 2

SPECTEXT®

- 1. COST.** The average general practice firm uses our stand-alone BASIC VERSION at an initial cost of \$395 including all quarterly updates during the first subscription year. All subscribers pay the same price.
- 2. RENEWAL COST.** MASTERSPEC 2 BASIC has a renewal cost of \$245.
- 3. SCOPE.** MASTERSPEC 2 system covers more specification sections.
- 4. ACCOUNTABILITY, UPDATING AND REVIEW OF TEXT.** PSAE's permanent staff of professional specialists research, write and update our text. Our text is reviewed by standing technical committees of the design professions. Have a question? Call us up.
- 5. EXPERIENCE.** More than 10 years of use and experience—billions of dollars in construction built annually using MASTERSPEC resulting in a technological lead over SPECTEXT in the development of a library of feedback from more than a thousand user firms and thousands of product manufacturers and trade associations.
- 6. ADAPTABILITY.** Our choices satisfy all firms. The small firm might want only our BASIC VERSION. Others might wish to add the optional SHORT LANGUAGE VERSION and/or NARROWSCOPE VERSION.
- 7. NAMES OF PRODUCTS AND MANUFACTURERS.** We name them to save you time in decision-making.
- 8. EVALUATIONS.** Our sections have unique evaluation sheets.
- 9. AUTOMATION.** We have Diskette Libraries compatible with 20 different brands of equipment, even for Radio Shack and Apple III. Our costs for Diskette Libraries are as low as \$500.
- 10. DRAWING CO-ORDINATION SHEETS.** We provide them with the text to prevent overlaps, duplications and omissions.

If you have any questions, CALL 800/424-5080 TOLL-FREE. Ask for Leonard Bain, AIA. You will receive an information package.



- 1. COST.** "The subscription fee is \$750 for CSI members (\$850 for non-members) which includes all quarterly updates published through the subscription year."*
- 2. RENEWAL COST.** No published renewal cost. "Subscribers will be entitled to order second and subsequent years quarterly updates every year without interruption by advance payment of an annual fee so long as CSI offers SPECTEXT services. This annual fee will be determined each year by the actual costs involved."*
- 3. SCOPE.** They cover fewer specification sections.
- 4. ACCOUNTABILITY, UPDATING AND REVIEW OF TEXT.** "SPECTEXT sections are prepared using information obtained from many sources, none of which are under the control of CSRF or CSI."**
- 5. EXPERIENCE.** Two years of experience of the system at the most.
- 6. ADAPTABILITY.** You must buy the entire text—you get no choices.
- 7. NAMES OF PRODUCTS AND MANUFACTURERS.** "SPECTEXT does not include the names of manufacturers of products... The 'Spec Notes' include references to proper CSI Technical Aid Series documents (TAS) to obtain manufacturers' names."**
- 8. EVALUATIONS.** They have no evaluation sheets.
- 9. AUTOMATION.** Only *one* authorized source for diskettes and equipment. Cost—several times ours for diskettes. Plus their diskettes can only be used on one model of one brand of equipment.
- 10. DRAWING CO-ORDINATION SHEETS.** They do not provide them.

MASTERSPEC 2 is a service of

PSAE

Production
Systems for
Architects &
Engineers, Inc.

A wholly owned corporation of AIA
1735 New York Avenue, N.W.
Washington, D.C. 20006

When you add it all up, the MASTERSPEC 2 master specification system is like having another pair of hands in the office.

The information in this ad is the result of extensive research and is accurate to the best of our knowledge, as of December 31, 1980.

*Form letter from Administrator, Technical Services, CSI, sent to prospective SPECTEXT subscribers
**SPECTEXT's Subscriber's Manual

Circle 29 on information card

Books from page 74

the modern city—water supply, sanitation, public health services, modern paved streets and transportation, and parks—were created. The new institutions of liberalism found sites in the Ring, where their concentration yielded a distinctive urban image unequalled among cities in its “cultural projection.” While most of the land, as in similar developments (the Paris boulevards created by Haussmann, Edinburgh’s new town, London’s Georgian squares) were consumed by apartments for the growing middle classes, the monumental character of the newly developed area was stamped by its municipal and national institutions.

Before this period really commenced, Schorske makes clear, the first buildings to be located in the Ringstrasse, the Votivkirche and the arsenal, were stamped by their military sponsors; but then “the substance and meaning of the Ringstrasse program changed, responding to the will of the new ruling class to erect a series of public buildings expressing the values of a *pax liberalis*. . . . In the new Ringstrasse development, the third estate celebrated in architecture the triumph of constitutional *Recht* over imperial *Macht*, of secular culture over religious faith. Not palaces, garrisons and churches, but centers of constitutional government and higher culture dominated the Ring . . . expressing the various aspects of the bourgeoisie cultural ideal in a series of so-called *Prachtbauten* (buildings of splendor).”

In the hands of the City Expansion Commission, and as designed by Ludwig von Forster and other planners in 1859, buildings were used to magnify horizontal space, defined in broad boulevards, radically different in character from that of the inner city and separating it from the adjacent suburbs. The principal streets affirmed circularity, creating a “sociological isolation belt,” while those streets connecting suburbs with the inner city were given little or no prominence.

The new institutions of liberalism that received prominent sites in the Ring were the neoclassical Greek Parliament building, the renaissance styled university, the Gothic City Hall, the baroque municipal theater, and also museums, art galleries, the opera house.

The “politically flexible” architects of these buildings arrived at their assorted styles by a process of ratiocination Schorske sufficiently describes. But it is in the event as a whole that “the monumental buildings of the Ringstrasse expressed well the highest values of regnant liberal culture.”

The importance of housing for a city that doubled in population between 1840 and 1870 was reflected in planning that allotted the majority of the space in the

Ring for this purpose. But the development of a distinctive housing type, the *Mietpalst* (literally, rent-palace) from earlier dwellings of the inner city aristocracy, and the devising of new ways to capture rising land values from which to finance streets, parks, public services and many public buildings, are notable themes Schorske pursues in support of his case for the liberal-aristocratic rapprochement. Regrettably, the rich detail with which Schorske treats this subject cannot be reflected here.

The strength of Schorske’s account of the development of the Ringstrasse lies less in its architectural history than in its broader cultural interpretation. As this extends in other chapters to the relations between architecture and painting, music, city planning, science, engineering technology and other aspects of fin-de-siècle culture, these can be seen as responding to the same historical forces. From this platform was launched the careers of Theodor Herzl, the founder of Zionism—and of Adolf Hitler; the controversies that surrounded Arnold Schoenberg’s rejection of tonality and his invention of the 12-note scale; Kokoschka’s “sublimated psychological realism” in painting or Adolf Loos’ stark rationalism in architecture; Sigmund Freud’s assertion of the importance of childhood wishes and the meaning of dreams. These revolutionary figures, who have left their stamp on modern life and events, take on new meaning as they rise from the pages of Schorske’s inspiring account.

Without doubt, this is the most important book of its kind to have recently appeared, and it is a pleasure to note that a paperback edition is scheduled. *Frederick Gutheim, Hon. AIA, Washington, D.C.*

Tax Incentives for Historic Preservation.

Gregory E. Andrews, editor. (National Trust for Historic Preservation, Preservation Press, \$12.95).

When the National Trust for Historic Preservation called a national conference in 1976 on public tax policy and the conservation of the built environment, it was a timely event. The first conference of its kind, the occasion was aimed at encouraging support for bills before Congress that eventually led to the 1976 Tax Reform Act’s provisions for historic preservation tax incentives and the investment tax credit provisions in the Revenue Act of 1978—both landmark pieces of legislation. This book builds on the conference, going on to give practical advice for all who would take advantage of the tax laws.

There are four major parts to the book, with papers by distinguished and knowledgeable contributors discussing the federal tax law, state and local tax laws, tax implications of preservation easements

and taxation of private historic preservation organizations.

The book’s basic purpose, says James Biddle, past president of the National Trust, is akin to the aim of the 1976 conference: “to stimulate discussion of, and appreciation for, the significant role that tax laws play in affecting historic properties.” But, as he says, the book’s role is different because of the tax laws since 1976. It “seeks to explain and evaluate the now numerous laws offering some form of tax relief for historic preservation and, in doing so, to help chart a future course.” The book is highly recommended.

The Chicago’s World’s Fair of 1893: A Photographic Record.

Text by Stanley Appelbaum. (Dover, \$8.95.)

Anyone who likes old photographs will enjoy this collection garnered from the archives of Columbia University’s Avery library and the Chicago Historical Society. There’s a bonus as well in Stanley Appelbaum’s entertaining text in which we are told of the fair’s conception and its architectural program and are given a detailed description of all its marvelous buildings. There’s also a brief account of what happened after the fair, and a bibliography.

Tradition of Craftsmanship in Mexican Homes.

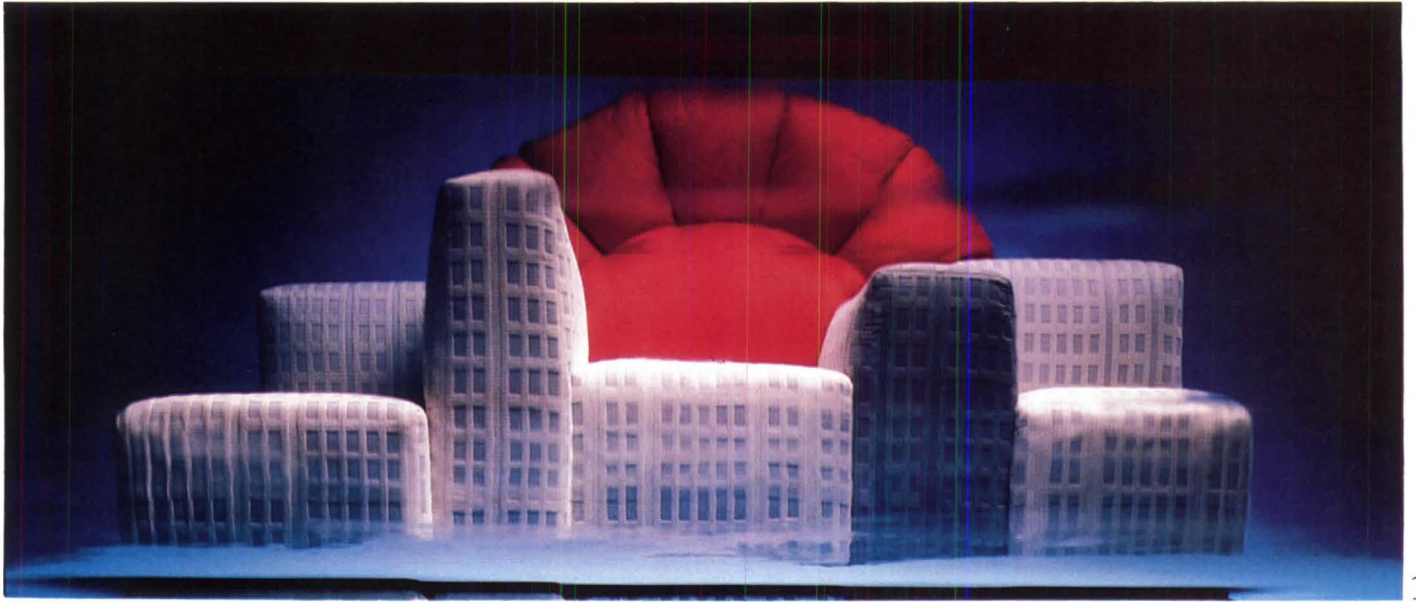
Text by Patricia O’Gorman; photographs by Bob Schalkwijk. (Architectural Book Publishing Co., \$22.95.)

“If one wishes to find utter perfection in adobe construction, the delightful town of Alamos in the State of Sonora in northwestern Mexico should be one’s Mecca,” says Patricia O’Gorman in this book. This is not a book on adobe, however. It is but one of the materials by which the book is divided. Others include stone, brick and masonry, plaster and stucco, terra cotta and tile. Whatever material is used, and even with the most primitive methods, the black and white photographs in this book reveal that great beauty can be achieved where there is craftsmanship.

English Architecture: A Concise History.

David Watkin. (Oxford University Press, \$7.95.)

Know someone going to England? Well, give him this little paperback that can be tucked in a pocket. Not only is it easy to carry, but it will help greatly in understanding the history of English architecture. Most readable, the book begins with pre-Conquest architecture and travels on down through time to the 20th century, explaining tersely how the styles of architecture were destined to be superseded. In a book so small, only the highlights of English creative genius as expressed in architecture can be emphasized. □



1

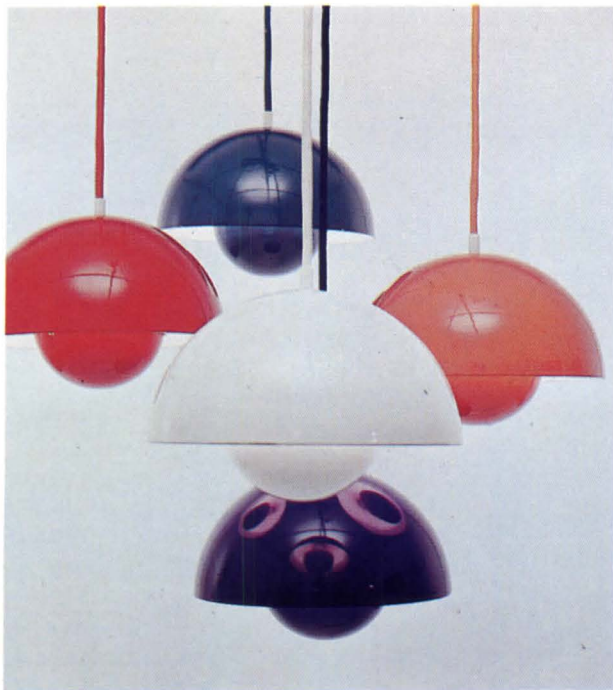
Furnishings

As resources for design and objects of design. By Stanley Abercrombie, AIA

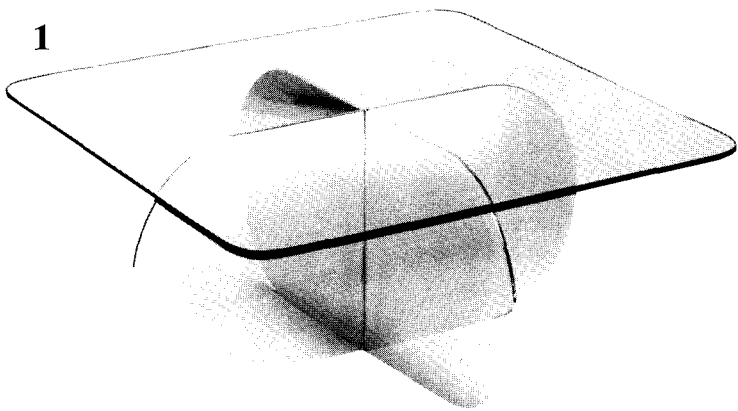
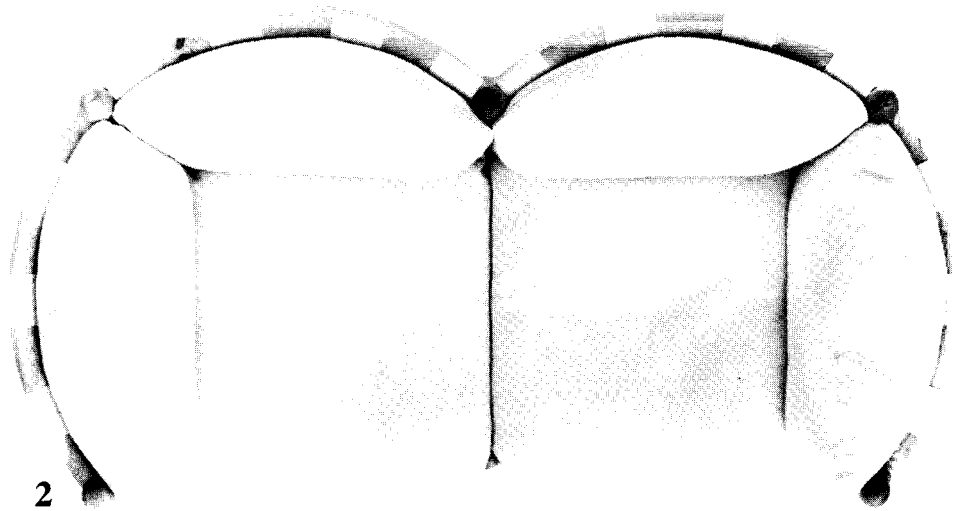
The three-seat sofa glowing above (1) is called "Tramonto a New York" (Sunset in New York) and is the design of the prolific and often provocative Gaetano Pesce. Made of foam polyurethane and Dacron padding over a plywood frame, it is manufactured in Italy by Cassina and will soon be imported here by a.i. (Atelier International). Winner of a £ 1,000 award in the last Dunlopillo design competition, sponsored by Dunlop of London, was Buckinghamshire College student Richard Betts for his armchair prototype (2). Its side supports are of sycamore, its slats cut from plywood but given resilience by resting on layers of foam. Other Dunlopillo awards went to John R. Jenkins for his seating (3) devised from foam cylinders on an ash frame and to West German designer Ronald Koob for his children's rocking horse (4) covered with knitted jersey fabric; its handle is made of rubber hose. The "Bikini" adjustable table lamp (5), in black, red or white with a halogen bulb, is designed by Raul Barbieri and Giorgio Marianelli and produced by Tronconi Illuminazione of Milan. The "FlowerPot" pendant lamp (6), enameled in orange, red, blue, turquoise or white, is designed by Verner Panton and produced by Louis Poulsen of Copenhagen.



2



Svend Bessing

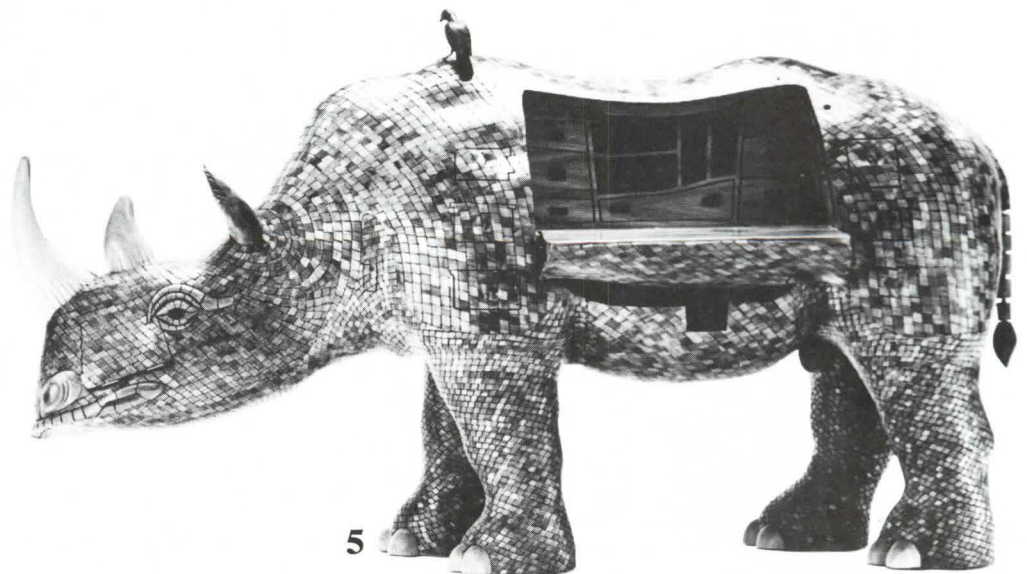


The cocktail table designed by Paul Mayen for Architectural Supplements (1) has a half-inch glass top with rounded corners. Its base of heavy gauge metal plate with a polished chrome finish has rounded ends as well and is assembled with no visible attachments. Two sizes are available: 36 inches square and 42 inches square. Reminders of the Danes' way with wood are two handsomely crafted items from Hirtshals Savvaerk of Hirtshals, Denmark: a two-seat sofa (2) with curved sides and back elements, its cushions suspended on fabric loops from the wood frame, and (3) a totally wood dining table and chair group. A detail typical of both items is the use of straight vertical supporting posts, usually rising uninterrupted for their full height.



The chaise longue (4) is mysteriously named "Dodo Redwall Safari 2" and is part of a series that includes chairs, poufs, stools, hammocks, cabinets, bars and magazine racks. The structure is of Finnish birch, and the canvas slings are reinforced with leather at the corners; hardware elements are of bronzed brass. Produced by Rossi di Albizzate of Italy, the series is available here through Casa Bella Imports. Less mysteriously named is "Rhinoceros" (5), a desk designed by Michael Speaker of Los Angeles and shown in the American Craft Council's "New Handmade Furniture" show last year. Its scales are of koa wood; the tail and bird are ebony. □

4



5

Courtesy, American Craft Council

The Institute from page 36

ters showing an increase in membership.

Reports on government affairs are as varied as the regions making up AIA, and component concerns range from the Northwest region's desire to "educate the elected and the electorate," to energy legislation in the Central States region, to the passage of a bill in Kentucky that "clearly defines the responsibilities of an architect and an engineer," to the "extremely distasteful" competitive bidding process in New Jersey, to registration laws in the North Central region.

DEATHS

Mario E. Campioli, FAIA: Assistant architect of the U.S. Capitol from 1959 until retirement last year, Mr. Campioli was architect in charge of restoring the original Senate and Supreme Court chambers of the Capitol in the 1960s. He died Jan. 9 at the age of 70.

A native of Parma, Italy, he grew up in New York City and received an architecture degree from New York University. He was director of architecture at Colonial Williamsburg, Va., from 1949-

57, and during that period assisted in the restoration of Tazewell Hall in Newport News, Va., and directed the Van Corlandt Manor Project in New York for the Rockefeller family.

Anthony Peter Smith: Once a practicing architect, Tony Smith came to be one of the most admired and influential sculptors of our time, producing powerful minimalist forms, often at large scale. He died in New York City on Dec. 26 at the age of 68.

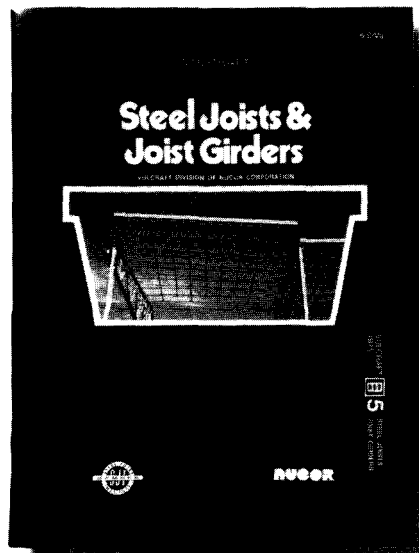
Mr. Smith studied at the New Bauhaus in Chicago and later at Taliesin, working there on Frank Lloyd Wright's "Usonian" housing schemes. Later, his own design, on the north fork of Long Island, New York, for the painter Theodoros Stamos, recalled the angular geometry of some of those schemes. His nearby house for art dealer Betty Parsons was more simple in form. His practice of architecture, combined with painting, continued until the mid-'60s, when he turned his attention to his architecture-derived sculpture.

His works are in the collections of the Museum of Modern Art, the Whitney Museum of American Art and many other museums. He was also professor emeritus of art at Hunter College.

- Van Evera Bailey,** Gleneden Beach, Ore.
- G. L. Barnum,** LaGrange, Ill.
- Harold E. Bechtel,** Fargo, N.D.
- Nathan Bernstein,** South Euclid, Ohio
- Richard Dale Burke,** Wichita, Kan.
- Lyle S. Cole,** Pleasant Ridge, Mich.
- Byron Dalton,** Cleveland
- M. D. Feinknopf,** Columbus, Ohio
- John E. Flynn,** State College, Pa.
- E. Friedlander,** Troy, N.Y.
- Bernard W. Guenther,** New Paltz, N.Y.
- F. M. Harley,** Naples, Fla.
- F. Arthur Hazard,** Walterboro, S.C.
- Walter J. Hubbard,** Miami
- Clarence A. Jensen,** Morton Grove, Ill.
- Steven C. Ladislaus,** San Diego
- W. D. McKinnie,** Memphis
- J. C. Meyer,** Houston
- Terry E. Nobles,** Billings, Mont.
- Howard R. Perrin,** San Jose, Calif.
- Warren Charles Perry, FAIA,**
San Francisco
- Albert Pretzinger II,** Dayton, Ohio
- J. L. Stetler,** Haversford, Pa.
- F. P. Sutton,** Yonkers, N.Y.
- James T. Swanson Jr.,** Jacksonville, Tex.
- Thomas Louis Udstuen,** Dallas
- Miroslav Vanek,** LaGrange Park, Ill.
- F. C. Vierk,** Lincoln, Neb.
- William Hamilton Wallace,** Kingsport,
Tenn.

Briefs on page 84

READING THIS PAPERBACK CAN CHANGE YOUR MEANS OF SUPPORT.



Find out how Vulcraft's system of steel joists and joist girders offers better support. Send for a free, 28-page Specification Guide. If you can't wait for the mail, just call (704) 366-7000 for more information.

I could use support from Vulcraft. Please send me a free Specification Guide immediately.

Name _____

Address _____

City _____

State _____ Zip _____

VULCRAFT
P.O. Box 220646, Charlotte, N.C. 28222

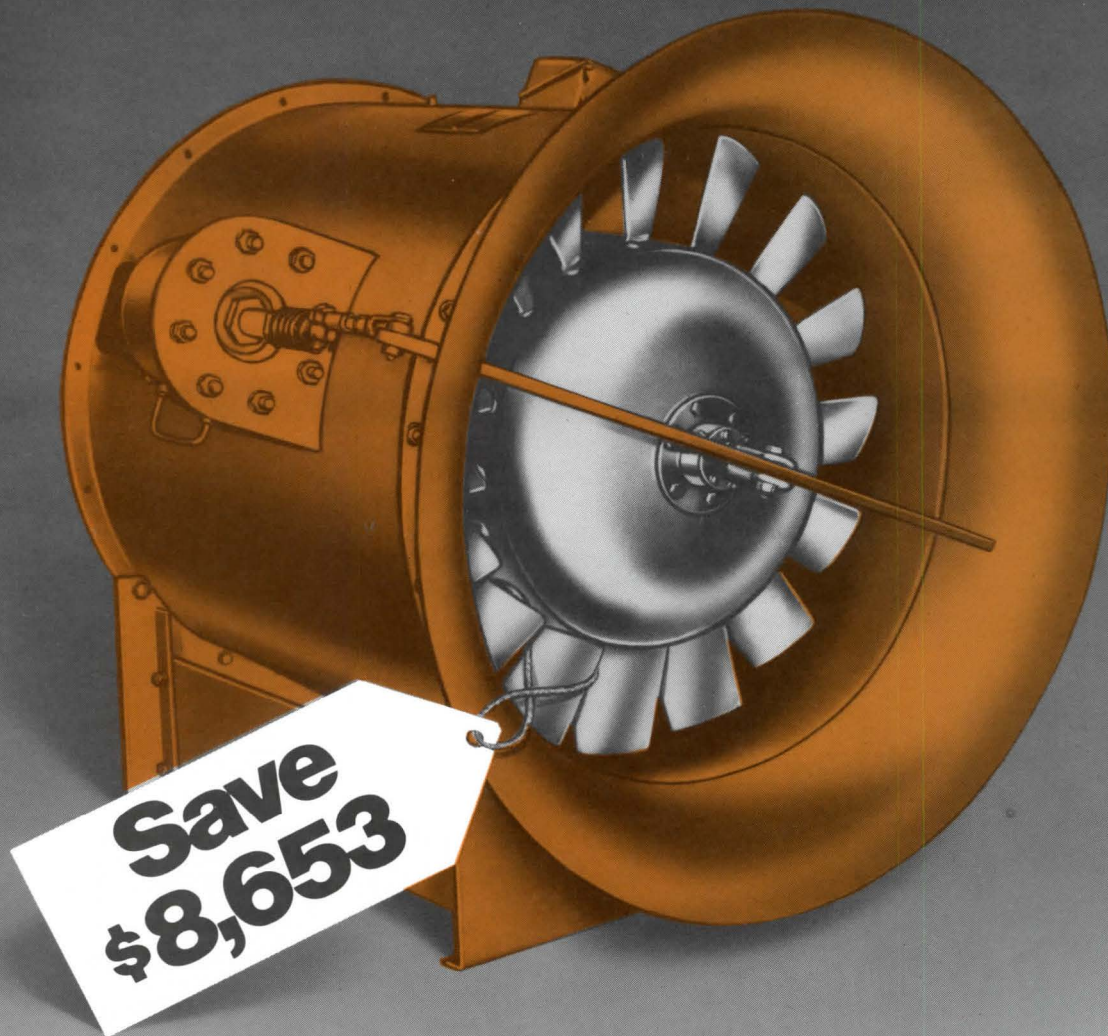


Free. It's the latest addition to the Architect's Cedar Library. 10 "how to" case histories on residential, commercial, recreational, and restoration projects, plus simply over-roofing with red cedar shakes and shingles. Full color before and after photos, plans, the works. Free.

Respond.

Red Cedar Shingle & Handsplit Shake Bureau

Send to: Suite 275, 515-116th Avenue N.E., Bellevue, Wa. 98004. Or use the reader service number.



This Joy™ axial fan can pay for itself in 2 years.

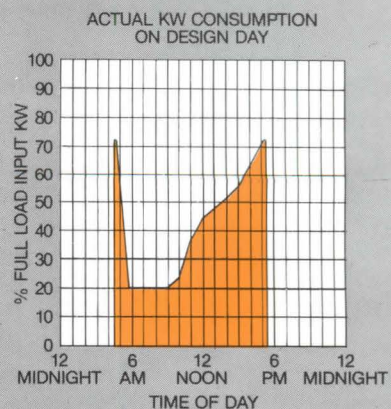
High energy costs concern us all. Joy has a solution to the problem that can deliver substantial savings. When Joy Controllable Pitch fans are applied to well-designed VAV systems, they will pay for themselves with power savings in a few years, in comparison to conventional systems.

For example, based on data from an actual installation, a 48-26-1770, 100 H.P. Joy Controllable Pitch fan saved 86,530 KW hours in one year. Using a cost of 5¢ per KW hour, the savings over two years amounted to \$8,653 . . . more than covering the cost of the fan.

For energy savings data contact Joy Manufacturing Company, Air Moving Products, New Philadelphia, Ohio 44663.

Offices and plants throughout the world

**NEW
PHILADELPHIA
DIVISION**



BRIEFS

James A. Scheeler, FAIA, group executive for program and services management at AIA, has been elected president for 1981 of the National Center for a Barrier Free Environment.

The Southern Building Code Congress International is the first major U.S. code organization to reference the new national design standard for accessibility.

The American Concrete Institute requests papers on "Rehabilitation, Renovation and Preservation of Concrete and Masonry Structures," to be presented at its annual convention Sept. 20-25. For information, contact Howard H. Newlon Jr., Symposium Chairman, Virginia Highway Research Council, Box 3817, University Station, Charlottesville, Va. 22903.

Works of the architectural firms of Holabird & Roche and Holabird & Root are featured in an exhibit at the Chicago Historical Society (Clark Street at North Avenue) through March 31.

The 1980 revised edition of *Standard Method for Measuring Floor Area in Office Buildings* is available for \$5 from Building Owners and Managers Associa-

tion International, Accounting Department, 1221 Massachusetts Ave. N.W., Washington, D.C. 20005.

"Directory of Minority and Women-Owned Architectural and Engineering Firms—1981," which lists 640 U.S. firms, is available for \$15 from the American Consulting Engineers Council Research and Management Foundation, 1015 15th St. N.W., Washington, D.C. 20005.

"Metric Conversion in the Construction Industries—Technical Issues and Status," is a new publication of the National Bureau of Standards. It is available for \$5.50 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

George Anselevicius, AIA, will become dean of the school of architecture and planning, University of New Mexico, this fall.

"Rehabilitation Guidelines," prepared by the National Institute of Building Sciences, is now available from HUD User, P.O. Box 280, Germantown, Md. 20767, at no cost for a single copy.

"Human Settlements and Disasters," a series of five slide lectures relating earthquakes, floods and high winds to struc-

tures in developing countries, is available from the Commonwealth Association of Architects, Projects Unit, 326 Grand Buildings, Trafalgar Square, London WC2N 5HB, England. Cost: £20 per lecture.

"Architecture in Context: 360 North Michigan Ave.," an exhibition tracing the history of Alfred S. Alschuler's London Guarantee and Accident Co. building, is at the Art Institute of Chicago through May 31. Also at the Art Institute through July 31 is an exhibition of 46 original architectural drawings by Peter Bonnett Wight.

The master planner for the 1984 New Orleans World's Fair will be Perez Associates of New Orleans.

Growth opportunities for architects and engineers over the next few years have been identified by *A/E Marketing Journal* after a market research study. The two markets uncovered are corporate/industrial facilities (for architects and A/Es) and hazardous wastes treatment and disposal facilities (for consulting engineers). Results of the research will be presented March 19-20 in New Orleans. Contact: *A/E Marketing Journal*, P.O. Box 11316, Newington, Conn. (203) 666-9487. □

Products on page 86

STOP WASTING ENERGY!

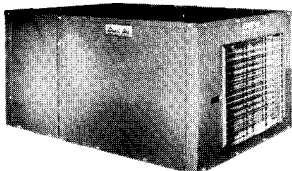
Control POOL ROOM Humidity

Finally! A sensible way to control Pool Room Humidity while reducing operating costs.

DESERT AIRE DOES IT ALL!

- Reduces Operating Costs Up to 75%
- Controls Damaging Humidity while Heating Pool Room
- Saves Money
- Uses No Gas or Oil
- Models to Suit All Needs

Don't throw Money Out the Window!



DESERT AIRE

CORP.

Dept. DA 2
5633 W. Florist
Milwaukee, WI 53218
1-414-462-4143

POSITION AVAILABLE

EXECUTIVE DIRECTOR BUILDING RESEARCH ADVISORY BOARD

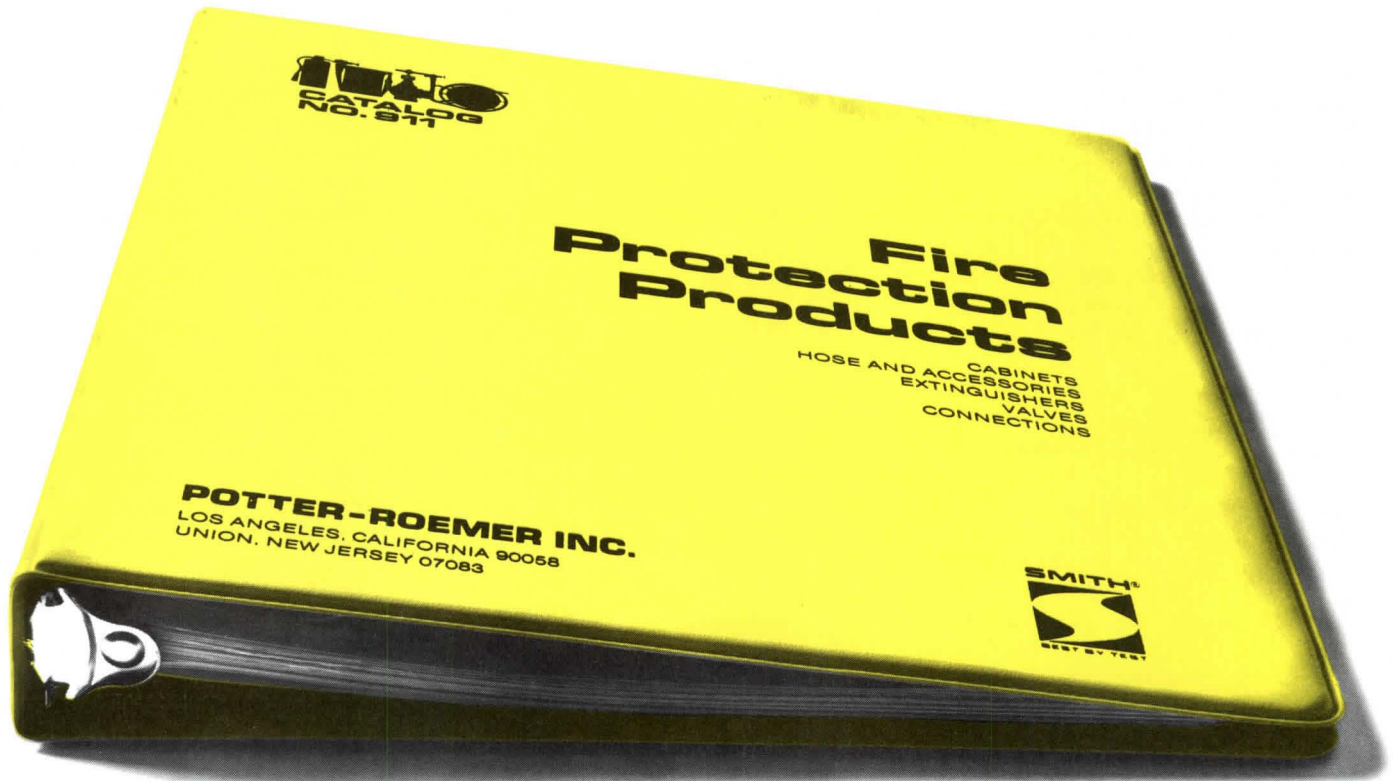
The National Academy of Sciences, located in Washington, D.C., seeks applicants for the position of Executive Director, Building Research Advisory Board. The Board is concerned with the built environment in a range of interest including building, construction, productivity, energy efficiency, economic cost, safety and other aspects. It provides a national forum that focuses on technical problems and opportunities, policy issues related to the built environment, and related sociotechnical impacts. The responsibilities of the position include execution of the BRAB programs, the administration of funding and budgets, guidance of programs and committee work, and supervision of the professional and support staff. Further, the responsibilities include liaison with the sponsors and with others concerned with the built environment in all levels of government, industry, and academe.

Applicants should have a Ph.D. or equivalent in a building-related discipline, with knowledge of other relevant disciplines including civil engineering, architecture, mechanical/structural engineering, and urban planning and design. Qualifications also include at least 10 years of progressive experience in one or more of these fields, including planning and directing research, preferably diversified among the governmental, industrial, and academic sectors. Ability to manage and to communicate effectively are essential.

Applicants should submit resumes to Dr. Edward Epremian, Commission on Sociotechnical Systems, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

AN EQUAL OPPORTUNITY EMPLOYER.

For the demanding, harassed, impatient, fastidious specifier.



Our new catalog gives you everything you need to take all of the guesswork—and a lot of the work—out of specifying fire protection products.

To make it the easiest and quickest to use catalog in the business, we've put it together the same way you work. Function is clearly shown

—along with a photo and a full description of each piece of equipment, how it's regularly furnished and whether it's UL or FM approved.

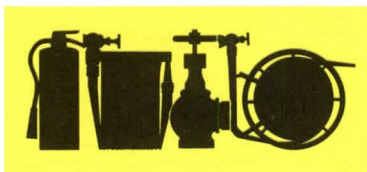
Also, products are shown in numerical order, so cross referencing to our latest price list is a mistake-proof, simple one-step job.

To make your task even easier,

we've included our competition with a clear, straight-forward product comparison guide.

Our catalog is free. Send for it. And you'll have one of the largest and best lines of fire protection products right at your fingers.

POTTER-ROEMER, INC.



Yes. I want a copy of your latest Potter-Roemer catalog in my hands as soon as possible.

NAME/TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ STATE/ZIP _____

PHONE _____

Potter-Roemer, Inc. (A subsidiary of Jay R. Smith Mfg. Co.)
2650 Leonis Blvd., Los Angeles, CA 90058.
(213) 589-7301. Telex 67-4336.

Circle 33 on information card

PRODUCTS

Steel Deck.

Epicore Concept 2 Floor System is a long span slab system using a dovetail rib configuration reinforced steel deck for structures with residential-type loading requirements. (Epic Metals Corporation, Rankin, Pa. Circle 193 on information card.)

Metal Ceilings.

Decorative metal ceilings are hand stamped from 80-year-old dies in a large number of classic designs. The line includes cornice and frieze plates, ceiling plates, mitres, side walls and wainscoting. (W. F. Norman Corporation, Nevada, Mo. Circle 199 on information card.)

Acoustical Panels.

Colored ceiling panels are frosted with white and soak up sound from .60 to .70 NRC. A foil backing is for energy conservation. (United States Gypsum Co., Chicago. Circle 198 on information card.)

Silk Screening.

Custom silk screening of commonly used details, symbols or notations is designed to provide a denser image for reproductions than offset printing. (Saga Division of Dade, Inc., Minneapolis. Circle 197 on information card.)

Software.

Six computer programs designed for construction management can be purchased separately or as a linked system. Programs are designed for the Radio Shack Model II 64 K memory unit. (Construction Data Control, Inc., Atlanta. Circle 196 on information card.)

Multiple Function Work Station.

Rectangular work table designed to accommodate terminals, with prewired electrical raceway and height adjustment capability, comes in left- or right-handed models and various sizes and keyboard styles. (Structural Concepts, Spring Lake, Mich. Circle 193 on information card.)

Fluorescent Lamp.

Super Bright lamps are said to reduce energy costs by 23 percent, using 20 percent fewer fixtures than standard systems. (General Electric, Cleveland. Circle 192 on information card.)

Wallcoverings, Draperies.

Silk-screened wallcoverings and custom-woven fabrics are matched in color to allow an interior designer to exactly duplicate borders and weaves. (The Jack Denst Designs, Inc., Chicago. Circle 191 on information card.)

Security System.

A central desktop system controls access to up to eight separate locations and can monitor up to 64 alarms. (Card-key Systems, Chatsworth, Calif. Circle 190 on information card.)

Doorpulls.

Ten doorpulls are detailed in teak, Indian rosewood, oak and Japanese beech. Oil-rubbed bronze, polished metal or custom metal mounts may be ordered. (Forms + Surfaces, Santa Barbara, Calif. Circle 189 on information card.)

Pen Plotter.

HP 7580A plotter attaches to Hewlett-Packard computers and interfaces with other systems. The low-cost plotter provides eight-color drawings and other computer graphics on precut sheets. (Hewlett-Packard Co., Palo Alto, Calif. Circle 188 on information card.)

Programmable Lighting.

A controller is preprogrammed to efficiently provide optimum lighting, HVAC and other electrical loads in commercial and industrial buildings. The system can be overridden by office workers via a standard pushbutton telephone. (General Electric Co., Norwalk, Conn. Circle 187 on information card.) □

FACULTY POSITIONS OPEN

COLLEGE OF ARCHITECTURE AND PLANNING
KING FAISAL UNIVERSITY
DAMMAM, SAUDI ARABIA

Several new faculty positions at all levels created for academic year 1981-1982 in all departments:

- Architecture
- Engineering Sciences
- Landscape Architecture
- Urban/Regional Planning
- Building Technology
- Mathematics/Physics

PREREQUISITE: Ph.D., M.A. or equivalent degree; practical and/or teaching experience; membership in professional organization.

SALARIES: Competitive with western academic institutions.

BENEFITS: Include free furnished accommodations, educational allowance for four children, air tickets to and from Saudi Arabia once a year for husband, wife and two children, 60-day summer holiday. No Saudi income tax.

Language of instruction is English. Positions available starting September 1981; interviews scheduled in the United States and Great Britain during spring 1981.

Send complete curriculum vitae and names, addresses and daytime telephone numbers of three references to:

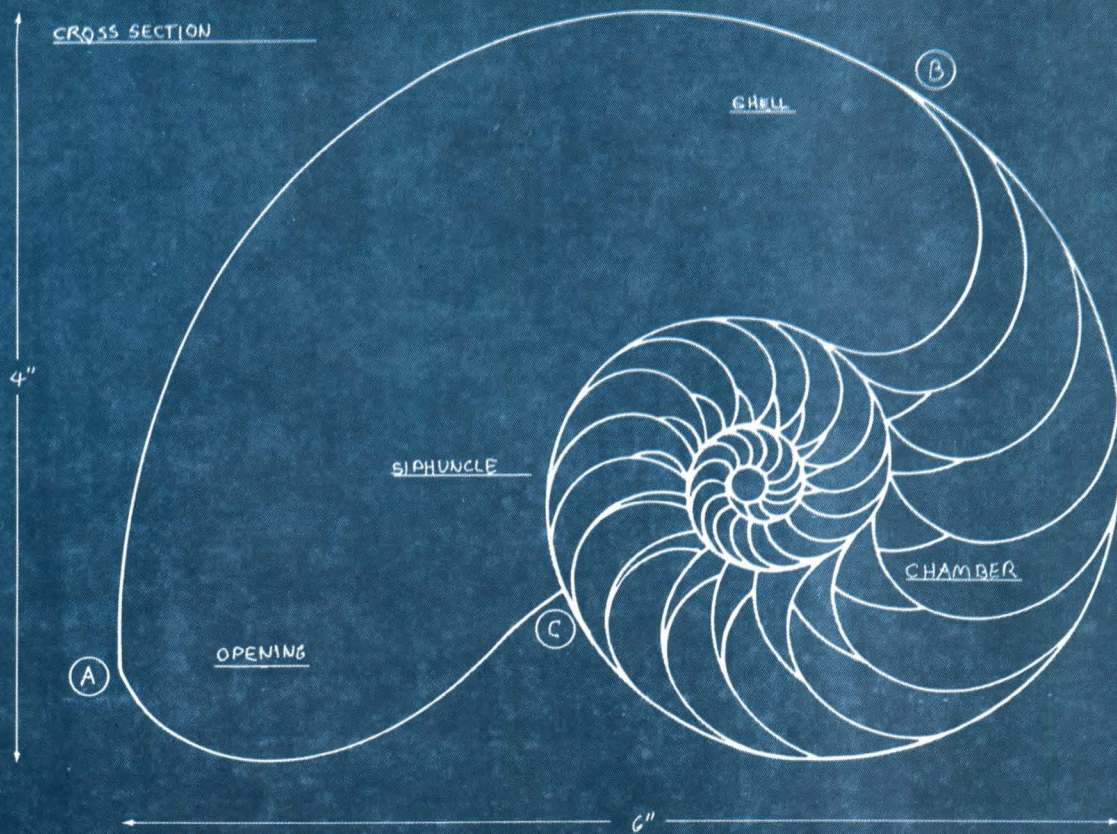
Dr. Ahmed Farid Moustapha
Dean, College of Architecture and Planning
King Faisal University
c/o Saudi Arabian Educational Mission
2425 West Loop South
Houston, Texas 77027

A NEW COLLECTION OF MULTI-USE FABRICS FOR ARCHITECTURAL APPLICATIONS...

For tension forms •
solar shades • canopies •
pavillion tents •

samples
available
upon request

 **JOHN BOYLE & CO., INC**
112 Duane Street
New York, N.Y. 10007



CHAMBERED
NAUTILUS

NATURE'S APPROACH TO FUNCTIONAL DESIGN

With the skill of a master builder, the Nautilus fashions its shell, creating one of the most beautiful forms in nature. Now, to recognize the best design and planning in the built environment, BUILDER Magazine and Better Homes and Gardens Magazine are co-sponsoring the first annual "Builder's Choice" design competition.

Awards will be presented to builders, architects, planners and developers of all types of housing and commercial buildings. New construction and remodeling will be recognized. Winners will be featured in a special edition of

**We'd
Like to
Recognize
Yours.**

BUILDER and regular issues of Better Homes and Gardens and honored at an awards ceremony at the NAHB convention.

To find out more . . . just fill in the coupon or call (202) 452-0273 and we'll mail you an entry form. Detailed rules and instructions will be included. Our objective is to recognize the best in design and planning for the building industry. Show us your best.

BUILDER Magazine
National Association of Home Builders
15th & M Streets, NW
Washington, D.C. 20005

BUILDER Magazine
15th & M Streets, N.W.
Washington, D.C. 20005

Please send me _____ entry forms.

Name _____

Company _____

Address _____

City _____

State _____

Zip _____

ADVERTISERS

Michael J. Hanley
 Publisher
Michael M. Wood
 National Sales Director
George L. Dant
 Manager, Production and Business
 1735 New York Ave. N.W.
 Washington, D.C. 20006
 (202) 626-7484
Lisa Hoke
 Director of Operations
Suzanne Maggi
 Assistant to the Publisher

ADVERTISING SALES OFFICE

Washington, D.C. (202) 626-7471

Michael M. Wood
 1735 New York Ave. N.W.
 Washington, D.C. 20006

New York/Philadelphia

(215) 639-3731
 George T. Broskey
 3 Neshaminy Interplex #301
 Trevoise, Pa. 19047

Ohio

(201) 729-4937
 Thomas R Crow
 46 Main Street
 Sparta, N.J. 07871

New England/New York State

(617) 632-8185
 Robert L. Tagen
 87 State Road West
 Westminster, Mass. 01473

Chicago

(312) 887-1171
 Robert M. Brown
 201 E. Ogden Avenue
 Hinsdale, Ill. 60521

Atlanta

(214) 352-9273
 J. Thomas Dorsey
 3840 Valley Lawn
 Dallas, Texas 75229

St. Louis

(314) 569-3210
 Richard D. Grater
 1466 Summerhaven
 St. Louis, Mo. 63141

San Francisco

(415) 348-8222
 Jules E. Thompson
 1290 Howard Avenue #303
 Burlingame, Calif. 94010

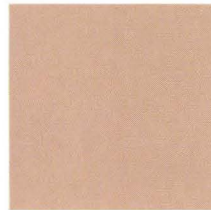
Circle No.	Page No.	Circle No.	Page No.
24	American Airlines Freight System	34	John Boyle & Co.
	<i>Bozell & Jacobs</i>		<i>Martin Quint Advertising</i>
28	Atlas Door Corp.	6	Johns-Manville (Bldg. System Div.)
	<i>American Ad Group</i>		<i>Broyles, Allebaugh & Davis</i>
17	Bilco Co.	35	Joy Manufacturing Co.
	<i>McLaughlin, Delvecchio & Casey</i>		<i>Covey & Koons</i>
26	Cabot, Samuel, Inc.	15	Kalwall Corporation
	<i>Donald W. Gardner Adv.</i>		<i>Synerjenn Advertising</i>
23	California Redwood Assoc.		King Faisal University
	<i>Foote, Cone & Belding/Honig</i>		<i>University Assoc. for Int'l. Health</i>
14	Cedarwood Forest Products		National Academy of Sciences
	<i>Tom Lipman & Assoc.</i>	31	Nucor (Vulcraft)
7	Celotex Corporation		<i>Faller, Klenk & Quinlan</i>
	<i>Mike Sloan Advertising</i>	37	Olympic Stain
16	Columbia Lighting, Inc.		<i>Kraft Smith</i>
27	Consolidated Aluminum Corp.	4	Owens-Corning Fiberglas (Energy)
	<i>Weitzman, Dym & Assoc.</i>		<i>Ogilvy & Mather</i>
32	Desert Aire Corp.	10	Owens-Corning Fiberglas (Roofing)
	<i>Arrow—Advertising</i>		<i>Ogilvy & Mather</i>
18	Disco Aluminum Products Co., Inc.	33	Potter-Roemer
	<i>Circle S Advertising, Inc.</i>		<i>Reed & Ferris</i>
	Dover Corp., Elevator Div.	8	PPG Industries (Glass)
	<i>Caldwell, Bartlett, Wood</i>		<i>Ketchum, MacLeod & Grove</i>
20	Epic Metals Corp.	29	PSAE (Masterspec)
3	Forms & Surfaces		<i>Clarkson Associates</i>
	<i>Sherrill Broudy Associates</i>	36	Ralph Wilson Plastic Co.
13	Gail Architectural Ceramics		<i>McKone & Company</i>
	<i>Averill Advertising</i>	30	Red Cedar Shingle & Shake Bureau
12	General Electric Co. Lamp Mktg.		<i>Cedarcraft Advertising</i>
	<i>Meldrum & Fewsmith</i>	22	Richards-Wilcox Mfg. Co.
11	Georgia Marble Company		<i>Hanson Advertising</i>
	<i>Corporate Communications & Marketing</i>	2	Shand, Morahan Company
19	Grefco (Permalite)		<i>Hakanson & Associates</i>
	<i>Boylhart, Lovett & Dean</i>	21	Tamko
25	Haws Drinking Faucet Co.		<i>Noble & Associates</i>
	<i>Mandabach & Simms/Pacific</i>	9	United States Ceramic Tile
5	Helios Tension Products		<i>Covey & Koons</i>
	<i>Hisata Design Associates</i>		
1	Howmet Aluminum Corp.		
	<i>Crume & Associates</i>		

When You're Looking for the Perfect Solid Color...

During 1980 ...



Wilsonart asked Designers



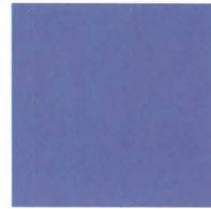
all over the U.S.



what a good,



contemporary decorative laminate



solid color line



should look like.

You talked. We listened.



That's why we believe ...



Wilsonart has great news coming to you



in March.

WILSONART
WILSONART BRAND DECORATIVE LAMINATE

Copyright© 1981 Ralph Wilson Plastics Co.
600 General Bruce Drive, Temple, Texas 76501
Manufactures of Wilsonart Brand Decorative Laminates,
Chem-Surf, Tuf-Surf, Dor-Surf, Metallics and
Contact Adhesives.

Circle 36 on information card

Beauty that's more than skin deep.



Architect: Wendell Lovett, FAIA, Seattle, Washington

Enhance and protect the natural beauty of wood with Olympic Oil Stain. Olympic *penetrates* wood to protect from within. Rich linseed oil and micro-milled pigments soak down into the fibers, giving wood a deep, uniform finish that stays beautiful no matter how wet or how dry the weather gets.

For additional information, consult your 1979 Sweet's Catalog. Or write Olympic: Dept. P, P.O. Box 1497, Bellevue, WA 98009.

**Penetrates to
protect wood
beautifully.**



Circle 38 on information card