

than 10 acres of office space and

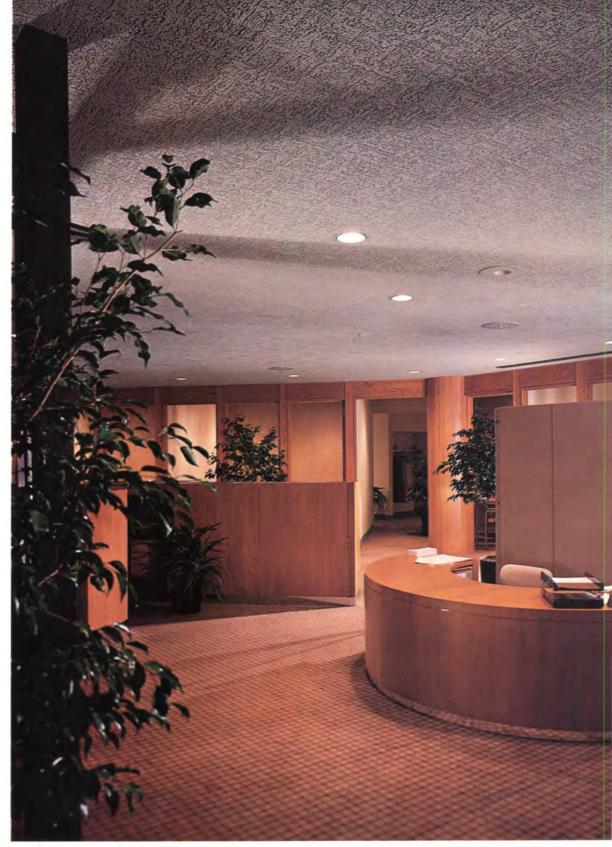
gleams with vitality and comfort.

But far more important: Its
energy savings can reach 27.2 billion Btu's a year, depending on the weather. In a moderate climate like Winston-Salem's, that's enough to heat and cool more than 1,800 homes for an entire year.

A key ingredient for the designers was the performance characteristics of the neutral silver PPG glass. It enabled the architects to make such a breathtaking design statement possible.

It could pay you to consider PPG Solarban Twindow reflective insulating glass for your next building. To find out more about it, see Sweet's 8.26Pp. Or write directly to PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222. **PPG: a Concern** for the Future





When Travertone goes together, see how the joints disappear.



Offices of Gingrich-Stoudt & Associates, Insurance. Architects, Haak Kaufman Reese & Beers; Interior Designer, Nancy Gilbert; Ceiling Contractor, Standard Acoustical Products, Inc. (all of Lancaster, Pa).

Hidden in this picture are thousands of tile joints.

With an Armstrong Embossed Travertone™ Ceiling, the precisely cut tiles fit so snugly, their joints are hard to see in the deep-etched patternmatched surface. The result is a rich textured expanse of ceiling.

Travertone is available in the Highspire design pictured here as well as two other embossed patterns, Sanserra and Grandshire. They come in 12" x 12" tiles, are 3/4" thick, and

offer excellent acoustical performance. Write Armstrong, Dept. 95NAJ, Box 3001, Lancaste PA 17604, and find out more about the ceiling that's as close as a tile can come to a wall-to-wall ceiling.



Circle 1 on information card

CONTENTS

The American Institute of Architects

Ehrman B. Mitchell Jr., FAIA, President Charles E. Schwing, FAIA, First Vice President Robert C. Broshar, FAIA, Vice President James M. Harris, FAIA, Vice President R. Randall Vosbeck, FAIA, Vice President Robert M. Lawrence, FAIA, Secretary Joseph F. Thomas, FAIA, Treasurer David Olan Meeker Jr., FAIA, Executive Vice President

Directors (Year indicates expiration of term) Directors (Year indicates expiration of term)
James C. Dodd, AIA, ('81), California
Donald L. Hardison, FAIA, ('80), California
Harry W. Harmon, FAIA, ('80), California
Henry N. Silvestri, FAIA ('79), California
Henry W. Schirmer, AIA ('81), Central States
Thomas H. Teasdale, AIA ('79), Central States
Lynn H. Molzan, AIA ('79), East Central States
Ellis W. Bullock Jr., AIA ('81), Florida/Caribbean
E. H. McDowell, FAIA ('81), Florida/Caribbean
Gaines B. Hall, AIA ('81), Gulf States Ellis W. Bullock Jr., AIA ('81), Florida/ Caribbean E. H. McDowell, FAIA ('81), Florida/ Caribbean Gaines B. Hall, AIA ('81), Gulf States Ray K. Parker, AIA ('80), Gulf States Raymond C. Ovresat, FAIA ('81), Illinois Paul D. Bowers Jr., AIA ('80), Michigan David A. Holtz, AIA ('80), Middle Atlantic Iames R. Nelson, AIA ('81), Middle Atlantic Gridley Barrows, AIA ('81), Middle Atlantic Gridley Barrows, AIA ('81), New England George M. Notter Jr., FAIA ('80), New England Harold D. Glucksman, AIA ('80), New Jersey Anna M. Halpin, FAIA ('79), New York William A. Rose Jr., AIA ('81), New York Saul C. Smiley, FAIA ('79), North Central States Edwin B. Crittenden, FAIA, ('81), Northwest William H. Trogdon, AIA ('80), Northwest Roger N. Ryan, AIA ('79), Ohio Derek Martin, AIA ('81), Pennsylvania Michael D. Newman, AIA ('80), South Atlantic Harold H. Tarleton Jr., AIA ('79), South Atlantic Iay W. Barnes, FAIA ('79), Texas Theodore S. Maffitt Jr., FAIA ('81), Texas Gerald L. Clark, FAIA ('81), Texas Gerald L. Clark, FAIA ('81), Western Mountain John B. Rogers, FAIA ('81), Western Mountain Harold C. Fleming, Hon. AIA, ex officio, Public Director Director John Wilson-Jeronimo, ex officio, President, ASC/AIA Des Taylor, ex officio, Chairman, Council of

Headquarters

Architectural Component Executives

David Olan Meeker Jr., FAIA, Executive Vice President Richard H. Freeman, Group Executive Component/Information James A. Scheeler, FAIA, Group Executive, Program Development
Nancy W. Truscott, General Counsel
Thomas P. Bennett, Assistant Secretary
William G. Wolverton, Hon. AIA, Assistant
Treasurer/Controller
Michael B. Barker, AICP, Administrator, Practice and Design Arnold J. Prima Jr., AIA, Administrator, Government Affairs James A. Schuping, Administrator, Component

Francise and Design
Francis X. Brown, Administrator, Conventions
Muriel Campaglia, Administrator, Public Relations
James E. Ellison, AIA, Administrator,
Education and Professional Development David Olan Meeker Jr., FAIA, President, AIA Corporation Jeanne Butler Hodges, President, AIA Foundation Charles R. Ince Jr., President, AIA Research

John H. Schruben, FAIA, President, Production Systems for Architects and Engineers, Inc.

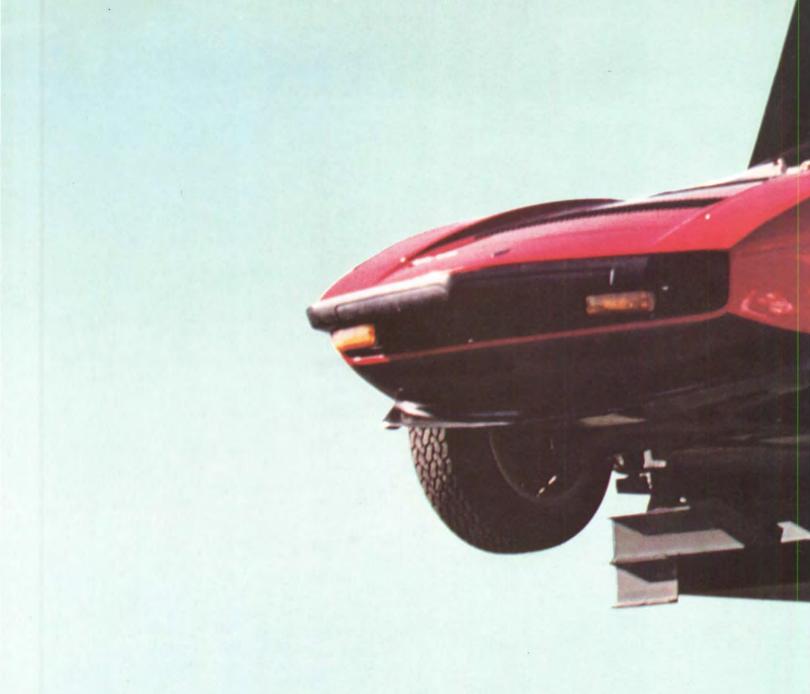
The Second Annual Review of New American Architecture

- 104 The Building as an Event—Donald Canty
- 114 A Triumphal Arch, a Gateway and a Garden-Cervin Robinson
- 118 Monastic Retreat for Secular Scholarship-Nory Miller
- 126 Streamlined Variation on Miesian Themes-Andrea O. Dean
- 130 Everything Ventured and a Great Deal Gained-N.M.
- 135 Two Screen Walls with a House Between-N.M.
- 138 The Need for a Contact with Nature—N.M.
- 146 Kaleidoscope of Current Work A brief look at some other recent buildings of note.
- Answers to Some Questions That We Didn't Quite Ask Or, what architects and critics really want to talk about.
- The 1979 AIA Honor Awards Nine new and six recycled buildings premiated— Mary E. Osman
- 207 **AIA Component Awards** A sampling of state and local winners-Nora Richter
- 264 **Events and Letters** Books 276 Advertisers 13 News

Cover: East Building of the National Gallery of Art (see page 104). Photography by Cervin Robinson.

Donald Canty, Editor; Suzy Thomas, Art Director; Carole Palmer, Associate Art Director; Nory Miller, Assistant Editor; Mary E. Osman, Senior Editor, Departments; Andrea O. Dean, Senior Editor, Articles; Allen Freeman, Managing Editor; Nora Richter, Associate Editor; Michael J. Hanley, Publisher; Michael M. Wood, National Sales Director; George L. Dant, Production and Business Manager; Gladys McIntosh, Circulation Manager; Lisa Moore, Administrative Assistant; Richard H. Freeman, General Manager.

The AIA JOURNAL, publication number: ISSN0001-1479, official magazine of The American Institute of Architects, is published at 1735 New York Ave. N.W., Washington, D.C. 20006. Second class postage paid at Washington, D.C., and additional mailing offices. © 1979 by The American Institute of Architects. Opinions expressed by the editors and contributors are not necessarily those of AIA. vol. 68, No. 6. Single copies of this issue \$9.50 each.



Only Owens-Corning Fiberglas* would be crazy enough to use its built-up roofing membrane to lift this \$32,000 car. Crazy like a fox!

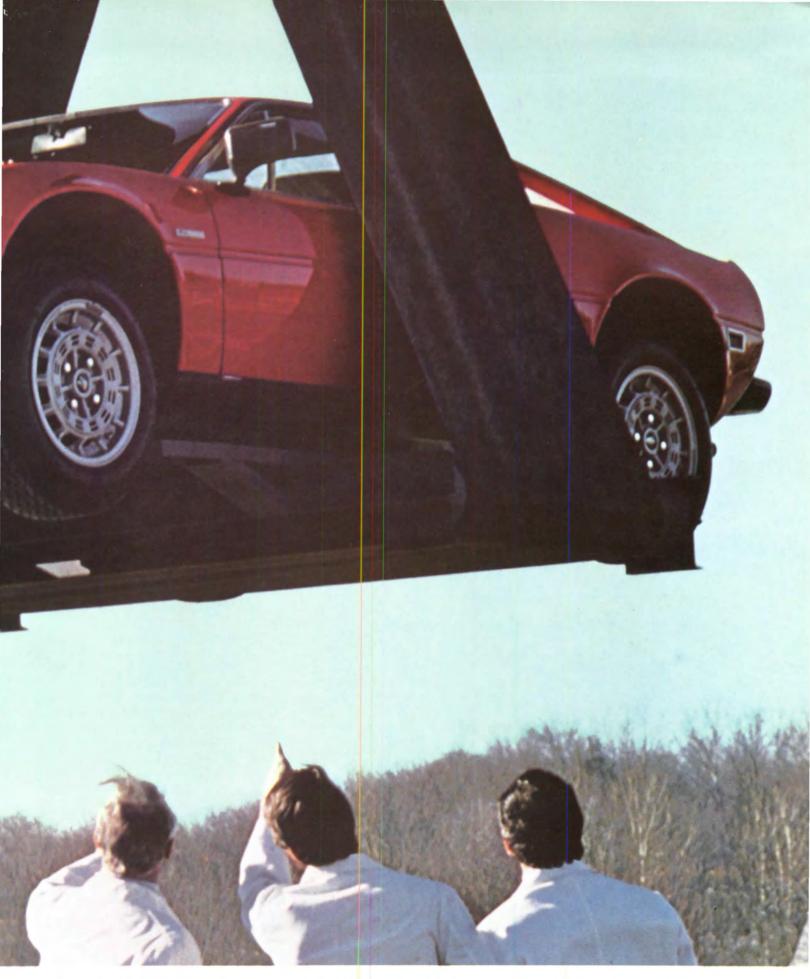
actually a piece of cake for Perma Ply-R**, Owens-Corning's unique brane. In fact, it's the strongest roof- and shifting also add to the strain. ing felt you can buy.

This demonstration of strength is roofing system is often subjected to You can minimize that risk with enormous strain. Rapid tempera- Owens-Corning Perma Ply-R builtture change can exert enormous continuous-strand roofing mem- stress. Normal building movement

This can cause a roofing system

up roofing membrane.

Like that very expensive 3,000lb. car it is lifting, Perma Ply-R is engineered for top performance. Why is strength so important? A to split. And that can be big trouble. Produced by a unique patented



made of strong continuous glass tudinal and transverse strength.

Because of this, Perma Ply-R outperforms any other roofing membrane you can specify. Perma

process, Perma Ply-R membrane is Ply-R meets the tensile strength requirements of ASTMD2178 Type fiber strands that give it great longi- IV. Shouldn't you be using the strongest roofing felt you can buy? Call your local Owens-Corning representative and ask him about our Perma Ply-R built-up roofing

systems. Or if you want more information on Perma Ply-R roofing, write to H.L. Meeks, Owens-

Corning Fiberglas Corp., Fiberglas Tower, Toledo,



Ohio 43659.
*T.M. Reg. O.-C.F. Corp. **T.M. @O.-C. F. Corp. 1979

EVENTS

June 2-3: Association of Architectural Librarians annual convention, Radisson Muehlbach Hotel, Kansas City, Mo. Contact: Susan Cosgrove Holton, Librarian, AIA Library, AIA Headquarters. June 2-7: Architectural Secretaries Association annual convention, Radisson Muehlbach Hotel, Kansas City, Mo. Contact. Terry Peck, ASA Liaison, AIA Headquarters.

June 3-7: AIA annual convention, Kansas City, Mo.

July 2-13: Institute on Factors Influencing Urban Design, Catholic University of Louvain, Louvain-la-Neuve, Belgium. Contact: P. Laconte, Université Catholique de Louvain, 13 avenue G. Lemaître, B-1348 Louvain-la-Neuve, Belgium. July 3-6: Conference on the Planning, Design and Implementation of Bicycle, Pedestrian and Moped Facilities, San Diego. Contact: MAUDEP, P.O. Box 722, Church Street Station, New York, N.Y. 10008.

July 8-14: International Conference on Wind Engineering, Colorado State University, Fort Collins.

July 9-17: The London Summer School, London, Contact: London Summer School, Architectural Association School of Architecture, 34-36 Bedford Square, London WC1B 3ES, England.

July 9-28: Institute on American Vernacular, Boston University.

July 11-13: Regional Solar Energy Updates Conference, Dearborn, Mich. (Repeat conferences: July 15-17, Orlando, Fla.; July 29-31, Philadelphia; Aug. 1-3, Los Angeles.) Contact: Trinity University Continuing Education, 715 Stadium Drive, San Antonio, Tex. 78284.

July 11-13: International Symposium on Transportation Safety, Anaheim, Calif. Contact: Institute for Safety in Transportation, 106 E. 41st St., New York, N.Y. 10017.

July 12-14: Seminar on Architectural Simulation Testing Techniques, Cornell University, Ithaca, N.Y.

July 15-20: International Conference on Computer Graphics. Harvard University,

Cambridge, Mass.

July 17-19: International Symposium on Practice Development, sponsored by the Ontario Association of Architects and the Royal Architectural Institute of Canada, Toronto. Contact: Professional Development Resources, 1000 Connecticut Ave. N.W., Suite 9, Washington, D.C. 20036. July 23-27: Institute on Residential Energy Auditing, University of Wisconsin, Madison.

July 30-Aug. 9: Course on the Principles of Construction Specifications Writing, University of Wisconsin, Madison.

Aug. 1: Entries deadline, Prestressed

Concrete Institute's 1979 awards program. Contact: PCI, 20 N. Wacker Drive, Chicago, Ill. 60606.

Aug. 2-4: Michigan Society of Architects mid-summer conference, Grand Hotel, Mackinac Island, Mich.

Aug. 9-23: Women's School of Planning and Architecture, Regis College, Denver. Contact: WSPA, Box 102, Palomar Arcade, Santa Cruz, Calif. 95060.

Aug. 15: Entries deadline, Owens-Corning Energy Awards, 1979. Contact: Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

Sept. 30-Oct. 5: World Congress of the International Union of Women Architects, Seattle. Contact: Jean Young, AIA, UIFA, 5601 N.E. 77th, Seattle, Wash. 98115.

LETTERS

The Celebration of Architecture: The priest celebrates mass; the architect celebrates architecture. A building is a commitment, an act of faith in the future. We are motivated in the building of a new structure by the conviction that the activity and the occupants deserve something better than their present quarters, that their aspirations would be better served by the provision of a more appropriate and adequate shell from which to act. We celebrate this conviction, these aspirations and their future significance in the design of a new building. Architecture is always a celebration.

Architecture is significant due to what it celebrates—obviously a church is more significant than an outhouse. Yet, once we leave the extremes, it becomes a personal matter of what each of us considers a function worth celebrating. The size of the project, and the fee, has little to do with the significance of the function. As a matter of fact, immense size of a project tends to diminish the immediacy of the human significance of the value to be celebrated, forcing us into broad generalizations that are seldom meaningful. Sorry indeed is the architecture that celebrates no more than the fee of its designer.

Indeed, in the design of a megastructure we have no choice but to admit a limited attention span. We are forced to generalize, to gloss over the individual details of function and the very special moods of inspiration. This "broad vision" is wrought with dangers of degrading our design in its sense of detail, content and possible wealth of expression. The artist in us revolts at the degradation and we return to the drawing board with an intensity of effort to uncover the detail we abandoned in the process of trying to grasp the whole as a unified concept.

The celebration of building that is architecture is the life of the architect. It

is our ability to make the process of building a celebration of life where we contribute. So it is hoped that our year dedicated to the celebration of architecture will continue with our devotion in the celebration of the purpose and human aspirations of every building we design, turning our buildings with increasing consistency into meaningful architecture: a true celebration of architecture.

> Peter Keleti, AIA Kansas City, Mo.

A Commendation to GBQC: My first intention was to write Geddes Brecher Qualls Cunningham directly in regard to winning AIA's 1979 firm award (see Feb. p. 28). Then, I decided to offer my congratulations publicly—as penance for never having thanked Messrs. Geddes and Qualls for being my surrogate Gropius and Hudnut.

I was an architectural student at the University of Pennsylvania when it had, unquestionably, the greatest faculty any architectural school ever had (1958-63).

It was with Geddes and Qualls that I spent most of my studio time and it was primarily they who laid down for me a superb foundation upon which I have been developing my own skills as an architect.

If, for once, I could play the juror to my "crits," I would award them a "commend" for the contribution they have made as educators of the succeding generations of architects.

Neil R. Parnes Honolulu

Confused Editors: As a practicing member of AIA since 1923, I would like to compliment the reporting in the February issue on "Evaluation: Designing for Confused Elderly People" (p. 59), The article was informative and concise, and the graphics were expressive of the pertinent points made in the story.

May I respectfully ask, however, who was the architect? Israel Demchick, AIA Philadelphia

Our apologies. The architect of the Weiss Institute was the writer of the above letter; architect for the projected building is Geddes Brecher Qualls Cunningham. Ed.

Martin Van Buren's Home: We are soliciting assistance in locating photos and/or glass plates (ca. 1839-mid 1900s), relating to interior and exterior views of Martin Van Buren's home, Lindenwald, in Kinderhook, N.Y. The National Park Service is endeavoring to restore the home to the period of occupancy, 1841-1862, by the eighth President of the U.S.

William N. Jackson P.O. Box 545 Kinderhook, N.Y. 12106

Let AAF help you keep your new building warm in the winter, cool in the summer--and profitable all year round.

Rising fuel prices can drastically cut the projected profitability of any new building. And although AAF can't control the rate of increase, we have two highly efficient, unitary heating/cooling systems that can keep the effect of those price increases to a minimum.

The AAF EnerCon is one of these energy-conserving systems. It consists of a series of unitary water-to-air heat pumps connected to a central water loop. This dependable water loop absorbs, stores and redistributes heat so effectively that EnerCon can operate up to 25% more efficiently than most systems currently being used in many buildings. And it's surprisingly inexpensive to install.

EnerSaver is the other AAF energy-conserving system. It is an air-source heat pump in a selfcontained chassis. The EnerSaver provides cooling just like any other packaged terminal air conditioner. But when you want heat, that's when the saving begins.

EnerSaver absorbs heat from the outside air, adds heat from the refrigeration cycle and distributes it throughout your building. The result: EnerSaver provides heat three times more efficiently than systems using electric resistance heat.

For more information on how the AAF EnerCon and EnerSaver systems can help you keep your new building profitable all year round, contact your nearest AAF representative or write: American Air Filter Company, Dept. 219, 215 Central Avenue, Louisville, Kentucky 40277.

Better Air is Our Business®.

Circle 3 on information card





FOUR HEALTHCARE FACILITIES THAT PLANNED FOR FUTURE CHANGE... WITH INTERSTITIAL SPACE DESIGN.

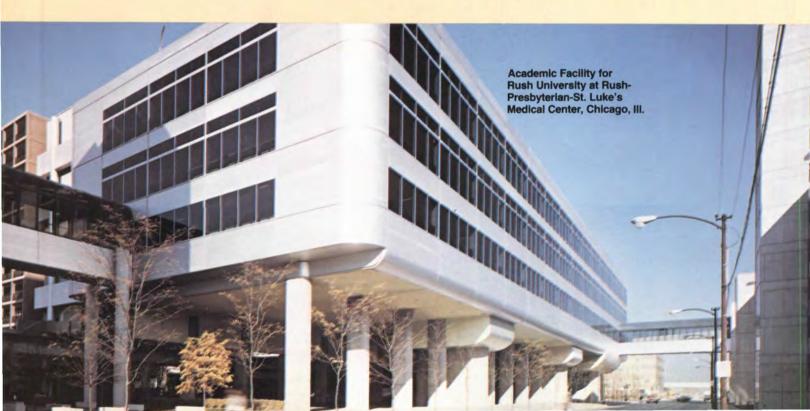
Anyone concerned with the planning and building of healthcare facilities knows that these structures are destined for many changes after completion.

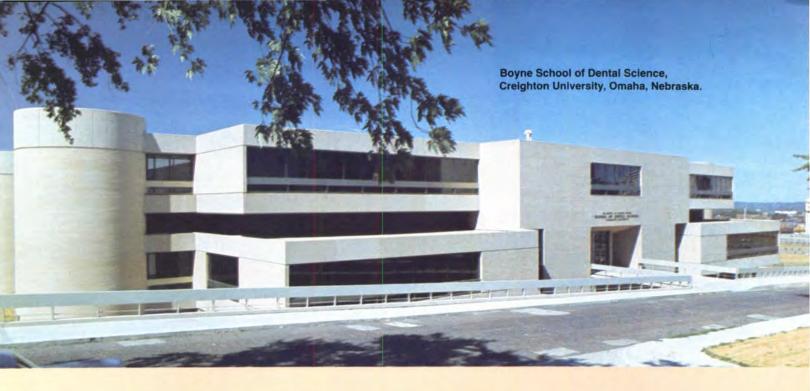
An effective and economical answer to this problem: Interstitial Space Design—a system which incorporates intermediate spaces between working floors.

In these spaces, electrical, mechanical and special service equipment, communications lines and piping and ducts are housed and serviced...allowing the working floors to undergo major changes without interrupting vital services. And maintenance of services need never disrupt normal operation of working floors—a key factor to a hospital which must function around the clock.

Steel for Flexibility and Economy.

Structural steel plays an important part in the concept. Large, column-free, open floor spaces and the long spans necessary to allow major functional changes





are only possible with steel. An important cost consideration: many of the steel trusses used for interstitial structures are shop-assembled, which can lower construction costs and reduce erection time. The deep trusses in the interstitial spaces provide a strong yet light frame from roof to foundation—which also results in economies.

The new, well-planned healthcare facilities pictured here all used the Interstitial Space Design System. To find out more about them, or for more information regarding the many applications for structural steel, contact a USS Construction Services Representative through your nearest U.S. Steel Sales Office. Or write for the Technical Reports to P.O. Box 86 (C1167), Pittsburgh, Pa. 15230.

United States Steel

(USS)

Good Samaritan Hospital, Dayton, Ohio. Hennepin County Medical Center, Minneapolis, Minnesota.

ARCHITECT: Medical Facilities Associates General, Minneapolis, Minnesota. A Joint Venture of Smiley-Glotter Associates and Thorsen & Thorshov Associates.

HOSPITAL CONSULTANT: Booz, Allen, Hamilton, New York, New York.

STRUCTURAL ENGINEER: Bakke Kopp Ballou McFarlin, Minneapolis, Minnesota.

STRUCTURAL CONSULTANT: Le Messurier Associates/SCI, Cambridge, Massachusetts.

GENERAL CONTRACTOR: M. A. Mortenson Company, Minneapolis, Minnesota.

STEEL ERECTOR: N.H. Sandberg Erection Company, St. Paul, Minnesota.

Boyne School of Dental Science, Creighton University, Omaha, Nebraska.

ARCHITECT/ENGINEER: Leo A. Daly, Omaha, Nebraska.

GENERAL CONTRACTOR/ERECTOR: Peter Kiewit Sons' Co., Omaha, Nebraska.

STRUCTURAL STEEL FABRICATOR: Drake-Williams Steel Inc., Omaha, Nebraska.

Academic Facility for Rush University at Rush-Presbyterian-St. Luke's Medical Center, Chicago, Ill.

ARCHITECT: Metz Train Olson & Youngren, Inc., Chicago, Illinois.

STRUCTURAL ENGINEER: C. A. Metz Engineers, Chicago, Illinois.

STRUCTURAL CONSULTANT: LeMessurier Associates/SCI, Cambridge, Massachusetts.

GENERAL CONTRACTOR/ CONSTRUCTION MANAGER: Morse/Diesel, Inc.

Chicago, Illinois.
STRUCTURAL STEEL FABRICATOR/

STEEL ERECTORS: American Bridge Division of U.S. Steel.

Good Samaritan Hospital, Dayton, Ohio.

ARCHITECT: Levin Porter Smith, Inc., Dayton,
Ohio.

HOSPITAL & HEALTH SERVICES

CONSULTANT: E. D. Rosenfeld Associates,
Inc., White Plains, N.Y.

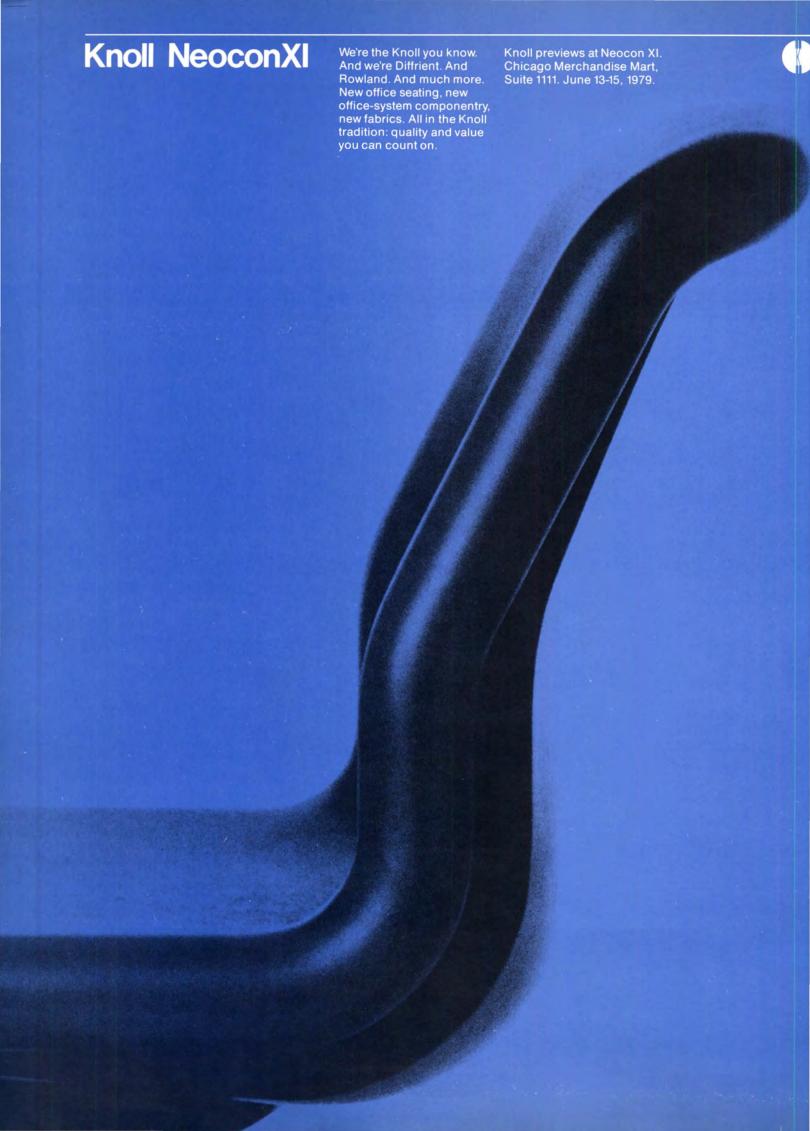
STRUCTURAL ENGINEER: R. S. Fling & Partners, Columbus, Ohio.

GENERAL CONTRACTOR: B. G. Danis Co., Dayton, Ohio.

STRUCTURAL FABRICATOR: (Now known as Berkley Steel Division, Inc.) Camden Steel Corp., Camden, Ohio.

STRUCTURAL ERECTOR: J. O. Berkley Co., Inc. Gettysburg, Ohio.

Circle 5 on information card





Wait 'til you see the light. <u>Holophane</u> Interior Lighting/Ceiling Systems.

Architects, and a lot of other people, appreciate beautiful ceilings.

That's why they look to Holophane® for interior lighting/ceiling systems.

All the ceiling components are engineered by Johns-Manville. So our complete systems are not only beautiful on the outside, they have inner beauty, too.

Because good ceilings start with good lighting, J-M gives you a broad choice of high performance, energy-efficient fluorescent and HID luminaires.

Then, we provide a grid suspension that adds crisp lines to the total look, integral air handling, and a selection of acoustical panels.

These components can be formed into a variety of ceiling modules —giving you the freedom to create virtually unlimited design themes.

Ask your local Holophane sales representative to go over all the facts and figures with you, including ESI, STC and NRC information.

You can also consult Sweet's Div.13 or contact Larry Edwards or Neil Thompson, Johns-Manville Sales Corp., Holophane Div., P.O. Box 5108-AIA-5 Denver, CO 80217. Phone: 303/979-1000.

JMI Johns-Manville

Circle 7 on information card



In these inflation-conscious, energy-critical times, you can still let your imagination soar.

Trust brick to hold down energy Trust Brick Most of all, trust brick to give spetter than any other building. Trust Brick Wour dream a reality. It co costs better than any other building material. Because of its mass, brick serves as an energy envelope, keeping heat in during the winter and out in the summer. Brick usually accommodates a smaller heating and cooling plant than other materials.

Trust brick to provide a long-lasting, maintenance-free structure that will hold its value over the years regardless of inflation. Brick requires no maintenance. And it provides ample fire protection.

your dream a reality. It comes in 10,000 shapes, sizes and colors. It turns corners, it soars as high as your imagination can go. Brick is a broad palette for your design ideas.

In these concerned times, when you're reshaping your design values, it's nice to know there's one material you can put your trust in.

If you'd like to know more about the values and characteristics of brick, write us.

We're the Brick Institute of America.



NEWS

Summarized below and on following pages are some of the happenings in a year's time that have affected architecture and its practitioners. In the recapitulation of events over a 16-month period in the 1978 Annual of New American Architecture, we said that change is about the only constant in today's world. This year's recounting reveals this statement, although unoriginal, is still very true. Change is occurring even as these words are written. The nine topics covered broadly this year, plus an essay regarding the commendable developments on Pennsylvania Avenue in the nation's capital, intertwine and are interdependent. They are but a few of the many experiences to be encountered in this era of information explosion. The items selected for review -from the pages of this magazine, from other professional journals and from interviews with knowledgeable people—seem worthy of repetition. They all reflect that architecture can never be separated from the values of the society in which it flourishes. Architecture and values are also intertwined and interdependent. Mary E. Osman and Nora Richter

Government

Brooks Procurement Approach Gains in Acceptance

A matter of deep concern to professional architects and engineers is how A/Es are selected for government work. The three most common methods are by competitive bidding, selection boards and the Brooks approach, (The Brooks law, named for Rep. Jack Brooks who introduced the legislation, is used by federal agencies and price is only a factor in final negotiations.) Each state and local government chooses A/Es under its respec-

tive laws.

Early this year, the American Bar Association decided upon a model procurement code similar to the Brooks approach. It recommends that state and local governments select A/Es on the basis of demonstrated competence and qualifications and at fair and reasonable prices. A state or local selection committee for A/E services shall encourage firms to annually submit a statement of qualification and performance. The committee will then interview no less than three firms for a specific project. The committee will choose the highest qualified firm and negotiate a contract. If negotiations fail, the committee will then interview the second most qualified firm, and so on. The Commonwealth of Kentucky and the city of Knoxville. Tenn., have already adopted procurement methods based on the ABA model. Detroit and the District of Columbia may soon become ABA pilot jurisdictions to further test the code. The ABA adoption of the code based on the Brooks approach is applauded by AIA and the engineering societies.

Nine states currently select A/Es by methods similar to the Brooks approach. Four additional states choose A/Es by selection board procedures, and Maryland uses competitive bidding. But in Maryland, engineers have introduced a mini-Brooks bill. Maine's legislature is still considering a bill based on the Brooks ap-



proach, although it has been scaled down from the original bill, In Indiana, a Brooks approach bill was introduced but not acted upon. In Connecticut, a similar bill is still alive. In other states: the Virginia legislature passed a bill for a oneyear study of A/E selection methods; the Mississippi and New Hampshire legislatures are considering competitive bidding; the Montana legislature killed a competitive bidding bill; Brooks-type legislation was introduced by the South Dakota Chapter/AIA, which drew support in the legislature, but had to be withdrawn after consulting engineers reportedly refused to endorse the bill, and the South Carolina Chapter/AIA headed off a competitive bidding proposal offered by Spartanburg's city manager (a compromise was reached in that price proposals are required of the final three firms).

In the scandal-ridden GSA, evidence of corruption has not surfaced in GSA's A/E selection procedure. In fact, Burt Talcott, executive vice president of the

American Consulting Engineers Council. said that A/E selection is insulated from fraud, because selections are based on qualifications rather than price competition. Despite this fact, the Senate committee on environment and public works has halted for the remainder of the year construction and leasing by GSA that is not yet approved by Congress. A Senate committee source said, "We've had enough, and we're not going to do anything until this mess is straightened out," referring to alleged procurement of goods scandals and not A/E selection procedures.

Under current law, both the Senate and House public works committees must approve a prospectus outlining need for a project and its cost before GSA can proceed with the construction or leasing of projects of more than \$500,000. The freeze has halted about \$400 million in projects already submitted by GSA for approval as well as plans to submit another 100 projects amounting to \$800

million.

While GSA's procurement practices show a clean record, Comptroller General Elmer B. Staats, head of the General Accounting Office, still holds the view that A/Es should compete on a price basis "just like all other businesses" for one reason, so that federal agencies will know if they are getting the best deal for the taxpayers' money. Two victories were won for competitive bidding: the U.S. Supreme Court ruled that the National Society of Professional Engineers could not prohibit competitive bidding in its code of ethics and Congress insisted that the Corps of Engineers undertake a \$5 million test of a competitive price procurement system of A/E services. (The Defense Department is not under the Brooks law, but it had previously selected A/Es on a similar nonpriced procedure.)

Government continued on page 18

Outside Salt Lake City, Vulcraft and the Army Corps of Engineers

544,400 square feet, to be precise. For a new warehouse facility at Hill Air Force Base. The completed 1361' by 400' building could accommodate thirteen football fields.

The Corps of Engineers and the Air Force first considered making the facility an all concrete structure like its twenty year

old counterpart next door.

Then, Weyher Construction Company value engineered the structural system to see if they could reduce the contract price without altering the function or characteristics of the completed building. And to obtain the greatest possible savings

they recruited Vulcraft to computer design steel joists and joist girders specifically for the job.

The resulting Value Engineering Change Proposal showed

The resulting Value Engineering Change Proposal showed that an estimated \$300,000 could be saved by using Vulcraft steel joists and joist girders instead of reinforced concrete.

When the Army Corps of Engineers and the Air Force saw that Vulcraft joists and joist girders were the least expensive structural system for the job, they gave Weyher Construction the go ahead. Weyher then issued Vulcraft's orders: deliver the joists and joist girders fast. In time to meet the original deadline.



covered a lot of ground together.

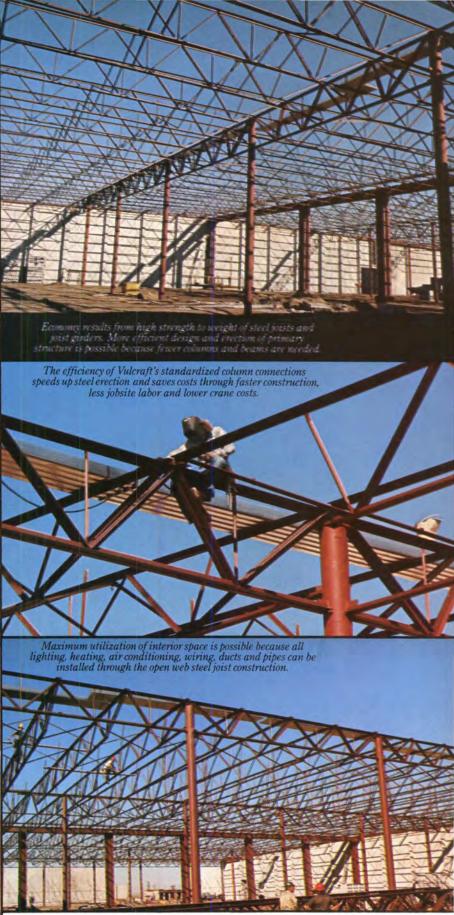
Vulcraft came through with flying colors. Weyher Construction came through with an on-schedule building. And the U.S. Government came through with an estimated \$300,000 savings.

The Vulcraft system might be able to save you money on your next job. So contact your local Vulcraft representative for details. Or write Vulcraft, P.O. Box 17656, Charlotte, North Carolina 28211 for your Joist and Joist Girder Specification Guide (See Sweet's 5.2/Vu.). Or call 704/366-7000.

What you'll get is action above and beyond the call of duty.

No matter how much ground you want to cover.





A Division of Nucor Corporation
P.O. Box 3009, Florence, S.C. 29501 803/662-0381
P.O. Box 169, Fort Payne, Ala. 35967 205/845-2460
P.O. Box 186, Grapeland, Tx. 75844 713/687-2460
P.O. Box 59, Norfolk, Neb. 68701 402/371-0020
P.O. Box 1000, St. Joe, Ind. 46785 219/337-5411

General Contractor: Weylter Construction Company, Salt Lake City, Utah. Steel Fabricator: Utah American Steel, Salt Lake City, Utah. Steel Frector: Masco, Inc., Centerville, Utah. Architect and Engineer: Reid & Tarics Association, San Francisco, California

Circle 9 on information card

It knows how to save water. Because it "sees" when to flush.



The Sloan OPTIMA" sensor-operated Automatic Flushing System. No handles. No timer. Flushed by an invisible beam of light.

It's Sloan's great idea for cutting water consumption, while increasing sanitary protection. And the key to it all is the Sloan **OPTIMA** Electronic Sensor.

It "sees" when to flush with an invisible, continuous light beam. When a user approaches the fixture, he reflects the beam back into the **OPTIMA's** scanner. The electronics take over and when the user steps away, the flush valve is tripped by a solenoid.

The **OPTIMA** offers the ultimate in sanitation because the user can't "forget" to flush. And since fixtures flush only when they

are used, precious water is conserved.

The **OPTIMA** is designed for easy, attractive installation. It works with the Sloan Solenoid-Operated Flush Valve that matches your application. This advanced Sloan **OPTIMA** System gives you a trouble-free, water-wise answer to high-volume flushing problems in hospitals, sport complexes, municipal and office buildings, and transportation terminals.

For more information, write for our new brochure.

Sloan Flush Valves. Anything else is a waste of money.



Circle 10 on information card



Available in square and rectangular

tural steel. Send for our catalog.

Two Robinson Plaza Route 60 Pittsburgh, Pennsylvania 15205 TWX 510-697-4061

Government from page 13

But A/E selection has been a mixed picture; there have also been victories on the side of the Brooks approach, ABA's decision, for one. In another case, the federal government recently published revised regulations for procurement of federally funded goods and services (professional and nonprofessional) by state and local government agencies, which included price as a factor in the selection process. But protest from architectural and engineering associations represented by COFPAES (Committee on Federal Procurement of A/E Services) caused the feds to change the regulations to exclude price as a factor except in the final negotiations. It was pointed out that the revision overlooked the fact that federal law, many state and local laws and the ABA model procurement code require competitive selection procedures in which price is not a factor.

Meanwhile, GSA Administrator Jay Solomon resigned on Mar. 21 and President Carter has designated Navy Rear Admiral Rowland G. Freeman III, a defense procurement expert, as Solomon's successor. Solomon has been praised for tackling the long-suspected, far-reaching corruption of the agency and also for improving GSA's architecture, design and historic preservation efforts. Among other things, Solomon restored the mandatory expenditure for art in public buildings to half of 1 percent of total construction costs; initiated efforts to restore historic landmark buildings by adapting them to federal use (for which GAO criticized GSA for being overaggressive); chose architects on the basis of limited design competitions; opened discussion of design and planning problems to the public; encouraged public use of federal buildings for neighborhood and ethnic festivals, art exhibitions and other community events, and introduced the postoccupancy evaluation of federal buildings.

Michael Pittas has been appointed director of the National Endowment for the Arts' architecture and environment program, which had been without a permanent helmsman for almost two years. Pittas was acting director of the urban design program at Harvard University's graduate school of design, where he has taught since 1971. Concern over the future existence of the architecture and environment program had been mounting. It has been the only one of NEA's 12 programs to receive no funding increases in the last three years, although the endowment's overall budget increased more than 100 percent. Pittas says he wants to create "a program that can act as a focal point for bringing together a diffuse constituency and giving the arts of architecture, landscape architecture, planning, etc., a voice in Washington.'

Both houses of Congress passed and President Carter signed a joint resolution that would initiate preliminary studies for the restoration and renovation of the Pension Building in Washington, D.C. (right), as a national museum of the building arts (original design by Gen. Montgomery C. Meigs). The resolution prepares the way for reintroduction of new legislation, earmarks the structure as a museum, ensures that occupancy by federal agencies will be only temporary and obtains for Congress advice from GSA, the National Endowment for the Arts and the Smithsonian Institution on the physical and programmatic aspects of the proposed museum. Renovation is estimated at about \$12 million, with special museum uses conceivably adding another \$1.5 million.

The federal government lost a legal battle over architecture and esthetics in the nation's capital. It had sought to stop construction of highrises across the Potomac River in Virginia, buildings which the government says will be a public nuisance despoiling the Washington, D.C., skyline. The proposed 24- and 29-story buildings will be twice as high as most of the existing buildings and will be visible from across the river. In suing the developers, the only evidence the U.S. government offered to support its public nuisance theory was height and bulk. The allegations of increased traffic congestion and other environmental damages were dropped. U.S. District Judge Oren R. Lewis contended that "height alone is not enough-unsightliness or offenses to the esthetic sense -is not sufficient to constitute a public

In California, Governor Jerry Brown proposed in his 1979 budget message that 15 professional licensing boards or major programs within boards be phased out, including the Board of Architectural Examiners. He also proposed that the Architectural Practice Act be repealed by Dec. 31.

nuisance." The government will appeal

the decision.

According to the Brown administration, this action would reduce unnecessary government regulation and the licensing of professionals and allow more ease of entry into a profession. Abolition of the licensing boards and major programs reportedly would amount to an annual savings of \$2.2 million; abolition of the Board of Architectural Examiners would be \$415,000 annually. Local building officials would review plans before issuing a building permit, and private agencies could assume the role of certifying qualified candidates, according to the state.

The California Council/AIA strongly opposes Brown's actions, because elimination of the practice act, says CCAIA, "would in effect allow anyone to practice architecture and offer architectural services." CCAIA also contends that there



would be less consumer protection because the current law "requires that a measured level of competence be required for the design of most buildings." Further, professional liability insurance might not be available to persons who do not have proven competence. CCAIA asserts that what is needed "is not abolishment of the Board of Architectural Examiners and repeal of the act, but legislation to strengthen enforcement powers and offer additional consumer protection." At this writing, Governor Brown is reconsidering his request for withdrawal of funds.

Also in California, there are indications that Proposition 13 (which cut property taxes by almost 60 percent), has caused higher fees for the construction industry. First, major increases in fees and service charges, instituted to recoup some of the losses incurred by Proposition 13, involve such things as increased or new fees for building plan checks, water and sewer connections, zoning changes and buildings permits. Second, local governments have no tax incentives to approve construction projects, so residential and commercial proposals "are now given the cold shoul-der by some cities." And third, because funds for major capital improvements were shut off, developers are told that dollars must be provided before new subdivisions can construct schools, fire stations, libraries and the like. The California Building Industry Association maintains that "the activities of the construction and development industries have borne a disproportionate burden" of fees increased by cities and counties after Proposition 13 was approved by voters.

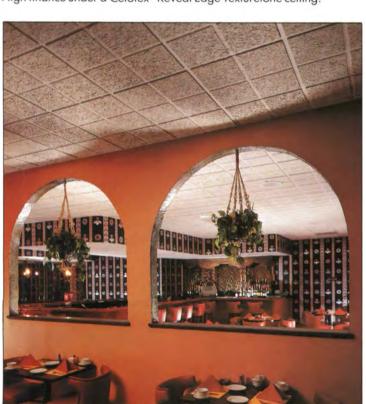
News continued on page 25



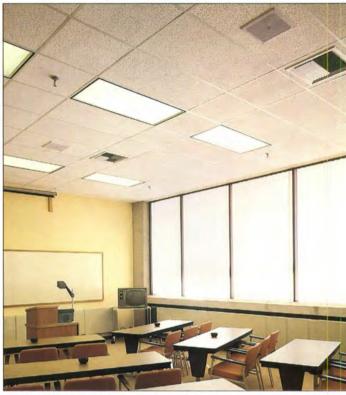
Celotex makes more kind for people to work, study, din



High finance under a Celotex® Reveal Edge Texturetone ceiling.



Artichokes for two under a Celotex® LeBaron ceiling.

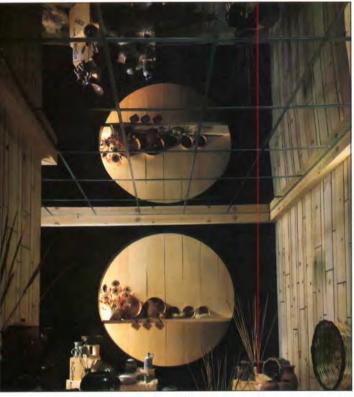


English 101 under a Celotex® Mineral Fiber Fissuretone ceiling.



Waiting for the dentist under a Celotex® Reveal Edge Fissuretone ceilir

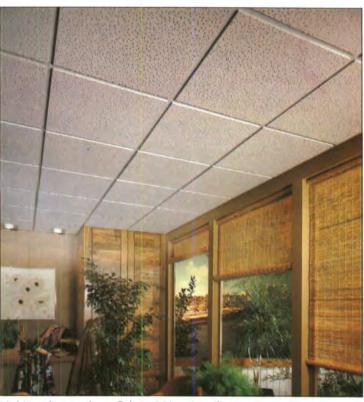
of ceilings than anybody hop, love and laugh under.



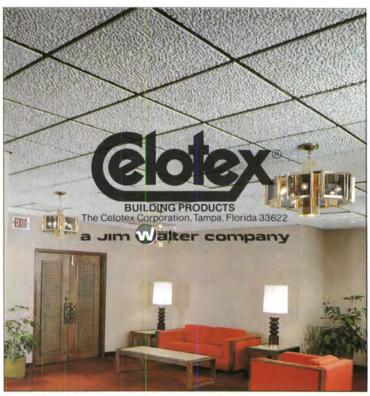
outiquing under a Celotex® Image ceiling.



heeling and dealing under a Celotex® Fissured Grande ceiling.



Making plans under a Celotex® Mosaic ceiling.



Impressing clients under a Celotex® Marquis ceiling.

A Report to the Profession from The AIA Research Corporation

- Since 1973, the AIA Research Corporation (AIA/RC) has distributed \$9 million to 3,000 architects and other professionals across the country who have participated in its 90 projects.
- In its largest project, AIA/RC involved over 400 design professionals in a program to develop new ideas for achieving energy conservation through design.
- In its solar research, AIA/RC has stressed that natural heating and cooling can be achieved through total building design and has developed design criteria for the federal solar demonstration program.
- In its work with architectural schools, AIA/RC has introduced seismic and energy issues into curricula and conducted seminars for architectural faculty in seismic and energy conscious design.

Established by The American Institute of Architects, the AIA Research Corporation explores issues of national significance affecting the built environment. AIA/RC operates as a separate corporation whose activities are supported by contracts and grants from government agencies, foundations and private industry. In addition to energy, AIA/RC has researched seismic safety design, flood design, environmental design and post-occupancy evaluation. By creating opportunities for architects to participate in its research, AIA/RC broadens the profession's role in national policy making and problem solving. The results of its research are available through publications and through its quarterly, *Research & Design*.











INTERIEST EARNER

The Zefran® Blend CR-4 carpet in Wisconsin's Brown Deer Bank has already paid dividends: it helped the bank win the AIA, Wisconsin chapter Honor Award for design excellence.

But colorful, wool-like eye appeal is only one reason why this carpet was specified for the bank. Made of Badische Corporation Zefran[®] Blend CR-4 spun of 70% acrylic/30% nylon staple fibers, the carpet has a durable, abrasion resistant strength that can stand up to years of hard use without marring its aesthetic good looks. In fact, it has been Performance Certified by Badische Corporation specifically for extra-heavy commercial traffic, and it also carries the Zefstat[®] lifetime static-free carpet warranty, as well as a five-year pile fiber retention warranty.

The Zefran® Blend CR-4 comes in a huge inventoried yarn bank of colors, and these can be plied into

thousands of colorations to suit your specifications. And it is just one of a full range of carpet blends and yarns that Badische Corporation makes for contract commercial carpets. You can see them all in our Contract Carpet Selection and Specifications Guide. Get your copy before specifying your next carpet installation. Call or write: Badische Corporation, Contract Carpet Consultants Service, CREATE® Center, Williamsburg, VA 23185, 804-887-6573.

PERFORMANCE CERTIFICATION



Badische Corporation Williamsburg, VA 23185

Member of the BASF Group

BASE

Zefran * and Zefstat * are registered trademarks owned by Badische Corporation, formerly Dow Badische Company.

CREATE * is a registered service mark owned by Badische Corporation, formerly Dow Badische Company.

Badische Corporation produces acrylic and nylon fibers and yarns especially engineered for carpets of beauty and performance.

Circle 15 on information card

In Warroad, Minn., we have a firm-but-polite sign concepts d windows, but where and sign concepts and cathedral glazing, including Solar Bronze, Solar Gray, and cathedral glazing, are furnished on request. We also offer

There are a lot of design concepts that call for fine wood windows, but where standard units don't meet all of the

requirements. When that happens, call Marvin. We make the world's largest line of fine wood windows,

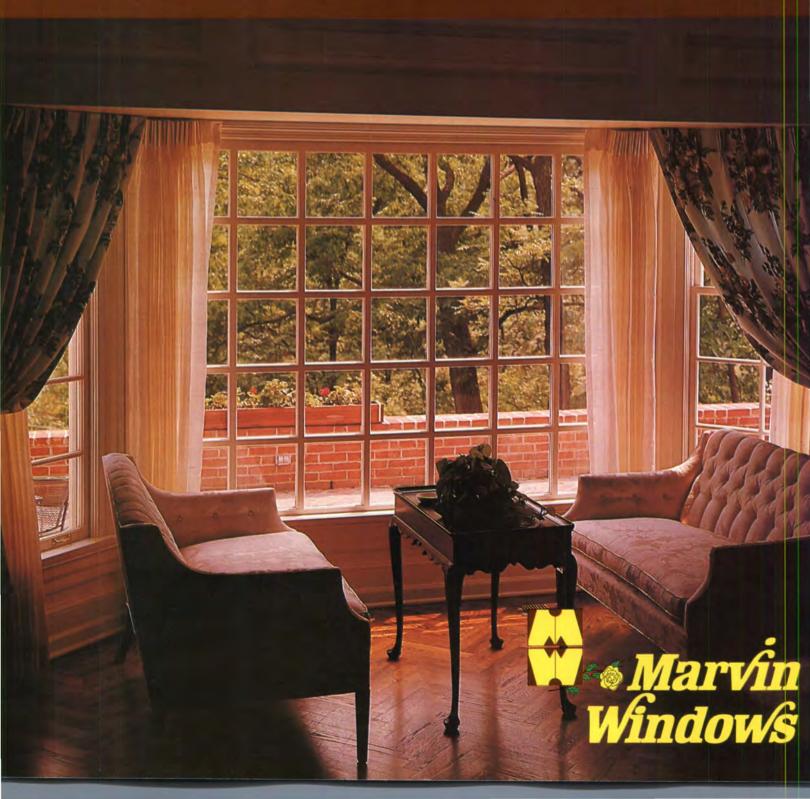
but we also build windows to architects' specifications. For instance, we'll furnish windows with extra wide jambs to match increasingly thicker walls. We can also supply non-standard frame sizes. When true divided

reques

beautiful trapezoids and

triangles in any shape or size you specify. These beautiful units have heavy 5/4 frames and 1" insulating glass. Write or call for catalogs and tracing details. Marvin Windows, Warroad, MN 56763. Phone: 218-386-1430.

Circle 16 on information card



Legislation

AIA Goes on Record on a Wide Range of Issues Before Congress

A crucial issue now before Congress, so far as architects and engineers are concerned, would help relieve design professionals of some of the trauma of escalating liability costs. Legislation, if passed, would permit A/Es and product manufacturers to set aside reserves in a trust fund to cover professional liability costs and to take a tax deduction for the reserved amounts in the manner in which insurance premiums are a deductible business expense.

The legislation, called the Product and Professional Design Liability Insurance Tax Equity Act of 1979, is similar to the Product Liability Tax Equity Act introduced last year but not voted on. It covers architects and engineers as well as product manufacturers and excludes other

professionals.

Payments made into a trust fund would be tax exempt so long as they remain in a trust fund account. Monies from the fund could be used to pay for legal and investigative costs relevant to a liability claim and its settlement, as well as for administrative costs for the maintenance of the trust fund. The reserve funds could be used to cover or increase the deductible amounts on purchased liability insurance.

Last year, when the first measure was before Congress, testimony was given by Robert C. Broshar, FAIA, an Institute board member, who presented the views of AIA, the American Consulting Engineers Council, the American Society of Civil Engineers and the National Society of Professional Engineers. His statement gave what this magazine called a "chilling recitation of the 'critical' liability issues faced by the design professional."

In the 1960s, Broshar said, professional liability insurance for design professionals generally cost less than 1 percent of a firm's gross receipts. In the '70s, insurance premiums began to skyrocket, with annual increases of 100 percent or more not uncommon. Over the past eight years, he said, the average annual premium increases raised the cost of insurance 557

percent.

These premium increases are but a part of the total liability cost problem faced by design professionals, Broshar testified, since many A/E firms have had to raise deductible amounts to help control costs. Thus, a firm that has one or more claims lodged against it in a single year could end up having to pay two or three times the amount of the premium, even if no claim were successful. The A/E firm also must

absorb the intangible but high costs of uncompensated professional time spent in investigation and defense preparation.

AIA seeks passage of the legislation in the belief that it will mean a stabilization or decrease in insurance premiums and will also reward quality professional performance. The Institute has urged its members to ask their congressional representatives to give support to the legislation. The fact that the legislation is directed to architects and engineers as well as product manufacturers is viewed by some as a partial victory within itself since



it gives attention to a degree to the economic strain under which design professionals have had to practice.

In other legislative matters, AIA gave support to the retention of Section 226 on design and planning assistance in the Economic Opportunities Act. The section would authorize the community services administration to make grants for design and planning assistance to community-

based organizations.

Elmer E. Botsai, FAIA, then president of the Institute, stated that if neighborhood groups are to have a meaningful voice in their development, "it is vitally important that technical planning and design assistance be specifically authorized rather than merely allowed within a block grant." Botsai mentioned that there are 80 community design centers in the U.S. which, he said, "are hindered by lack of proper funding."

AIA also called for an appropriation of \$100 million for fiscal year 1979 for the historic preservation grants-in-aid program. Gordon D. Orr Jr., AIA, chairman of the Institute's committee on historic resources, pointed to the fact that "historic preservation projects have played a key

role in a great many urban revitalization efforts, often sparking private sector investment in marginal areas by acting as anchors of pivotal points around which rehabilitation grows." The Institute also urged expansion of the Historic American Buildings Survey program as a valuable documentation of the nation's significant architecture and for its use as a training program for students prior to their entry into the profession.

Other support in legislative matters was given by AIA over the past year to the establishment of a museum of the built environment. The Institute stressed that the Pension Building in Washington, D.C., could be adapted to museum use with little alteration of Gen. Montgomery C. Meigs' original design. David Olan Meeker Jr., FAIA, executive vice president of the Institute, testified that many innovations in the building industry are lost, simply because there is no place to record the knowledge. Studies are made only to gather dust, he said, "for lack of a central depository and retrieval system." In the long run, he said, this archival aspect of a museum of the building arts will be of the greatest importance to the architectural profession.

In other matters, AIA continued actively to seek congressional approval of legislation in accord with Institute policy and to monitor legislation for its potential impact upon the profession. Support was

given for:

 energy conservation to achieve the full potential of energy savings offered by the built environment, including the development of comprehensive energy conservation policies, financial assistance in the retrofitting of existing structures and endorsement of renewable energy source systems development and application;

 a broad national public works program, with legislation monitored on authorizations and appropriations for major domestic federal civilian and military construc-

tion programs;

 maintenance of architectural services selection procedures for government contract work, as mandated by the Architect-Engineer Selection Act of 1972 and based upon qualifications of competence at a fair negotiated fee;

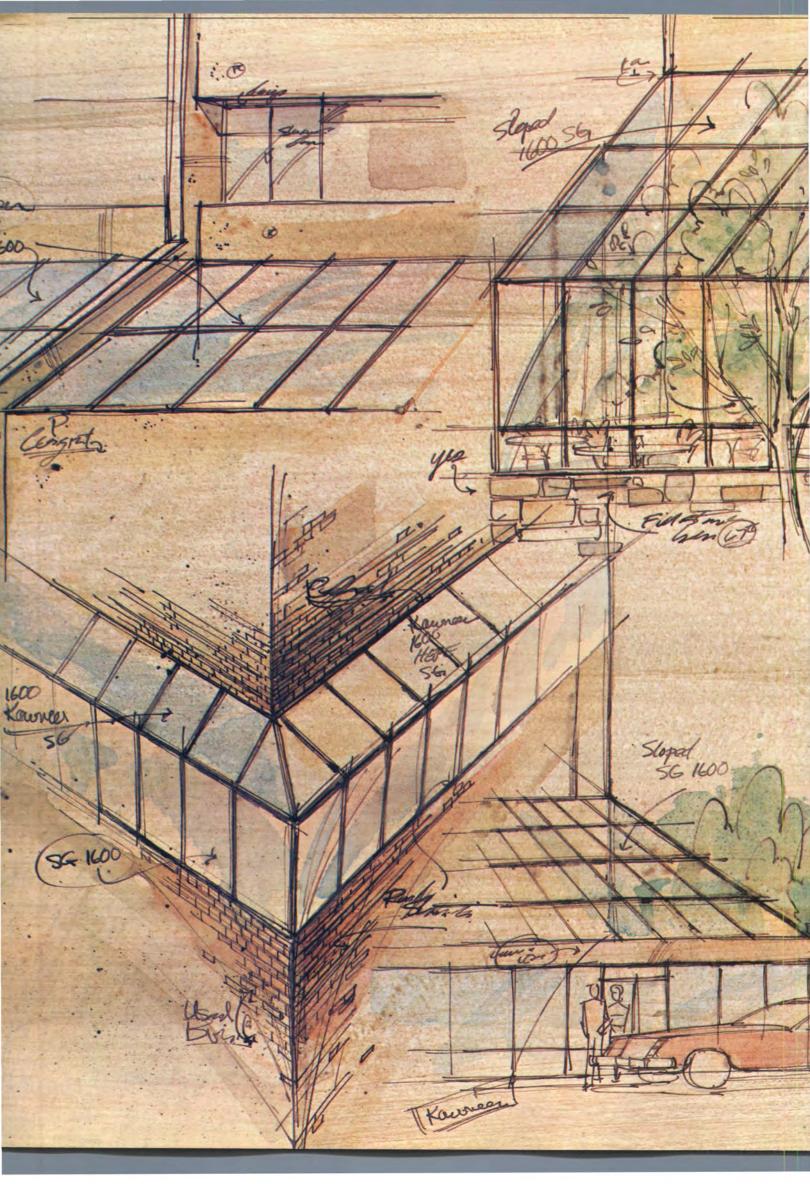
 tax reforms, with emphasis placed upon such factors as growth patterns, housing, historic preservation, energy conservation, barrier-free environments and favorable treatment of those who export professional services;

 the establishment of a national system of health care, with adequate measures for both short- and long-term planning of health facilities, and the support of legitimate costs savings measures;

opposition to the inclusion of professional employees in coverage of the Service Contract Act for federal contractors.

News continued on page 30

AIA JOURNAL/MID-MAY 1979 25



IMAGINATION.

The only tool needed to design with Kawneer 1600 SG.

Sometimes, the skylight is the limit.

The addition of sloped glazing to a building's design can be a frustrating, time-consuming experience. After hours of design, drafting and consultation, the choice is often between budget breaking costs or painful performance compromise. With a large budget and custom design, the sky is the limit. But, in many cases it is the skylight which is the limit.

Introducing Kawneer 1600 SG for

Sloped Glazing.

1600 SG by Kawneer is a companion system to the 1600 Curtainwall System. It can be used to easily create a variety of building skylight accents. It allows an architect an extended vista of design opportunity. And, because Kawneer 1600 SG is based on an existing wall system, it does not make the design and dollar demands of custom-engineered systems.

Kawneer 1600 SG is a pre-engineered, standardized sloped glazing system. Design, performance and life cycle savings are built in before 1600 SG ever leaves the factory. This includes features such as internal drainage gutters, a unique, baffled sill assembly* for continuous drainage and a PVC thermal barrier to minimize heat loss and to control condensation.

Kawneer 1600 SG can be integrated with vertical walls, or applied to curbs, or to structural steel sub-framing, or even used with inside and outside corners. It is not only compatible with Kawneer's 1600 curtainwall system, it can be blended with all Kawneer entrance systems for a truly unique design. 1600 SG can accommodate a variety of slopes and configurations.

Most important, 1600 SG by Kawneer is a system that performs. It has been performance tested under conditions equivalent to 8 inches per hour of rainfall and winds of more than 60 mph. These test reports are certified and available upon request.

Where would you like your piece of the sky? Kawneer 1600 SG for sloped glazing does not require extra effort, long custom-engineering lead times, expensive installation, or performance compromises. All it needs is your imagination.

Talk to your Kawneer representative about designing with 1600 SG for sloped glazing. Or for more information, write: Kawneer Architectural Products, 1105 N. Front Street, Niles, MI 49120.

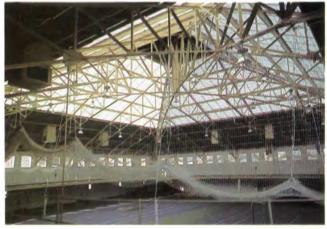
Kawneer
The designer's element

Circle 17 on information card

THE WALL THE ROOF THE TOTAL ENVELOPE



St. Mary's College C. F. Murphy Associates, Architects



Phillips Andover Academy Johnson Hotvedt Di Nisco & Associates, Inc., Architects

KALWALI



Jackie Robinson Middle School Stull Associates, Architects

The most highly insulated light transmitting material ... saving energy for 25 year

Kalwall Corporation, 1111 Candia Road, Manchester, NH 03103 603-627-386

See Sweet's 8.14/Ka, 7.8/Ka, 13.25/Ka, 13.6/Stu.

Circle 18 on information card

A beautiful home for a cosmetics company. ELEVATORS BY DOVER



Crisis Persists Amid Skepticism As Battleground Becomes Price

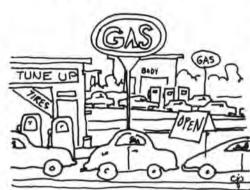
The national energy crisis continues, and it seems highly unlikely that the picture will become any brighter in the next few years (though public opinion polls indicate that many Americans don't believe a crisis exists).

Essentially, the problem is that as oil and natural gas become scarcer and harder to obtain, the cost increases significantly which in turn affects consumers and business and causes inflation. And there is growing skepticism about nuclear energy due to the recent Three Mile Island nuclear power plant accident, increasing costs to consumers, environmental hazards of waste materials and long-term decline in uranium sources. Coal, too, is seen by some in an unfavorable light, because of the toxic fumes produced when coal is burned (although some insist that environmental protection regulations could reduce this effect).

More and more energy experts are calling for a greater national effort to promote development and use of renewable resources of energy—solar, biomass, wind, geothermal, nuclear fusion (which uses hydrogen as the basic source), all of which now account for only about 6 percent of U.S. energy consumption. Economists favor renewable over nonrenewable sources, for unlike nonrenewable energy sources whose cost will only increase in the future, renewable sources will remain constant and even decrease as appropriate technology becomes less expensive,

The question remains as to what can be done to solve our energy problems without causing severe economic setbacks. The federal government has taken some positive steps in the passage of the National Energy Act, hailed as the nation's first comprehensive energy policy. In April, President Carter announced phase 2 of his energy plan. And the Department of Energy plans to announce the proposed building energy performance standards in August to go into effect by February 1980.

It took 18 months of political compromise for the extensively revised version of Carter's National Energy Act to be passed by Congress. The package focuses on energy conservation and will gradually deregulate natural gas by 1985 and requires most electric power and industrial plants to convert to coal by 1980 rather than using oil or natural gas. Some of the legislation's provisions include: a tax credit for homeowners for insulation of 15 percent of the first \$2,000 invested or a



maximum of \$300 per household; a tax credit up to \$2,200 for the installation of solar equipment; an authorization of \$900 million over three years for energy conservation in schools and hospitals and local public buildings; a 10 percent tax credit for businesses on the purchase of various items of energy-saving equipment, and an additional 10 percent investment tax credit for businesses installing solar equipment. Many experts agree that the tax incentives for the installation of alternative energy sources will not, in and of themselves, have great impact. Additional financial incentives are needed, say the critics.

Phase 2 of President Carter's energy plan, announced this spring, includes a gradual lifting of price controls on domestic oil and a complex series of other measures, the net effect of which, it is hoped, will force Americans to use less oil, paying more for it. Carter proposed that Congress enact a windfall profits tax on the oil industry—the chief beneficiary of price decontrol-and to put the tax proceeds into an energy security fund. The proceeds from the tax, estimated at \$10 billion by the end of 1982, would be used to provide grants to low-income families that will suffer from higher energy prices, to underwrite expanded mass transit systems in urban areas and for government research investment in developing other energy sources,

Among other things, Carter's proposal could bring a slight boost to the solar field. If the energy security fund is passed by Congress (and early indications are favorable), proposals for the use of the funds include tax credits for use of passive solar loan guarantees for construction of demonstration projects and a tax credit on the cost of solar thermal energy equipment. A tax credit would also be provided for builders of new passive solar residential construction for 20 percent of

the value of solar energy equipment for each unit (up to four units), and builders of new passive commercial construction would be provided with a tax credit of \$20 per million BTUs estimated design savings per year above the building energy performance standards,

The President has asked Congress to appropriate more than \$3.6 billion in the fiscal year '80 budget for energy research and technology development, of that \$589 million for solar development coupled with \$845 million in tax credit expenditures. Carter is expected soon to announce significant measures to increase and to accelerate the use of solar energy. At this writing, the White House would not provide information on this program, but there have been rumors that Secretary of Energy James Schlesinger has recommended that the federal government spend \$2.5 billion to stimulate solar development.

A coalition of solar energy advocates suggested to President Carter and Congress that \$2.5 billion per year for the next 22 years would enable the country to obtain a fourth of its energy from the sun and other renewable resources by the year 2000. The report, "Blueprint for a Solar America," maintains that this level of solar development "need cost no moreand could cost less-than would a program to obtain the same amount of energy using nuclear power or synthetic coalbased fuels." The lowest estimate of the amount of government subsidies for all major forms of energy is \$200 billion. In contrast, the subsidies granted so far to solar energy development are less than 1 percent of this figure. The congressional office of technology assessment seems to agree with the "Blueprint," A recent OTA report said that within 10 to 15 years, solar energy systems could begin to play a significant role in meeting the nation's energy needs, given current energy prices and affirmative federal action.

Meanwhile, the AIA board changed the section on solar energy and design in its energy committee policy statement to include passive solar energy. It now reads: "Every building design should maximize the beneficial contribution of practical passive and active solar energy concepts in order to meet the urgent energy and resource needs of the U.S. and the world. All AIA members should promote passive energy designs that are not only practical in terms of cost effectiveness, but also that hold promise of long-term energy and economic benefit, whether or not governmental financial assistance is available."

And in an unusual step, the Department of Energy published some trial regulations for the building energy performance standards (BEPS). More figures are expected in mid-June. The final regulations will be published in August.

Energy continued on page 37





have to work out all the bugs in advance.

That's why it's reassuring to lay your plans for any exacting project with the help of Bruning's full line of drafting intermediates.

Bruning's Optirase™ erasable sepia, for example, assures clear, crisp reproduction - even after countless erasures and revisions. And because it's 100% rag, translucent paper, your visions and revisions come through looking their best.

There's lots more, of course. Bruning has a full line of top-quality engineering reproduction equipment and supplies.

For more information, call your nearby AM Sales Office. Or write AM Bruning, Dept. E, 1834 Walden Office Square, Schaumburg, IL 60196.

We help bring your vision to life.

AMA Bruning

the Informationists.

Circle 20 on information card

€ 1979 AM International, Inc.

Creative design with LUCITE sheets: DuPont now offers four basic options for architects.

Now, with "Lucite" SAR, Du Pont research has established a new level of performance in abrasion resistance for optically clear acrylic sheet. Du Pont's broad line of four different "Lucite" acrylic sheets gives architects greater freedom of choice in glazing materials for creative designing.

1. "Lucite" SAR for applications requiring the highest abrasion resistance...close to that of glass.*

Solar-tinted "Lucite" sheet for energy saving through reduced air-conditioning loads, available in SAR and uncoated form.

3. "Lucite" T-1000 extruded sheet for use where maximum resistance to impact is needed.

4. "Lucite" L cast acrylic sheet, with optical clarity and caliper-controlled thickness, for general glazing applications.

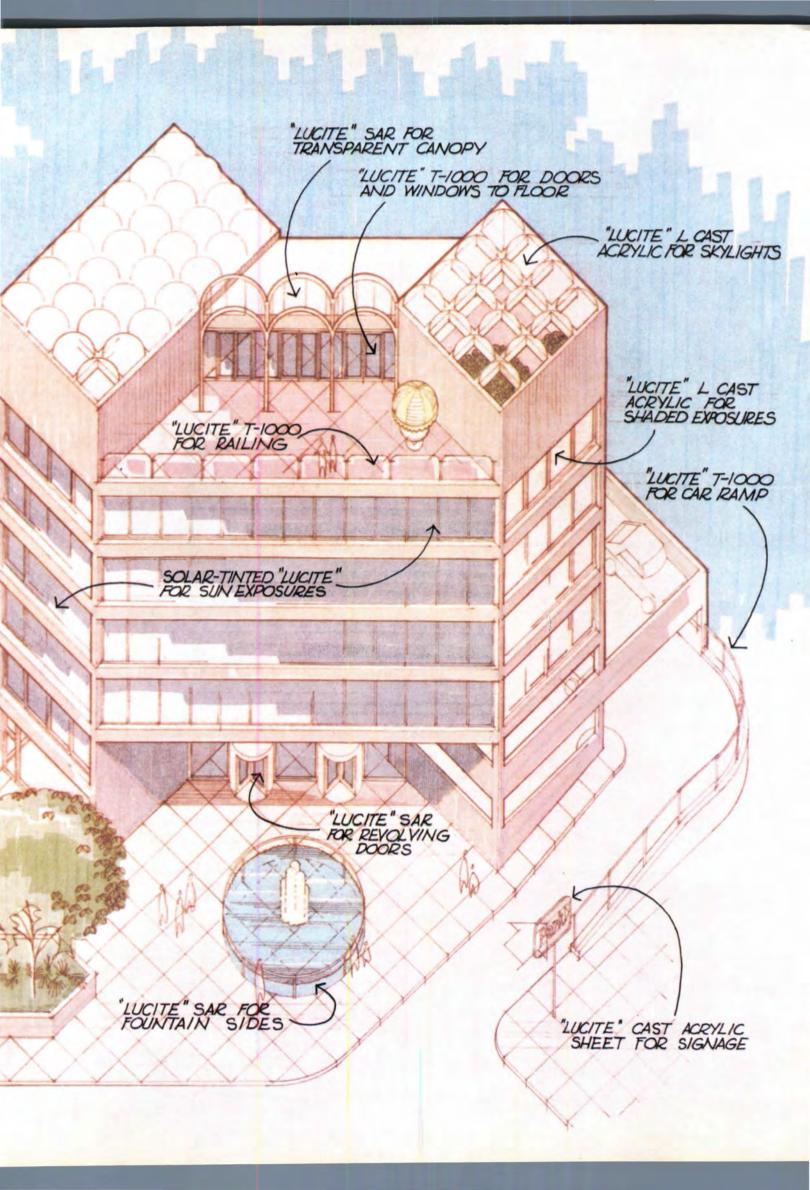
All "Lucite" sheets are alike in offering good optics, resistance to chemicals and weathering and less than

half the weight of glass.

Send for a free kit that dramatically demonstrates the optics and comparative abrasion resistance offered by "Lucite" SAR. And get full details that will help you select from the broad line of "Lucite" acrylic sheets now available. Write: Du Pont Company, Room 37282, Wilmington, DE 19898.

Claim based on standard measurements according to ASTM D-1044; ANSI Z26.1-1966, Suitability of "Lucite" SAR for any specific application should be verified through appropriate testing by the user





How Mercedes Benz and Cuyahoga Vocational High School solved their parking problems.



Nova, an exceptionally comfortable, stacking chair, can cater to the upscale image of corporate dining rooms, or stand up to the pandemonium of teen agers in cafeterias and classrooms.

Nova. A three-year guarantee.

Nova's unique cross-frame design eliminates the need for easily-breakable welded connections found in many other systems.

So after successfully testing it in over 250,000 sittings, each up to 220 pounds, without any damage, we offer a three-year structural guarantee on each chair.

The shell, molded in either nylon or polypropylene, is light enough to move, yet heavy enough to provide extra strength and durability. And unlike painted metal shells, the color is integral, so a scratch on the surface only reveals the same color underneath.

Nova. Unlimited options.

When Gerd Lange designed the Nova system in 1970, winning one of Germany's leading design awards, he planned for almost every option.

You can order upholstered pads

that can be replaced right on the premises, chair-stacking dollies, ganging frames, tandem units with or without tables, tandem riser mounts (for theater riser steps), fixed pedestal bases (that bolt

into the floor), book racks, glide feet, tab-

let arms, removeable-top tables, tabletop dollies, even a variety of ashtrays. But if you're ingenious enough to think of something more, we can prob-

ably make it on special order.

Nova. It's parked everywhere.

Since its invention in 1970, Nova has sold by the tens of thousands all over the world.

Mt. Sinai Hospital, The University of Alaska, the Guggenheim Museum and the Largo Library use it.
When Pan Am flies into J.F.K., Nova

is waiting.

Prudential Life, Bell Telephone, Holiday Inn, and Zip'z ice cream parlors use it And, of course, Cuyahoga Vocation-

al High School.

So whether your clients include the carriage trade or the galloping herds, Nova is the best parking place you'll find.

For more information about Nova write or visit Atelier International, 595 Madison Avenue, N.Y., N.Y. 10022. Or phone us at (212) 644-0400. Our complete catalog of furniture, lighting, art and accessories is available upon request. Some major credit cards accepted.

For your convenience, we have additional showrooms in Chicago, Dallas, Los Angeles, Atlanta and Seattle; sales offices in Boston, Cincinnati, Detroit, Houston, Miami, Philadelphia, Pittsburgh, San Francisco, Washington, D.C. and selected furniture dealers nationally. Member ASID, IBD, BIFMA.

Circle 22 on information card

We Switched To WHITE CHEROKEE



First Federal Savings and Loan Association Office Building, Chattanooga, Tenn./Arch: Derthick and Henley, Chattanooga, Tenn./Setting Contractor: Intrepid Enterprises, Inc. Metairie, LA.

The First Federal Savings and Loan Association of Chattanooga switched to White Cherokee and they are glad they did. Delivery of the originally specified foreign stone was already three months late and a firm date for delivery was growing increasingly uncertain. The first truck of White Cherokee marble was ready within twenty days and the project was completed right on schedule.

Here are some reasons why you should switch . . . Cherokee is readily available on a guaranteed schedule of deliveries . . . it has an exclusive deep-textured finish that softens the veining of the stone and makes it brighter, more reflective . . . its extreme hardness and low absorbency to dirt require the barest minimum of maintenance . . . its sound absorption coefficient is virtually zero keeping unwanted noise outside and private conversation inside . . . its beautiful, permanent, economical, energy efficient . . . and it's all backed by the world's largest producer of marble products.

Shouldn't you switch to White Cherokee on your next project? Services to assist you in application, design, budget-pricing, detailing, specification writing or just answering questions are offered without cost or obligation. Call us today.

Marble for the original and new east wing of the National Gallery of Art was fabricated and furnished by Georgia Marble Company.



georgia marble company

STRUCTURAL DIVISION / Nelson, Georgia 30151 / (404) 735-2591

a Jim Walter company Circle 23 on information card

INTRO!

Columbia Lighting's family of next generation luminaires—Form 4! Fluorescent lighting fixtures which provide architectural esthetics and utmost versatility. Available for prompt delivery. For additional information, contact your Columbia representative or write to us at the address below.

FORML



Energy from page 30

Developing the standards has been a three-stage process. In the first stage, design energy consumption data were collected on 1,661 new commercial and 170,000 new residential buildings or units in seven climatic zones of the U.S. In phase 2, the AIA Research Corporation contracted with 168 of the teams who had designed buildings in the original sample to redesign their buildings to the maximum practicable limits of energy conservation, given the same budget, program and location constraints as the original building. These data were then compared with the original data. The results of phase 2 showed a 40 percent average energy savings in the redesigned buildings and a savings nearly as large when compared to such energy standards as the American Society of Heating, Refrigeration and Air-Conditioning Engineers' standard 90-75.

The advance notice in November had energy budgets for 37 climatic regions. The notice also illustrated that the categories of buildings need further subdivision, for it is difficult to separate process from nonprocess energy in industrial buildings. Also, the ratio of process to nonprocess energy for both fast-food and full-menu restaurants was extremely high.

Many questions about the BEPS have already been raised. For one, designers are concerned about the potential for professional liability exposure. If the designer certifies that a building meets the energy budget, but operational experience shows that it does not, can the designer be sued? Also, how will the standards be enforced? Enforcement will rest with the states, which must certify to HUD that local governments in their respective jurisdictions have adopted either performance standards or building codes at least as stringent as the BEPS. Failure to do so will subject the entire state to a complete cut-off of all forms of federal assistance, and will prohibit banks and other lending institutions from approving loans for construction. How will compliance be tested? It will probably be proved through some type of simulation procedure, probably a computer program. Will the standards mean higher construction costs? No, say DOE officials.

The energy story isn't complete without mention of some of the vast number of publications recently marketed on energy and how it relates to design and architecture. Although it is only a handful, the following are some of the publications announced in the pages of this magazine. The National Bureau of Standards published "Life-Cycle Costing: A Guide for Selecting Energy Conservation Projects for Public Buildings"; the Office of Archeology and Historic Preservation/heritage conservation and recreation service pub-

lished "Conserving in Historic Buildings"; the American Bar Foundation issued "Overcoming Legal Uncertainties About Use of Solar Energy Systems," and AIA published the book Energy Planning for Buildings by Michael M. Sizemore, AIA, Henry Ogden Clark, AIA, and William Ostrander. And a survey of 1,000 mechanical engineering and 1,000 architectural offices by the Glen Oaks Research & Sta-

tistical Services of Glen Oaks, N.Y., indicates that 85.4 percent of the architects surveyed and 78.1 percent of the engineers are placing greater emphasis on energy conservation in their projects than they did as recently as three to five years ago. It reported that architects now rely more upon such techniques as insulation than they do upon design considerations for energy conservation.

The Institute

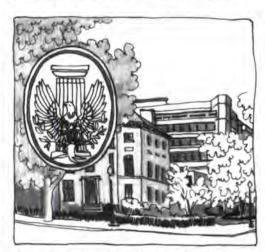
Mitchell Instigates a Celebration As Membership Numbers Swell

For the first time in its history, AIA's membership surpassed 30,000 in 1978. On Aug. 31, there were approximately 30,600 members, an increase of almost 15 percent since December 1977. On Mar. 1 of this year, the total membership reached about 32,030.

In December of last year, Ehrman B. Mitchell Jr., FAIA, was inaugurated as the Institute's president for 1979 in ceremonies conducted at the National Gallery of Art's new East Building in Washington, D.C., designed by I. M. Pei & Partners. Five other national officers were installed: first vice president/president elect-Charles E. Schwing, FAIA; vice presidents Robert B. Broshar, FAIA; James M. Harris, FAIA, and R. Randall Vosbeck, FAIA; secretary-Robert M. Lawrence, FAIA (for a second term), and treasurer —Joseph F. Thomas, FAIA, continuing in his two-year term. Also installed were 13 new members of the board of directors.

Mitchell, a partner in the Philadelphia and New York City firm of Mitchell/ Giurgola, succeeded Elmer E. Botsai, FAIA. Under Mitchell's leadership, the Institute launched a year-long "celebration of architecture." Mitchell sees four purposes for the celebration: the broadening of public awareness of architecture, the quality of architectural design and the profession; the stimulation within the membership of the desire to achieve design excellence and the willingness to assume greater accountability for new work; the improvement of communications and the encouragement of greater use of AIA's resources and services, and the capturing of the opportunity to influence public policy in a maturing gov-

AIA's 1979 budget of \$9 million was developed after an 18-month study of the various facets of the Institute. The 1979 program transferred the community services commission programs to other existing commissions. AIA's minority resources program and the community assistance



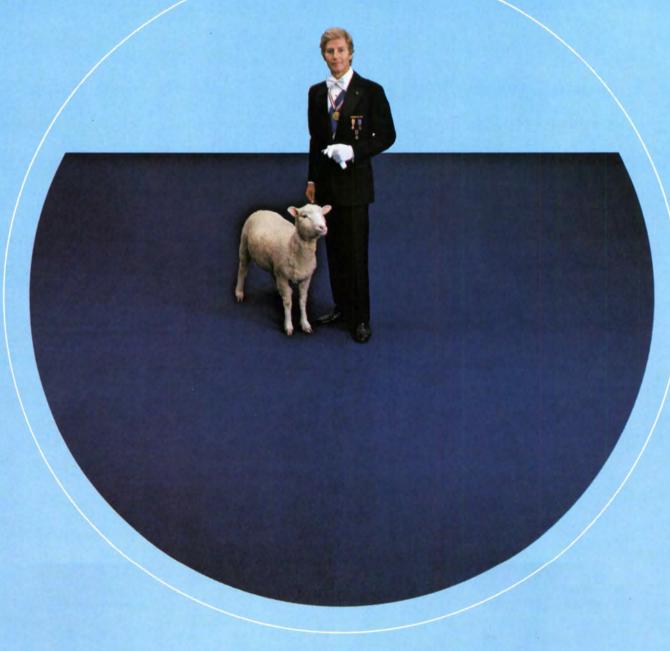
committee are placed within the component affairs commission; the environmental education committee and related programs are returned to the education and professional development commission. In order to broaden membership participation, certain committees are restructured, and an architects in education committee has been established.

To meet escalating costs of legal challenges to AIA's ethical canons, a \$5 increase in dues was approved for 1979. The intent is to help buttress the code of ethics from outside intrusions. President Mitchell noted that 1979's projected dues income "will pay for all programs and services for members and about one-third the cost of all AIA committee activity.' Projected nondues income, he said, will pay for the balance of committee activity, total staff costs and administrative and operating expenses. "This means," he said, "that for every dues dollar invested, 100 percent is returned to members in programs and services. Program expense and commission/committee expense account for 55.4 percent of total expenditures, as compared to 54.1 percent in

Among the programs and services to which President Mitchell referred, developed over the past year are seven major The Institute continued on page 42

AIA JOURNAL/MID-MAY 1979 37

Allied Chemical introduces
Noble
NaturaLuster...



with the enduring elegance of Anso-x nylon.

NaturaLuster brings the classic look of wool to the commercial carpet market, in sturdy, easy care nylon.

NaturaLuster is the newest of ANSO-X commercial grade fibers, with the closest-to-wool look available in nylon. The attractively natural luster of fine wool — at much less than the cost of wool, but with the superior durability of nylon — and featuring the special depth and richness of color that sets all ANSO-X yarns apart.

NaturaLuster advances the scope and versatility of commercial carpet a giant step ahead, by combining the beauty of wool with the superior performance of ANSO-X nylon, the most durable carpet fiber available. Stubborn resistance to dirt, stains, and soiling. Remarkable resilience. And easy maintenance.

NaturaLuster is yet another facet of Fashionnation. A revolutionary new movement in floor design, brought to you by Allied Chemical and the leading manufacturers of commercial carpet.

But the real beauty of ANSO-X is that all commercial carpets made with ANSO-X nylon

are engineered for superior performance.

- ANSO-X "reduced soiling" fibers for outstanding appearance retention.
- Permanent static control.
- Rigorous performance tests, including a 100,000 tread floor test for every cut-pile style.
- The strongest wear and static guarantees in the industry; a lifetime anti-shock guarantee as well as free replacement if any portion of the carpet wears more than 10% in 5 years. That's the Allied Chemical GuaranteethTM... the Guarantee with teeth.

Naturaluster for the look of wool. The toughness of nylon. And for everything else you specify carpet for. Available in posh plushes, tasteful tweeds and prestigious patterns.

Come . . . join the revolution . . . it's getting under way at all the best mills.

Ask your Carpet Resource or contact Allied Chemical Corporation, Commercial Carpet Specialist, 1411 Broadway, New York, NY 10018, (212) 391-5079

ANSO-X means enduring elegance





ENERGY MANAGEMENT VIEWS FROM THE NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION VOL. III NO. 5

DON'T TURN DOWN THE LIGHTS — TURN UP THE TECHNOLOGY.

As utility bills continue to go up and up, building managers and executives continue to look for ways to cut energy costs. One of the most obvious ways is to reduce the wattage used by lighting systems.

But this isn't as simple as it may seem. In fact, a general reduction in overall lighting may even lead to a rise in overall costs. How? Well, it has been proven that lighting levels greatly affect working efficiency. For example, when the lighting level in a Social Security Administration office was reduced from 110FC (footcandles) to 50FC, worker productivity fell twenty-eight percent. To make up for this lost efficiency, more workers and more overtime were needed and overall costs increased. When original lighting levels were restored, productivity increased immediately and eventually reached its original level.

So now the question is, "How do you reduce lighting energy costs and still maintain working efficiency?" And the answer is "new lighting technology," in both the way lighting systems are designed and the kinds of lamps they employ.

Today, most offices, plants and stores have uniform lighting systems. They were designed to provide proper lighting in almost all situations (e.g. the moving of desks or work stations). But uniform lighting does have disadvantages. It can cause uncomfortable glare, it can produce unwanted shadows, and most important, it uses energy very inefficiently.

Now, however, with advances that allow lighting panels to be easily relocated, uniform lighting is no longer necessary. And a new "non-uniform" lighting system may be the perfect answer to cut your high lighting costs.



Nonuniform lighting concentrates on areas where it is most needed such as desks, work stations and conference tables, and provides lower-contrast light in less vital locations such as storage rooms, wall spaces and reception areas.

Nonuniform lighting creates a more attractive visual environment, which eliminates visual boredom and results in higher productivity. It lowers initial installation costs because it takes less time to install and uses fewer fixtures and lamps. The fewer number of fixtures can reduce lighting energy costs by as much as thirty percent. Less fixtures also reduce maintenance costs. If offices or equipment are rearranged, a well-designed nonuniform lighting system can be easily changed to meet the new requirements.

Recent technological advances have also produced new kinds of lamps that produce far more light per watt of electricity. In some cases you may want to replace traditional types of lamps with new, more efficient versions of the same thing, such as fluorescent lamps. Other situations

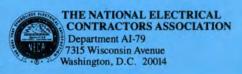


may call for the new high-intensity discharge lamps. These include the mercury vapor, metal halide, and high-pressure sodium lamps, now made for office applications and other indoor uses. While these lamps are more expensive than their fluorescent or incandescent counterparts, the savings they generate result in long-term cost savings, and in some cases, initial cost savings as well.

If you're thinking about putting in a more energy-efficient lighting system or installing more effective lamps, it's a good idea to talk to a qualified electrical contractor first. He can survey your lighting needs, make recommendations, give you an estimate of the initial cost and possible operating cost savings, and answer your questions about installation.



For more information, request, on your letterhead, a free copy of the NECA publication "Let There Be the 'Right' Light...," Index No. 30045.



Circle 26 on information card

Photo decor. As design media go, it's fast becoming one of the hottest, hippest ways to express a client's personality. And it leaves plenty of room for you to make a statement of your own, too.

Take Bell Canada, for example. They wanted to sell rather than rent telephones to their customers in Montreal. So when they launched the Teleboutique concept, they decided to reach out to people through photography.

What could photography do for Bell that no other medium could? Take a look at these pictures. Thousands of Bell customers did. And they acted on them, helping to make the ten new Teleboutiques a huge

Why not consider the possibilities of photo decor in your next job.

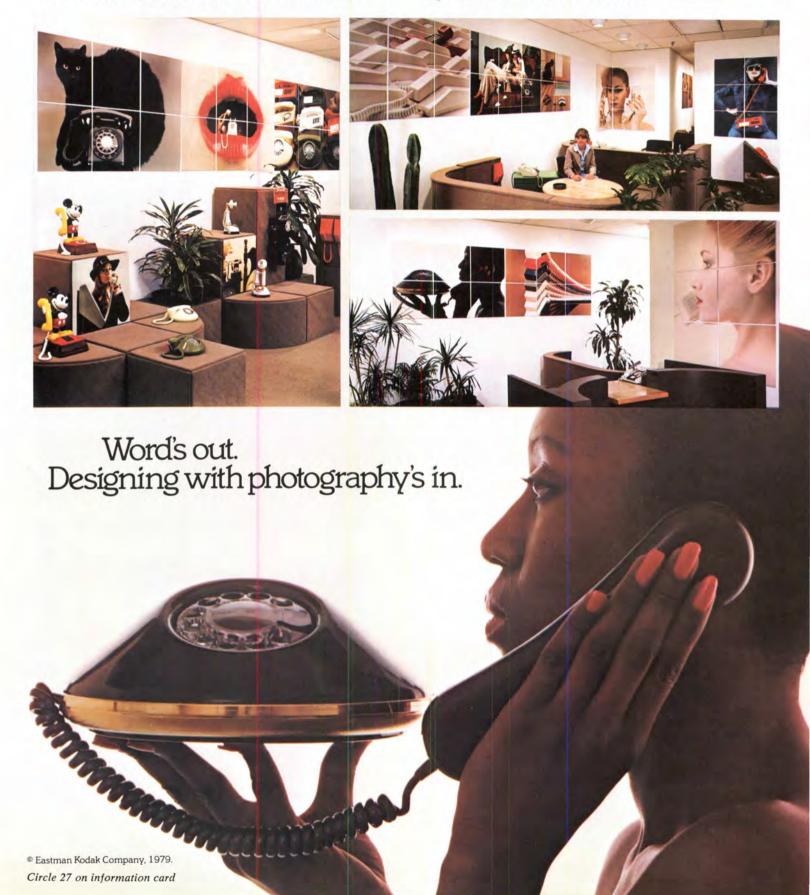
And when you do, remember to specify Kodak paper for your images. It helps bring out the best in your design.

For more ideas on photo decor, send for your free copy of a new book on designing

with photography.

Write: Eastman Kodak Company, Dept. 412L-140, Rochester, N.Y. 14650.





The Institute from page 37

AIA practice publications, now published and distributed, on such subjects as life cycle costing and personnel practices. Also, 12 revised and/or new documents were prepared, including among them owner-architect agreements, change orders and certificates of substantial completion. By the end of 1978, more than 1.5 million contract documents and publications were supplied to architects, owners and other members of the construction industry.

Over the past year, AIA has expanded its educational programs. Correspondence courses were provided in 1978 to more than 1,000 members on such subjects as land development, marketing professional services and management practices. About a dozen architectural training laboratories for members were conducted across the nation. AIA helped local sponsors establish more than 100 programs offering continuing education units. With the National Council of Architectural Registration Boards, the Institute continued the internarchitect development program in seven states, with 15 to 20 more scheduled to be ready this year.

AIA's government affairs commission and department, during the past year, continued to represent the profession with the executive and legislative branches of government toward the improvement of federal programs and legislation affecting the profession and the public interest. Among the legislation on which AIA lobbied or testified were the following: passage of the National Energy Act, with a \$1.8 billion energy conservation program for schools and hospitals; increase in funding in fiscal year 1979 for historic preservation projects; defeat of professional wage rates in government contracts proposed in the Service Contract Act, and approval of a feasibility study for a national museum of the building arts to be located in the Pension Building in the nation's capital.

Among the achievements in federal agency liaison in the past year were a review of the U.S. Civil Service Commission of classification standards for architects in federal service; the inclusion of architects in the interdisciplinary process of assessing environmental problems in all agencies; the development of new Veterans Administration contracts for design and construction services, and the preservation of the Small Business Administration's definition of a small business to ensure the protection of small A/E firms.

Other Institute activity included the work of the component affairs commission and department in assisting in the development of the American Bar Association's model procurement code for A/Es and the development of strategy guides and documents on sunset laws, statutes of

limitation, political action and environmental education. Component assistance team visits were made to Nevada, New York, North Dakota, Rhode Island, Tennessee and Tulsa, Okla. There were eight R/UDAT programs, including visits to Detroit, Lafayette, La., and Oldham County, Ky.

AIA also awarded nearly 100 scholarships totaling \$100,600; developed a design sector metric conversion plan for architects; worked with building code organizations; placed new emphasis upon environmental education programs, appointing for the first time a director of environmental education programs, to influence teachers and students in elementary and secondary schools; published with Archimedia Inc., the first comprehensive directory of firms.

AIA bestowed upon I. M. Pei, FAIA, of New York City its highest honor: the



gold medal. Yale University's Art Gallery, designed by the late Louis I. Kahn, FAIA (AIA's 1971 gold medalist) in association with the office of Douglas Orr, is the recipient of AIA's 25-year award, given annually in recognition of architectural design of "enduring significance." AIA's 1979 firm award winner was the Philadelphia/Princeton, N.J., firm of Geddes Brecher Qualls Cunningham.

Two separate juries selected 15 architectural projects for 1979 honor awards (see page 164.) Also, a diversity of accomplishments of benefit to the profession are recognized in AIA's awarding of medals to eight persons and two organizations. Those honored are: Barry Commoner, ecologist and author; Christo, the Bulgarian artist celebrated for his "wrappings" in the landscape; John Entenza, Hon. AIA, critic, editor, publisher and foundation administrator; Douglas Haskell, FAIA, the so-called dean of architectural editors; Charles E. Peterson, FAIA, preservationist and founder of the Historic American Buildings Survey; Bernard Rudofsky, architect, engineer and recorder of architectural accomplishments; the late Arthur S. Siegel, pioneering architectural photographer; Brooklyn's Bedford-Stuyvesant Corporation, integrator of disciplines related to architecture, and the architecture, planning and design program of the National Endowment for the Arts for its support of the arts.

The Institute elected 12 individuals to

honorary membership in AIA for their "distinguished contributions" to architecture and the allied arts and science. Ten foreign architects of "esteemed character and distinguished achievement" will be invested as honorary fellows at AIA's convention next month, and 95 members will be advanced to fellowship for their "notable contributions to the advancement of architecture."

Among the other honors bestowed by AIA in the past year was the 1979 Kemper award which went to Herbert E. Duncan Jr., FAIA, for "significant contributions to the Institute and the profession." G. Holmes Perkins, FAIA, former dean and current professor of architecture at the University of Pennsylvania, is the 1979 winner of the award for excellence in architectural education, given by AIA and the Association of Collegiate Schools of Architecture.

At AIA's 1978 convention in Dallas, convention delegates "came to grips with issues" that have troubled the profession for many years, said Elmer E. Botsai, FAIA, then Institute president. AIA's ethical rules were changed to permit members to engage in design/build and contracting activities for a three-year experimental period and AIA's ban on advertising was lifted. Passions probably ran highest over debate on whether continuing education as a condition for AIA membership should continue to be studied. A resolution that "AIA shall not make continuing education a mandatory requirement for membership" was defeated, after which Botsai said that AIA's policy is to continue studying the matter of professional development as a possible requisite for membership and that the issue would be brought back for vote in some future convention.

There was heated debate as well over an amendment to a resolution regarding convention site selection, which asked that criteria for the selection of future convention sites be recommended to the AIA board. One criterion was that conventions "shall only be held in states that have ratified the Equal Rights Amendment." The amendment won by a vote of 1,157.90 to 774.85. And in September, the board adopted the policy that ERA ratification should be one, but only one, of the criteria.

Among other resolutions passed was one which stated that AIA will "continue the testing and refinement" of its professional development measuring system, making it available for use by individuals in the evaluation of their professional development, Also passed was a resolution stating that AIA "does not advocate adoption of license renewal or maintenance legislation by the states."

At its meeting in March, the AIA board The Institute continued on page 48



Sandoz has developed a unique dyeing system that provides an exciting range of colors to satisfy your ultimate creative expression. You now have at your fingertips bright, fast attractive yellows, golds, reds, blues, and blacks. A full color spectrum that lets your imagination run away.

You're no longer restricted to a

limited selection of dull copper, bronze, or black. And because the Sanodal System locks the colors in they last and last. More than 10 years of world-wide testing prove these colors retain their beauty even in the toughest weather conditions.

Let us show you what the Sanodal System can do for you.



for our brochure.

SANDOZ Colors & Chemicals

Metals Department East Hanover, New Jersey 07936 (201) 386-7690

Circle 28 on information card



OUR GLASS PIPELINE BRINGS SOLAR ENERGY DOWN TO EARTH.



Y.K. Pei, technical director for new product development at Owens-Illinois and inventor of the SUNPAK solar collector.

At the end of 1973, Y.K. Pei, technical director for new product development at Owens-Illinois, was asked to experiment with solar energy. His instructions were brief and to the point.

"Show us you can make something that can collect solar energy better than anything else"

To Y.K.'s mind, however, one simply does not reach the sun without his feet planted firmly on the earth.

"If we cannot make our collector affordable, then it doesn't really matter how good it is."

This kind of "dollars and cents" thinking combined with O-I's leading expertise in glass technology is responsible for the successful development and practical application of SUNPAK™ evacuated tube solar collectors throughout the United States.

In Middleboro, Massachusetts, for example, SUNPAK collectors are putting hot water on tap for busy St. Luke's hospital. Ohio's Troy-Miami library and the Federal office building in Saginaw, Michigan depend on SUNPAK systems for hot water, too. Also heat. And, in Saginaw's case, air conditioning as well.

Then there's industry

Next time you flip open an Anheuser-Busch product, remember: that bottle of beer could have been pasteurized with 150°F water supplied by SUNPAK collectors.

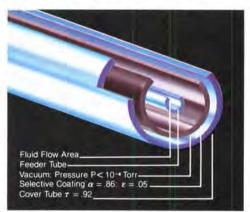
Higher energy output than flat-plate types.

SUNPAK collectors deliver more useful energy than flat-plate collectors. Particularly under "real world" conditions: cold, wind, cloud cover. In fact, efficiencies over four times those of flat-plates are not at all unusual

The optical characteristics of glass tube and reflector are important, of course. Curved surfaces can better collect the diffuse light as well as direct overhead rays.

Then there's the high performance selective coating and vacuum inside each tube. Together, they minimize heat loss. And the vacuum protects the coating from deterioration as well.

As for the glass itself, it's borosilicate glass. Selected for its strength, low thermal expansion and outstanding heat resistance



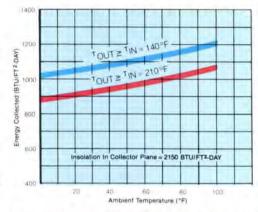
SUNPAK collector tubes absorb and retain energy more efficiently than flat-plate types.

Both coatings and tubes withstand the temperatures encountered during stagnation: 500°F, 600°F and more. And this is not an idle claim.

Extensive life testing proves it.

Freeze and boilout protection.

At the end of the day, all collected energy is drained from the collector tubes through



The outside temperature may be low, but SUNPAK's energy output isn't: close to that achieved at high ambient temperatures.

the insulated manifold. And in a matter of minutes. There's no heat dumping, you see. No energy lost from the working fluid that would otherwise stand in the tubes overnight.

But what's really important to our customers in the Northeast and Great Lakes regions is how this drainability feature protects their collectors from freezing.

And, if there should ever be a power failure, boilout is eliminated the same way.

Simple installation and maintenance.

SUNPAK collectors were designed for installation anywhere, anytime: in new or retrofit structures; for residential, commercial and industrial applications.

The collector modules can be connected to each other to provide whatever collecting area you need. Just six pounds per square foot, they're easily mounted with brackets to south-facing roof structures.

If a tube should ever need replacing, it's quickly plugged in — much like a fluorescent lamp.

Limited five-year warranty.

We guarantee our collectors to be everything we say they are. For complete details — and some down-to-earth facts and figures on how our glass "pipeline" can be an important component in your next project — write or call: SUNPAK, Owens-Illinois, Inc., P.O. Box 1035, Toledo, Ohio 43666. (419) 247-9098.

upper left: Federal office building; Saginaw, Michigan upper right: St. Luke's Hospital; Middleboro, Massachusetts lower left: Anheuser-Busch brewery; Jacksonville, Florida lower right: Troy-Miami County Public Library; Troy, Ohio

We build a pipeline to the sun.

SUNPAK

Energy Products and Ventures Group of Owens-Illinois C1



Underneath the fabric covering lies an engineered masterpiece of acoustical accomplishment.

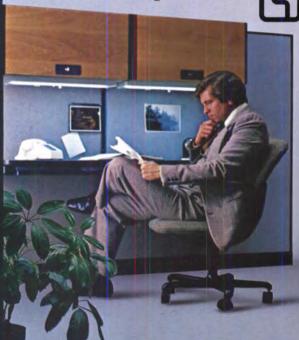
No open office system is complete without privacy. American Seating understands this. They've designed an acoustical panel that is functionally superior in absorbing sound...Privacy 2.

Only at American Seating could such technological expertise and traditional excellence produce

this acoustical accomplishment in the open office system.

Totally new Privacy 2...from American Seating, committed to the superior standards the name represents.

American Seating



See "Lighting In The Open Office" seminars and the complete American Seating Open Office Furniture System at our showroom during NEOCON XI.

American Seating, 901 Broadway, N. W., Grand Rapids, Mich 49504 (616) 456-0395 Showrooms in Chicago, Dallas, Grand Rapids, Los Angeles, New York, and San Jose.

The Institute from page 42

of directors approved three policy statements. The first concerns energy; the other two, presented by the committee on architecture for the arts and recreation, deal with AIA policy on art in architecture and on architecture for recreation. The policy on art states that the Institute "supports and encourages the recognition of art and its importance to the quality of life in the U.S. The Institute, therefore, will pursue opportunities to expedite the inclusion of art as an integral part of architecture.' Article I says that AIA "supports public and private programs in which an appropriate and significant percent of a total project construction budget be used to integrate art in such a project and its surroundings.'

The policy on architecture for recrea-

tion states that AIA recognizes "the role of recreation in the American way of life" and that it "supports and encourages the necessary consideration for planning, establishing and maintaining rural and urban spaces and facilities to provide for participation by all people and for improving the quality of life." Article 1 calls for "comprehensive recreation planning processes which provide for adequate funding and facilities, and which utilize the expertise of professionals and their associations."

An accomplishment unrelated to AIA's programs and policies was the election of Louis de Moll, FAIA, former Institute president, to the presidency of the 70nation International Union of Architects. This position has never been held before by an American architect.

Ethics

Profession Goes into Advertising, Three-Year Design/Build Trial

Over the past year, there have been many challenges to and changes in the rules of ethical conduct enunciated by professional societies. Some observers say that the changes will deeply affect the manner in which the public regards professionals and that professionals are educated and trained to care less for profit than the publie welfare. Others, on the contrary, say that the changes have come because the public has already changed its attitude about professionals and that accountability is long overdue.

Since the mid-1960s, antiauthoritarianism has grown, with consumer groups stressing, as one antitrust lawyer put it, that professionals are not "gods from Olympus," but are subject to the same rules of the game to which businessmen

and tradesmen must adhere.

A decade ago, few would have predicted that AIA would lift its ban on advertising, but this was done by a margin of 82 percent at the 1978 convention when delegates voted without much discussion and little dissent to permit "dignified" advertising by AIA members in the print media. This was not an isolated happening, and certainly many of the delegates must have had in mind that the Supreme Court had earlier ruled that bar associations could not forbid lawyers to adver-

In February of this year, this precedent was carried further when the New Jersey supreme court ruled that lawyers not only could advertise but could publish fees, hourly rates and the availability of credit. The whole matter is viewed as having reached an unprecedented peak last De-



cember when an administrative law judge declared that the American Medical Association's ban on advertising was "to fix prices and inflate fees." An AMA official said he was "appalled" by the ruling, adding that "the very nature of professionalism is at issue."

Perhaps more surprising than AIA's lifting the ban on advertising, and certainly more "history making," was the vote by 3 to 1 at the 1978 AIA convention to allow a three-year experimental period during which AIA members may engage as principals in construction and contracting. Ever since the Philadelphia convention of 1976, there has been debate, sometimes acrimonious, on the ethical canon that forbad design/build contracting, and at least four task forces have studied the pros and cons.

Those in favor of design/build, such as John M. McGinty, FAIA, former Institute president, told the convention that design/ build is an "opportunity" for the extension of "professionalism and the discipline of architecture beyond paper and into the execution of design as well." An opponent, Jerome Cooper, FAIA, said that design/build is a descension "into the quagmire of conflict of interest," where the architect becomes an "adversary" of his client. But Cooper and others at the convention voted for the experimental period because they did not want to see the Institute further torn by dissension. Cooper told the convention that he would vote for the experiment. Even if it fails, he said, "perhaps we will have developed in the process some substantive arguments with regard to the degree of competency that can reasonably be expected of us as a profession."

The delegates passed the recommendation of a special task force that the threeyear period be closely monitored by an Institute task force. The task force, chaired by Herbert E. Duncan Jr., FAIA, retained the Opinion Research Corporation, a subsidiary of the Arthur D. Little Co., to develop a data collection system. The data, now in process of collection, will measure changes in the use of and attitudes about design/build. The intent is to find answers to such questions as the number of AIA members engaged in design/build, what the risks and rewards are, what the impact is upon AIA services and if there are changes in the public's perception of the architect's role in

The task force and the Opinion Research Corporation have mailed questionnaires to more than 9,400 architectural firms, asking for attitudes toward and involvement in design/build. Similar surveys will be conducted in 1980 and 1981 for the anticipated report to the convention at the end of the three-year period. Owners will be surveyed as well and the operations of more than 100 firms who have volunteered to give in-depth information will be studied.

At the 1981 convention, it is expected that delegates will have three alternatives: to adopt the ethical canon permanently, to stop design/build participation by AIA members completely or to continue the experiment for a specified length of time. Meanwhile, AIA's board has affirmed that only employees of firms which follow the ethical code on design/build contracting as a general practice in their operations are eligible for AIA membership.

Ethics continued on page 55

Ethics from page 48

The American Bar Association's committee on advertising recently reported that lawyers do not know how to advertise effectively, and a guide is being prepared for distribution at the ABA convention in August. Although legal advertising is considered ineffective by the committee, an ABA official has said that in some localities advertising has attracted new clients to lawyers and that prices have been brought down. When the public knows prices, he said, people are discovering that "peace of mind can cost only 15 bucks."

In a related ruling during the past year, the Supreme Court struck down an ethical canon of the National Society of Professional Engineers. The unanimous ruling said that the ethical ban on competitive bidding deprived clients of the rights of free and open competition. Although disappointment was expressed by AIA and other professional societies that the ruling gave no clearcut antitrust guidelines, the court did say that a professional society's canons cannot be used to ban competition.

Consumer groups viewed the decision that the client has the right to know prices and fees before the selection of an engineer as another step in the direction of making professionals accountable, while many design professionals see it as just another means of "victimizing" the public, further opening the way to "rampant quackery," as one put it. A professional administrator commented, "It's a buyers-beware world out there now."

There may be handwriting on the wall regarding ethical matters in a recent report to ABA by its committee on disciplinary action. In a move to "assure the integrity of the disciplinary process in the eyes of the public," the committee has prepared new guidelines. It is proposed that disciplinary hearings be open to the public. "An announcement that a lawyer accused of serious misconduct has been exonerated after a hearing behind closed doors will be suspect," the committee said. "The same disposition will command respect if the public has had access to the evidence."

Further desire to enhance ABA's credibility with the public is seen in recommendations that nonlawyers serve on all disciplinary boards. "There is a human tendency to suspect the objectivity of a discipline body composed solely of members of the respondent's professional colleagues," the committee said. The deputy director of the Department of Justice's antitrust division has endorsed this view, saying recently that lawyers should "move away from traditional notions of selfregulation toward more reliance on the marketplace and upon the input of nonlawyers." It's anyone's guess if this direction is the next cause for debate in other professional societies.

Design

Exhibitions, Celebration and New Respect for Architecture's Past

When Philip Johnson, FAIA, accepted the Institute's gold medal at last year's convention in Dallas, he alluded to "three main switches of sensibility" in design today and in how architects "look at things, which in turn comes from a different way our public is looking at things." The three changes, he said, are (1) a renewed feeling toward history, a "sense of the past"; (2) a change in attitude toward symbolism, with new respect paid to ornamentation, and (3) what he called "genus loci," wherein locale is one of the determining elements in design. "Diversity is the name of the game," he said.

If design trends of the past year are any indication, Johnson is on target about the change in attitude toward the past. Exhibitions by museums are always a bell-wether, and examples of the many exhibitions of the past year suffice to underscore Johnson's design "switches."

A major exhibition prepared by the Smithsonian Institution for circulation to major U.S. cities, entitled "Buildings Reborn: New Uses, Old Places," is based on a book with the same title by Barbaralee Diamondstein. The exhibit and its tours are aimed at helping efforts toward a national policy for the recycling of architecturally and historically significant older buildings. Recycling, which pays homage to the past and also influences contemporary design, has become, said Joan Mondale, wife of the U.S. vice president, a "grass roots movement," making "great esthetic and economic sense."

Sometimes, an event "opens our eyes to what we have discarded," said an architectural critic. Such an occasion was an exhibition of photographs at Columbia University which shed new light on the wonders of the World Columbian Exposition of 1893 in Chicago. "After years of being downgraded as a vacuous exercise in empty styles," said Ada Louise Huxtable, Hon. AIA, "this assemblage of monumental palaces, this Olympian stage set of colonnaded arcades, peristyles, porticos and pavilions, with a trumpeting of allegorical statuary, is an incredibly impressive achievement." The exposition showed how to build "without the restraints of reality," she said.

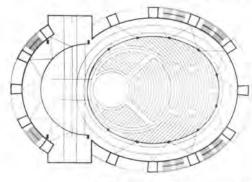
Another exhibition—as predictably extravagant and attention-getting—was the Cooper-Hewitt Museum's show on "Ornament in the 20th Century." There were such things displayed as a brass hippopotamus bathtub, color blowups of some

New York City buildings, the Beatles' Rolls-Royce and architectural drawings by the likes of Bernard Maybeck.

Ornament was also central to the exhibit "The Decorative Designs of Frank Lloyd Wright," planned by David A. Hanks, former curator of the Art Institute of Chicago and the Philadelphia Museum of Art, which circulated to Washington, D.C., New York City and Chicago. The articles in the show, gleaned from Wright's Prairie School days as well as his later period, showed the master's talent in the decorative arts. Shown were his leaded glass windows, magazine covers, ceramics, draperies—and even dinner napkins and dresses.

Our look to the past was further heightened by an exhibit marking the opening of the East Building of the National Gallery of Art in Washington. Called "Piranesi: Early Architectural Fantasies," the engravings proved the imaginative abilities of this engineer/architect. Other fantasies were in "Visionary Drawings of Architecture and Planning: 20th Century Through the 1960s," developed by the Drawing Center in New York City for circulation by the Smithsonian Institution. Planned by George R. Collins, with a catalog published by MIT Press, the exhibit showed visionary drawings to be "paper architecture," as Collins says. But they have an influence on built architecture; Wright, Gropius, Mies van der Rohe and Le Corbusier have been, at one time or another, visionaries, Collins says. (See the 1926 rendering below by Gropius of the "Total Theater.") Works by lesser known visionaries were exhibited as well-for example, Austrian Raimund Abraham's stunning "Megabridge" and Japanese Noriaki Kurokawa's equally interesting "Helix Structure."

The Drawing Center, established two years ago "to express the quality and Design continued on page 60



LEVOLOR INTRODUCES CEILING



VITH FEELING.



Ecol-O-Vane®Aluminum Ceiling Systems by Levolor put the accent on designing with color.

The people who know all about colorful windows are now making colorful ceilings. In fact, there are so many dazzling colors and metallics available with Ecol-O-Vane, over 100 in all, you just may run out of creative ideas before you run out of color choices.

Each color comes in three panel styles, flat, vee or zee shaped. They arrange, and interchange, with a minimum of effort, to create color sweeps, patterns, even images.

But while you ooooh and ahhhh over the beauty and versatility of Ecol-O-Vane, bear in mind the practicality, too. This is a ceiling system that can provide a noise reduction coefficient as high as .95* In addition, it's easy to install, maintain and store, and completely compatible with conventional HVAC and lighting systems.

So, right now, if you look up and see a dull, "just-there" ceiling without feeling, maybe you should investigate Ecol-O-Vane. Clip the coupon and we'll be glad to send you all the particulars.

LEVOLOR

Ecol-O-Vane Ceiling Systems

Circle 33 on information card

*Applies to "Vee" style panel with 2 inch. 1 lb density liberglass blanket

Levolor Lorentzen, Inc., Department ssss79 720 Monroe Street, Hoboken NJ 07030.

I'm interested in a ceiling with feeling. Please send me more information on Levolor's Ecol-O-Vane Aluminum Ceiling Systems.

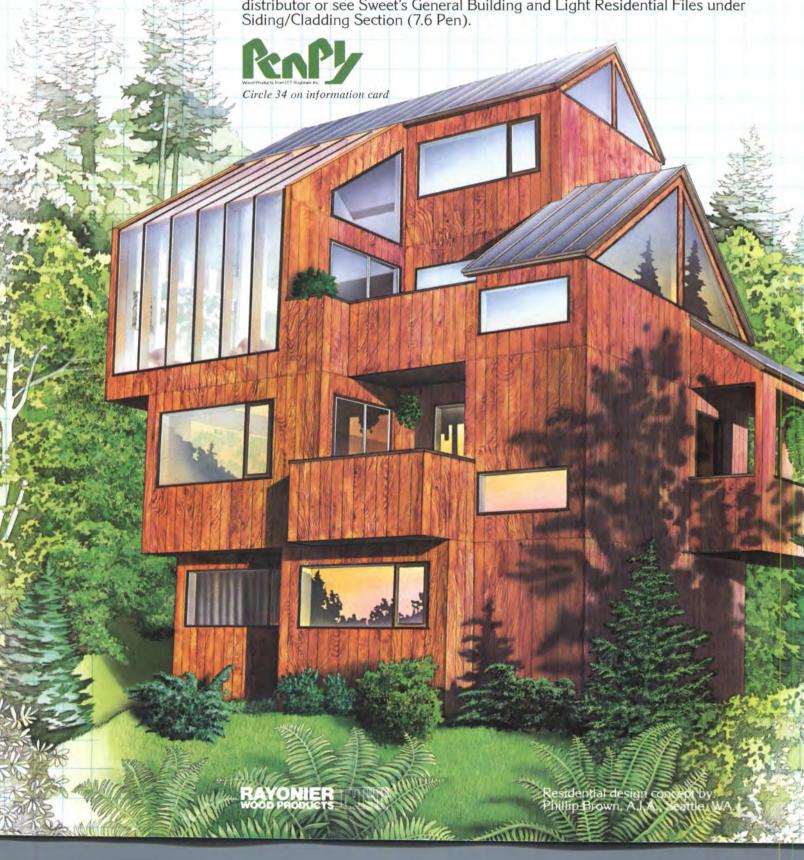
Name	Title
Firm	
Address	
City	StateZip

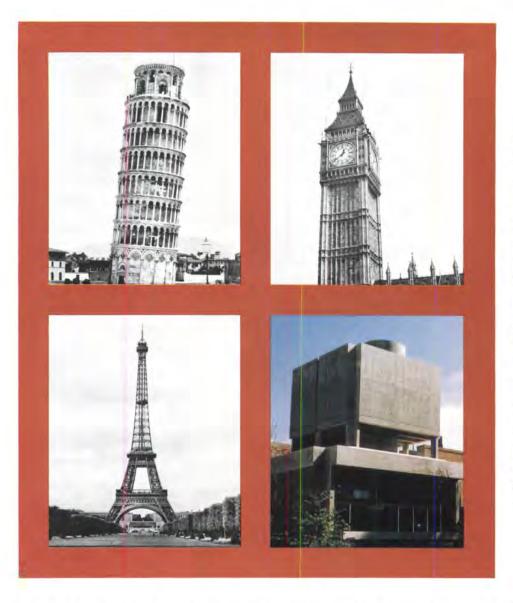


Designs can be beautifully realized in Western red cedar. That's a given. But when you specify quality PenPly exterior 303 *plywood* panels, beauty becomes more than a surface thing. The savings are also beautiful. The bottom line is *real* economy that comes from reducing labor intensity. For example, a 2,000 square foot surface requires only 62 panels, minus windows and doors. And, PenPly goes on in less time, using less manpower than masonry and other piecework sidings. This means faster completions, and quicker sales with greater profits.

Our Western red cedar plywood panels also give you the advantage of low maintenance, weather resistance and the ability to take a wide variety of stains. Side with PenPly and show a good-looking bottom line, too.

For additional information, contact your nearest wood products distributor or see Sweet's General Building and Light Residential Files under Siding/Cladding Section (7.6 Pen).





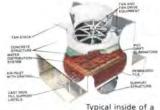
Congratulations! Hardy Holzman Pfeiffer Associates Recipient of AIA Honor Award for the St. Louis Art Museum Air Conditioning Retrofit Incorporating Ceramic cooling Tower

THE 4 MOST REMARKABLE TOWERS OF THE LAST 800 YEARS

The Leaning Tower of Pisa, Big Ben Tower in London, and the Eiffel Tower in Paris have their own beauty, individual style, and were constructed to stand the test of time. This has made them remarkable landmarks throughout the world.

A cooling tower from CCT Cooling Systems also has these remarkable qualities. A Ceramic Cooling Tower can be designed to complement any architectural style and can be engineered to fit any shape. Unlike other towers which are built to general cooling specifications, a Ceramic Cooling Tower is designed and engineered to meet your individual cooling requirements. **Remarkable!**

Like the other famous towers, a Ceramic Cooling Tower also stands the test of time. The PERMAGRID fill is guaranteed for 25 years. All Ceramic Cooling Towers are certified by the Cooling Tower Institue for 100% thermal performance. Our first tower, built with PERMAGRID fill over 30 years ago, is still in service today. **Remarkable!**



Ceramic Cooling Tower

All Ceramic Cooling Towers are constructed of masonry or concrete with PERMAGRID tile fill. Ceramic Cooling Towers are virtually indestructible, and impervious to chemical, fungus, and ultra violet attack and are immune to wooden cooling tower problems of deterioration, fire, and icing failures. Remarkable!

Call us today for more information about our complete family of remarkable cooling systems. You will find a Ceramic Cooling Tower is **the most remarkable** tower of the last 800 years.



CERAMIC COOLING TOWER COMPANY

A Subsidiary of Justin Industries P. O. Box 425 Fort Worth, Texas 76101 Phone: 817/335-2474 Telex: 758236

Sales offices in major cities throughout the United States International offices, Fort Worth, Texas Circle 35 on information card

PERMAGRID fill has negligible water Design from page 55

diversity of drawing as a major art form," has achieved success at a tender age. Before the exhibition on visionary drawings, it mounted the drawings of Antonio Gaudi (the first showing outside Spain) which was accompanied by a catalog by George Collins and a series of lectures, colloquia and films on the Spanish architect's work.

With all the controversy among critics about postmodern architecture, it was refreshing to have a look at the work of AIA's gold medalist of 1925, Sir Edwin Lutyens, whose classical designs were somewhat lost in the heyday of the International Style. An exhibit at the Museum of Modern Art in New York City, some 30 years after the British architect's death, assembled by Allan Greenberg, included 16 examples of his architecture—views of the Viceroy's house at New Delhi, the cathedral at Manchester, World War I memorials and his houses built at the turn of the century.

One of the largest shows of the year was "Transformations in Modern Architecture," also at MOMA. With more than 400 photographs and three years in the making, it was a roundup of architecture over the past 20 years. Its ostensible purpose was to put the immediate past into perspective and to look at the not-so-recent past to see what it has to teach us. The exhibition generated controversy concerning its quality of insights, inclusions and exclusions and last minute changes.

Design was also investigated in a series of conferences over the past year. At AIA's 1978 convention, Philip Johnson led a group of architects representative of a multiciplicity of directions into two sessions on "Design in Transition." The discussions, which ranged from heated debate on how abstract a structure should be to lessons to be learned from technology, revealed "connecting strands and deep gulfs" among the participating designers, as this magazine reported.

Design really came to the forefront at AIA with the Institute's year-long concentration on a "celebration of architecture." "Why celebrate architecture?" asked Ehrman B. Mitchell Jr., FAIA, president of the Institute. He answered, "because no other art form is quite so public. No other art has the potential to shape so completely our daily lives for the better. We live, work, play and pray in and around our buildings. Our buildings are a comfort to our older citizens, a legacy to our children."

The Institute encouraged its components to celebrate the architecture of their own locales, meanwhile launching its own celebration at the December inaugural dinner for new officers and directors in the National Gallery of Art's new East Building, Citations were given to those primarily responsible for the structure: Paul

Mellon, benefactor; J. Carter Brown, Hon. AIA, gallery director, and I. M. Pei, FAIA, this year's Institute gold medalist and architect of the East Building. Mellon explained at the opening of the structure in June 1978 that he "wanted a building that would create a sense of joy, of celebration, when people entered it." Said Mitchell at the inaugural dinner, "This new work has stirred more public attention and more public awareness and appreciation of architecture than any major work in recent memory."

Each of AIA's three grass roots meetings early this year devoted a portion of its program to learning more about significant architecture in each of the grass roots cities. In the nation's capital, there was a tour of the U.S. Capitol; in New Orleans, the focus was upon Jackson Square and the historic Cabildo; in Los Angeles, the city's 1939 landmark Union Station, designed by John and Donald Parkinson, was celebrated.

Meetings of AIA's board of directors during the year are also celebrating architecture. In San Francisco in March, the Institute's board, with city officials and citizens, participated in the opening of a rehabilitated Market Street, The board will also meet in Kansas City, Mo., and Boston.

Working through its 265 state and local component organizations, AIA invited people throughout the country to join in the celebration. Activities of the components have been varied. For example, the St. Louis Chapter/AIA has sponsored the construction of a detailed model of the 1904 World's Fair in St. Louis, including all the fair's 1,576 structures and landscaping. The 10x18-foot model was unveiled on April 28 in the city's Jefferson Westward Expansion Memorial, designed by Eero Saarinen & Associates. In Houston, the local chapter joined in a festival that opened in March. Featured, among other things, were tours of architects' offices, an urban design symposium and tribute paid to winners of the chapter's 1979 architectural awards program. In San Jose, Calif., members of the Santa Clara Valley Chapter/AIA celebrated with a project believed to be the first of its kind, in which an older house was retrofitted as a demonstration of energy conserving design.

In February, AIA's commission on practice and design held a meeting of its steering committees, boards and task groups in Reston, Va., at which time four architects explained their respective firms' design philosophy, organization and procedures.

AIA also held a national design conference in Chicago in May when architects from all parts of the country explored the principles that have shaped Chicago's architecture. "What better place," AIA



asked, "to celebrate, take stock and look ahead than Chicago, whose cityscape catalogs in stone and steel a remarkable century of American architecture?" (Carson Pirie Scott & Co building above.) The two-day conference concentrated on the Chicago school of architecture, the eclectic view, the International Style and a reexamination of today's design principles in the context of changing cultural values.

The celebration will continue at AIA's convention in Kansas City next month. The convention's seminars, theme sessions, exhibitions and events are to focus upon celebration as a "performance, a proclamation, a public announcement of joy," says AIA President Mitchell.

A design event in the past year for sure was a charrette conducted to select an architect for the Provincetown Playhouse's new theater and Eugene O'Neill archival center in Provincetown, Mass. Seven New England architects, in an intense eight-day session, crowded into a restaurant to produce seven designs. The public watched the architects at work, rooting vociferously for their favorites.

The announcement of William Warner, AIA, as winner was made by I. M. Pei, FAIA, jury chairman, to an audience packed into a local church. Pei was perhaps upstaged by actress Helen Hayes who told her memories of playwright O'Neill.

No less unusual was the way the twin cities of Fargo, N.D., and Moorehead, Minn., chose an architect for a cultural center bridge (see p.256). A committee of community representatives made up a master list of 120 well-known architects, preparing a background report on each. Then these architects were grouped into six categories used by Charles Jencks in his book Architecture 2000. The field of 120 architects was reduced to 16 and then cut to five after a visual presentation. And

Design continued on page 67

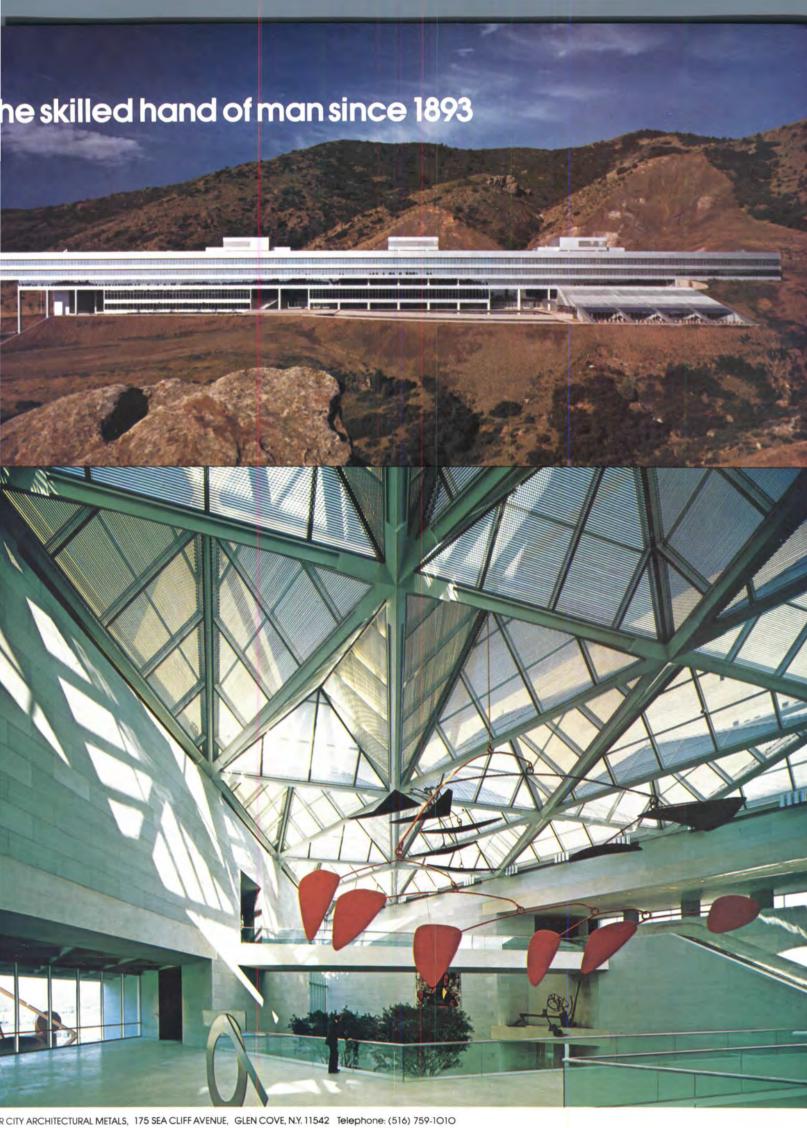


FLOUR CITY

CURTAIN WALLS/ARCHITECTURAL METAL WORK



- Citicorp Center, New York, N.Y., Hugh Stubbins and Associates, Architect, Emery Roth & Sons, Associated Architect
- $\bullet \ \, \text{Johns-Manville World Headquarters, Jefferson Co., Colo., The Architects Collaborative, Architect}$
- East Gallery of the National Gallery of Art, Washington, D.C., I.M. Pei, Architect



e 37 on information card

NEW HEAVYWEIGHT CHAMPION

Heavier than any overhead door closer will probably ever be...and stronger, by far.

How it might look or fit on a door frame was irrelevant. Rixson's floor closers conceal in the floor, out of sight and harm's way. Our only concern was performance, long term economy.

- Controls heavy traffic doors better, more reliably, longer than any other closer.
- Provides true fast latch, or slow latch, and more efficient door control than any other closer.
- Warranty is for 10 years, longer than any other closer.
- Mechanical efficiency and shock resistance unsurpassed by any other closer.

And an exclusive combination of many, many important advantages: Unique long-life iron closer body...double sealed unit...standard all temperature hydraulic fluid... delayed action capability...vertical adjustment for uneven door conditions...and available with coordinated holder/stop and/or with electric pivot. Prohibits removal of closer or door when locked. But can be removed for service without door takedown.

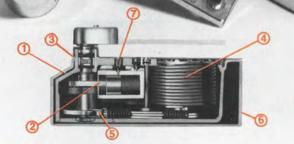
Ask the door control specialists:

RIXSON-FIREMARK

ARCHITECTURAL AND FIRE/LIFE SAFETY PRODUCTS

9100 West Belmont Ave., Franklin Park, Illinois 60131 and Rexdale, Ontario 312/671-5670

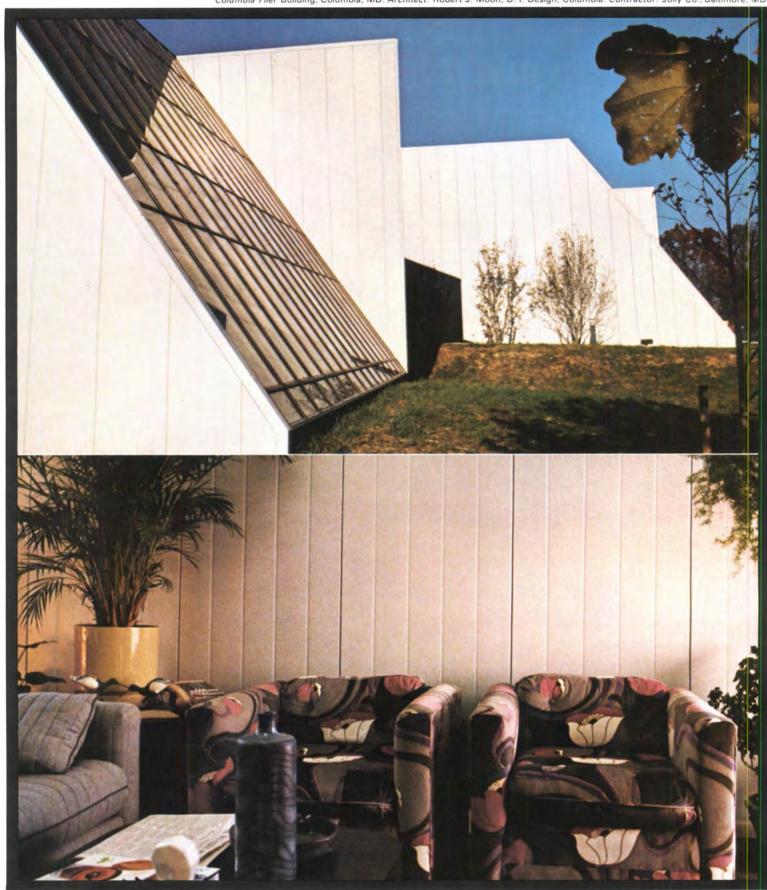
CONFAC



Exclusive Rixson-Firemark

- 1 Cast iron closer body
- 2 Stainless steel valves (non-removable)
- (3) Teflon, urethane and steel seals (5 total)
- (4) High efficiency torsion spring
- 5 Direct loading link and pin assembly
- (6) Heavy duty Cycolac® cement case
- 7) Full control panel





Beautiful on both sides

One-piece Inryco/wall 2PS preinsulated sandwich panels are only 2" thick, but even with interior surface exposed, their isocyanurate foam cores give them an outstanding U-value (.064)—keeping interiors warm in winter and cool in summer—conserving energy in all seasons.

Inryco/wall 2PS panels are beautiful on both sides: exteriors and interiors coated with oven-cured Duofinish over galvanized steel. *Expensive?* 2PS panels actually save money in terms of life cycle costing. For more data, contact your Inryco representative, or INRYCO, Inc., Building Panels Div., Dept. E, 4127 W. Burnham St., Milwaukee, WI 53201.



Inryco an Inland Steel company

Circle 40 on information card

Design from page 60

after in-depth interviews, came the winner: Michael Graves, FAIA, of Princton, N.J.

The evident interest of the public in architecture and design was also seen this year in articles in general magazines. U.S. News and World Report featured AIA's 1978 honor award winners; Newsweek did a big spread on postmodern architecture; Time Magazine had a cover story on "U.S. Architects Doing Their Own Thing"; United Airlines' Mainliner Magazine's March issue on "The Urban Renaissance" contained the speculations of 13 American architects on the design of tomorrow's cities

Even kids have gotten into the design act. Two New York state architects are leading the children of White Plains "like Pied Pipers of architecture," this magazine reported. Allan and Barbara Anderson have been singularly successful in an architect-in-residence program in which they have taught youngsters how to design and build useful child-oriented structures for their schools, And at the Michigan Society of Architects/AIA's annual meeting, 19 children from an elementary school tackled a problem and came up with a solution that was virtually the same as the one arrived at by professionals. Using miniature cars, and reinforced by preliminary study and a visit to the site, the children solved the traffic and zoning problems besetting a restaurant owner.

Several museums have put on design exhibitions with children in mind. For example, the Hudson River Museum in Yonkers, N.Y., is showing an exhibition which uses the principles of design in a child-scaled environment. Called "1,000 Boxes: An Exhibition about Architecture for Kids," the show was mounted by Bill Lacy, FAIA, president of the American

Academy in Rome.

Meanwhile, at the Octagon House in Washington, architects came in to create play structures for an exhibition, called "Just for Fun," which concentrated on architectural toys of various periods. For example, Nicholas A. Pappas, AIA, reinterpreted Philip Johnson's glass house, using Lincoln Logs, and in the Octagon garden Hugh Newell Jacobsen, FAIA, sculptured an elaborate sand castle, incorporating an incongruous but well-proportioned Greek temple.

Perhaps these efforts and others for children are as important as anything involving adults. Children may be shorter and less experienced than their elders, but they aren't bound down by a lot of "useless knowledge which may render them incapable of intelligently ordering their surroundings," as Ivan Chermayeff said in the foreword to a book called *Children Spaces* by Molly and Norman McGrath. And that's what design is all about—the intelligent ordering of our environment.

Urban Affairs

Debate on President's Proposals And on the State of the Cities



The prognosis of our nation's cities swings like a pendulum. Since the late '60s, there have been cries that urban decline would lead to the "death" of some of the nation's cities. Now we hear of inner city renaissance as young professionals flock to and renovate deteriorating neighborhoods. In most cities, it is double-edge phenomenon: urban renaissance and decline at the same time. And prospects for ambitious national efforts to revitalize inner cities are diminishing due to Congress' budget tightening mood.

The gap between distressed cities and those in relatively good condition increased from 1960 to 1975, according to Robert Nathan of the Brookings Institution in Washington, D.C., who said, "The figures suggest that the rich got richer and the poor got poorer." In a few cities—such as Chicago and New York—revitalized areas are gathering places for young professionals. Meanwhile, other parts of the cities continue to deteriorate. And a recent HUD report stated, "The circumstances which have generated longterm urban decline—loss of jobs, people and economic base-have not been significantly altered." On the other hand, the Urban Land Institute estimates that 70 percent of all sizable American cities are experiencing a significant revival in previously deteriorating neighborhoods. The market for downtown office buildings and shopping centers is very strong.

But the antispending mood in Congress is discouraging to inner city revitalization.

Some urban specialists are predicting a long-range decline in assistance to cities from the federal government. City governments have increasingly relied on federal aid, which has risen more than tenfold over the last 11 years. The 95th Congress rejected four of the five major bills of President Carter's urban policy, due in large part to the desire to cut back the federal budget. And there are indications that some of Carter's urban related bills will have a poor showing in Congress this year.

Carter's original urban policy, announced in March 1978, consisted of a set of 10 minipolicies combining old and new initiatives. The strategy called for a combination of job and tax incentives, grants, loans and public works efforts, all directed to revitalizing the inner cities (totaling \$8.4 billion). The program was designed to make federal investment a catalyst to private and other public investments in cities (for example, one federal dollar could be used to encourage five to six dollars of private investment).

The bills rejected by Congress included: a national development bank which would have provided \$8 billion in loan guarantees, \$3.8 billion in interest rates subsidies and \$1.65 billion in grants during a threeyear period to attract business back to distressed areas; the state incentive grants bill which would have provided \$200 million in grants to states to encourage urban planning and redirection of state programs toward urban areas; the public works bill calling for \$3 billion over three years for "soft" public works projects, renovation and maintenance of public parks, government offices and schools and the fiscal assistance to provide \$2 billion over two years for "distressed" cities. Bills passed by Congress related to urban development will provide approximately an extra \$785 billion in fiscal year 1979 for such things as community development, HUD's 312 housing rehab program, livable cities and neighborhood crime prevention programs.

Carter has proposed \$3 billion in grants and \$3 billion in loan guarantees for fiscal year 1980 to strengthen economic development in urban and rural communities. In addition, he has requested an increase of \$275 million in HUD grants for rehabilitation. The proposals include \$675 million in urban development action grants; \$1.5 billion for development grants and loan guarantee programs to be adminis-

Urban Affairs continued on page 72

WOULD YOU RISK TO SAVE A FEW

There are 143 different door manufacturers out there. All eager for your business.

Some promise you "the best door at the lowest price." Others say "quality at a competitive price." Then there's the claim, "we will not be undersold."

Who can an architect really believe? Hint: Stick with the door people with a solid reputation.

Suggestion: Weyerhaeuser. Quite frankly, we aren't the only people in the door business with a good background. But we are the only door supplier with seven essential points of difference.

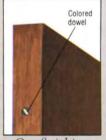
Plastic Cr or wood face veneer

The quality goes all the way through.

They run like this: Weyerhaeuser has the broadest line of flush wood doors in the world. Interior and exterior. Fire doors rated from 90 minutes to 20 minutes. Sound retardant. X-ray. You name it, we make it.

Weyerhaeuser fabricates all our own Timblend. Mineral. We pay as much attention to the part you don't see as the part you do.

Weyerhaeuser extra touches set us apart as well. Hardwood side edges to match faces. Stiles and rails bonded to the core. Type I fully waterproof glue. Permanent identification with colored dowels for easy verification and reference.



Our finishing touches make the difference.



YOUR REPUTATION DOLLARS A DOOR?



Our doors are readily available. Many Weyerhaeuser Customer Service Centers across the country carry a local inventory. Or you can order them from our plant in Marshfield, Wisconsin.

No one beats Weyerhaeuser on choices of faces. Hardwood veneers. Plastic laminate faces. MDO. More than 100 selections. They're all our specialty.



We have a face to match your plan.

The Weyerhaeuser warranty is the toughest in the business. And that's no advertising claim. It's fact. We back you up.

Finally, we offer a wide range of custom services. Factory finishing. Prefitting. Edge beveling. Cutting for hardware. Decay protection.

Now you might be able to specify a door that's cheaper than Weyerhaeuser. But in no way can that door live up to our 80 years of manufacturing experience, our 7 major points of difference and the Weyerhaeuser reputation.

So the next time *your* reputation goes on the line, think of Weyerhaeuser.

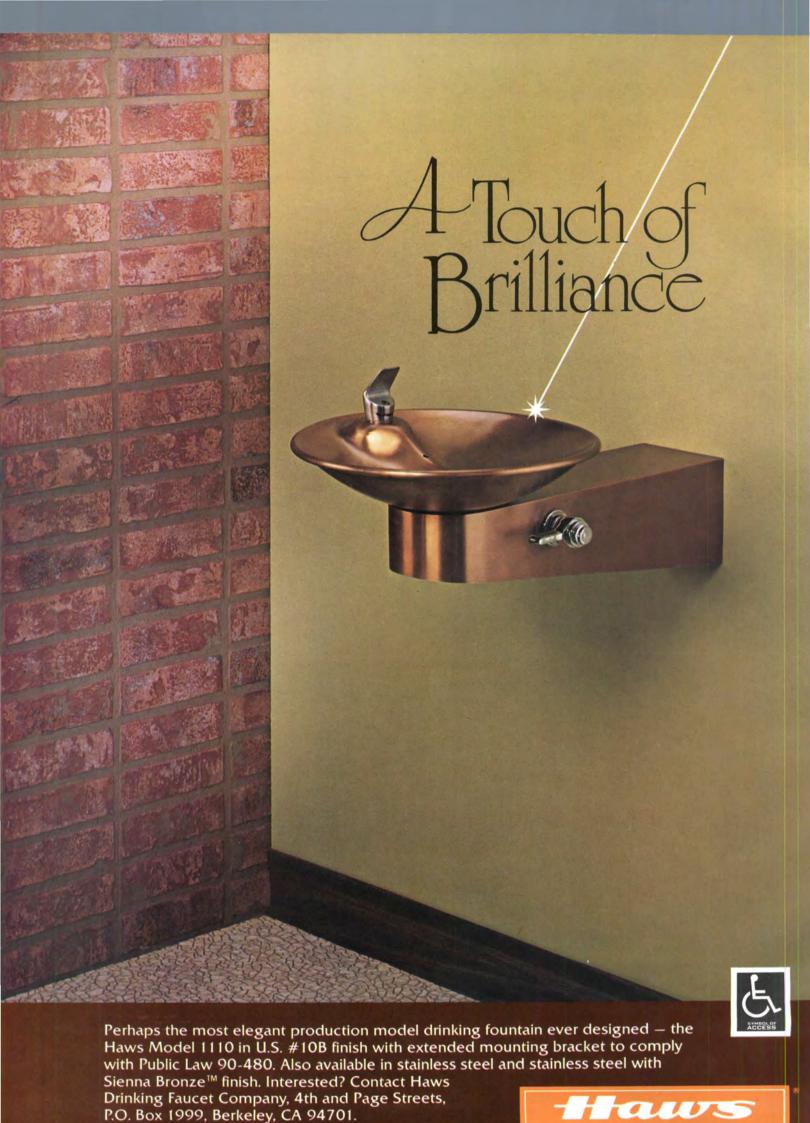
That way, both our good names will have a chance to shine.

For more information, write: Weyerhaeuser, Box B, Tacoma, WA 98401. Or just check Sweets.

A

Weyerhaeuser

Circle 41 on information card



Circle 70 on information card



SKAGEN, by definition, small wood—exactly how this outstanding grouping of furniture is made. R-Way craftsmen, using modern cabinet making technology, laminate many layers of select red oak to produce Skagen—furniture for outstanding design and durability, offered in a choice of natural oak or walnut colors.

offered in a choice of natural oak or walnut colors.

For the name of the dealer in your area, and a full color catalog, write R-Way Furniture Company. Or visit one of R-Way's showrooms in New York, Chicago, Atlanta, Dallas, Seattle, and Minneapolis.

Urban Affairs from page 67

tered by the Economic Development Administration; \$1 billion for the Farmers Home Administration's business and industry loan program; \$1.8 billion for an investment tax credit to provide a 10 percent tax credit for the rehabilitation of factories, warehouses, hotels, stores and other businesses; \$500 million for a tax credit to encourage private sector business to hire the economically disadvantaged, and \$400 million in supplemental funds for the Comprehensive Employment and Training Act. In addition he has proposed legislation to reauthorize the Multi-State Regional Action Planning Commission to provide \$90 million for economic development planning assistance to urban and rural areas and technical assistance to both the private and public sector. Carter's proposals have already run into trouble in Congress. The House budget committee rejected the \$1.5 billion EDA program for urban aid. The Senate budget committee cut \$2.2 billion from the President's employment proposals.

The Administration has taken some "employment initiatives" that do not need congressional approval. The initiatives are aimed at the persistent problem of high unemployment in the cities and are designed to direct a greater number of jobs created by federal economic development programs to the hard core unemployed. The four initiatives are:

 application procedures for each major economic development program will be

altered to explore a project's employment potential and to link the project directly to a training program for the hard core unemployed;

 six federal agencies are to set specific goals with respect to jobs which will be directed to the structurally unemployed;

· the same agencies will participate in a jobs demonstration program, with extra federal funding;

· each federal regional council chairperson will convene regular meetings of an economic development/jobs task force to review pending applications for job crea-

tion potential.

Meanwhile, other groups are getting involved in efforts to help rebuild our cities. The creation of a \$10 billion fund to boost the savings and loan industry's investment in deteriorating neighborhoods was announced by the Federal Home Loan Bank Board. The five-year program aims for the purchase and rehabilitation of at least 300,000 housing units. Five major trade associations joined forces to create the first nationwide privately funded program for the promotion of community revitalization: the National Association of Realtors, Mortgage Bankers Association of America, National Association of Mutual Savings Banks and the United States League of Savings Association. And an alliance of civil rights and conservation groups are campaigning to ease the plight of urban parks, many of which are now ravaged by overuse, vandalism and shortages of space and funds. One of the main

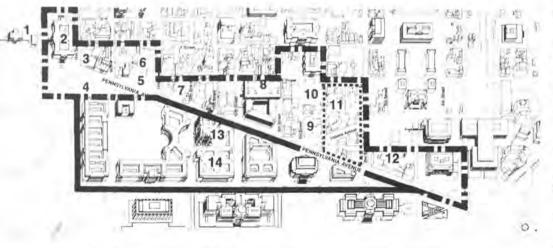
tasks will be to monitor the implementation of the new federal urban park and recreation recovery program.

Studies indicate that there is still an outmigration from inner cities to suburbs and blacks are an increasing part of the picture. Of the nation's 20 largest cities, all but seven have lost population in this decade, says a HUD analysis. And according to the census bureau, as many people left the cities between 1970 and 1975 as had moved out in the previous 10 years. The level and rate of black suburbanization has varied greatly among the large metropolitan areas. In seven large cities the black rate of movement to the suburbs is beginning to approach the white movement. In 12 cities, the rate has increased slightly for blacks, and there is indication that major disparities remain between the races in choosing suburban residence.

It seems that in many integrated suburban neighborhoods there are fears that the black population will soon exceed white, raising the question of whether segregated housing patterns of many central cities will be repeated in the suburbs. Federal laws are aimed at preventing discrimination in sales and rentals, not in promoting integration. Some suburbs have passed ordinances to maintain racial diversity. The U.S. Supreme Court is expected to rule on a case in which brokers challenged the right of a Chicago suburb, Bellwood, to sue them under charges of "steering" blacks to Bellwood and whites to less integrated suburbs.

The Capital

Putting the Pieces Together Along The Avenue of the Presidents



PADC Corridor

Federal Triangle

PADC Historic Preservation Enclave

- White House Treasury Building Washington & Willard Hotels Pershing Park Western Plaza site Schlesinger, Mitchell/Giurgola building site National Theatre Schlesinger, National League of Cities building

Skidmore, Owings & Merrill building site FBI Building Kann's Department Store Lansburgh's Department Store Gallery Row, Hartman/Cox Canadian Chancery site Old Post Office Building IRS Building

As President John F. Kennedy rode down Pennsylvania Avenue on a wintery day in 1961, he remarked on the shabby state of this so-called ceremonial avenue between the Capitol and the White House. During his short term in office, the first steps were taken which, it now seems probable, will transform the avenue by the turn of the century. Under President Kennedy, Nathaniel Ownings, FAIA, was appointed chairman of the President's advisory council on Pennsylvania Avenue and continued as chairman of a temporary commission on the avenue under President Lyndon B. Johnson.

This commission laid plans for the redevelopment of the ceremonial route which extends along the southern edge of downtown's older commercial area and is bordered on the south by the Federal Triangle enclave of 1930s government office buildings.

In 1972, the Pennsylvania Avenue Development Corporation (PADC) was established by Congress to supervise the redevelopment of the north side of the avenue. For the south side, the federal government has announced plans to redevelop a portion of the Federal Triangle,

The Capital continued on page 79

THE DETAILS BEHIND THE DETAILS. A SERIES FROM ACME BRICK.

These structural details are made possible by Acme's Engineered Brick Design. A technology which has opened bold, new solutions in architecture. Solutions unthinkable only a few years ago.

The real beauty of Engineered Brick Design is in

how it provides maximum function and design with minimum cost. Walls are not only structural, but are energy-conserving, fire resistive, sound attenuating, and finished both interior and exterior with no "hidden" costs.

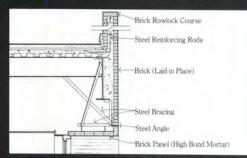
All this, with little or no maintenance. And at an initial construction price which, according to a 1979 analysis by the American Appraisal Company, is dramatically more cost efficient than comparable steel or concrete systems.

Whether you consider

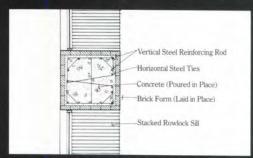
cost, flexibility, or beauty, no other system can match the total performance of Acme Brick and Engineered Brick Design. It's the best all-around choice for your next commission.

For more details, call collect, 817/332-4101, ext. 365. Or write Acme Brick Technical Services, P. O. Box 425, Fort Worth, Texas 76107.

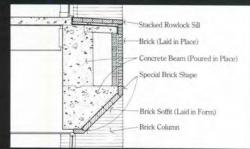
ACME BRICK. THE BEST ALL-AROUND BUILDING MATERIAL.



Hung soffit panels constructed of Acme Brick and high bond mortar produce deep, shadowed recesses below the parapet.



Acme Brick laid in place is the concrete column form, and becomes a part of the structural section.



Concrete forms are lined with Acme Brick separated by foam spacers. After concrete beams are poured, face joints are then pointed.

Circle 44 on information card



Architect-Engineer: Geren Associates, Architects Engineers Planners, Fort Worth, Texas; General Contractor: Thomas S. Byrne Inc., Fort Worth, Texas; Masonry Contractor: Dee Brown Masonry, Dallas, Texas.



Because it's not people that make an office noisy. It's the office.

People can't help but make noise while they work. Not much you can do about that.

What you can do something about are noisy walls, floors, ceilings, and furniture—the hard surfaces that reflect and broadcast every little sound people make.

Design an open office acoustically, and these surfaces can actually be used to control noise.

Not too noisy, not too quiet.

The Acoustic Open Office by Owens-Corning is a system of components designed to reduce the

overall noise level and create the conditions that allow speech privacy.

It's made up of five basic elements:

An Acoustic Ceiling made of Owens-Corning Fiberglas* ceiling boards that works so well absorbing sound it's earned a Noise Isolation Class of 20. (The open sky has a perfect rating of 23.)

Sound dividers divide space and provide speech privacy. Each divider has a sound-absorbent core of Fiberglas.

Acoustic Wall Panels to soak up deflected sounds that hit the wall.



Sound Masking Speakers hidden above the ceiling that emit noise to help cover noise.

And Owens-Corning's acoustical experts. They work hand in hand with your designer or architect so our system is properly tuned to your open office.

The result: an open office that's not too noisy, not too quiet. So everyone gets the speech privacy that he needs.

Hear it work

More and more major businesses are turning to open office planning for greater economy, improved

productivity, and better communications.

And they're turning to Owens-Corning to make their new open offices work.

You're invited to come see and hear how we do it in our own open offices in Toledo.

Or take an armchair tour with the free booklet, "Hear Yourself Think."

Write **Z**. **Z**. Meeks, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

*T.M. Reg. O. C.F. © O.-C.F. Corp. 1978



Architects and Engineers E&O.

We're already the second largest underwriting manager of claims-made E&O for architects and engineers. And our list of top ENR 500 design and construction clients gets more impressive every day. The same goes for our growing list of medium and smaller sized architectural and engineering accounts as well.

The reason behind this success is basic to our way of doing business. We pay full attention to our client's individual needs, react at once to their inquiries, and provide the finest E&O program available anywhere. Coverage written on a claims-made basis. The type of liability insurance selected by more and more professionals each year—including insurance professionals.

Shand, Morahan is one of the nation's leading suppliers of custom claims-made professional liability programs. We invite you to share our extensive experience of this coverage. Simply contact your insurance broker and mention our name. We could be building a model relationship that can last a lifetime.

We provide the model coverage.



Hospital's increased glass dosage improves patient outlook.

When a building's setting is this beautiful, it should take advantage of the view.

Aspen Valley Hospital does with large expanses of LOF bronze-tinted glass in patient rooms, work areas, and reception and waiting rooms.

Besides letting in the view, the hospital's glass areas admit large amounts of natural daylight. So interior, artificial lighting requirements can be reduced, saving electrical energy and dollars.

And the hospital has discovered improvements in patient morale and staff-member productivity since they've moved into their new facility. They aren't alone. Studies show that worker performance and the amount of window area often go hand in hand.

Want further information? Send \$1.00 for "Predicting Daylight as Interior Illumination," a 43-page definitive study on building design to conserve energy and increase visual performance. Libbey-Owens-Ford Company, Merchandising Department, 811 Madison Avenue, Toledo, OH 43695.



LOF

Circle 47 on information card



OUR FURNITURE LIGHTS UP THE ROOM. LITERALLY.



In case you're puzzled about which piece of furniture provides smooth indirect lighting to this room, it's the tall, handsome structure in the foreground. One of the many versions of Torchier, the exceptional new task/ambient

lighting system from Wide-Lite.

Naturally, Torchier gives you all the advantages you expect from a task/ambient lighting system. Flexibility of luminaire location. Easy installation. An uncluttered ceiling. No visible light source. Tax advantages. And impressive energy savings.

But Torchier also offers some remarkable advantages no other does. Unparalleled visual comfort and visibility, with a choice of three distribution patterns. Ultra-Quiet operation. Our exclusive HID Dimming and LiteMatic Standby features. Sculptured design with rounded corners. Thirty standard laminate colors and a broad range of custom wood fin-

ishes. And our three-year limited warranty.

Now you can have both. The obvious advantages of task/ambient lighting, and the superior quality you expect from Wide-Lite.

With Torchier. Great-looking furniture that doubles as an energy-saving luminaire.

See your Wide-Lite representative for more information. Or write for our free brochure.

TORCHIER.
TASK-AMBIENT HID
LIGHTING FROM

Widelite

P.O. Box 606, San Marcos, Texas 78666. Wide-Lite* products also manufactured in Australia, Belgium (for Europe), Canada, Mexico, Great Britain, Venezuela and South Africa.

A company of the Z Esquire Lighting Group

Circle 48 on information card

The Capital from page 72

has begun the restoration of the old post office building and will develop a master plan for the triangle.

Congress also approved a 21-block area over which PADC has the power of eminent domain (see map, p.72). And it was given the authority to regulate both private and public development, undertake construction activities and enter into a wide variety of real estate and other commercial transactions. PADC's overall plan, approved by Congress in 1974, is intended "to bring important economic, physical and social benefits to the older parts of downtown through renovation and redevelopment." The corporation encourages the "liveliest possible mixture of uses"-apartments, offices, restaurants, theaters, art galleries, specialty shops, etc. With funds appropriated by Congress, PADC will underwrite parks, plazas and a major historic preservation effort. For private development, PADC buys and assembles properties in the area and leases them back to private developers. A private investor may also purchase land to be developed in accordance with PADC's plan.

The project is scheduled for completion in 1992, to cost an estimated \$300 million in public funds and \$5-8 million in private funds. By then, the avenue is expected to be lined with up to 1 million square feet of office space and a similar amount of retail space, 1,400 hotel rooms and 1,500 residential units. Thus far, Congress has appropriated \$28.8 million for public development activities and \$45.9 million for land acquisition. President Carter requested \$74.5 million in fiscal year 1979 supplemental and FY 1980 funds. In November, Carter signed legislation extending PADC's authority through 1983. The act increased PADC's funding authority by nearly \$200 million.

Last year, preliminary plans were ap-



proved for the development of three office buildings, and a firm was chosen for renovation of the Willard Hotel. W. Anderson Barnes, executive director of PADC, says he expects the avenue to be significantly improved by the 1981 Presidential inauguration. Disagreements do arise, said Barnes, between the architect/developer teams and PADC's board and staff—a city planner, landscape planner and two architects—over specific plans, and with the District of Columbia over municipal services. Problems sometimes are solved only by heated debate.

Here are some of PADC's concerns, beginning at the west end of the ceremonial axis near the White House.

At the corner of Pennsylvania Avenue and 14th Street is the 1901 Beaux-Arts Willard Hotel, designed by H. G. Hardenburg, architect of the Plaza and the Waldorf Hotels in New York City. The Willard was once a center of Washington's social and political life and called the "hotel of presidents." Its money-making capabilities declined in the '60s, and the 1968 riots after Dr. Martin Luther King's assassination led to its closing. PADC paid \$5.5 million for the gutted shell and plans to acquire the land between the Wil-

lard and the nine-story, Italian Renaissance revival Washington Hotel at 13th Street, designed by Carrère & Hastings.

Last December, PADC chose Hardy Holzman Pfeiffer Associates to renovate the Willard into a 600-room Fairmont hotel with an adjacent retail mall. The opening is planned for January 1982.

The hotel's main lobby, its central arcade (Peacock Alley) and its two main dining areas (the Crystal and Willard rooms) are to be restored. Its Beaux-Arts facade—cornices, turrets and porticoes—are to be imitated in an addition between the two hotels, a design which Malcolm Holzman, AIA, has described as postmodern. A park is to wind through the site.

Facing the Willard on 14th Street, a mixed-use structure is to contain Marriott's flagship hotel, an office building and a three-level shopping galleria, designed by Frank B. Schlesinger, FAIA, and Mitchell/Giurgola. The adjoining National Theatre will be restored. Construction is expected to begin in 1980, although there are now only preliminary plans.

East of the National Theatre, construction has begun on the first privately financed office building (with retail space) in the PADC corridor in more than 10 years. The major tenant will be the National League of Cities. Frank Schlesinger is architect of the 12-story building which will have a skin of glass and precast concrete (photograph above).

Across 13th Street, construction is to begin soon on a granite-faced office structure by Skidmore, Owings & Merrill (Washington) with ground floor retail facilities, a large interior space with full height atrium and skylight and a roof terrace. The facades of three small buildings on this site are to be moved to another site in what will be set aside as a historic district

The site of Kann's Department store (left) at Eighth Street across from Market Square eventually was to be cleared for a residential development (preliminary plans call for a building with an inner court sur-

The Capital continued on page 84



Linda Wheeler







Stark Structural Tile allows for superior climate control designs. Its capacity insulation reduces HVAC costs.



Fire protection Zero flame spread Zero fuel contribution Zero smoke density



Impervious surface Fired on hard-as-glass finish Circle 50 on information card



Sound control STC rating: 46 NRC rating: .55 to .60



Stark Ceramics, In P.O. Box 8880 Canton, OH 44711

Call toll free 1-800-321-0662 (In Ohio, call collect 216-488-1211

Stark Structural Tile is:
Glazed Facing Tile
Acoustical Tile
Textured Tile
Textured Acoustical Tile
. . . also utility and lustre
finish utility brick and
High Brick.

PANEL FOR PANEL, COREROOF IS THE WHOLE ROOF.



First complete one-step energy sandwich. Forget steel decking

and insulation. Forget layers of asphalt and felt. And the gravel.

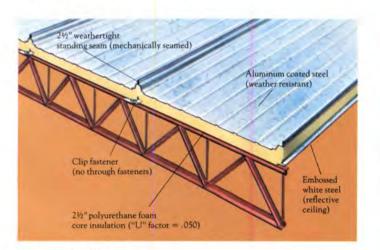
Just remember Coreroof. One factory-finished sandwich panel from Granco. It does everything a built-up roof does, only better. Much better.

Because you get an energy barrier with a "U" factor of .05, one of the lowest available

today. And a superior, low-maintenance roof that has been tested and approved by Factory Mutual as a Class I roof system.

The ingredients.

Each Coreroof panel faces the sun and weather with a layer of tough aluminum-coated steel. Tests show an extended life before maintenance (painting) is required. Factory-bonded beneath the outer skin is a 2½" layer of insulating urethane foam. Bonded to the underside of this sandwich is a layer of factory-painted, galvanized steel which provides a highly reflective, white-finished ceiling.



Two-step installation.

The 40"-wide panels are simply attached to the structurals (1) and crimped together (2) along a standing seam by machine. In lengths up to 32 feet. And because of the lighter weight, only 2½ pounds per-square-foot, the roof needs fewer structural supports. It saves money in both labor and materials, but at no sacrifice in performance.

And, since there's no curing, Coreroof can be installed in any weather, hot or cold, without critical worries about buckling or faulty adhesion. It turns a major chore into a single operation and leaves a superior roof.

more information.

In a time of inflationary labor and material cost,
Coreroof offers a faster, more efficient roofing system. Add the accelerating costs of energy, and the concern with getting sufficient amounts of energy, and Coreroof starts looking even more like the roof

Why you need

system whose time has come.

Send the coupon and let us tell you more about how Coreroof can cool the concern that's going through the roof. And keep the energy bought and paid for, where building owners pay to put it. Inside.



Granco

Building products that perform



P.O. Box 40526, Houston, Texas 77040 Phone 713/466-2300

Dept. AIAJ-59 P.O. Box 40: Yes, I'd like to hear n or send more informa	nore about Coreroof.	
NAME		
TITLE		
COMPANY		
CITY	STATE	ZIP
ADDRESS		
PHONE NUMBER		EXT



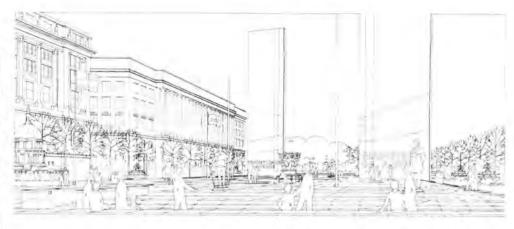
The Capital from page 79

rounded by stepped-back terraces). The National Archives and Records Services and GSA are developing plans for additional exhibit, research and storage space beneath the housing complex. Before a fire destroyed much of the store early this year, PADC was considering salvaging some of Kann's 19th century facades which had been covered by aluminum siding since the '60s. Now the buildings will be leveled and the site will be temporarily used for such things as craft fairs and food pavilions.

Last spring, PADC acquired the former Lansburgh's Department Store at Eighth and E Streets in the four block area intended for housing. Until final plans for this site are reached, the National Archives will use the third and fourth floors, and the first and second floors will be rented to local arts organizations at the low rate of \$1.50 per square foot per year.

Work will begin this spring on PADC's first historic preservation project: the 19th century buildings at 401-417 Seventh Street (above left), which was once part of a thriving retail center. Five building facades will be restored and the structures adapted for an art cooperative's galleries, shops and loft apartments, called Gallery Row. Architect is Hartman-Cox.

A Canadian chancery is to be built on the avenue near the National Gallery on property purchased by PADC and the Canadian government.





A number of buildings in the PADC corridor are of historical significance and will be restored: The Evening Star Building at 11th Street, a classical Beaux-Arts building designed by Marsh & Peters in 1898; the National Bank of Washington (Indiana Avenue and C Street), a Richardsonian/Romanesque-style building of 1890; the Central National Bank Building at Seventh, built in 1895 with conical towers added in 1888 by A. B. Mullet, and the 800 block of F Street which contains five commercial structures of the late 1800s.

In PADC's historic district (see map), some buildings will be restored, others will get new facades from 19th century buildings in other sections of the PADC corridor and ornaments will be salvaged from other historic buildings.

Also scheduled is a \$77 million program of improvements on Pennsylvania Avenue: broad sidewalks, a double row of trees on each side, brown brick pavement, granite curbstones and unified lighting fixtures and street furniture. And PADC is to reshape six existing open spaces: Sherman Park, Pershing Park, Western Plaza, Market Square, Indiana Plaza and John Marshall Place.

Reconstruction near the Willard has begun. The section between 13th and 14th Streets has been redesigned by a joint venture of Venturi & Rauch and George Patton (above right). The plan has three elements: two landscaped areas at either end of a plaza and a central patterre. A map

will be paved in granite, with its light and dark stones tracing the streets of Washington as envisioned by L'Enfant. Venturi & Rauch designed pylons for this area which would have framed the Treasury building when looking west. This design was rejected by PADC after a heated debate. Pershing Park, between 14th and 15th Streets, is to be redesigned by M. Paul Friedberg & Partners and Jerome Lindsey Inc.

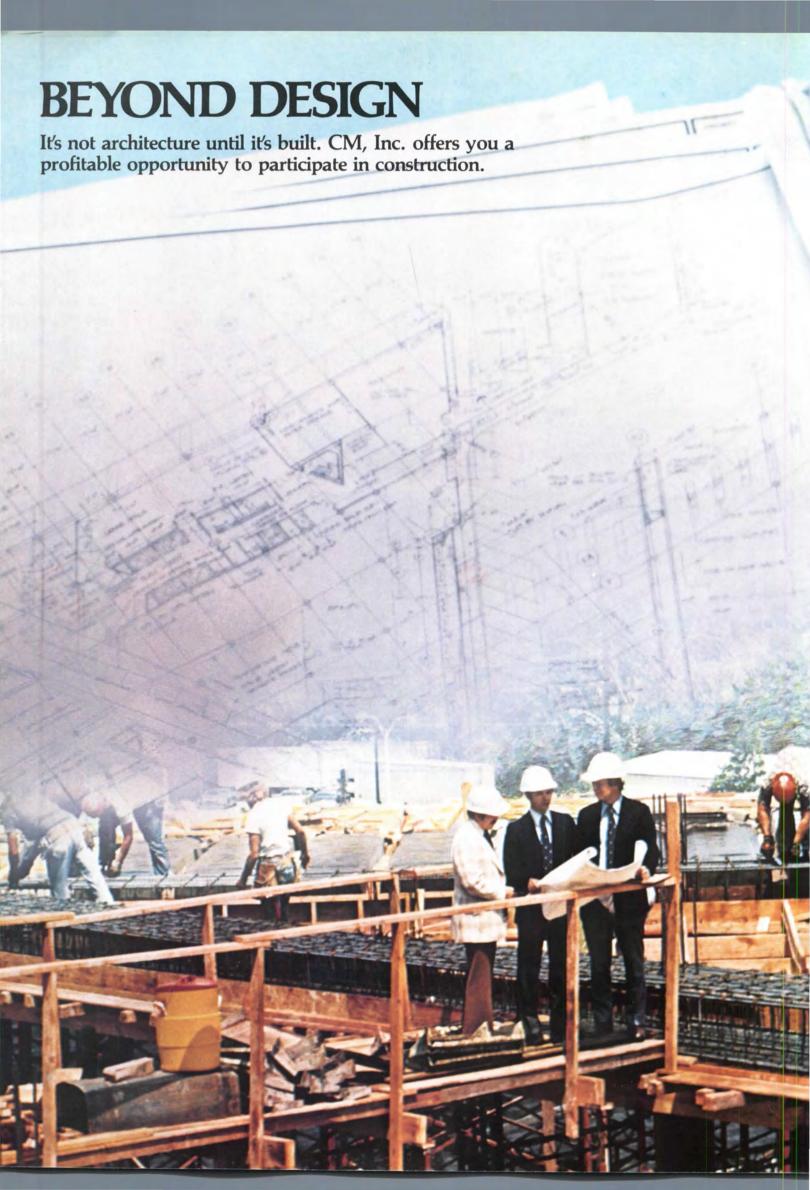
Redevelopment of Pennsylvania Avenue would not be complete without the federal government's efforts on the south side. The Federal Triangle's neoclassical and Art Deco buildings house the Departments of Commerce, Labor, Justice and Post Office, and the Interstate Commerce and Federal Trade Commissions, the Internal Revenue Service and the National Archives. The Romanesque old post office building of the 1890s also remains. Plans for extensive landscaping around the buildings were never realized. Harry Weese & Associates will develop a new master plan for the triangle.

Earlier plans for the triangle called for the removal of the old post office to create a "great circle" with the colonnade facades of adjacent buildings. Today, it is known as "Delano's hemicycle," forming a crescent-shaped plaza along 12th street. In 1975, the National Capital Planning Commission voted to save the old post office building, which left unresolved the problem of the truncated IRS building. The Weese firm proposes completion of the unfinished sides of the IRS building in the style of the existing architecture and redevelopment of the arcade court between the old post office building and the IRS into a public space.

The old post office building (above center), designed by W. J. Edbrooke in 1899 is to be restored and adapted to mixed use by the joint venture of McGaughy, Marshall & McMillan, Arthur Cotton Moore/Associates, Stewart Daniel Hoban Associates and Associated Space Design, Inc. The cortile roof will be glazed and offices and retail shops will surround the inner court. Restoration work began last September and should be finished by spring 1980.

News continued on page 88





As an architect, you'd like to have greater participation in construction—to preserve design intent and quality, control schedules and costs, reduce liabilities, increase profitability. How can you do it?

Answer: Add construction management to your scope of services. Joint venture with CM, Inc. We can share our knowledge of construction technology with you — help increase your expertise in the field.

Three out of every four delegates attending the Dallas AIA Convention endorsed getting into the construction business.

Small wonder! It's aggravating being blamed for time and cost overruns over which you have only minimal control, and not being able to control circumstances that affect design. And it's frustrating not being able to actively participate in construction.

Architects should be involved in construction

You conceived the design and worked nights and weekends to perfect it. You should have a whole lot more to say about making it a reality. And you should get paid more for it. Here's how to become more involved in construction, including adding a portion of the construction management profits to your existing revenue.

Our definition of construction management

CM, Inc. pioneered the concept of construction management. We have made it work successfully for many architects here and overseas. In short, what construction management means to us is that a company thoroughly steeped in architecture, engineering, and "down in the pits" construction technology works jointly with you to complete your project.

CM, Inc. has all three of the capabilities mentioned above. Our track record proves it. And why not? We grew out of the firm of Caudill Rowlett Scott. We also learned how to be hard-nosed constructors by getting mud on our boots and doing it. We will do with you what we've done for ourselves. Again, as a partner, not an adversary.

Major benefits for architects

Getting you involved in the total project, as architects once were, is the objective of Beyond Design involvement with CM, Inc.

What it will mean to you is: (1) your profits on design work will be improved by shortened project time cycles; (2) you'll increase your

income with a negotiated share of the joint-venture construction management fee (the general contractor's normal fee); (3) there will be fewer risks to your credibility with owners; (4) your control of subcontractors will be improved, as well as your status with owners. Perhaps most meaningful of all — you'll see your building emerge the way you planned it.

No matter which approach you and CM, Inc. may take, whether a construction management, design-build or turn-key contract, our two firms will effectively manage the complexities of early-on cost estimating, safety programs, labor problems, change orders, and many other aspects of construction.

How CM, Inc. can help you participate in overseas construction

Among your clients, are there U.S. companies planning to build overseas? Or overseas firms with building plans for the States? The foreign offices of CM, Inc. can help

A large part of our practice is overseas. We have offices in four foreign countries. We have worked with success on all five continents. And we are comfortable working in foreign environments where we are familiar with costs and construction practices.

We'll gladly furnish more information about the overseas capabilities of CM, Inc. Call us here. Or contact directly David Thomas, Vice President, in our London office: CRSDA (U.K.), Ltd., 62/72 Chiltern Street, London W1, England. Telephone: 4864711. Telex: 8952846.

How to start things moving between you and CM, Inc.

We can't cover the whole story in one ad. We could do a lot more over the phone or person-to-person. Let's do it soon and get you into construction on a current project of yours.

Obviously, too, we will not be able to joint venture with everyone, as much as we'd like to. It depends on such variables as the size of the project and the location. Generally, a two-million-dollar project would be the minimum, except if you are located in the vicinity of one of our current projects. Then the minimum might be a little lower.

Beyond Design starts for you with a call to Chuck Thomsen, President; or to Vice Presidents Frank Whitcomb, Joe Scarano or Tandy Lofland in Houston, Texas at (713) 622-5030.



It would be sheer folly for most architects to keep current cost data on 20,000 building materials. But not for us. Our computers make that data readily available. We also have one of the country's best estimating systems for supporting design.

CONSTRUCTORS/MANAGERS 2700 South Post Oak Road Houston, Texas 77056 Preservation

Buildings Lost, Some Saved and Important Progress in the Courts

The wrecking ball still threatens many historic buildings in this country, but several events in the past year allowed preservationists to take a breath before pursuing their fights. The U.S. Supreme Court ruled that New York City has the constitutional right to make historic landmark designations and to halt the demolition or alterations of such landmarks. Congress passed a tax credit bill encouraging preservation. A recent analysis of effects of the 1976 Tax Reform Act holds that its measures promote rehabilitation over demolition, despite criticism to the contrary. And the National Trust for Historic Preservation established an endangered properties fund. Meanwhile, GSA has been scolded by the General Accounting Office for being too aggressive in its preservation efforts.

The Supreme Court's decision extends beyond New York City, for in all 50 states and in more than 500 municipalities there are statutes dealing with the preservation of buildings of historic, cultural or esthetic significance. This legislative effort, spanning the past 50 years, has accelerated recently due to a growing appreciation and acceptance of the premise that the destruction of historic or esthetic structures has an adverse effect on the quality

At issue was whether a government had the right to preserve landmarks and whether landmark designation through restriction of the uses of a structure or a

site amounted to the unconstitutional "taking" of private property without compensation. The Supreme Court's 6-3 decision refers to alterations proposed for the Grand Central Terminal (Reed & Stem and Warren & Wetmore, architects, 1903-1913).

The terminal was designated a landmark in 1967 by the New York City Landmarks Preservation Commission. Five months later, the owner of the terminal, Penn Central, announced plans to lease air rights over the terminal to a developer for an office tower. The commission rejected two development plans, and the owner took the case to court, which granted an injunction against the city's use of the landmark law. The ruling was later reversed by the appellate court, which said the city had not "taken" the property and Penn Central's rights had not been surrendered without due process of law.

The Supreme Court upheld the appellate court's decision. Speaking for the majority, Associate Justice William J. Brennan Jr. said, "It is, of course, true that the landmark law has a more severe impact on some landowners than others. but that in itself does not mean that the law effects a 'taking.' Legislation designed to promote the general welfare commonly burdens some more than others.'

Another boost to the preservation movement was the passage by Congress of a bill which permits a 10 percent tax credit

Above, the City of Paris building, San Francisco (Clinton Day, 1896) may be replaced by a Neiman Marcus department store (Johnson/Burgee), although dome (top) may be saved.

Craig Buchanan

Craig Buchanan

on the amount spent on rehabilitation of commercial and industrial properties that are at least 20 years old. Previously, the investment tax only covered the equipment within buildings.

A National Bureau of Standards report maintains that the rehabilitation incentives in the Tax Reform Act of 1976 are strong enough to save historic property over the long haul. Under the act, the owner of a "substantially" rehabilitated historic building can depreciate the entire cost of the structure as though it were new, and rehabilitation expenditures may be amortized over 60 months rather than over the entire remaining life of the buildings. The act also penalizes demolition, since such related costs must be added to the value of

Preservation continued on page 96



In a landmark decision, the U.S. Supreme Court ruled against building a tower over Grand Central Terminal (above). Union Station, Nashville, Tenn., to be restored for office space by GSA (right).











After 71/2 years

and over 100,000,000 people, it looks brand-new and beautiful.
That's Beauty & The Bottom Line.

Obviously good design, superb color, professional service, static control, soil resistance and sound absorption are all important in contract carpet. But the real question is...does it still look good long after it's on the job? If it's not toughunder tough conditions...the world's best design is worthless. Take another look at the photograph. With this kind of extraordinary performance at Tampa Airport, think what Bigelow can offer you and your clients.

Circle 53 on information card

For further information on Bigelow Contract Products, write or call for our **"Proven Performers" Booklet:** Bigelow Contract Department, Bigelow-Sanford, Inc. P.O. Box 3089, Greenville, SC 29602, 803-299-2000.

Name

Title
Address

City State Zip



Beauty up front, performance down the line.

A SPERRY AND HUTCHINSON COMPANY

AIA-7

Four buildings selected by Alcoa for their functional beauty.

The four buildings presented here show the versatility and functional beauty of Alcoa aluminum. Alcoa® produces a complete line of formed industrial roofing and siding panels and supplies flat sheet and extrusions to curtain wall fabricators and finishes for commercial, monumental and industrial applications. No matter where they are used. Alcoa products show a consistent record of high performance. Aluminum's excellent weathering and corrosion-resistant qualities make it ideal for use when designing buildings to withstand highly contaminated atmospheres.

Alcoa panels offer you more. A competitive initial cost. Long life and reduced maintenance. And because they're easy to handle and lightweight, you get fast, easy installation. In addition, Alcoa's field

service technicians, engineers and consultants are on call to assist the erector with special technical aid when needed.

Alcoa industrial products are available in a range of styles and finishes. You can choose from eight corrugated and ribbed designs, in mill finish, stucco-embossed. And with Alcoa's Super Alumalure® baked-on factory applied fluoropolymer enamel colors, they'll stay looking good for years to come. Or you can elect flat sheet which can be formed and anodized. Ideal

for commercial and monumental structures. To find out what Alcoa industrial and commercial building products can do for your next project, see Sweet's 7.4/Alu, or write to Aluminum Company of America, 1203-EAlcoa Building, Pittsburgh, PA 15219.

Alcoa 8-inch ribbed siding on addition to International Paper Company plant, Texarkana, Texas Design: Design Engineering Group of International Paper, Mobile, AL Erector: Corbesco, Inc., Kenner, LA

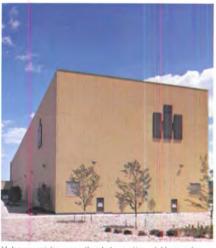


Bold Rib II siding at work on maintenance hangar for Ozark Airlines, St. Louis, Missouri Architect: R & D Contractors, Inc. Park Ridge, IL Erector: Stupp Brothers Bridge & Iron

Company, St. Louis, MO







V-beam siding on the International Harvester Automated Materials Storage Facility at East Moline, Illinois Architect: Duchscherer-Obeist Associates Erector: Wisconsin Bridge & Iron



Aluminum sheet with Duranodic finish on the Denver Service Center of Mountain Bell, Denver, Colorado
Architect: Rogers, Nagel and Langhart, Denver Metals, Division of Seagrave Corp., Minneapolis, MN
Erector: PPG Industries



Celotex makes the stuff the best roofs are made of.

The Pink Stuff: Thermax® Roof Insulation

Thermax Roof Insulation is the most efficient on the market with a Factory Mutual Class 1 Fire Rating. Thermax provides from 75% to 250% more insulating efficiency per inch than fibrous glass, composite, perlite and fiberboard roof insulations. Yet Thermax's unique construction makes it thinner and lighter than less efficient insulations.

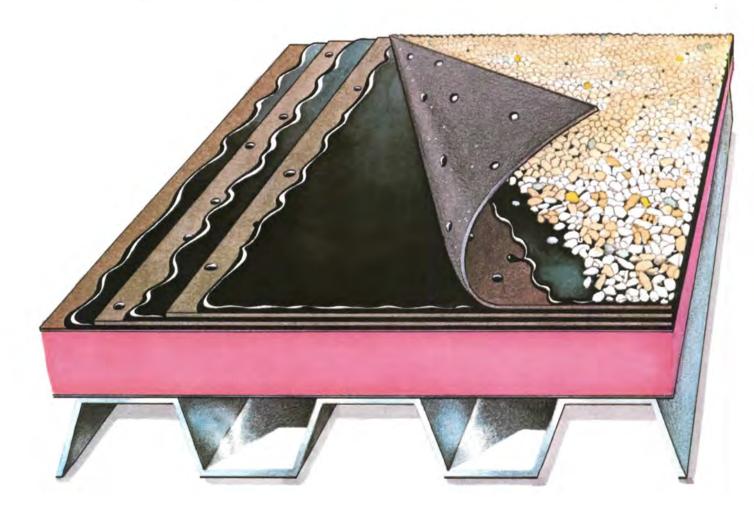
Thermax's isocyanurate foam core is reinforced with glass fibers for greater dimensional stability. It is sandwiched between two asphalt-

saturated inorganic facers which give it the additional strength necessary for good roofing application. It can be installed directly over steel decks with no other material (like perlite) between.

For architects, that means: less deadload factor, thinner nailers at roof perimeters and around roof openings, and smaller fascia design.

The Green Stuff: Tempchek® Roof Insulation

Tempchek gives you the same high "R" factor as Thermax, with the same top-rated insulating efficiency per thickness. Tempchek also has the same



htweight, easy cutting, easy handling, easy applition characteristics as Thermax, and the same impatibility with hot asphalt.

Its glass-reinforced urethane core gives mpchek excellent dimensional stability. In a Tempchek costs less installed than the greater icknesses of conventional, lower-efficiency aterials required to achieve the same insulating sults. That makes Tempchek the first choice for any on-fire-rated job.

ne Stuff With Holes In It: clotex Vented Ply Sheet

When laying a roof, inadequate brooming is ne of the major sources of roofing problems. Ometimes even the most careful brooming can ap gases, vapor and moisture that can cause blistring later on. Celotex Vented Ply Sheet has 1/4" ples that allow gases, vapor and moisture to escape uring application, so the whole brooming process

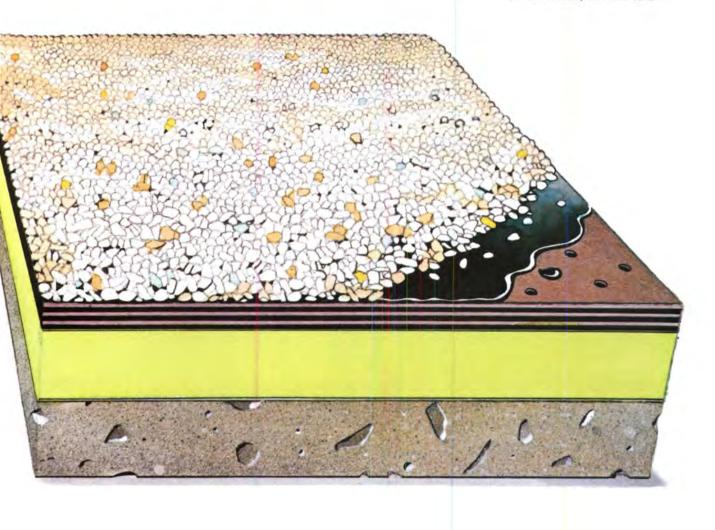
is eliminated. The holes are computer-patterned so they fall in different places in each successive layer of felt. The results are a roof that is easier to install because no brooming is necessary and, more importantly, a roof that is almost blister-proof.

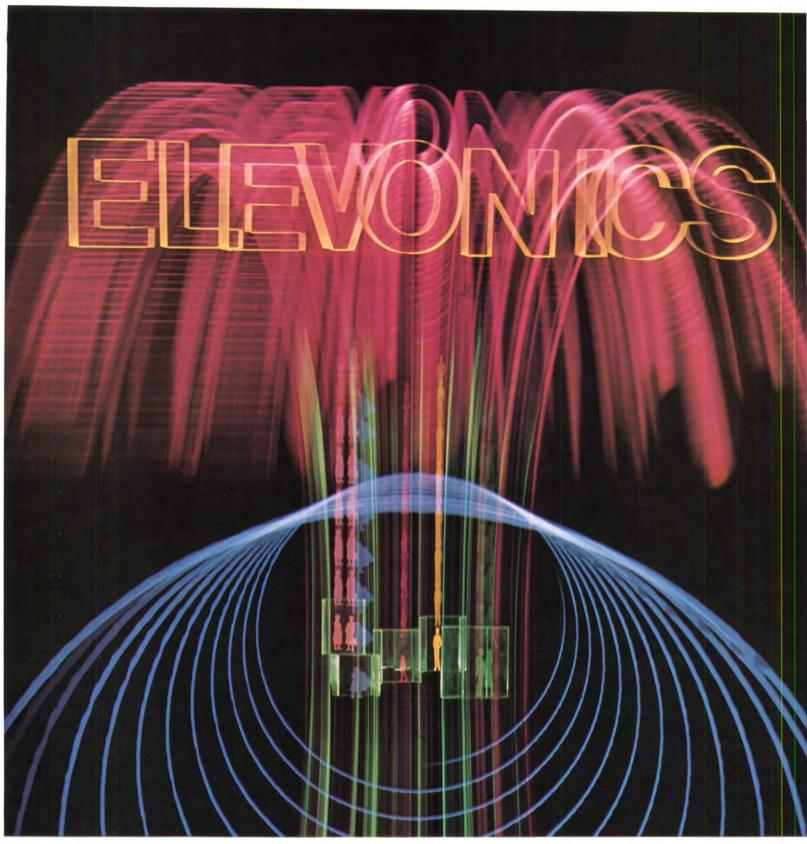
Celotex Vented Ply Sheet further reduces installation cost by requiring only three plies instead of the conventional four. (Over insulation and non-nailable substrates, only three plies are required. And over nailable substrates, lay down three plies and a Celotex base sheet.)

The Pink Stuff, The Green Stuff and The Stuff With Holes In It. They add up to a roof that gives you what you want: maximum insulating efficiency, minimum weight, and no problems. For complete details,

contact your Celotex rep or write: John Hasselbach, The Celotex Corporation, P.O. Box 22602 Tampa, Florida 33622.

ROOFING PRODUCTS
The Celotex Corporation, Tampa, Florida 33622
a Jim Walter company
Circle 55 on information card





Microelectronic technology is rapidly changing today's elevator systems. In fact, at Otis, we're workbest be called elevonics.

Elevonics...the science of moving people and products through the use of advanced elevator and microelectronic technology.

Elevonics has made possible the development of our new Comput-O-Chek™ diagnostic system and has helped us make our advanced LR-MR-HR elevator systems even more efficient, safe and reliable.

But it is the future that stretches the mind. The

potential of new propulsion systems for elevators; fiber optics to replace copper wire; computerized ing in totally new dimensions. Dimensions that can "self-corrective" maintenance systems are all possible using the science of elevonics.

Elevonics, the new dimension that enables Otis and United Technologies to search for significant advances, not just improvements, in elevator technology.

OTIS ELEVATOR COMPANY



Circle 56 on information card







World Wide Photo



Clockwise top left: 1920s Fitzhugh building, San Francisco, demolished; 1902 Florida State Capitol, to be restored; Blenheim Hotel, Atlantic City, demolished.

Preservation from page 88

the land, offering no tax benefits until the property is sold. And the replacement building is denied accelerated depreciation.

On the basis of a life cycle cost analysis, says the report, the tax act "has tipped the scale in favor of historic preservation." Before the act passed, rehabilitation was between 4 and 9 percent more costly than redevelopment; after the act, rehabilitation is between 13 and 28 percent less costly, according to the report.

As a last resort for buildings threatened by demolition, the National Trust for Historic Preservation has established a \$1 million endangered properties fund to help save nationally significant historic properties whose futures are in severe jeopardy. Through this revolving fund, the trust will make loans, purchase options, acquire rights to protect buildings and pay for other emergency preservation techniques until there are permanent preservation plans. Currently, more than 40 properties are on the trust's endangered list. The first action was a loan of \$18,500 to help preserve the Thorstein Veblen boyhood home and 10-acre farm near Nerstrand, Minn.

Meanwhile, the General Accounting Office has charged the GSA with taking its responsibility for preserving historically and architecturally significant structures too seriously. GSA is acquiring and renovating buildings in cities with no need for federal office space, says GAO. Specifically at question is GSA's plan to restore the Nashville, Tenn., Union Station rather than housing federal agencies in a leased building.

The Economy

Last Year's Construction Peak Expected to Level Off in 1979

The year 1978 reached a record-high volume in new construction contract values: \$158.4 billion, a gain of 13 percent over 1977. Inflation, however, cut this pleasant figure to size, resulting in a growth of actual physical volume of construction by only between 2 and 3 percent. The figure for 1978's dollar volume probably represents a capping of a three-year-long period of expansion, and the momentum probably will weaken in 1979, say some economic forecasters, due to continuing inflation, slowing economic growth, budgetary limitations and, perhaps most critical, tight money.

Other less predictable factors which will affect construction in 1979, say the economists, are such things as energy considerations, the soundness of the dollar and government spending. Other observers point to the quixotic and changing marketplace. For example, the National

Constructors Association says that the volume of construction work by U.S. firms in foreign countries has dropped in the past two years from first to fourth place, behind West Germany, Italy and Japan.

Economic experts at Dodge/Sweet's division of McGraw-Hill Information Systems Co. recently predicted that there will be a downturn in total construction volume in 1979 of 3 percent, dropping to \$154 billion, and a decline in actual physical volume of construction of about 10 percent. The economic editors of Engineering News-Record said late last year that the "setback should be brief and mild, as compared with the deep recession of 1974-1976." Although employment and output in the construction and building materials industries will stay strong in 1979 as 1978's project starts come to completion, the editors of Business Week

say that all indicators make it clear that 1979 calls for "caution more than it does for exuberance."

The Department of Commerce predicted a 6 percent drop in spending for new construction in 1979. When adjusted for inflation, construction spending in 1978 increased by 4.2 percent over 1977, according to Commerce. This, however, was 6.5 percent behind 1977 rates.

Dodge/Sweet's February update on construction potentials indicates that in 1978 \$29.1 billion was expended for commercial and manufacturing buildings (office buildings, stores, etc.); the forecast for 1979 is \$28.8 billion, or a drop of 1 percent. The construction contract value in 1978 for institutional and other non-residential buildings (educational buildings, hospitals, etc.) amounted to \$15.1 billion; it is predicted that the value will come to \$16.2 billion in 1969, an increase of 7 percent.

Through the end of 1978, demand for housing remained high, despite 10 percent mortgages and double-digit inflation in prices. The total value of construction of residential buildings in 1978 was \$74.5 billion. Dodge/Sweet's predicts a decline

Economy continued on page 205



What's New?

This office reception area of the Navarino Shipping and Transport Company, New York—designed with daring by Charles Boxenbaum, A.I.A., a member of Formica Corporation's Design Advisory Board. Fabricated in Black FORMICA® brand laminate

Fabricated in Black FORMICA® brand laminate (#909) by Bachmann & Dunn, Yonkers, New York, the result is as functional as it is aesthetically beautiful.

Because FORMICA* brand decorative laminate is the perfect material for commercial remodeling, contract furnishings and casework. With all the benefits that have made Formica Corporation the industry leader in laminate design, quality and innovation.

To see what else is new, write us for your free subscription to FORMICA TODAY. Excite your imagination with the unique and beautiful things that are being created using FORMICA® brand decorative laminate. Write to: Formica Corporation, Advertising Services Department T, Wayne, N.J. 07470.

What's Next!

FORMICA® is a registered trademark of Formica Corporation. Formica Corporation, subsidiary of American Cyanamid Company, Wayne, NJ 07470

Circle 58 on information card

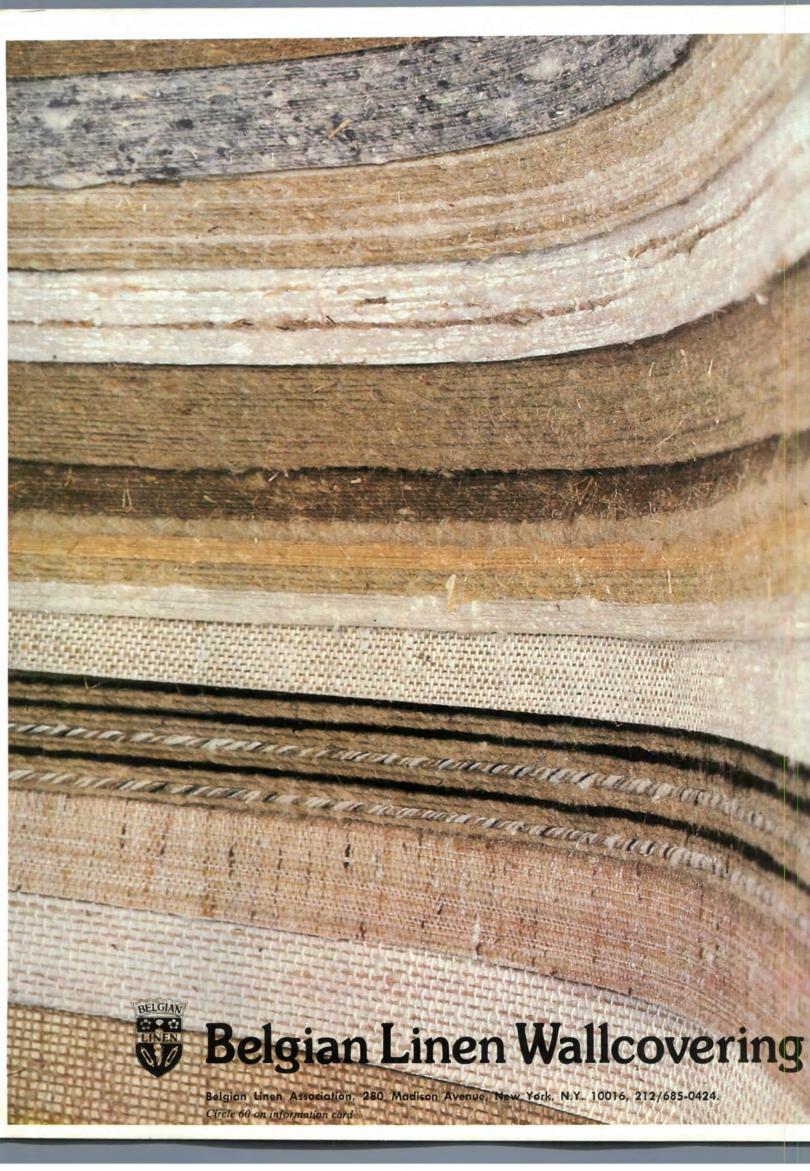


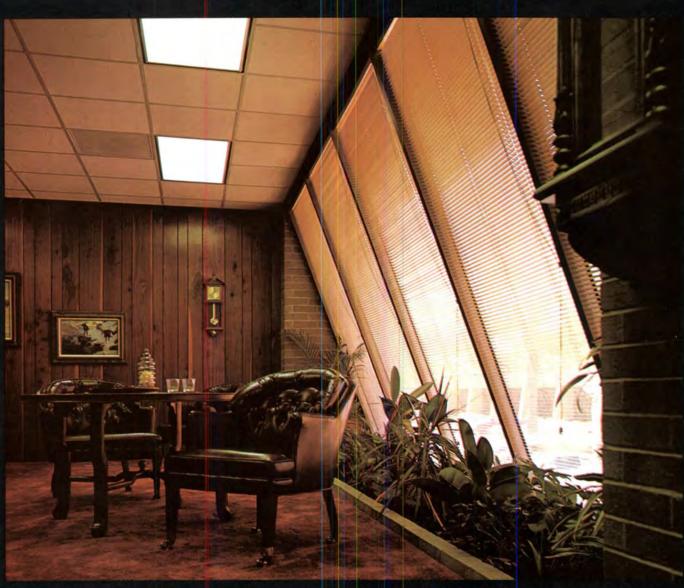
AND NOW, A FEW WORDS FROM THE MACHINE THAT PATTERNED THIS CARPET.

Milliken's Millitron® is an invention that speaks for itself. Because you know that if a machine can put words on carpet this clearly, there's no limit to the intricate patterns it can reproduce. The dye is injected with computer precision and the color goes all the way through to the backing whether the carpet is ANSO® nylon or wool or any other fiber. But to truly appreciate the results, you have to see them in person. When you've looked over the colors and patterns our Millitron® makes, we promise you'll want to try it yourself. And we're willing to put that in writing.



Visit us at NEOCON Suite 1822-1827.





TRICKS OF THE TRADE, EXPLAINED.

To be a blinding success, just use your imagination. And the Blind Imagination of Bali one-inch blinds.

When you specify Bali, you'll be giving your building a more uniform appearance. With none of the visual distractions so common with drapes.

That's only our outside story.

Our inside story is this: Bali Blinds do a better job controlling light than other types of window coverings. That saves energy. Even when they're wide open, Bali Blinds still work at 25% efficiency.

Bali saves time, too. Because when it's time to move walls as office arrangements change, inside and recessed or pocket-mount blinds don't have to be moved.

But there's one thing Bali won't leave to your imagination. That's our specifications.

Bali Blinds have been specified in a simple

CSI format to permit ready reference for procurement packages.

And we'll make these specs available to you, for you to write your requirements around them.

So, if you want to be a blinding success in business, build around Bali. And use the coupon below for a copy of our brochure, *The Tricks of the Trade*.

	IcFall Company, Loyalsock Avenue, Montoursville, sion of Marathon Manufacturing Company.
Show me The Tricks of the	Trade, free.
Name	
Company	
Address	
City	State Zip
Telephone	
Тесртоте	

BALI BLINDS BALI IS BLIND IMAGINATION.

Circle 61 on information card

The basic forms of light.

Crouse-Hinds Bollards.
Rugged, strong, and comfortable to view. Superbly constructed with seamless extruded aluminum housings. No exposed setscrews, fasteners, or other hard-ware to clutter the design. Simple. Clean. Vandal resistant. Basic.



Crouse-Hinds Company Lighting Products Division Syracuse, New York 13221.



CROUSE-HINDS



Bollards and people go together. Crouse-Hinds Bollards are designed for people. Beveled tops mean no sharp edges. The lamp is below the lens to keep the temperature down on the top housing. This makes our Bollards cooler to the touch.

And our unique "seethrough" look is easy on the eye. The impact-resistant acrylic lens is an integral element of the housing. There are no reflectors, refractors, or other optical devices visible in the lens area. Polycarbonate lenses also available.

Crouse-Hinds Bollards are designed for use with 70 and 100 watt HPS and 100 watt mercury lamps to accent or set off almost any pedestrian area.

Bollards. A good example of basic shapes.

When you think of "basic forms of light," think of Crouse-Hinds. Write for our literature.



Circle 62 on information

AIAJOURNAL

The Second Annual Review of New American Architecture

The intent of this special issue is a simple one, as we said in launching it last year: "to bring together in a single place a sufficient sampling of recent buildings to show and discuss directions in American architectural design."

As we noted then, some of the buildings will be familiar to regular readers of the architectural press. The effort here is not to be "first with the latest," but to look at significant examples of new work in conjunction with one another and in perspective.

Once again some of the choices of buildings for inclusion are ours and some are those of AIA honor awards juries. This year we are adding to the national award winners a selection of state and regional honorees to further enlarge the sample.

An issue like this one has special relevance to AIA's current celebration of architecture. For it demonstrates that, despite American architecture's current turbulence and soul-searching, there is a good deal being built that is worth celebrating. *D.C.*





Building as Event

I. M. Pei & Partners' East Building, National Gallery of Art, Washington. By Donald Canty

It was, in fact, the architectural event of the year, perhaps the decade. The fact had been predicted—critics began conferring greatness on the building while it was still in construction—and in some ways it was inevitable. The spotlight would have been on anything built upon this site, the last remaining parcel on the north side of the Mall, the closest to the west front of the Capitol, smack at the junction of L'Enfant's two major axes, Pennsylvania Avenue and the Mall itself.

It was obvious from first viewing of the design that this building would be an event for another reason as well: It was clearly to be the most adventurous, most sculptural, most geometrical piece of contemporary architecture in the federal precinct of Washington. Contemporary architecture has not fared well here. Until World War II it was shunted aside in favor of neoclassicism. (One of the last of the prewar breed, and one of the best, was John Russell Pope's original National Gallery of Art. More typical was the Federal Triangle, the heavily bureaucratic clump right of center in the photo.)

In immediate postwar years the impact of the modern movement began to be felt, but mainly in elimination of ornament. Jane Jacobs called it "the architecture of subtraction." The result was a generation of federal buildings blander and no less bloated than their predecessors. Even after the Kennedy Administration instituted a policy of calling upon leading contemporary architects to do federal buildings, these luminaries always seemed to play it safe when designing for Washington's core. Not so, in this

instance, Mr. Pei.

Despite the anticipation, no one was quite prepared for what happened when the building opened in June. It was toured on television, lavishly praised by critics of art and architecture alike in the national press, displayed on the covers of magazines as diverse as *Esquire* and *Smithsonian*.

It was more than a media event. The building became a principal magnet for visitors to the capital. It received its millionth visitor before the age of two months. And this in a museum devoted to art rather than the treasures and trinkets of history,

technology or air and space.

Critical acclaim continued. But any response like this has to generate a reaction, and since fall there has appeared a series of critiques containing negative comments ranging from reservations to downright dismissal. Some of the points at issue will be discussed on the following pages.



Cervin Robinson

A trapezoid cut into a collection of triangles.

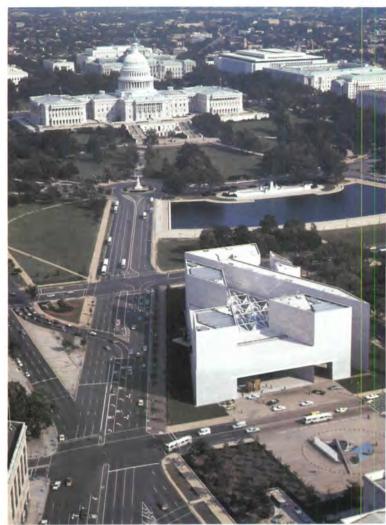
The facades of the building are endlessly variegated and fragmented and thoroughly different one from another. All of this reflects the nature of the spaces inside, which in turn reflects the response of the plan to the peculiarities of the site.

The drawings at right chart that response. Given an irregularly angular 8.8 acres, a program that called for a museum of suitable monumentality, plus a study center for the visual arts, setback requirements and height limits. Pei began by sketching a trapezoidal building envelope, then slashing a diagonal line across it. This created a large isosceles triangle which became the museum and a smaller right triangle which became the study center.

Triangulation continued as the plan developed. A large triangular court was opened in the center of the building, and around it were placed three towers containing most of the actual gallery spaces.

The whole is sheathed in marble from the same quarry that supplied it for the original National Gallery. On the facades facing the original building (right) and Pennsylvania Avenue (previous pages) the walls are windowless and the marble is interrupted only by concavities at ground level. These facades are aggressively akimbo and nearly symmetrical. The knife edge of the study center triangle slices past the southwest museum tower next to the entry. It ends in a 19-degree angle and the marble is thoroughly discolored from the fingers of visitors feeling the edge. The mall facade (above) is glassier and more complex. More than one of the recent critics has used the word clumsy to describe this composition. And indeed, the exterior of the building leaves a great deal of room for argument. From some vantage points, it can seem a collection of planes and masses in search of a building.

But it undeniably has interest and movement, even rhythm of a complicated and esoteric kind, in welcome contrast to most of its neighbors around the Mall. And it continually hints that there is something special going on inside. Which there is.



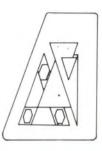
Robert Lautman

106 AIA JOURNAL/MID-MAY 1979

Left, the mall facade. At right, the entry facade that looks at the original building across a paved court whose glazed pyra-mids and fountain are, from the concourse be-low, skylights and water-fall. The bottom picture was taken during the Carter inaugural parade.











Overleaf, the courtyard of the museum. Photograph by Cervin Robinson.







Left, a typical small gallery. Right, the amphitheater gallery displaying David Smith sculpture, one of two with natural light. Above right, the concourse-level restaurant with its waterfall. Far right, the 70-foot court of the as yet unoccupied study center.

Cervin Robinson

Around the great courtyard, towers and galleries.

The great courtyard (previous page) is the heart of the building, in terms of experience, organization and the affections of its designers. Here they have employed a full architectural palette: soaring volume and changing glowing light, rich materials, grand stairways, bridges in space, windows carefully framing special views and, of course, intricate geometries. Crowning it all, quite literally, is a huge skylight combining a muscular steel space frame with delicate aluminum sunscreening. The word that immediately came to mind on first viewing the courtyard, and still recurs, is exhilaration.

The only thing that the courtyard doesn't have very much of is art. There is a group of large-scale set pieces commissioned for the space and, overhead, Calder's last and largest mobile

floating beneath the skylight to magical effect. But the art that is the building's reason for existence is elsewhere: in a series of small galleries largely around the perimeter of the great space (the exceptions are an aerie-like gallery at the very top of the northwest tower and a very large gallery at concourse level below grade, used mainly for traveling shows, that can be subdivided into as many as 60 rooms).

The small galleries have only angularity in common with the big space. Where it is all openness, they are all enclosure; where it is suffused with often bright light, they glow more softly (only two of them, the aerie and the amphitheater shown at right, have natural light coming into them). Some of these galleries lead from one to another but others require passage through the courtyard in transit.

The execution of the courtyard has few detractors, but the

110 AIA JOURNAL/MID-MAY 1979

idea of a central space and perimeter galleries lately has attracted several. Some seem to have had early childhood experiences that won't let them associate volume with anything but transportation facilities. Others feel that the art is denigrated by being put off to the sides in small rooms.

These critics tend to speak of the big space as having grown of and by itself (with a helpless Pei mesmerized by the triangle), squeezing life out of the small galleries. Actually, the idea of residential scale galleries was in the mind of National Gallery Director Carter Brown from the beginning, and the contrast between big space and small was basic to Pei's intentions. He calls the courtyard an "orientation space," where visitors can go on the way from one gallery to the other for a change of pace "so that they feel refreshed rather than worn out."

A more serious challenge to the courtyard-gallery concept has to do with the quality of light in the galleries. The entirely artificial light in the galleries, some have charged, is insufficient to



Allen Freeman

Cervin Robinson





Ezra Stoller-ESTO

Above all, a building that is an experience.

experience the full depth of color in the art—and seems even more so in contrast to the bright courtyard where one has just been. Yet the light level here is almost exactly that of the galleries in the original building, which also reserved natural light for its interior courts.

My first visit to the building was during a press preview. Pei was there and after we exchanged greetings he asked just the right question about it: "Are you enjoying yourselves?" For it is, above all, a work of experiential architecture whose primary aim is to engage the psyche and senses of the visitor.

My second visit was on the first Sunday after the opening. The press crowd had been sparse, but this time, lured by the initial burst of publicity, vast numbers had come. If anything, the courtyard was more exhilarating than before. People moved through it at all levels as if choreographed and the great space came alive with them. It was worth the price of some crowding in the smaller galleries (if one of them got too uncomfortable there was always the spatial safety valve of the courtyard for escape).

I have returned to the building numerous times, partly to gauge visitors' responses to it. This involved some random conversations and a good deal of eavesdropping. Despite a total lack of social-scientific rigor in this investigation, a few generalizations seem safe to make. One is that nearly everyone who visits the building regards it as an experience, reacts to it as well as to its contents. The most common reaction to the courtyard can be summarized in the single word "Wow!"

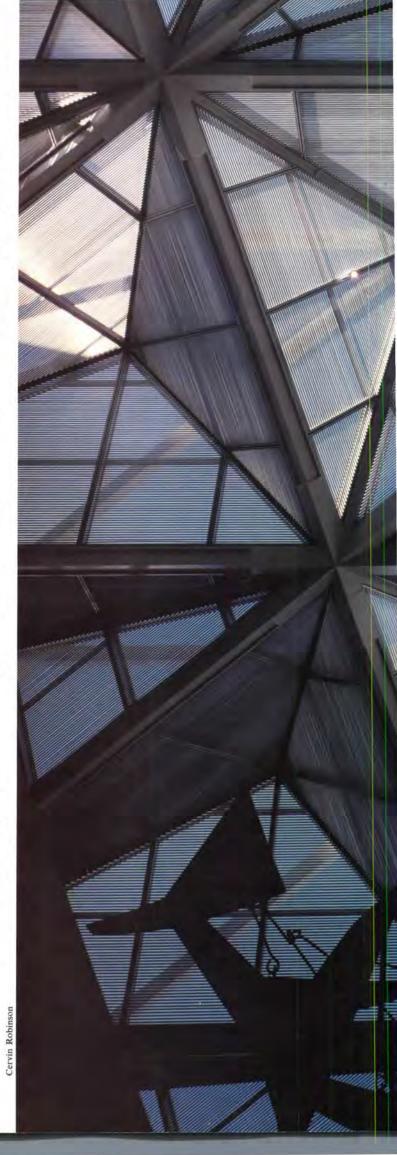
People who are serious about art, on the whole, seem to find the small galleries pleasant and reposeful places in which to view it. The reaction to the large concourse-level gallery for traveling shows varies with its arrangement show-by-show, which is designed by the museum staff.

For people who are not so serious about art the experience of the building is almost totally that of the courtyard and the concourse beneath the plaza that links the new and original buildings. Here, past a moving sidewalk in an oddly incomplete metal tube, are restaurants and a shop, illuminated by triangular skylights that become the plaza's centerpiece overhead, and enlivened by a wonderful glass-enclosed waterfall. Visitors seem to enjoy these spaces but I find them at once barnlike and kitschy (one critic has suggested that they almost seem to have been designed by another architectural firm).

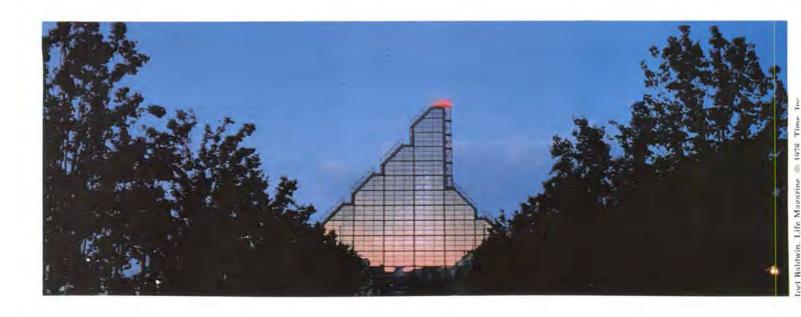
Returning to the courtyard, a frequent visitor can't help but observe indications of confusion about intended circulation patterns. People don't audibly complain, but there is a great deal of wandering and usually more than one vaguely lost expression. This should not be surprising, since directions to a given exhibit can go like this: "Go up the grand stairway, turn right across the bridge, then turn right again and walk past the sales booths to the rear corner." If the courtyard is indeed a place of orientation, then something needs to be done to more explicitly orient visitors to where the art is to be found.

In the end, perhaps the best measure of the building may be Charles Moore's postcard test. "It has become apparent," Moore has said, "that when people go somewhere they like and want their relatives and friends to know about it, they send a postcard very often." He does not claim that a building that results in 10,000 postcards being sent is precisely twice as good as one that prompts 5,000, nor does he know of "any test that is as precise as that. But it does seem to me a useful start to say that if people like something, connect with it, feel good about it and feel as though they're glad they went there, they enjoy being there and more central to themselves there, there must be something good about it."

Not all of Washington's numerous postcard stands yet carry images of the National Gallery East wing, but at those that do vendors report that they are selling briskly.







A Triumphal Arch, a Gateway and a Garden

Gruen Associates' Rainbow Center Winter Garden, Niagara Falls, N.Y. By Cervin Robinson

The most famous American winter garden was not a garden at all but a mid-19th century New York City theater. This fact should suggest the versatility—if not downright ambiguity—of this building type. The Rainbow Center Winter Garden at Niagara Falls, N.Y., is indeed a garden, but it is also a gateway, an exciting public space and a fragment of a futurist city. With its synthesis of Eden and Metropolis, it aims to revitalize a city.

Falls Street, across which the Winter Garden is built, was the main street of Niagara Falls until the 1960s when the city sought to solve the problems of its troubled downtown by demolishing it. When, 10 years later, that downtown had been only haltingly rebuilt under a master plan prepared by Gruen Associates, the city decided to spur private redevelopment by spending \$7 million in federal money on the development of a pedestrian mall designed by Gruen and landscape architects M. Paul Friedberg & Partners that runs from a new convention center by Johnson/Burgee to the state park overlooking the American falls.

Primary purposes of the redevelopment were to attract to the city some of the four million people who visit the American falls yearly and to bring in conventions. In addition there had been little in the area that meant downtown to citizens of Niagara Falls: The main post office and city hall were blocks away, and Paul Rudolph's Brydges Library was on the other side of town. So the redevelopment was also to reattract citizens to this former downtown.

Whatever was done to the mall had to allow pedestrians to pass from one side to the other in comfort during Niagara's harsh winters and to cross the two streets that cut through. Simply roofing the mall would not have solved the climatic problem and heating the full length would have been prohibitively expensive. Moreover, neither alternative would have provided a positive attraction to the area.

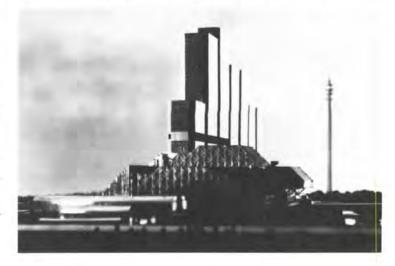
One idea Friedberg offered was that the city build a structure to house precisely those activities that citizens of such Northeastern cities as Niagara Falls were leaving in the winter to find: swimming, golf, boating, tennis and skiing. Whether that sugges-

Mr. Robinson is a New York City-based architectural photographer and writer.

tion seemed too novel or too commercial or too risky, it was not pursued. It could probably be argued that the Winter Garden is a retreat from or, alternatively, a refinement on the earlier idea, the subtropical climate of the Winter Garden is apparently a legacy of it.

Cesar Pelli, AIA, Gruen's partner in charge of design at the time of the Winter Garden's design, sees the building as being both self-centered and contained, on the one hand, and open and permeable, on the other. Urbanistically, the building serves as a terminus to the mall, whether seen from the convention center or from the direction of the falls, and, in Pelli's term, as a triumphal arch.

The stepped roof, it is generally acknowledged, derives from Pelli's winning design for the International Organizations Head-quarters and Conference Center in Vienna (below). Its asymmetrical profile, reflecting in part the southern exposure of one pitch of the roof, is intended in addition, several critics have said, to avoid a cathedral look to the building. Curiously, the image was raised by the Vienna building too, of whose office towers Sybil Moholy-Nagy wrote: "They are not cathedrals." Pelli himself says that he aimed at a balance between symmetry

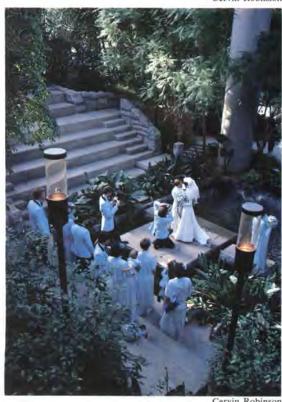


114 AIA JOURNAL/MID-MAY 1979



Cervin Robinson

Cervin Robinson



Cervin Robinson

Greenery beneath an airy web of steel and glass.

and asymmetry and that to him the building presents the appearance of a facade with a steeple to one side. And, of course, its silhouette, when the building is seen obliquely, gives the Winter Garden an extrusion-like character that it shares with Pelli's earlier Pacific Design Center.

In its role as triumphal arch, the Winter Garden is sometimes more permeable and sometimes less so: It is variably transparent and glassy depending on the angle from which one sees it and depending on the light, the sky and the time of day. In summertime, the windows at ground and mezzanine levels fold back. opening these levels completely to the out-of-doors at both ends. In full triumphal arch mode for parades (or to allow passage to service trucks), the center section of the mezzanine at both ends of the building can be raised by hydraulic jacks to a full twostory opening.

But, even more than a triumphal arch, the building is a city gate. One side of the mall is clearly inside the gate and the other outside it. Where the mall leads to the park from which the falls can be viewed, it is informally paved and planted, and there is a children's play area. On the other side, it is formal, fully paved and lined with regular rows of trees in planters. Here the mall leads to an urban plaza by Abraham Geller, Raimund Abraham and Giuliano Fiorenzoli on which the convention center faces. The Winter Garden as city gate (Porta Niagara? Watergate?) will be complete when commercial development to either side completes its wall.

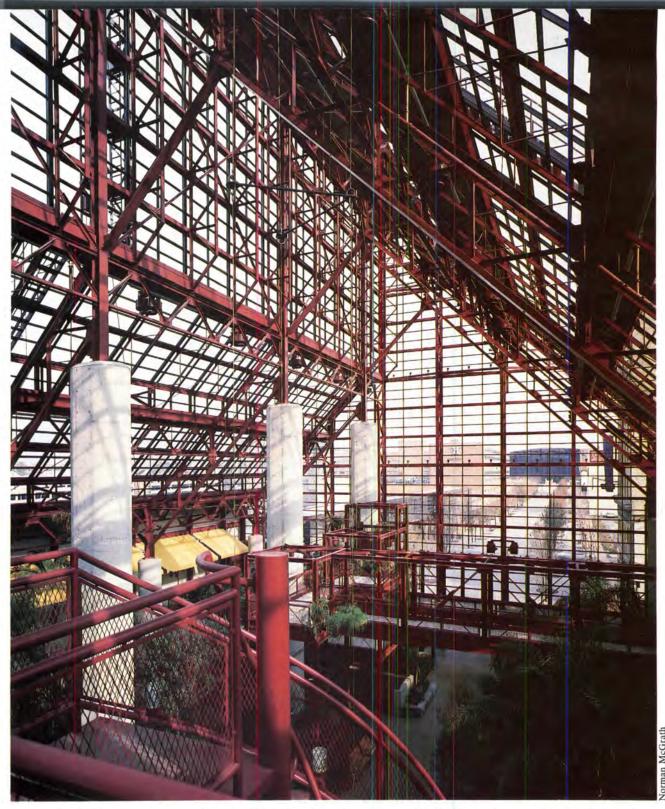
Inside, the Winter Garden is part romantic garden and part Portmanesque lobby, the two subsumed under one glass membrane. A winter garden must be the last form of clear glass building that is responsible in terms of energy—the end of the road for modern architecture's dream of transparency. The membrane is supported on 20 post-tensioned, reinforced concrete columns which underpin a maroon-colored steel filigree of five transverse and 12 longitudinal trusses, from the cantilevered ends of which the curtain walls are hung. Since these are separated from the mezzanine floor by an expansion joint in order to avoid buckling, all loads, both vertical and horizontal, are taken by the concrete columns.

Laminated tempered glass is used for the roof, clear float glass for the curtain walls and tempered glass at ground and mezzanine levels. What heat the sun does not supply in winter is provided by units at truss level with fans that blow heated air into the lower part of the building and by units just above and below mezzanine level. The electricity for all of this comes from the Niagara River. In summertime, temperatures are kept at outdoor levels with ambient air drawn into the building at ground and mezzanine levels and with heated air vented at the top of the building.

Below this airy web of steel and glass are a landscaped garden and a pair of observation towers accessible by catwalks from mezzaine level, by stairs and by elevators. The horizontal movement of pedestrians on these raised walkways and the vertical movement of exposed elevator cabs create a dynamic futuristderived imagery. Commercial development on either side of the Winter Garden will be able to use it as a lobby by plugging directly into it through removable metal panels in the curtain wall.

The garden itself features, amid a wide variety of subtropical plants and trees, a central promenade, amphitheater and grotto. The rationale of the observation towers is that they allow the plants to be viewed from their own levels. From the garden, these towers are follies. In this context the garden below is part classical landscape (with grotto and amphitheater) and part Gothic landscape (a nave overgrown with bushes and trees). The Winter Garden offers a romantic synthesis of "greening" and ur-

Pelli's other designs have often shown a concern for common, enclosed space. With the Winter Garden, he curiously reverses a process the 19th century undertook with a vengeance. The Win-

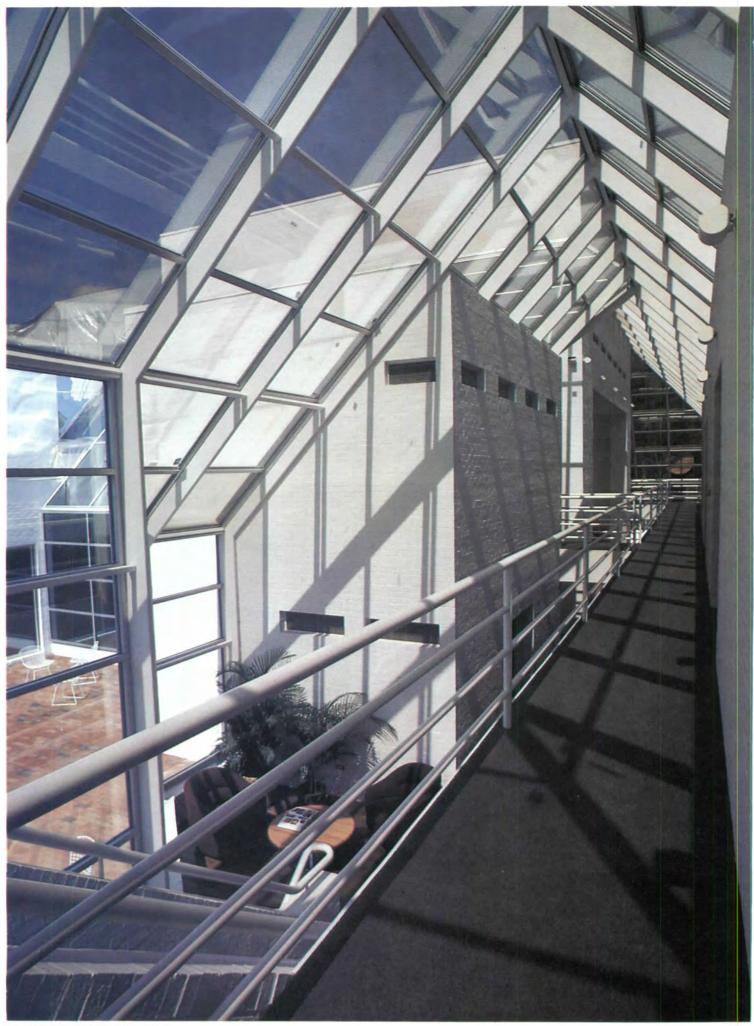


ter Garden is like a freestanding city gate that asks to have its city wall reinstalled on either side (in the form of commercial development), whereas the 19th century removed *its* city walls to leave such gates freestanding. It is a cathedral (almost) that asks to have lesser buildings built up against it, whereas the 19th century cleared such abutting buildings from cathedrals to leave them also standing free. It is a building that asks to have distinctions remade: between inside downtown and outside it, between enclave and precinct and enclosure.

How well does it work? Until adjacent development occurs and abutting buildings make use of the Winter Garden on the sides where this possibility is now merely symbolized by yellow awnings at mezzanine level, this must be in part conjecture. For the moment, the building is used by citizens reading newspapers, by baby sitters whose charges run the length of the central promenade, by lovers (in the older, less activist sense, I think) who can find peace and privacy in the more secluded of the benches that are to be found throughout the building, by conventioneers staying at the nearby Hilton Hotel that is connected to the Win-

ter Garden by a glass corridor and by tourists who have just seen the falls. On a Saturday, brides are likely to be having their wedding pictures taken in the Winter Garden. Concerts are held there, glee clubs try its acoustics, art classes use it.

According to its architect, the Winter Garden needs the more intense use that development of its flanks will give it. Its success will depend on how this development connects to and uses the building. All too easily it might find this Eden an obstacle to passage. A pedestrian wants to choose between routes offering different degrees of involvement with such a garden, a quick skirting at one extreme, absorption into the garden at the other. The promenades and mezzanines from front to back offer this choice now, as do the observation towers. But from side to side, such choices are not apparent; and the catwalks and observation towers do not help. But then, developers may use their opportunities more cleverly than I expect them to. And Pelli has said that an architect's work can at best be only a strategy for success in a building. In the Winter Garden he has initiated for Niagara Falls what is so far a most successful campaign. \square



Monastic Retreat for Secular Scholarship

Hartman-Cox's National Humanities Center, North Carolina. By Nory Miller

The National Humanities Center by Hartman-Cox is, like most buildings, far from perfect. The silhouette shambles rather vaguely down the hill, the elaborate and ambitious entrance doesn't quite come off, and sometimes, on the inside, too many corners come together too fast for the design to field them. And yet there is a mood to this building, a mood of lucidity and alertness and quickened perception, a sense of things being possible,

that sets it apart.

To some extent this derives from the crystalline logic of its conception: a simple geometry based on taking a linear building and folding it at a 90-degree angle and making the bisecting diagonal its axis. On the ground, from the outermost deck in front, through the building, to the outermost deck in back, the implied diagonal is rendered subliminally visible in the brick line. Within the geometry, each piece is distinct. Rooms are solid, pathways are glazed. The important spaces are elaborately worked out and there are only two of them, the entrance procession and the center salon. Everything else is simple and to the

But what contributes most to the mood are the qualities of space and light. There is a lot of control over just how large places are and how gradually they end. The tiny places don't shut you in and the big places don't get away from you. The light is quiet-fresh and crisp and so evenly dispersed that it seems to give the air presence. The mood is white and still and invig-

orating.

And it is an appropriate mood, for the humanities center is more than an educational institution, it is a private retreat for scholarship. Several years ago, the American Academy of Arts and Sciences, taking due note of the Institute for Advanced Study in Behavioral Sciences in Palo Alto, Calif., the Institute for Contemporary Problems at Ohio State University and the Institute for Advanced Studies at Princeton where Einstein spent his later years, thought it was time there should be one for the humanities. It wanted an organization that would extend fellowships to recognized and promising scholars and a sanctuary in which the scholars could do their work. But the academy had no

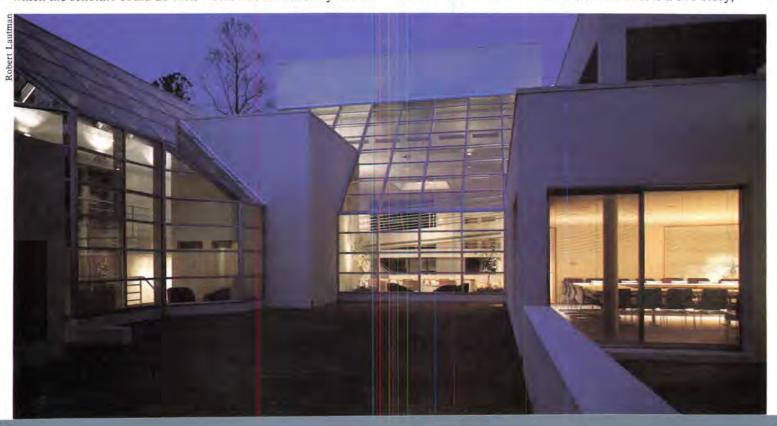
funding for such an institute and invited various universities to bid for its sponsorship in starting one.

In North Carolina there are three schools—Duke University, North Carolina State and the University of North Carolina at Chapel Hill-which team for various enterprises, the most enterprising of which is Research Triangle Park, a 5,200-acre site between Raleigh and Durham. In 1958, the state, on behalf of the schools, set up a foundation to own the land and sell it piece by piece to corporations for erecting research facilities. In

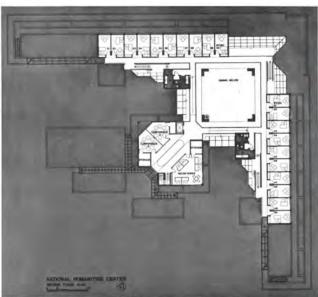
1975, it was decided to set aside 120 acres for use by the schools themselves, represented by an umbrella group called Triangle University Center for Advanced Studies Inc. (TUCASI). It was TUCASI that the academy eventually picked to create the hu-

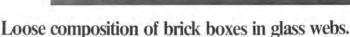
What exactly this was to be physically, however, was unclear. When Hartman-Cox was hired (George Hartman, FAIA, partner in charge) -a scant 18 months before building completionthere was as yet no institute to work for. There were representatives of TUCASI, the academy and a future assistant director of the center. Midway, Charles Frankl was hired as director. Hartman-Cox's programming consultant, Walter Moleski of ERG in Philadelphia, went from meetings in New York City to meetings in Boston where some talked about having a piano and a sherry bar and others talked about the inadvisability of a country club atmosphere. Frankl said what was needed was a nonascetic monastery. In the course of the meetings, it was decided that the center was not to be monumental, elitist or isolated from the world; it was to be integrated with the site, have a low profile yet announce its presence and have a well-defined entry. It was to be elegant but not rich, Spartan but not institutional. Everyone visited Princeton and Palo Alto and OSU and decided what not to do and learned that lunch turns out to be the main social adhesive so that if they were interested in developing interdisciplinary discussions among the scholars-and they were-the dining room had to be a real center.

The National Humanities Center opened in October 1978 with 26 of its eventual 50 annual scholars. It is a two-story,









30,000-square-foot building costing \$2.5 million, on a 15-acre site. And it is apparently a success with its new tenants. The scholars seem genuinely pleased with the design, calling it "comfortable," "tasteful" and "a delightful little building." Complaints seem limited to an excessive delay in getting the unusual 8 percent reflective glass so that some areas have only recently been fully roofed and another apparently solvable problem with soundproofing.

From the outside, it is rather a ramshackle of white brick boxes emerging from mirrored webbing, loosely tucked into the woods. What trees were torn down for construction have been replanted—the same Southern yellow pine and scrub oak—right up to the walls. Cars park along a widening in the road or use the circle drive in front to let someone off.

There the entrance procession begins, and it is a major point of articulation, a march of alternating open and closed rhythms played by almost but never quite symmetrical sections. To begin with, there is the round driveway, then an arced curbstone and steps, and a tiny plaza that narrows to a point, framed on one side by a solid wall, on the other by a punched one. Moving from wide open space to tight passageway, you have now made the first transition from outside to inside. You then enter a hexagonal court, captured on five sides by the building but still outdoors. Behind, on either side of the passageway, are solid walls pushing you forward. In front, on either side, are glazed corridors flanking the truly hierarchic entrance. Higher than its flanks



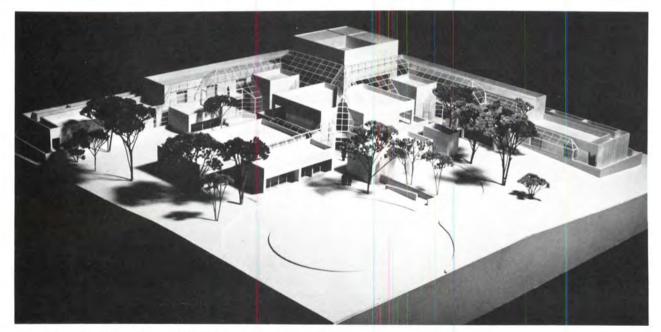
and more transparent, the two and one-half stories of gabled glazing rules its small court. Playing with the diaphanous quality of the sheathing, the architect makes certain allusions to traditional doorways. The second story deck, visible through the glass, operates as a kind of visual lintel, forcing the skylight gable to play pediment. A bit of railing at the upper floor reads through like a crown or the ribbing of an old-fashioned fan window. The entrance overtaken, you find yourself once again in a wider, roomier space. Lobby furniture is arranged along the still dominant diagonal, displacing movement slightly. Overhead, a lozenge-shaped cut gives the linear gesture of the lobby twostory height flushed with sunlight from the skylight above. To one side sits a receptionist. To the other is a large conference/lecture hall. Denied a direct path by the furniture, you are forced to consider each of these on your way. Yet the space's essential axiality is maintained.

At the end of the lobby the walls again grow close and the transition is made to the commons—first to a kind of foyer where your motion and vision are abruptly halted by a brick pier and then turning either left or right, to the open room itself. The procession is now diffused. The commons, although still arranged symmetrically along the same diagonal, reads from the inside as a four-sided center from which several wings disperse.

It is a deliberate deception. The building is not truly composed of a center and three wings, one of which is the entrance. It is composed of two intersecting square diamonds with studylined corridors running off the back edges of the second one. The first section is treated as a mere pathway to give the second



Robert Lautman



The commons, felt both architect and client, is the secret to encouraging interaction among scholars, so it became the focus of the center. It is the destination of all the corridors inside and the most open, most elaborate, most formal space, reading through on the exterior as the tallest of the white brick boxes.



Reflective glass arches up over corridors (left) and folds down around lounges (below). Within the skylit central commons, the dining area is marked out by the four piers of the room-sized white brick canopy (facing page). By layering with the intermittent punctuation of baldachin, bridges, ramps and railings, the architect has managed a variety of defined spaces, infused with a sunny, open feeling throughout.



Private studies and opportunities for socializing.

dominance. In fact, it is not only as big as the commons but, with its less geometrically regular effluvia, much bigger. This is the administration wing, a necessary concomitant to the center but one which Hartman did not wish to render visible to any who did not specifically require its services. Hence, he exaggerated the processional, borrowing every technique he could from Edward Lutyens' Grey Walls in England to do so. "In an earlier version," he admits freely, "it was even more of a direct lift; the entrance was curved. But that seemed too much."

The result is quite successful from the standpoint of the commons appearing to be the center and grand hall of the building without having been bloated out of all sense of intimacy. What mars the effect is that the step-by-step experience of the procession suffers from a fuzzy beginning—with the entrance slightly to one side and actually somewhat obscured—and insufficient scale to make the transitions palpable. Unlike Grey Walls, there is never quite enough time here to sense one state before the next is already upon you.

Far more successful are the commons and studies, where the scholars reside. And here the analogy of the monastery with its cells and cloister is quite vivid. The fundamental consideration was to provide absolute privacy for each scholar but also to encourage interaction among them. The individual studies are the vehicles in privacy. Each turns its back on the building and

opens up with a full glass wall to the north or northeast and even extends into the woods by terrace or balcony.

The social maneuvering begins the moment a scholar opens his door. There are no unpleasant on-the-way chutes or stuck-where-it-fit meeting rooms. As closed as his private space is, that is how open the public area is. Everything in it is reduced to its lightest weight and most manageable size. All forms within the skylit area are treated as figural, as pieces of furniture—even the staircases. The skylight ambles along gabled walks and folds down over casual greenhouse lounges. Walkways are narrow, squeezed by the budget, but the result is a nicely domestic scale. Light softly filters through and is bounced gently back and forth between the white painted brick surfaces. Spaces are open, separated only by the thin, white railings of the corridors.

When a scholar leaves his private world, he can see who else has stopped working and might be willing to chat. He can spot colleagues in the commons or along the corridors, run into them on the way back from the washroom and stop for a moment on the stair landing where a slight alcove and a couple of chairs have foresightedly shown up. There is a lot of deliberate redundancy in the circulation paths in order to facilitate leisurely encounters. The paths also give scholars a chance to pause before making an entrance to the commons. Because the view is clear, they can choose with whom they wish to sit or, seeing someone less pleasing, regroup and head off in a different direction. There are also terraces off the hallways for warm weather



conclaves. And many a discussion occurs as people just stand in the corridor or hang over the railing because the sunlight is so pleasant.

The center of social life is the commons. It is the center of the building and the place where lunch is served. This is where the lounges are and where all the corridors lead. To get coffee or to order a library book requires a trip there. This is the space that would make or break the center, its board thought, and the space that occupied Hartman's most intense efforts.

It is composed of the same materials as the rest of the building —exposed red brick floors, white painted brick walls and reflective glass skylights. The details are industrial—pipe railing, round metal lamps, gray carpeting in the dining room and on the upper corridors. The lounges are softened with Oriental rugs on the floor and (soon) a few tapestries on the wall. Tables are natural oak and chairs are covered in fabric of maroon, royal blue or forest green. Oak trim is used architecturally as an accent, for doors, bookcases, around glass partitions. And though the whole feeling is one of cool restraint, it is enlivened with an insistent patterning, almost in monochrome, created by the framing of the skylighting and the railings, their reflections on the white brick, the texture of the brick itself and the punched openings of corridors, recessed study entries and HVAC grilles.

While the commons is at the very heart of the building, the layout makes it possible to be interwoven so tightly with its site that it is just on the verge of being outdoors. The greenery seems

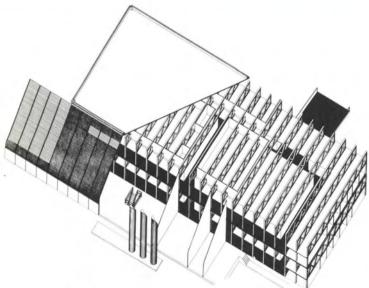
to seep in at the corners, and the greenhouse lounges jut out into the forest. From any point, you can see outside in three directions. And there is a small stand of trees at the heart of the space.

And, though it is open and minimal in feeling, it is quite complex. "There is lots of architecture there to make it seem pleasant and important," says Hartman. The "architecture" breaks the space down into more intimately scaled areas and makes distinctions of importance and direction.

Basically, the commons is like the child's toy of a box within a box within a box within. . . . The brick-edged stand of trees under a square recessed skylight is the very smallest box in the center. The skylight resembles the lantern of an Italian church, as many of the pieces of this room resemble religious architecture, Hartman having spent the previous winter in Italy and a monastery being the building type considered most appropriate.

The next bigger square is the dining area, carpeted in gray and covered with square tables and cane chairs. Above this space, and marking it as the most important space in the building, is a huge baldachin—actually four brick piers supporting the mechanical room into which the little square skylight has been cut. It is the highest point of the exterior silhouette as well. The dining area, marked but floating, sits within the larger square formed by surrounding corridors, both on the ground and as balconies above, over which the skylights arch upwards. The final layer is the perforated surrounding of lounges, given sepa-





Reception area with exposed, painted trusswork (above), a cut-away isometric (left), second floor plan (below) and the mechanical room with exhaust shrouds (across page).



128 AIA JOURNAL/MID-MAY 1979

Bright ductwork and columnar exhaust shrouds.

exhaust shrouds, which were originally designed to poke through the roof of the lean-to. They have been likened, among other things, to a modern colonnade. But no such symbolism was intended. The purpose was simply to maintain the formal integrity of each visual element and to let the free-standing shrouds express a "factory type image for a building in an industrial neighborhood," according to Clark. He explains that by locating its new laboratory here and taking pains to make it an architecturally distinctive structure, Monsanto wanted to "show its commitment to the city of St. Louis and set a standard for others who move into the immediate neighborhood."

The east elevation of the laboratory is the only one facing the street, and is all glass, in part for energy reasons, in part "to provide for security reasons a sign to passersby both day and night that the building is occupied," according to Clark. Esthetic considerations also played a role in the placement of most glass on the east wall. At night it becomes a transparent membrane revealing a composition of lighted, diagonal trusses and ductwork with rectangular offices sandwiched between.

By day, the east facade is quiet and unobtrusive, especially since it is partially obscured by a concrete retaining wall. The main reason for the wall and for scooping out the eastern portion of the site and lowering the building into it was to screen from public view the loading dock with its live animal deliveries. The concrete wall, as Horn readily admits, is somewhat crude in treatment. "We asked for better form lines, ties and sandblasting, but couldn't get what we wanted," he explains. Both the concrete wall and the eight-foot metal security fence that was placed around the building after it was completed (Horn calls it "that bummo wall") are being planted with ivy "so they won't look so awesome," as Horn puts it.

The building's detailing, in general, is probably its weak point. Explaining the use of Miesian corners, Horn says, "When you do a skin building, somewhere you need to relate it back to structure, give it a place to stop and start and show it's a skin applied to a frame. You don't introduce something new." But here, the corners do appear as incongruous elements. At Crown Hall, for example, where the identical corners are used, they serve to frame symmetrical facades and reinforce strong vertical detailing. On the asymmetrical Monsanto building, with its strong horizontal thrust, they serve no such purposes, while impeding the linear flow. The only other vertical detail on the building is the front door, also taken directly from Mies, and again bearing little apparent relationship to the elements surrounding it.

The bridge which leads to the main entry is meant to indicate that this is not a public building, nor is one meant to "casually walk into it," Horn says. The bridge was also used to make the building accessible to people who cannot climb stairs. Visually, though, it functions more as a gangplank or ramp, as an element that juts out from the building without either being differentiated from it nor yet comfortably relating to it in detailing or scale.

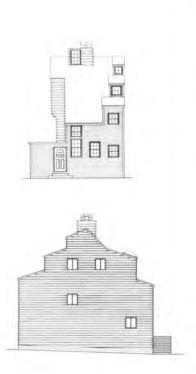
Most notable about the interior spaces is that by letting in natural light and using color overhead on exposed trusses and ductwork, the architects managed to transform otherwise "basement-like" spaces into airy, cheerful areas. The use of glass was taboo in animal rooms and most laboratories, but light streams in overhead at the ends of corridors through glass covering interstitial spaces, "so that people have a feeling of life in the building," says Horn. The colored trusses and ductwork were left exposed for easy access to mechanical equipment as well as for esthetic reasons.

Trusses and ductwork apart, the interiors are white, gray and black, with white concrete block lining hallways in the laboratory and animal areas. The laboratory's director, Dr. Paul Wright, reports that "people were upset at first by all the white, but I don't hear complaints about it anymore." The light, bright feeling overhead may be one explanation. \square



Photographs by James Norris







Everything Ventured and a Great Deal Gained

The Jefferson Riley house (architect, the owner) in Guilford, Conn. N. M.

At the unpaved end of Dunk Rock Road, seemingly alone in the woods but actually amid a sprinkling of such houses, two of which were designed by him as well, is the house that Jefferson Riley, AIA, built for himself, wife Barbara and two children. It is a tour de force, which is not uncommon with young architects building for themselves. There is that almost insurmountable temptation to pack in every last idea one has ever had. But Riley's ideas hit right at the heart of what a house in the woods in Connecticut might be about-informality, family gatherings, memories of childhood places, trees and sun and a sense of

Riley, when not designing his own house, is a partner with Moore, Grover, Harper of Essex, Conn., the firm that grew out of Charles Moore & Associates when Moore left for the coast and still maintains a loose relationship with him. Like Moore, Riley-who also studied with him at Yale-approaches architecture as the making of an experience. He likes surprises and jokes, unexpected vantage points, things out of place and out of scale, ambiguity and paradox-things to keep you on your visual toes but all of it somehow suspended in a cozy, shoes-off

atmosphere.

The nature of the experience is more earthy and playful than that aimed at by, for instance, Venturi, but Riley, like Moore, is quite as light-fingered about history. "We wanted a house," he says, "that reminded us of New England cottages-not reproduced by rote, but joyously assembled into a unique composition with contemporary strivings of its own." For this, he borrowed amply from New England stock-be it Victorian, Georgian or colonial—and proceeded to enrich the flavor with tidbits from the American South, Mediterranean and Paris. As well, he included quite modernist ideas of open plan, glassy walls, panoramic views.

A cottage slice, with jigsaw-piece front (left and upper drawing), symmetrical edges (lower drawing, north; photo above, south).

And while the interlacing of all these things is done with almost frenetic sophistication, there is a bit of the old noble savage mystique in the attraction for naive (vernacular) forms and penchant for a pseudo-clumsiness in compositional technique.

The constraints for building the house were serious. The land, three and one-half acres bordering a state forest in Guilford, Conn., had been expensive. So the house had to be small (1,500 square feet), inexpensive to build (\$45,000) and inexpensive to heat. Nonetheless, it is loaded inside and out with not only the images but the qualities of the architecture that the Rileys like.

It is, first of all, colonial—as the architect had grown up in Greenwich, Conn.—with red-stained clapboarding, steeply pitched roof and central chimney. The dormers are a combination of a favorite meeting house in Massachusetts and Parisian piggybacked dormers, Paris being where Riley had just returned from when he sat down to the drafting table. At the top is a lantern, quoted loosely from Italianate houses of the 19th century. And at bottom, the Georgian door foreshadows the facade around the corner, facing south—a knowing interpretation of Palladian five-part composition and the classic arched window with connected dependencies. North and west facades return to various versions of colonial farmhouses.

Between inside and outside is a greenhouse, like a decompression chamber that you have to go through on the way. "That," says Riley, "was inspired by Charleston, S.C., houses where you enter through the front door into a courtyard garden, generally on the south side, collonaded but covered, and then to the house. The sensation that appealed to us was the idea of threshold between one world and another like the wardrobe in C. S. Lewis's fairy tale. The house becomes a kind of sanctuary through a magic doorway."

Inside, the house suddenly opens into a two-story interior court, sided in beaded fir boards as if it were exterior wall and on which the bedrooms overlook through fully operational sash The passage to the interior is through a greenhouse (right) and into a 'Mediterranean courtyard' (facing page) containing the public rooms. Zigzag patterns of windows, stairs and shelves perform acts of wit, rhythm, texture, definition and, ultimately,



A Mediterranean court in a New England house.

windows. "We were interested in spaces like Mikonos," explains Riley, "where clusters of family units share a 10x15-foot court-yard and there's always some guy with a pipe sitting there and kids playing and laundry being done and people hanging out windows participating. Putting that in a New England cottage affords a life style that no other house I've ever seen makes possible. It's a way of communing among people that a family ought to have. We can smell bread baking through the window of a bedroom or call out to each other."

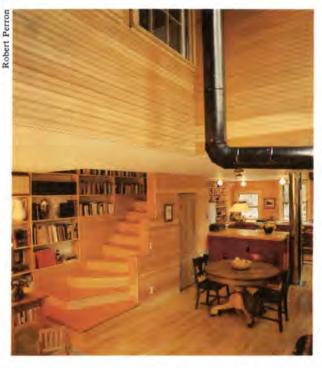
The kitchen is red because Barbara wanted a red kitchen, with a red sink and red cabinets like Creative Plaything toys. A couple of stained glass windows are popped into the wall of windows from the bedroom, like found objects.

But what is intriguing about this house is not only which things the Rileys stuffed into it but how they are put together. Riley plays a deft game of knitting the historical and formal fragments together without ever quite blurring their edges. He is not an architect interested in transformation. Like a number of his fellow architects today, what he pursues is the quality of assemblage, with all that implies. The building is conceived of not only as a place but as a catalyst for the display and development of mental and visual dexterity and understanding by both author and audience.

To begin with, the cottage isn't thought of exactly as a cottage, it is thought of as a slice of cottage. East and west facades are the front and back of the cottage and they are appropriately clapboarded. The sliced edges, north and south, are covered in rough sawn cedar siding. All of this fits into a carefully graduated sequence between landscape and interior.

There are basically four layers: the outdoors, the captured outdoors (deck and greenhouse), the courtyard-like living and dining spaces (indoors as if it were outdoors) and the completely private spaces. The demarcations are precise. The deck is kept separated from the woods by a series of steps while the greenhouse is kept separate from the house by distinguishable facade treatments. Not only is the fenestration of the greenhouse incompatible with that of the south facade against which it sits, but the facade's rigidly symmetrical window pattern continues right on behind the greenhouse, oblivious to its presence, making it seem as stuck on as possible. That facade, that separates deck as well as greenhouse from living spaces, is made of cedar and punctured by huge windows (really sliding glass doors, which were cheaper), bringing light and stunning views of the forest inside. The next wall, between bedrooms and living spaces, is fir and punctured with small-paned double-hung win-





dows that look out onto the public rooms and through their windows, onto the trees. The back wall, facing north, is almost entirely closed, with only four quite small openings.

So much for overall order. In, around, through and making up these layers are a seemingly inexhaustible series of manipulations pushing toward unity and pulling away at the same time. For instance, the south facade. Symmetrical if you don't count the greenhouse, almost symmetrical if you do, the wall is really one way-out-of-scale Palladian window splintered apparently by some sort of explosion. The extraordinarily centralized form holds the disparate pieces in a kind of suspension, but the explosion has distorted the arrangement just enough that several readings of how to fit them back together are possible and no single reading is quite correct.

On the north facade, an asymmetrical window pattern is held within an almost symmetrical silhouette. But it is the east facade, the first thing that comes into view from the driveway, that is the most ambitious of all. For the east wall may be the front of the house on the outside but that honor shifts to the south on the inside and a lot of that shifting goes on on the east facade itself. First of all, it has two centers. One, the true center of its full width, is marked in the middle by double-hung windows making a strong vertical punctuation. The other, an adjusted center caused by the carving out of part of the front to reveal the side to the south, is registered unarguably by the central thrust of the roof. The whole thing comes to a head at the top where a jack-in-



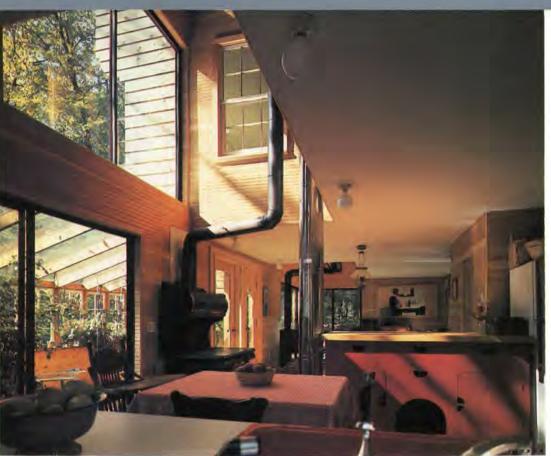
the-box pops out that acknowledges not only both centers but ambiguous and seemingly incompatible functions. It is a lantern on the one hand, whose window echoes the original center of the wall, and whose purpose is to let in clean sunlight. On the other hand, it is also a chimney-borrowing from the lantern the massiveness appropriate to colonial chimneys—whose protruding chimney pots mark the shifted center and whose purpose is to let out dirty smoke. (Riley's taste for this kind of reversal leads him to hide on the inside what is the hierarchically most important feature externally, the crest of the Palladian window. One comes across this most perfect framed view not in the parlor, not in the master bedroom, but in the bath.)

Meanwhile, both centers continue to vie for primacy, giving the facade its particularly restless quality, which is only aided and abetted by the efforts to present this facade not only as a thing in itself but as a jigsaw puzzle piece that has been inter-

rupted at each side. At the north edge, it suddenly erupts into dormers which jump out of each other so fast that they would push off the roof altogether were it not for the diagonal clapboarding at the side tying them on. To the south is the cutaway which gives that facade a kind of frontage of its own, but one from which we are firmly held back at ground level though allowed to peek above. We are so firmly held back, in fact, having gone so far as to use a false front to do it, that when the front door opens into a greenhouse, it is a complete surprise.

As much of a surprise is the Mediterranean courtyard in which living, dining and cooking are to go on. So fundamentally opposite to what we have been led to believe from the outside, it is threaded to it not only by the continuing presence of wood but by continuing the single zigzag (step) and double zigzag (ziggurat) patterns found all over the exterior.

Windows climb in zigzag arrangements across a wall or



Norman McGrath

All the openness (left) and the ability to afford more space have driven the Rileys to design an addition, to begin construction this summer. Called the gatehouse (below), it includes garage, guest room and studio joined to the house by an arcade. The then-created courtyard is to be adorned, says Riley, 'by flower beds, a baroque vegetable garden and houses for cats, dogs, birds, squirrels and dolls.'

Solar design for energy efficiency—and pleasure.

around a corner—emphasizing a gable here, pulling the oneand two-story halves of a room together there—with sudden changes in size to bring the motion to an abrupt halt or gradual changes to keep it going. All of this creates a kind of progressive overlap, moving the eye around the room as it moves the eye up, heightening the sense of enclosure and somehow whirling the whole disparate palette together.

As well, these zigzags help give each area within the continuous open space a sense of separate definition. The strongest division is made by the ceiling which leaves the living room at one end and the kitchen and breakfast room at the other at their gabled two-story heights but comes down to one story over the dining area in the middle. It is through this single height space that one actually enters the house from the greenhouse (yet another stage of transition between outside and inside). And the distinction between this middle section and its higher wings is further reinforced by two wood stoves which stand like wooden Indians on either side of the doors.

It is on the back wall (the closed wall) that the zigzag patterns play their part in separating the areas. The back wall of the kitchen is composed of open shelves for various boxes and dishes, except in the middle over the stove. There the shelves fall away in a ziggurat pattern, making a specific backdrop to the kitchen and, incidently, playing a little game with its facade which it mimics in shape while reversing what is solid and what is void.

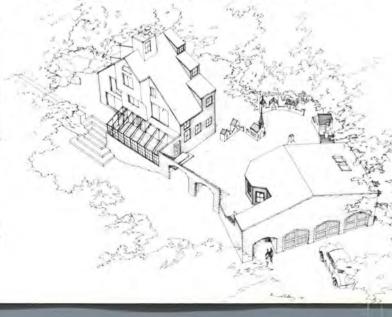
Backing the dining area is the interior wall of the staircase, its stepped silhouette the dining table's backdrop. Behind the living room similarly is an egg crate of bookshelves which zags up the wall as it becomes the back of the staircase. There is a lot of zigging and zagging around the staircase; its front wall, back wall and stairs are all high stepping it at different paces with the horizontal banding of the wood grain, treads and rows of shelves sounding an interesting counterpoint.

There are nice touches on the way up. At one point the patterning turns into a window as if it were just one more thing on the shelf. But basically the private side is just that. On the second level are two children's bedrooms and a bath. Master bedroom, bath and study are on level three. All bedrooms look onto the court. The master bedroom looks onto both sides of the

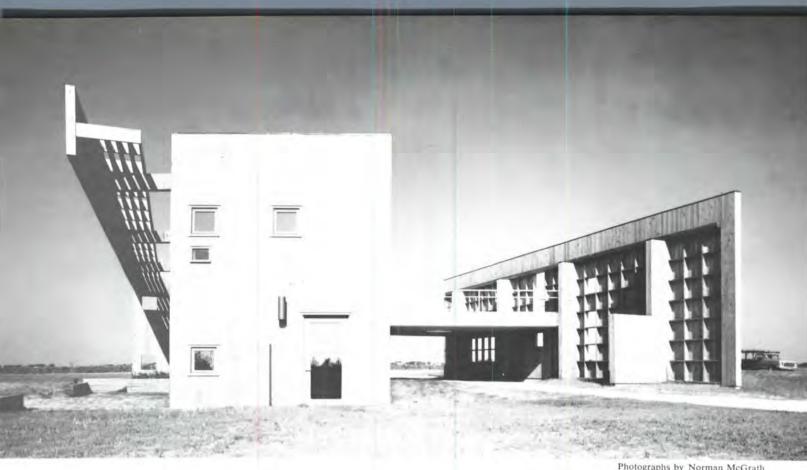
court, from either side of the bed, with direct light from the lantern above. And, for those who are still looking for it, the master bath is where Riley has hidden the Palladian window.

All this translates rather simply into a house which is energy efficient as well. The greenhouse operates as a direct gain airlock passive solar collector. The heavily windowed south wall lets in enough sun frequently to warm the house during the day. As the house is only 16 feet wide, the rays penetrate every room. The antique wood stoves provide most of the heat needed after dark (actually they've never found it necessary to light more than one). There are thermal shutters for the big south windows if it is quite cold at night but, in any case, the bedrooms are recessed so there is no direct heat loss from their windows. The north wall, which bears the brunt of the prevailing winds and gets little sun anyway, has only four little windows. There is a backup oil furnace, but Riley claims not to spend more than \$100 a year on heating oil. He also has the capacity to dump extra solar heat in the basement but has yet to put in the fan, rock bin and ductwork that would permit this, as he is "not tired of chopping wood yet."

Most of all, Riley insists that the house not be thought of as a solar machine. "The solar advantage," he says, "is used to heighten the experience of the house. The pleasure of all that south facing glass is as much a part of it." And he's right. The house is a pleasure, and an experience, and a catalyst.



134 AIA JOURNAL/MID-MAY 1979



Photographs by Norman McGrath

Two Screen Walls with a House in Between

Tod Williams' Tarlo house on Long Island, N.Y. N.M.

There is more to a parallel between Tod Williams' speculative house in Sagaponack, N.Y., and Jefferson Riley's house for himself in Connecticut (preceding page) than the accidental coincidences of low budgets, small programs and young architects. Or the practical exigencies of cedar siding and passive solar design.

What these two houses significantly have in common is a restlessness with the broad strokes of the architecture which preceded them. "We lose touch with coming down to the intimate scale of things," says Williams; and his house, like Riley's, takes entry, context, windows and anything else that can possibly serve as a design cue and renders them active and specific and articulate. His house is full of all different sizes and constantly varying shapes. As in Riley's house, the technique is cut and paste; and the paste a matter of repetition, both of motif and material. If Riley's house goes further, becoming almost a shadow box of distinct pieces and spaces, even Williams interprets his fewer figural elements with that same Pop sensibility.

Conflict is received by both architects with open arms. If it is possible to be both open and shut, symmetrical and asymmetrical, simultaneously inside and outside, then all the better. And if in the process the details become a bit cryptic and the conflicts a little belligerent, then perhaps there needs to be more control, but at least the balance has been tipped away from bland im-

personality.

Williams' impatience, like Riley's, has been nurtured by leading architectural dissidents, albeit different ones. From a nonarchitecturally directed childhood at the prep school of Cranbrook Academy, he went to Princeton, Cambridge and a five-andone-half year apprenticeship in the office of Richard Meier. At 35, he heads a small firm in Manhattan, teaches at Cooper-Union and was prepared to take advantage of the opportunity when William Tarlo asked him to design a house for speculative resale on the eastern Long Island shore. It was to be an economical,

three-bedroom, three-bath, full basement vacation house on a one-acre potato field. But with no real client, it was almost the same as designing for himself. (It has since been sold.)

The site was flat and treeless, 1,000 feet from the ocean and next to a couple of houses not to the architect's taste. A screen wall is thrown up next to the country road. It is parallel to it and to the shore beyond. Carefully distributed openings pull views of far-off farmhouses right up close, framed like paintings. The wall is like a false front from the Old West, a signboard, a formal facade that gives the house a larger and more horizontal presence on the largely barren landscape than its size and compactness would naturally command. It provides shelter from winter wind and from peering eyes. Within is a porte cochere and above, a protected deck for sunbathing. In the middle of the deck is a







Norman McGrath

Composite drawing shows, from top, interior of windscreen in elevation; deck in plan; second floor, first floor and rear facade in axonometric: brise-soleil in plan. Below, night picture of rear facade; far right, interior from second story balcony, and facing page, approach view of windscreen and house from front.

Norman McGrath

Polar juxtapositions and zigzagging walls.

bubble skylight, making the space below seem even less like out-doors and more like a room.

Paralleling the windscreen in back is a brise-soleil. The house finds its own axis within them. The wall and brise become the frame, the house the figure. The angle of the house aims the "garden" side windows down the beach, avoiding an adjacent structure, toward the best available view of the ocean. A growing hedge will block out another neighbor.

In this way windscreen and sunscreen both modify the setting in which the house finds itself and become a setting, a kind of envelope, themselves. But the space of the house and its surroundings is not conceived of as vacuous, it is conceived of as a gridded field within which some lines have sprung up solid and some remain implied. The grid is the organizing element. Not satisfied with the calmer geometries of his de Stijl-influenced antecedents, Williams implies two fields, two intersecting grids, one made manifest by the screens, the other by the house inside. What holds the house so firmly in place is the tension between them.

This technique, this defining of opposing things and letting each remain strong, is the essence of Williams' approach. "I'm interested in dualities," he says. "I make volumes inside other volumes. I try to establish polar ends of things. I'm interested in this not as abstraction but as experience. I don't want the juxtapositions to be jarring like the work of Frank Gehry or humorous like that of Charles Moore. I want them to have a deeper presence."

The polar ends at Sagaponack are varied and overlapping. In some places, one end is set up against the other, in some a continuum is suggested. The windscreen, for instance, embraces both symmetry and its opposite. The door-like opening in it establishes an exact center, around which other openings are arranged in carefully poised asymmetry. In back, the antitheses of open and shut are disposed sequentially. The jagged plan divides the house into three bays, each with its own face connected in sawtooth fashion by fins. Both faces and fins progress step-bystep from most solid to most open, with the last "implied" fin a mere rectangle of air caught between the house and the "post" of the brise-soleil. The procession from closed to open is not gradual but jagged; elevation paralleling plan.

The carefully designed screens are contrasted to the "dumb" box of the house's front and sides and its "ugly little street" of a back in an attempt at an ugly/beautiful dichotomy. The opposites of inside/outside and, similarly, private/public are heightened by a progressive layering of stages and transitions.

Central to this staging is the punctuation of movement by alternate conditions of compression and release. From the open road, you drive between wall and house, under a low deck which squeezes you from above. The point of free space, the skylight, makes the tightness the more emphatic. Out of the car, you head for the door and suddenly find yourself with two stories of height but now squeezed from the sides, chimney-like, on the front stoop. Once inside, spaces continue to crunch down and open up, narrow and widen so that no movement from one place to another can go unregistered.

Williams exploits other techniques of articulation as well. The screens not only have a lively texture in themselves but cast intricate and changing patterns all over the interior. Any number of rhythmic variations and reversals are woven into screens and facades, and Williams permits the figural gesture of the fireplace.



Terra cotta color against the gray bleached wood wall, threedimensional against its flatness, it stands not only as counterpoint but as a signal. "I just let the flues read like columns," says Williams. "To me, columns mean entry."

Tending to unify what threatens to come apart is the smallest module, the 2x2-foot square. Repeated over and over in different configurations, but within a limited range of materials, it establishes a certain coherence.

Inside, the elements of articulation are much the same, but with a dual purpose. As on the exterior, the architect invests in the means to "come down to the intimate scale of things." But on the interior, the architect is also faced with the difficulty of making a small house (1,800 square feet) spacious.

It begins, like the exterior, with the two grids, but here they are superimposed, not adjacent. Interior walls zigzag around the house, moving as program dictates from one to the other. Lines are constantly coming together and pulling apart, leaving infinite variations of angular shapes in their wake. Sometimes these are objects like the triangular bench at the top of the stairs and sometimes these are spaces like the kite-shaped child's bedroom.

The most intense geometrical confrontation occurs at the entrance. It is the old Frank Lloyd Wright trick of using a split stair that catches the entering visitor at the landing. Only it is made even more uncomfortable by converging planes, and by lowered ceilings over the stairs. By the time you get to a room, it seems capacious by comparison.

The shifting grids also add a sense of breathing space by interlocking the public areas. Breakfast nook, dining and living rooms seem distinct on one grid, in rapport mostly with the backyard. The other grid maintains a continuous flow between them, a flow made visible in the pattern of the Mexican clay tile floor. While not quite an open plan, each small area borrows from the space around it. And this is possible in several directions. There is not nearly the square footage to realize grandeur from the double height space, but it does provide relief.

More relief is provided by the master bedroom's ambiguous location. It overlaps its bay by just enough to gain a neat little view down into the dining and living rooms and out through the dining room's large windows to the oceanfront.

The other dualities also play on the interior. The progressive transparency of the "garden" facade is, of course, an inside as well as outside phenomenon. And just to make things more complicated, the upper balcony wall/rail across from it proceeds along the same jagged continuum from closed to open, but in the opposite direction. The layering of inside to outside and private to public is not only continued but reinforced by intricately constructed views, which distinguish as well between front and back. For instance, the view from the living room toward the ocean is direct, scaled only gently by the sunscreen and then again by a low wall. The view out the front goes through layers like circus hoops—a cutaway in an inside wall, the foyer window, the porte cochere, an opening in the windscreen, and at last, the view of a farmhouse.

Throughout the house, the 2x2 square continues as a motif, but its use is not limited to maintaining a continuous language. The square is also the ultimate gesture of intimacy. It provides individual views of the backyard from the breakfast table and a handy little niche for a book in the bathroom. Like Japanese tokonomas, there are squares for vases of dried weeds. And there are squares to look out from while sitting in the bath or walking downstairs.

The fireplace is again the figural element. Centrally located, its recesses are asymmetrically arranged and then reflected unexpectedly through the window in the sunscreen's vertical support.

The interior cannot be said to be as adroit as the exterior. There are too many awkward moments like the wall of the study built so tightly against a therefore discarded window that a hole had to be cut to reach the handle of the one operable pane.

Nonetheless, the house succeeds at what it set out to do. It is personal, animated, eloquent. The happenstance angles and attention to pathways give it a vaguely medieval quality, but unlike Riley's house, there is very little of the found object about Sagaponack. What Riley approaches with memory and a butterfly net, Williams has approached with geometric abstraction. But unlike that of postwar modernists, it is not a geometry of minimalism. \square



Recognizing the Need for Contact with Nature

 $Roche/Dinkeloo's\ Deere\ \&\ Co.\ head quarters\ addition,\ Moline,\ Ill.\ N.\ M.$



Deere West, Roche/Dinkeloo's addition to Eero Saarinen's John Deere masterpiece (both shown at right), is the opposite of Leo Marx's famous thesis. It is a garden in a machine (above). The two, as always, struggle for compatibility.

Perhaps the most important thing about Eero Saarinen's Deere Headquarters in Moline, Ill., and Kevin Roche/John Dinkeloo's recent addition to it is that each has taken seriously its role as workplace. The modern age has done more than replace elaborately carved marble with steel I-beams; it has replaced coopers, cobblers and knights with secretaries, market researchers and executives. The change in program is as extraordinary an architectural challenge as any, yet surprisingly few have responded to it. With well-known and understandably respected exceptions such as Frank Lloyd Wright's Johnson Wax Co. and Hermann Herzberger's Central Baheer, office buildings tend to reserve what money and architectural attention they do receive for the show of looking expensive and sometimes even quite beautiful. But rarely are attention and money directed toward bettering the daily life of the workers.

Everyone agrees that the problem is to relieve the deadly monotony of sitting day after day at a desk shuffling papers, and the alienation of being one of interchangeable hundreds doing so. And anyone with sense knows that most of what can be done about these things would require rearranging the way work and responsibility are distributed. At the same time, the setting is not immaterial, which brings us to John Deere & Co., manufacturers

of farm, construction and garden equipment.

The beginning of the story is well known. The client: William Hewitt, boy wonder who married the boss's daughter and who, along with turning a respectable company into an international contender has, with his wife, pursued a program of corporate enlightenment in the arts, including prize-winning buildings, an extensive company art collection, free concerts and more. Also in the beginning was the architect: Eero Saarinen, the most acclaimed American architect of his day, who brought along the leading landscape architect, Hideo Sasaki. The result has been described as a rugged, durable image with the serenity of a Japanese temple; one grand composition of buildings, trees, water, geese and swans. With these buildings Saarinen brought Cor-Ten into the architectural world and wed it to his then recently developed reflective glass. The whole effort was declared a triumph—strong and romantic on the exterior, elegant throughout. Hewitt was proclaimed a true patron in the best sense of the Medicis and Bourbons.

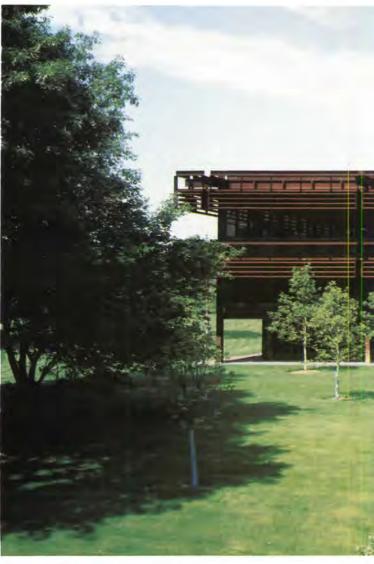
Withal, the office building (there is also a display pavilion and auditorium building) had been from the start an attempt not only to make a beautiful piece of art but to create a better building for working in, which led to several innovations. One was a tentative open plan which divided the floors with movable partitions into small communities of six to eight people. Another was a reversal, a democratization, of typical layouts so that administrators occupied the centers of each floor while secretaries and



Jon Naar

The building turns its indifferent slipped bay side to the approaching visitor (below), saving its formal address for entrance and bridge approach (right). Exterior materials and sunscreening duplicate those of Saarinen's original headquarters.





Taking the original order and stretching it.

assistants were given the coveted windowwalls. To make being cooped up all day seem more pleasant, Saarinen wove exterior views into interior spaces. The cafeteria as well as offices looked out on Sasaki's remarkable man-made landscape. So did the product display building where clients were brought to see the latest machinery. Clients were impressed and, to a large extent, workers were too.

In 1975, anthropologist Edward T. Hall and wife Mildred published a follow-up study on the building. Interviews with employees yielded some complaints about the noise level of the semiopen offices and resentment of the Deere policy that forbids any personalization of one's space—no family portraits, favorite cartoons or even self-chosen ashtrays. Others said they felt they were on display all the time which led the Halls to lament the lack of spaces for employees to gather informally. But the interviews also showed a great deal of pleasure at being in a "special" building in a lovely park.

Thus did things stand several years ago when Hewitt decided Deere's expansion necessitated another building and turned to Saarinen's long-mature protégés Kevin Roche and John Dinkeloo. Not only was Kevin Roche/John Dinkeloo & Associates the successor firm to Saarinen's, but the principals had, in fact, actually built the original headquarters when Saarinen died only days after the contract was let.

For Roche as for Saarinen, the problem was a complex mixture of designing an exquisite object and designing a sensitive stage for human activity, but here to manage these as an addition to an acknowledged masterpiece. When Roche talks about his goals, he is inclined to play down the building-as-object aspect, declaring things like "architecture is a social and personal service, not an abstract art." But the sheer hauteur of the new building suggests that he doesn't mean this quite as baldly as he states, but is speaking instead of priorities and obligations. And the obligation to provide a thoughtful place for a large chunk of the lives of 900 people is of great importance to him. In doing so, he expanded and refined ideas that have been part of his work for some time—the tie with nature, avoidance of institutional materials, inflected mass and volume. The latter takes on particularly interesting aspects in Roche's hands, for instead of merely breaking down large things into digestible pieces, Roche is involved with injecting some shard of controlled anarchy into an otherwise authoritative lucidity.

Roche responds enthusiastically when this is brought up to him. "The problem," he says, "is trying to breathe life into the building. One could just hack off a piece of the original building and plop it down a few feet away, but instead there's an intentional jumbling of parts of systems and orders that all come together and crash into each other. The question is to keep the vocabulary that produced the original building, yet break it apart enough to diminish institutionalization, to remove the relentlessness without losing the positive aspects of structure and order. Some architects take these parts of classical architecture and make dehumanized objects and some just destroy the order. But I think you can take the same thing and stretch it."

Deere West, as the addition is called, is almost as large as Saarinen's original headquarters, 200,000 to its 300,000 square feet, 900 to its 1,000 employee capacity. As a problem in adding on, it is a simple one and received a simple solution. The archi-



tect was in all but complete sympathy with the original and there was plenty of land. Thus the building all but matches the original and sits a healthy distance from it. As Saarinen's three-building complex is connected by flying bridges that plug into control central at the fourth level, so too does the sequel spin a glass-enclosed Cor-Ten corridor through the air to that same connecting floor. The exterior materials are identical, with slight technical adjustments—double glazing instead of single, aluminum extrusion frame instead of neoprene, some improvement in the tack welding techniques.

But for all intents and purposes, that wildly romantic rusting bronze grillework of ornamental exuberance sold as sunscreening and overstated structure is re-enacted next door. Even identical brick was salvaged from the yards of the company that had stopped manufacturing it. Yet the two are hardly interchangeable. Saarinen's headquarters is a metallic slit across a ravine. Deere West is an amalgam of shuffling boxes and gables. Though the ingredients are almost identical, the effect is almost diametrically opposite.

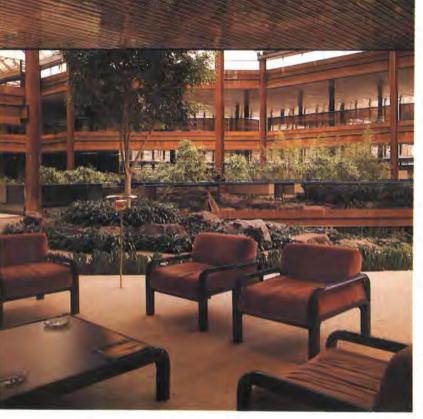
Saarinen built three separate linear boxes and laced them with bridges. Roche has built a lower, much wider box, a doughnut with its sides slipped a half bay, with service cores between. Although, each side now preserves the proportions of Saarinen's narrower 90-feet widths, Deere West has become a different kind of animal. Zigzag and indeterminate, a clash of materials as well as shapes, the alloy tactfully takes a subordinate position to the prime element. From the main approach road it is barely visible among the trees; from the bridge it is but a mirror. Saarinen's building reigns. Hierarchy, from the outside at least, is undisturbed.

On the inside, however, the building declares incontrovertibly that it has no real intention of being an annex. At first it seems barely even to be an office building; rather a rocky hillside covered with fruit trees and large southern yews, bright with flowers and tamed by intricate little paths. Of course, like the one at Roche/Dinkeloo's Ford Foundation in New York City, the 11,000-square-foot garden is surrounded by offices but, unlike that earlier project, the garden is not an elaborate atrium lobby upon which office workers look but cannot touch without the aid of an elevator. Two of the three floors walk right out into the landscape, the third has an open air balcony over it and all workers walk through the trees to get to the cafeteria.

"We are not born to work in office buildings," says Roche.
"It is the most artificial activity that exists. The human need for contact with nature is not fully recognized." And it was the garden which occupied Roche's most elaborate attentions—both the landscape design and its architectural surrounding. As a result, Deere West has not suffered the usual low prestige associated with architectural appendages.

To create the right mood, the reversal of inside and outside in the garden is as complete as could be devised. No planters, no interior materials, no sense of enclosure. On the ground there are dirt, vegetation and granite. The edges are frames in the same Cor-Ten steel with the same gravity-defying details as the exterior (balconies seem to sidle up to columns rather than actually being supported by them). A bridge that runs through the garden, from the building's entrance on one side all the way through ultimately to the main headquarters on the other, is the only object that is acknowledged to have weight. Here Roche takes advantage of the anticlassical detailing of the edges (which after





A living thing in the middle of an office block.

all was only borrowed from the exterior which was borrowed from next door) and differentiates the bridge by supporting it not with the mass-denying I-beams of the larger structure but with solid round columns, the only ones in the place, positioned firmly under the bridge. By giving the bridge weight, Roche neatly nudges the main structure closer to weightlessness.

What interior architectural elements do intrude are rendered evanescent, such as the balconies edged in reflecting glass and railed in chrome. The whole is bathed in sunlight from the skylights above. And it is skylights, not skylight. "It could have been covered with a truss or single shed," Roche admits, "but it seemed nicer to have a grid of columns going through and to have a shape evocative of a greenhouse." Roche is understating his case. That grid of columns does go through, but the garden is, if anything, indifferent to it, and the greenhouse, such as it is, seems to have felt the touch of the sorcerer's apprentice. The slight displacements of the exterior were but a prelude to the manipulations that Roche has worked in this central space.

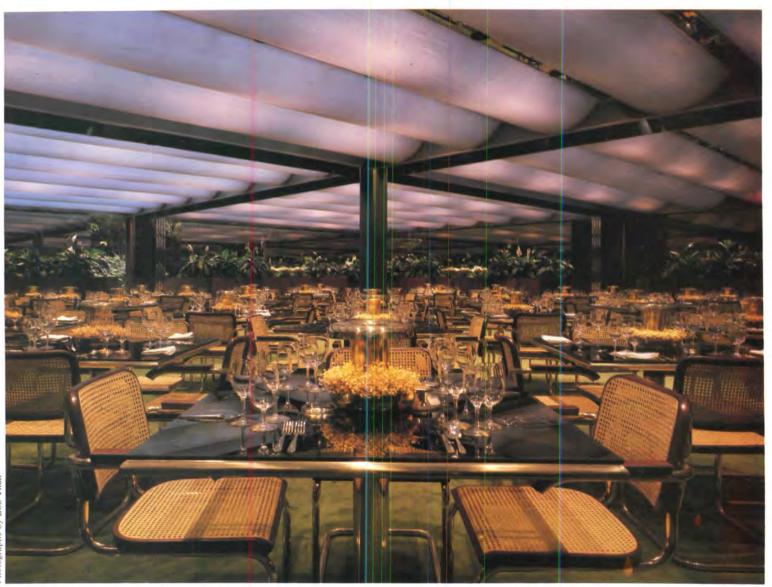
Over the whole garden are one after another long, narrow, gable-profiled glass coverings. Each is a different size—growing larger toward the center of the space and then smaller again as an overall diamond configuration made of shifting pieces. Each piece of the skylight seems slightly at odds with the pieces next to it, just as the whole arrangement is at odds with the rest of the building. Each of the glass forms has two ends which are different from each other and the forms are laid in the sky head to toe. To further activate the space, there is a quiet little battle of patterns with the different grids of the vertical and ceiling panels of the skylight playing against the grid of the granite pavers below and the slatted pattern of the aluminum ceilings adjacent.

Along with the skylight and the fundamental grid shift between offices and garden, it is the pathways that contribute the most to the delicate sense of motion. Roche acknowledges that he had a hard time with them. "You can't do gravel," he says, "because people complain about walking on it. Grass would die. Big stone slabs are too heavy." So Roche chose 3x6-foot granite slabs (the same module that runs through the building) and set about arranging them in a way that would most contradict their size, hardness and regularity. They are staggered in narrow paths that wind up and across the hill in seemingly random fashion. No edge of any path is continuous for more than one stone, so there is little sense of a solid break between trail and landscape.

At one point, Roche had sketched a rather Japanese bridge arching over the garden and had toyed with the idea of water flowing through, but had rejected these on grounds of being just too cute. "It began to look like a Trader Vic's," he sighs. "That's what haunts you when you design something as romantic as this."

Nonetheless, the garden is spectacular. It is a completely living thing (literally and figuratively) in the middle of an office block. Lest critics dismiss such glassy indulgence as inappropriate in the post-oil crisis years, it is not without energy conscientiousness. Exactly how conscientious is not available, just as the total price tag of the building is company policy secret, but Dinkeloo claims the building uses less than half the energy budget of Saarinen's. The reason why involves 20 percent glass in the skylights (letting in only 20 percent of the light), 35 percent glass in the side walls, double glazing and task lighting. The court, which contributes some passive benefits in light and heat, is not heated or airconditioned mechanically itself but serves as way station between offices and return air ducts.

At the bottom of the garden court is a terrace onto which a scattering of tables has spilled out from the cafeteria. The cafeteria itself looks more like a pâté and Perrier restaurant. The ceiling is covered in waves of billowing silk taffeta and lit from behind, curving the light into ever so subtle flashes of color. The walls are mirrored and lined with teak booths. The tables are



The garden is a magic kingdom within the building but interlaced at its edges. Balconies push forward and slip back (facing page, top); the reception area is floated out with outdoor lamps next to the latest Gae Aulenti designs (facing page, bottom); granite steps tred just over the carpet (right). Yet each juxtaposition is a clash. Above: the elegant cafeteria festooned in silk.







The bulk of Deere West is a rectilinear arrangement of individual office carrels in oatmeal and russet, covered by a slatted aluminum ceiling that reflects both light and who is in.

Sumptuous, but sometimes rigid, interiors.

smoke glass and chrome with cane chairs and brass fixtures in the center to provide a glow by night or fill up with flowers during the day. The serving area is full of granite, not stainless steel, with sliding mirrors to hide kitchen personnel and an overhead mirror on slant to whet the appetite and help choose. Roche calls the room festive, but it really goes beyond festive. It is downright sultry. And very, very elegant.

Also elegant are the more than 100 pieces of textile art from many nations, some dating back as far as 1600, selected by Roche/Dinkeloo and distributed throughout the more public areas. There are English Jacobian bed curtains in the reception area, other hangings in the stairwell, along corridors, etc., touches of softness and intricacy amidst the brick and granite.

Business begins at the upper levels of the garden. Here the organization is open plan and rectilinear. Row after row of cloth-covered carrels are lined up under a slatted aluminum ceiling. The color scheme is restrained—oatmeal, buff and russet; the materials gracious—fabric, blond wood, sophisticated synthetics; and the scale ample—desks a third again as large as the desks across the bridge. Each alcove beams fluorescent light downward to the desks and upward to the reflecting ceiling. Sound is masked by white noise.

It is this section of the building that is the most troublesome, for it is the section that ought to be most sensitive to the needs of the individual. Instead, it is the section which is most monotonous and regimented and where people are rendered most visually interchangeable. There is none of the displacement and inflection—the "breath of life"—that Roche deftly forces into the garden. Roche says the rigid rows were dictated by a desire to give as many workers as possible a view of either the garden or the out-of-doors (although the view from within each alcove

is each alcove, or craning one's neck, another alcove, most of the time), and also by the need to pack in a great many desks. The desks themselves are large but the actual square foot allotment per person (including the garden footage) is less, says Roche, than is generally used. That lack of square footage is realized by giving workers shallow carrels instead of partitioned spaces or enclosed offices.

That consideration of efficiency led to such standardization is understandable. Open planning is cheaper generally to build and always to change. More people can occupy less space. And once everything is, as it were, hanging out, there is a terrific incentive to control it. Says Roche: "The strewn around look generally looks untidy and unclean. And it's not very restful. Why should people feel they're working in an old summer closet where everything is falling off the walls?"

What was lost in space and variety and liveliness was attempted to be made up in taste and sumptuousness. And as is true of Deere's other building, workers are not allowed to personalize their shallow turf nor even to leave papers out at night. The result is office floors that look like a designed boutique—expensive, sophisticated, refined. But there is no room for work stations to reflect individual tastes nor even to be differentiated among themselves. And each person's sense of territory is cramped into the space of a large desk, without even the ability to "capture" loose space around it as would be possible in an open pen arrangement.

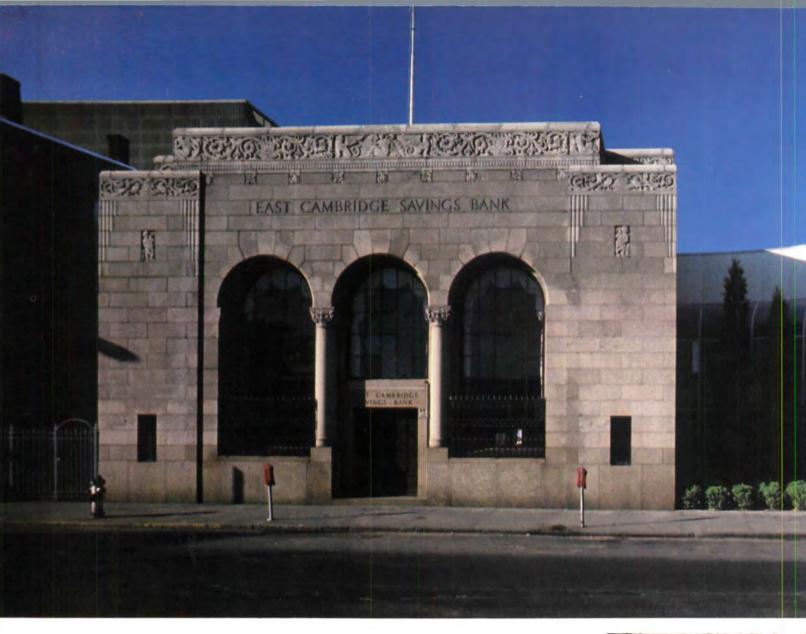
As all this exists next to a voluptuous garden and cafeteria, it is a little reminiscent of classic Italian urban living where most people lived in small, dark, stuffy apartments from which they would escape into the grand piazzas to socialize and cool off. The question is whether the idea of restricted private living and sumptuous public facilities will work in an office building in affluent America in the latter part of the 20th century.

About to be constructed on the same site is Roche/Dinkeloo's John Deere Insurance Building. The unexpectedly anticlassical design includes an exterior skin of white aluminum siding and an entrance punctuated by giant piers poised in the air.







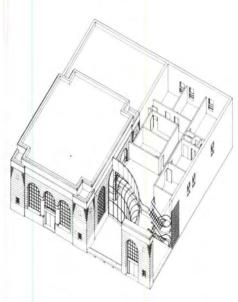


Kaleidoscope

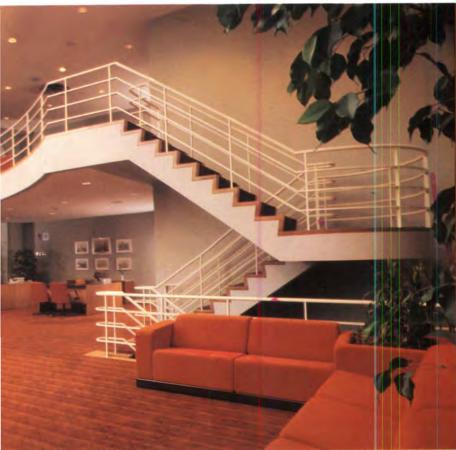
A brief look at some other recent buildings of note



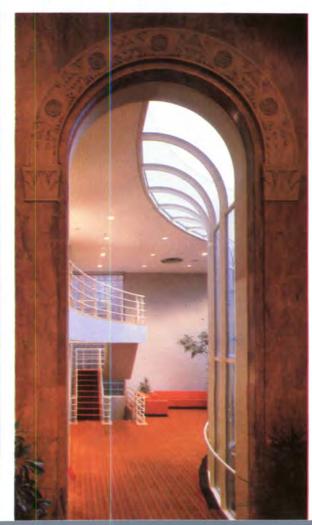


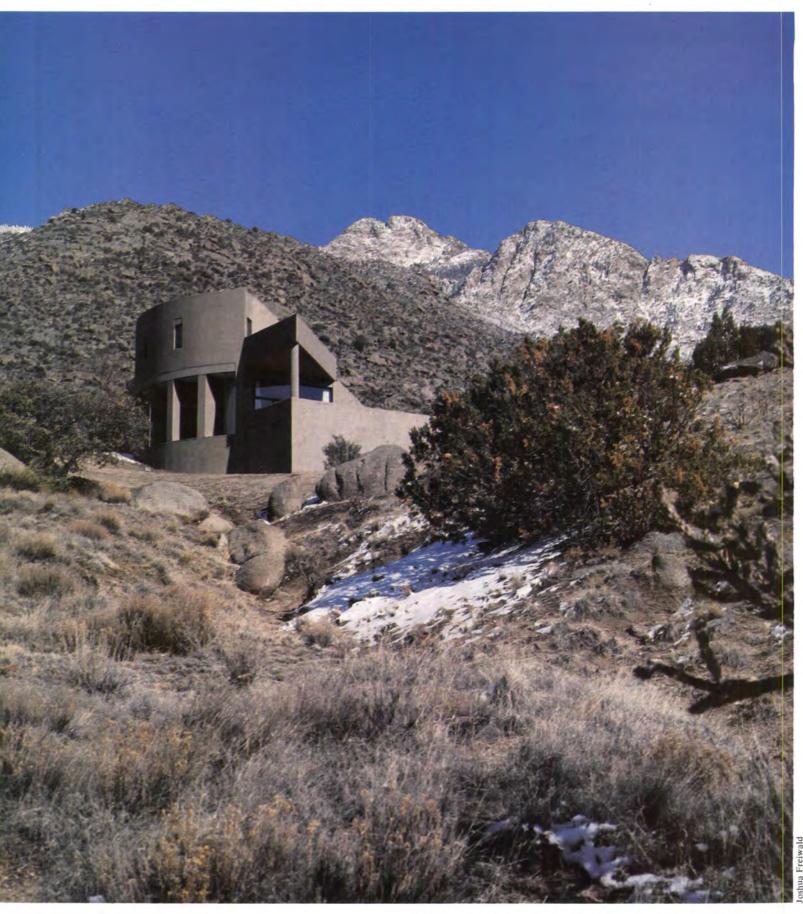


With the demise of modernist discomfort with older buildings but with one of the formation of the control of th ings but without the financial wherewithal to really match them, the question of how to do an addition is left wide open. Designer Warren Schwartz of Charles G. Hilgenhurst & Associates in Boston has attempted neither contrast nor blend but the construction of an out-and-out appendage in the tradition of the baroque—or more recently, James Stirling's Arts Center project for St. Andrews. The original East Cambridge Savings Bank is a boxlike 1931 Byzantine revival building elaborately worked by Depression craftsmen in granite, marble and bronze. The architect took this highly self-contained form, peeled the arched granite bay off its side where the new wing was to be attached, curved the wing out from that side in faceted glass and reattached the granite bay as the wing hit the street at the end. The appearance is that of a building whose side has suddenly sprung out like a Slinky. Sly but respectful, the wing provides an additional 9,000 square feet of public space and offices. The interior not merely contrasts with that of the eclectic 1931 bank but wittily contrasts with the opposing 1930s style, moderne. N.M.

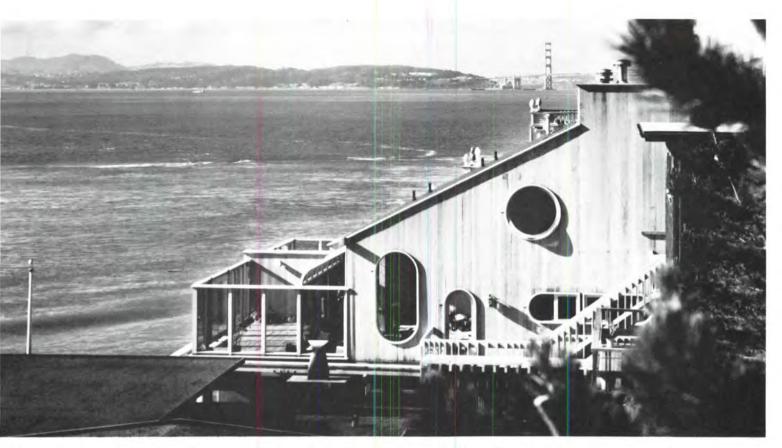


Photographs by Steve Rosenthal



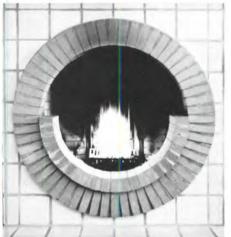


A ntoine Predock's modern pueblo takes up its watch in the Sandia Mountains of New Mexico, melding with the desert in material and color, but aloof in its sharp-edged geometry. Predock combines local tradition with contemporary sophistication also in technique by screening the sun with thick walls and deep overhangs on one side and harnessing it with solar collectors on the other. Outdoor terraces and a roof garden provide a middle ground between sheltered interior and blazing sun. N.M.

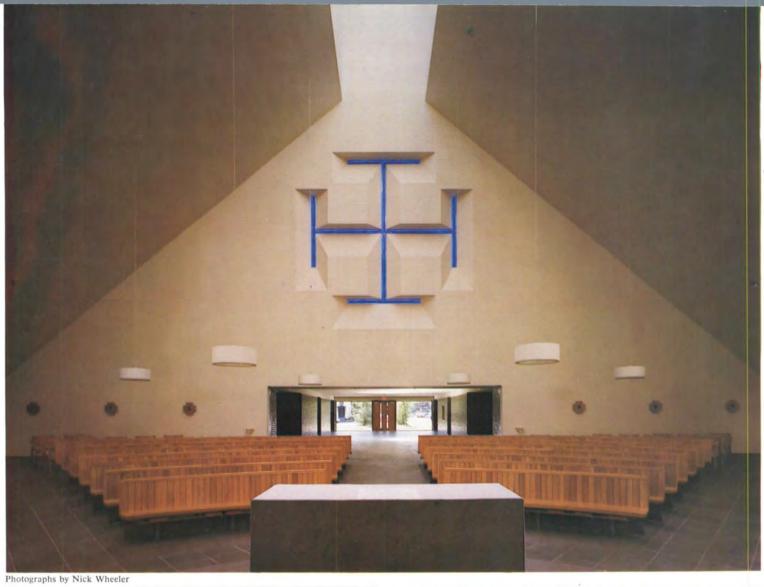


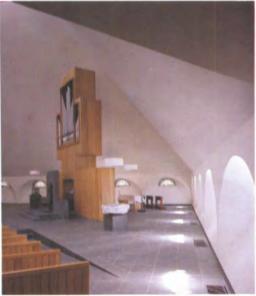
Callister Payne & Bischoff's Jones house in Tiburon, Calif., is a "water house." Says the firm, "In the past we have used a lot of exposed beams and darker wood, with emphasis on the connections, but that had to do with building in the woodlands." The Jones house, set in a steep cliff over San Francisco Bay, has a nautical flavor-in its portholes, pipes, interior fireplace aping portholes, railings and high-tech streamlining. Light is let in on all sides and through skylights, bounced off white tiles and other light surfaces in an attempt to balance the inevitable glare from seaside. On the upper story, big glass barn doors around bedroom and Japanese bath open to make the house almost like a boat on the bay. N.M.



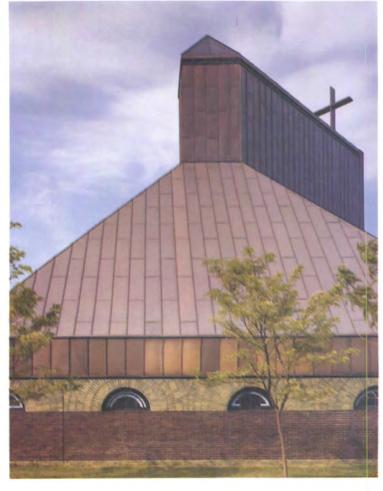








Edward Larrabee Barnes' Immaculate Conception Cathedral in Burlington has been likened to the Richardson library at nearby University of Vermont, but its historical roots go deeper than that. The form may be Richardsonian and the exterior materials (copper roof, brown and green glazed brick) individualistic to the point of being idiosyncratic, but the powerfully simple sanctuary, in its arrangement and appointments, is evocative of the early church. There is no decoration that is not integral to the building and its uses: the wooden organ housing; stained glass etching; sunken, arched windows, and most dramatic, the vivid blue glass Greek cross imbedded in the wall opposite the altar. D.C.





Taliesin Associated Architects continues to complete the buildings Frank Lloyd Wright began before his death in 1959. The latest, this free-standing bell tower in Phoenix, was erected from drawings dating from 1957, according to the architect. Topped with a four-ton gold cross lit at night from underneath, the tower joins a Wright begun-Taliesin finished church completed in 1972. Under construction at the same site is a classroom, office and chapel addition. Aubrey Banks was project architect on the tower, which bears close resemblence to Wright's Art-Deco-like spire at Marin County Courthouse. *N.M.*



Radislav Zuk takes up the recently revived issues of symbolism, historicism and regionalism in perhaps the one building type that never completely lost touch with them, the church. A professor at McGill University, he designed the Holy Trinity Ukranian Catholic Church in Kerhonkson, N.Y., in association with the Montreal firm of Gorman, Mixon & Blood—his seventh church for this faith. True not only to the liturgy but to the principle of meaning in architecture, Zuk has woven a design of equilateral triangles whose rooms, spires and roof shapes reverberate with the symbol of the Trinity while its spiral plan, courtyard and wooden columns recall the ancient Ukranian practice of worshiping in the forest. Traditional design elements merge into a stark contemporary silhouette that is sheathed in shingles in harmony with its Catskill Mountains neighbors. N.M.

A rchitect Milo Thompson of Frederick Bentz/Milo Thompson & Associates of Minneapolis suggests that the roots of this vacation house for himself on Lake Placid in Deerwood, Minn., lie in Norwegian stave churches, French châteaus, Harvard's Memorial Hall, Wright's Lake Tahoe cottages and north woods cabins. The top two floors contain a children's bedroom with dormer bunk beds, out of the middle of which the attic chimney rises. N.M.



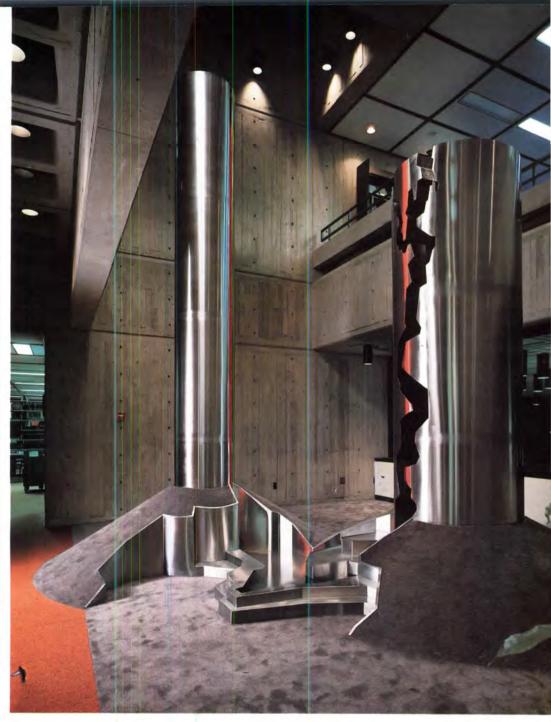




This is a kind of single-building family compound on the Massachusetts coast (Graham Gund Associates, architect). There is a year-round house for a St. Louis couple and a warm-weather house for their children and children's children. When all gather for vacations or other occasions, the main house serves as headquarters. The two and a garage ring a courtyard that is "the primary living space": sufficiently sheltered to provide protection from the wind but open to the sun and penetrated frequently to let in views of the sea. The whole is plainspoken and angular, and from the court the structure pops up and down, sending out projections of various kinds, reading almost like a very large play sculpture. The court is traversed by bridges linking the houses at their second levels and there is a thirdstory deck resembling a crow's nest. D.C.

Aerdesign

lready a landmark, Charles Moore's A Piazza d'Italia in New Orleans (below) is a far cry from the cool abstraction of most recent plazas. There are gateways -a cardboard-like miniature campanile and a ghostly skeleton classical temple. In the center is St. Joseph's Fountain, a neonlit collage in honor of the city's Italian community. A huge map of Italy is the focus, built of alternating slate and cobblestone layers, along which the Arno, Po and Tiber flow toward the Tyrrhenian and Adriatic Seas. Framing and transecting the "boot" are fragments of colonades, each a stucco and stainless steel interpretation of an architectural order-Doric, Ionic, Corinthian, Tuscan, Composite and, a new contribution, Delicatessen. The cartouches with Moore's likeness spouting water were a surprise from his colleagues at August Perez & Associates of New Orleans, for which he was design consultant on the project along with Urban Innovations Group of Los Angeles. Another supermap, this time of New York state, is the theme of Moore's fountain for the library of Rensselaer Polytechnic Institute in Troy, N.Y., done in conjunction with Moore, Grover, Harper of Essex, Conn. (right). This fountain tends toward pure forms, supposed to represent the four elements, into which the regional specifics have been clawed, like the Hudson River which etches down the pristine stainless tube representing water. The base stands for earth, the hot red neon tube for fire, and air, presumably, for air. N.M.







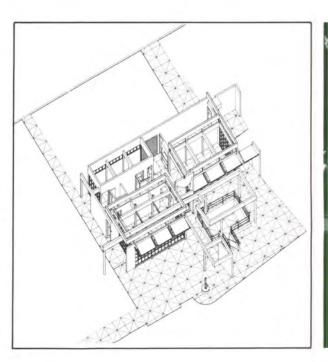


Ruyell Ho



dedar siding attached to aluminum panels respects the 18-acre wooded site without losing the cost advantages of curtain wall assembly in this speculative office building by Hammond Beeby & Babka in suburban Chicago. Bands of black-framed windows whirl across the wood in moderne fashion, narrowing to thin strips for computer areas, pushing to full height for entry and dining hall and zigzagging around corner stairs in a particularly deft adaptation of American colonial. The building is arranged in four wings pinwheeling around a skylit atrium. A small cubist guitar-shaped wing houses conference rooms for client meetings; the other three, offices. Without breaking the regular planning module and structural system, the south wing is also curved slightly as a gesture to the visitors' approach. N.M.

The Sarah Campbell Blaffer Pottery Studio by Richard Meier & Associates is a foundation-owned pottery school in New Harmony, Ind. Done at the same time as his better-known New Harmony Atheneum, the studio is composed of interlocking planes of varying levels of transparency, ranging from post and lintel through glass and glass block to punched wall and solid wall. The planes define working areas, exhibition spaces and patios, regulating movement through them and suggesting a graduated transition from inside to outside. Dead white against the small town landscape, the studio appears as a carefully controlled, almost ornamental puzzle in which threshold and edges hold the positions of prominence. N.M.





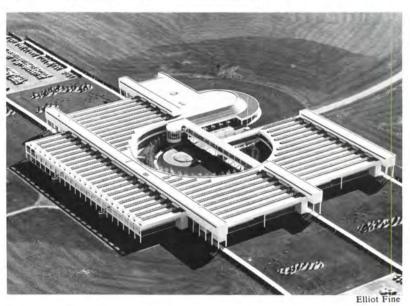


In a neighborhood of single-family pastel stucco homes from the 1930s, architects Alan Tossman and Steve Wiseman designed, developed and built this five-unit apartment building. High on their list of priorities was a courtyard for every unit, two-story spaces and low cost (\$29 per square foot). Color, invariably the inexpensive answer to decoration, dresses up the simple stucco in the general tradition of the Spanish Southwest, in this case by heightening the articulation of planes in the specific tradition of Schindler, both outside and inside. *N.M.*



Hedrich Blessing

The headquarters for the Aid Association for Lutherans, an insurance organization, spreads across the farm country near Appleton, Wis., echoing its flatness. The two-story, 500,000-square-foot building (John Carl Warnecke & Associates, architect; William Pedersen, project designer) is a rectangle with an arc-shaped courtyard scooped out of the center and another arc appended to the facade. The roof is striped with skylights that are the primary source of illumination, permitting the planned doubling of the space by simple extension of perimeter walls. On the second floor, light from the skylights is diffused by fabric "socks" hung around mechanical services (left). D.C.





Norman McGrath

Angeles, coped with the 250,000 square feet of Dallas' North-lake Community College by slicing it into a series of low pieces and rolling them gently down the hill. An outdoor terraced garden connects the various elements and levels together, providing exterior circulation flanked by decks and landscaped courtyards that face toward southerly winds and distant views of the Dallas skyline. This spine is connected to and paralleled in section and plan by an internal vertical and horizontal circulation system adjacent to the classrooms. *N.M.*



Hedrich Blessing

Donald Stull's Jackie Robinson Middle School in New Haven, Conn., is intended as an antidote to institutionalized design. It enthusiastically borrows from the arsenal of high-tech for lightness and brightness. It is wrapped in translucent Kalwall, pierced by bands of windows, and decorated with gaily painted exposed ductwork. To mitigate the feeling of being lost in a big place, the entry has been placed at the crest of a hill while the other two floors slide down it so that only one story is visible from the front. Moreover, the school is divided into three "houses," each with its own protruding landmark-like stairtower and separate entranceway, and designated with a primary color. The entries, in keeping with the tech image, are space age skylit stair/bridges that lead through the library to classrooms. N.M.

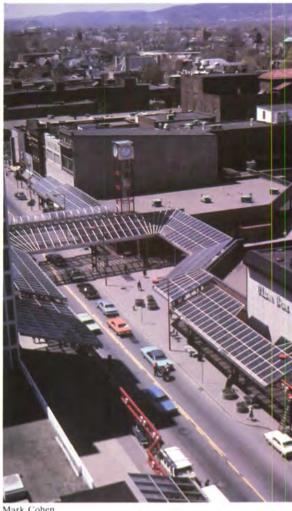


Norman McGrath

Bohlin Powell Brown's high-tech urban revitalization is in its home city of Wilkes-Barre, Pa. A 65-foothigh clock tower in red pipe marks the crossing of Main Street. And for a little tongue-in-cheek fantasy, peopled benches pop up here and there. Underfoot is a random archeology of petroglyphs—little etchings into the pavement of famous architecture, Pennsylvaniana and private symbols like World War II planes. Planner for the downtown renewal program was Direction Associates of Spring House, Pa. N.M.







The double function of this district office for the Public Service Co. of North Carolina in Durham provided the design cue for Raleigh architect Roger Clark, design consultant for the project to John D. Latimer & Associates of Durham. The utility building is both an office building and a public building and the two are expressed in overlapping rectangles whose points of juncture provide the key elements of the design. Around the building is extensive screening which, while saving more than 40 percent on energy consumption, serves to increase the impression of mass in order to compensate for this being a small building on a prominent site. On the northeast, the massing erodes, tumbling down the hill, in acknowledgment of the residential area to that side of it. N.M.







Mark Cohen

Answers to Some Questions That We Didn't Quite Ask

It started last year with our first annual review of new American work when we asked several architects and commentators to discuss "the emergent directions of design today." We thought it a bad idea to ask about directions again only one short year later so for our second annual we picked a similarly diverse and thoughtful group and asked them to write about the external forces that are influencing current design. We thought it was the kind of question that if it were asked in 1930 might have yielded discussions of World War I or de Stijl art; or in 1630, the Counter-Reformation. And we were curious about the kinds of things that might be as seminal now. What we discovered is that at this juncture, when values are so hotly debated, almost everyone is more interested in discussing what architecture ought to be rather than what is making it what it is right now. Concern with what architects unconsciously absorb from the culture they live in paled beside the impulse to consider what architects can and should consciously attempt. We feel that this discovery is as telling of the circumstances we live in as are the essays themselves. And gathering insights into those circumstances, after all, is why we asked for them in the first place. The editors.

By Robert Campbell

If the JOURNAL had asked anyone, say 20 years ago, to name an "external force" that would influence design, the likeliest answer would have been "industrialization of the building process." We can probably expect a similar level of accuracy this time.

It's sobering to recall that nobody, in 1960, foresaw the influence of the energy crisis, environmentalism, the preservation movement, Robert Venturi, Jane Jacobs, architectural psychologists or the collapse of large-scale, marketaggregating European-style building systems in such experiments as Operation Breakthrough.

A view of today must come against the back-ground of those 20 years. If "industrialization" was the buzzword then, today we have "art" and "energy." No doubt both are important influences, but the bigger problem lies in the space between them. It's the fact that the people who worry so much about art and Lutyens don't talk to the people who worry just as much about the sun and rock-storage, and that neither talks much to anyone else.

There's no virtue in so much mutual incomprehension. I'd therefore suggest as candidate for "external force" the public's need and demand for some consensus about what constitutes good environment.

The reason we have so much confusion is that when architects fail, they do it in a characteristic way: They give up on the complexity of real design and settle for a small part of the whole, then trumpet their discovery of that part as if no one else had ever noticed.

For instance, it's surely true that one—just one—criterion of a good building is its thermal performance. But to build a whole life style and design philosophy around this one criterion, as one sometimes sees in the solar movement of northern New England, is silly. It's surely true, too, that another single criterion of a good building is that it offers some interest from the point

Robert Campbell is a practicing architect in Cambridge, Mass., and architecture critic for the Boston Globe. of view of art and the history of esthetics, but to build a whole philosophy around that criterion, as some do in, say, New York, is silly too. It's about equally notorious that some of those high-style New York houses are thermal basketcases as it is that underground solar houses offer little in the way of esthetic interest.

And that's just the beginning of confusion and splintering. The social researcher, for instance, may claim that neither the underground nor the high-style house is even livable, or that neither resembles most people's "image of house."

Still other groups clamp onto other fragments of truth. The over-zealous preservationist strips the lovely black glass moderne storefront from the brick Victorian main street. He knows that people value the past, but he doesn't know why: For him, the past only happened once. On the other hand, the over-zealous redeveloper tears

I look forward to the day, which certainly hasn't occurred in my lifetime, when most people understand and like most new buildings.'

that whole main street down to replace it with something new. Both the preserver and the destroyer share the same illusion, that a place without time can have meaning.

Oldness and newness are good, so are art and frugality. A new consensus is going to have to stretch to embrace all those fragments and many others. But it will surely come. Exciting as the present period is, with all its turmoils and debate, all its fresh ideas and breaking down of dogmatisms, people won't tolerate it long because there isn't enough meaning in a babble of voices. Such periods have a natural span.

This time the consensus had better include not only the architects, as modernism did, but more of the public too. Architects can't perform well without a supporting, critical, buying audience. I look forward to the day, which certainly hasn't occurred in my lifetime, when most people will understand and like most new buildings—even prize-winning buildings. That will be a milestone in the mutual education of performers and consumers that both can be proud of.

Confusion and excitement within a profession may stimulate the practitioner or the student, but to the public they look like madness, a Trotskyite proliferation of competing cells. What the public is surely demanding is architecture that supports our sense of who and where we are in space and time, that helps resolve the existential dilemma, the panic of floating moorless in the void that is always at the fringe of consciousness. To do that, architecture must again create recognizable, nameable places Beacon Hill, Trafalgar Square, but also your living room or mine-that are unique as place and also point both backward and forward in time. Good environment is layered with the visible or remembered ghosts of past time, and it must incorporate as well the visible or imagined ghosts of future change. Everyone needs that. My own house in Cambridge, Mass., would be boring without the ghosts of the past called up by its 1880s Italinate detailing and by the recollections of older neighbors. It would be equally boring if it didn't contain, wherever I look, the ghosts of unborn improvements we plan some day to make.

Spatial and temporal continuity—it was modernism's attack on these twin stays against confusion that made it the enemy—will be basic to the consensus that will return meaning to our environment and make it again precious.

By Juan Pablo Bonta

The masters of the modern movement claimed that their work was congruent with external forces peculiar to "the spirit of the age." (Mies: "Architecture is the will of the epoch translated into space.") Their view was based on the Hegelian notion of unidirectionality and inevitability of historical change, as applied to art history by Burckhardt and upheld by architectural historians such as Giedion and Peysner.

The alleged conformance with historical development lent modern architecture its legitimacy, its superiority over revivals. The influence of external forces appeared not only as inevitable, but as desirable. Architects were prepared to go a long way to make sure that they were responsive to such influences. This was somewhat incongruous since, if the forces were really that powerful, their influence should have permeated architecture anyway.

Submitting to real or imaginary external forces may have lent modern architects a certain credibility, but it also undermined their self-reliance. If architecture had to be justified on nonarchitectural grounds, its ability to stand on its own merits was necessarily impaired. In their effort to accommodate external forces, architects may have compromised their power to become a cultural force themselves, aimed at modifying rather than accepting their milieu.

This state of affairs has changed drastically,

Juan Pablo Bonta is professor of architecture at Ball State University in Muncie, Ind., and author of An Anatomy of Architectural Interpretations: A Semiotic Review of the Criticism of Mies van der Rohe's Barcelona Pavilion. Writers such as Norris Smith and Watkin have challenged the existence of an unhaltable "trend of the ages," while architects in America of every coloration have disentangled themselves from modern dogmas, and re-established architecture as a self-sufficient discipline. External forces are surely influencing it; but the idea that architects should take deliberate action to make sure that their architecture will comply with forces is definitely passé.

But which are the forces influencing architecture? Technological and social factors have long been overrated. The force that is having the biggest impact on American architecture today is one that does not need the architect's permission to operate: verbal language.

'Specifying in literary form the thoughts or feelings that architecture is to elicit is becoming central to our transactions as it was in the 19th century.'

Verbiage was despised by the modern masters. (Mies: "Don't talk; build!") The antidiscursive prejudice was particularly strong in this country, where it fitted the American self-image of practicality, expediency and down-to earthness. This has been changing. Architects and their public are becoming more vocal and more articulate. Magazines are flourishing that would have been rejected as incomprehensible only a decade ago. Language is affecting our ways of perceiving architecture and of teaching it: The studio is losing ground before the seminar room. Specifying in literary form the thoughts or feelings that architecture is to elicit is becoming central to our transactions with architecture, as it had been during the 19th century.

Future generations may find our buildings difficult to understand, just as we are perplexed by Victorian architecture. They will have to study what we meant; or else, they will ignore it altogether and interpret it from the perspective of their meanings-not ours-which is what we do with our historical environment. Preservation and restoration tend to flourish when architecture is approached in a literary manner. The old empty building fabrics become available to be filled, so to speak, with new literary meaningseach generation providing its own. On the other hand, when the prevailing belief is that architectural significance, or meaning, or identity, is embedded in the stones themselves, the physical environment must be rebuilt each generation.

There is a bad side and a good side to the influence of language over architecture. On the bad side, verbalization can become a poor substitute for the architectural experience. Language in this case becomes a getaway, as recourse to the spirit of the age has been before.

On the positive side, linguistics can provide a model to think about architecture. Architecture is not a language—but there are certain analogies. Some of the social forces operating upon architecture are the same forces that shape language. Buildings ought to be seen less as material objects and more as social phenomena. In the process of so doing, architectural theory will move away from the physical sciences and come closer to being a human science.

By Jorge Silvetti

For at least half a century, architecture has supposedly been tied to, influenced by, explained through or "solved" by means of external forces, be they techniques, technologies, intellectual disciplines or alien facts or forms. What in the 1920s began as a promising renewal of the sources of architecture-a dramatic release from the restrictive boundaries within which architecture had operated since the Renaissance -through the presumed alliance of a quasiscientific rational process, with a seemingly inescapable "spirit of the times" and a healthy incorporation of new figurative elements extracted from modern technology, culminated in the '60s with the total dissolution of architectural specificity. The "architecture as . . ," syndrome dissipated whatever was left of the discipline so that it became, in essence, a case study at the service of operations research, behaviorism, information theory, semiotics, etc; or it became the ultimate extrapolation of technology as represented by the fantasies of Archigram, a tool of social critique like Superstudio or Archizoom, or naive hyperfunctionalist methodology.

While avoiding an assessment of their appropriateness or value as applied techniques or speculations, let it suffice to say that their major failure was due to the erroneous notion that these extra-architectural endeavors were indeed sources of architecture. That they could be prescriptive theories rather than intellectual en-

'In fact, architectural meaning does not derive from words but from architecture.'

deavors that might help to explain some aspects of the process of design, but not to produce it. Thus while semiotics or operations research might help to describe and explain the structure of the architectural symbol or the nature of the design decision process in architecture, respectively, they cannot generate architecture itself. These confusions represent still another dangerous characteristic of the ideology of the program, which presupposes that forms can be derived from words. In fact, architectural meaning does not derive from words but rather from architecture itself — its elements and its language.

Paradoxically then, all those disciplines and outside forces, by creating a vacuum where the expertise, craft and art of design once existed, have helped to restore the belief that it is within architecture itself and within its tradition that the "generating force" is to be found. Ironically, to identify the one factor that is influencing current design is to point to architecture itself, recovered and reinstated as a discipline. It is in this sense that the recent return to history has to be interpreted positively, for it has become apparent that the approaches of the recent past have nourished a generation of architects who, in short, do not know how to design. Thus, it is natural that architecture should now turn to itself to find its own history as a source of

Jorge Silvetti is a principal of Machado & Silvetti in Boston and associate professor of architecture at the graduate school of design, Harvard University, knowledge and inspiration. As with any force, it will prove beneficial or destructive, depending on the quality of its interpretation and application.

Certainly, there exists today a kind of historicism in design which has been marketed as yet another product for consumption, with its results of debasements and degradation of the elements it uses. But there exists as well a serious kind which adheres to the established tradition of thoughtful, measured and constant reinterpretation of historical material. Modern architecture has also been historicized and become a subject of interpretation. Key concepts, like that of architectural type, have become active again. This has happened both as a critique of the programmatic approach and socalled scientific methodologies, and as a recognition of the way in which the creative process really works, which is not by constant "invention" but as an inspired transformation of the known.

At the level of theory, the disciplines that have dealt with explanation of culture-anthropology, linguistics, etc.-have indeed helped to clarify the panorama and to reinstate the process of architecture in terms of its own mechanisms and traditions, but only as long as they have remained outside the realm of architectural production. I hope, finally, that we will concentrate our efforts on rediscovering the force of architecture and its mechanisms of operation. The task of rediscovery is tremendous, for much repression has plagued architectural thought in the past decades. Only when we have restored architecture in its entirety will the other forces begin to fall in their proper places. There is room for technological innovation, but not technological determinism; for programmatic response, but not formal derivation from programmatic requirements; for historical allusion, but not banal transposition of architectural signs, and for formal investigation but only in the search of architectural qualities.

By Romaldo Giurgola, FAIA

What is meant by the phrase "current design?" The use of this term indicates one aspect of architecture which is limited in scope and time, reflecting a particular condition of taste or cultural situation. It assumes that design can be understood as a perennially changing aspect of architecture, bound to transient esthetic perceptions rather than fundamental conceptual positions. In fact, at the present time, an array of figurative expressions seems to be prevalent in architectural design. Although the spectrum is wide, and the statements are shocking, they all essentially derive from that modern movement in architecture which they very often claim to oppose. While current design hardly abandons the technology, vocabulary of forms and premises of human accommodation of the modern movement, it is nevertheless to a greater extent based upon imagery, illusions and an architecture without function looking toward nature on one hand and to the figurative world on the other, thus escaping the crucial critical step of rational thinking.

Memories play a large role in such design,

Romaldo Giurgola, FAIA, is a principal of Mitchell/Giurgola in Philadelphia and New York City, and Ware professor of architecture at Columbia University. memories which often appear as a vague desire for play, expression, poetry or symbols. In this way historical references are liberally included in current design, which nevertheless claims no interest in the future, probably because of its minimal real interest in the past, trivialized as it is by the consumption of outmoded styles. It proclaims a concern for taste and beauty, as if this concern had been unknown to previous conceptual positions. Yet, like desiring wealth, desiring beauty in this limited sense is mere hubris,

If the art of the environment is to communicate . . . it must be generated by integration of various aspects of human behavior.'

since the only aim of any honest artist is "good," not beautiful, work.

Thus, having been generated in an atmosphere of false intellectual criticism, the phrase "current design" most frequently refers to the accepted coexistence of several modes of design in the same building, if not in the same complex or in the same neighborhood. While all this does not necessarily indicate a lack of conviction, it certainly represents the renunciation of any attempt to search for a unified view of all the forces that shape architecture.

As a consequence, to attempt to identify specific disciplines or aspects of society as major forces affecting current design no longer seems easy. Design seems to draw little inspiration from science or technology and even less from the simple motivation of the social condition. On the other hand, it may be possible to explore to what extent the more ambiguous field represented by the cultural traits of a society affects current design. With its connotations of fragmentation, metaphor, intellectual explanation and self-contemplation, current design seems not only to reflect, but actually to promote a culture that has been at its best called hedonistic, narcissistic, alienated, self-gratifying, impulsive and despairing. Most views of contemporary society have been rather disheartening. "Is there hope for man?" exclaims Heilbroner at the peak of one gloomy prediction.

Taking into account that dramatic failures are always more popular than signs of life, and that simple despondency is often taken for permanent decline, nonetheless, this is a culture whereby the present is favored above anything else, particularly above the future and the past. As always occurs in such a culture, the future is hardly questioned (since it only happens), while the past is treated as a disposable commodity, in no way better than life today. Far from being a source of learning, it is seen only as an inconsistent sequence of overlapping nostalgic images. The ancient Romans shared this view of the past, and their art was forever incapable of emulating the sophisticated expression of the Etruscans or the Greeks. One finds the same point of view in the culture of the Industrial Revolution before the arts and crafts movement and the Bauhaus.

Current design is affected by a culture which abounds in historical recollections, far distant or only a few years away, but they are far from being loving recollections, like those of the thinkers of the Renaissance. Instead, current design uses historical assumptions merely to exploit the prejudices of a society on behalf of the status quo—a culture always open to new

ideas but lacking real convictions—avoiding the intimate, the reserved, the principled as a trap; preferring the exciting, the unusual, the complex.

Perhaps it may seem surprising that the general implications of our culture should be influencing architectural design both in broad and yet very specific ways, especially in a time in which the cry of many critics has been that we must "talk only of architecture." Yet this rallying cry may in itself be one of those manufactured illusions so typical of our culture. After having maintained the value of specific influences in shaping design for so long, perhaps we may perceive as a sign of new life the ability to relate these to the general cultural condition. For if the art of the environment is to communicate in the truest sense, it must be generated by an integration of various aspects of human endeavor.

In architectural design this effort can be productive only when the means are simple, clear and expressive to those who are going to live in the environment. Essential to this endeavor is a sense of the past, to which the modern movement in architecture belongs as well, and an awareness of history not as a fashionable and disposable commodity, but as a space for humanity which will endure and expand as long as there are people on earth.

By John F. Hartray Jr., FAIA

Architects are handicapped by the widening gap between theory and practice. The bright young formgivers are marching in all directions at once under the banner of pluralism, and offer us a wide selection of narrow philosophies. They work in isolation and have agreed to tolerate rather than respect one another.

If the leading edge of the profession is going in all directions, its center must be standing still. More accurately, it is operating on momentum developed over the past two generations. It lumbers on with little theoretical support or critical notice competently fulfilling the unremembered promises of yesterday's theorists. Materialism may be enjoying its golden age at a time when we have ceased believing in it.

While there is little doubt that the current proliferation of architectural theory is a manifestation of this larger disenthralment with the idea of material progress, it is hard to believe

'Architecture, in spite of Bauhaus public relations, has not been at the cutting edge of technology since the age of the cathedrals.'

that we have no responsibilities beyond individual artistic expression. It is also hard to believe that the International Style is in a class with Plutonium as a threat to humanity.

Architecture, in spite of Bauhaus public relations, has not been at the cutting edge of technology since the age of the cathedrals. If nothing else, our handcrafted, postwar style remains useful as an appropriate symbolic environment for bureaucracies and boilers. The application of

John F. Hartray Jr., FAIA, is a principal of Booth Nagle & Hartray of Chicago. ornament from a humanistic age to these structures is misleading.

To fulfill its responsibilities, our profession requires a theoretical foundation equal in breadth to the spectrum of concerns it is asked to face. This probably requires the expansion or modification of theories that have almost worked in the past rather than a new collection of conflicting individual revolutions. We have entered an age where continuity may be more useful than brilliance.

By David Gebhard

The often humorous pretensions of architecture as High Art abound in the world around us. New captions both symbolize and in themselves create new responses. The current in-phrase "postmodernism" should be seen for what it is—namely a caption. Like the caption which it replaces, "modern," it signals that architects, critics and historians wish to maintain the time-honored tradition of distinguishing between architecture and building. The caption of postmodernism has freed us from the rhetoric of architecture as a social instrument, and now we can once more (without hiding) concentrate on that which architecture has always been about—the creation of images.

—the creation of images.

The "New York Five," the "Chicago Seven," the Los Angeles "Silver Group" have not only nudged architecture back into a more traditional stance, they have gone a step further. For now architecture and art share the same environment—the pristine and secluded world of the art museum/gallery. The new reality which they are pumping for is the reality of the language of drawings and models. The International Style

One advantage of postmodernism: 'It is easier to collect drawings, models and bound texts than buildings.'

had its own vital connective links with the world of art, but the product itself (the building) enjoyed its prime existence within the conventional framework of architecture. Postmodernism should be seen for what it is—a comment on architecture and, at times, a profound, erudite and often purposely obscure one. This phase of postmodernism entails many advantages, one of the most impressive being that it is easier to collect drawings, models and bound texts than it is actual buildings. Nor in the decades ahead do we have to clutter up the National Register of Historic Places with them. Instead, the drawings or models can receive loving care from our projected national museum of the building arts.

The postmodernism of the New York Five, of the Chicago Seven, of the Los Angeles Silvers has generally produced a product which can only be read when a caption has been provided. The visual element has become secondary. The built or projected building now is used to illustrate the caption. Such reversal of roles is

David Gebhard is director of the Art Museum of the University of California at Santa Barbara, and author of, among others, A Guide to Architecture in Los Angeles and Southern California (with Robert Winter), and 200 Years of American Architectural Drawings (with Deborah Nevins).

intellectually fascinating; visually it is a disaster.

Charles Moore's recently completed Piazza d'Italia fountain in New Orleans points up a very difficult facet of postmodernism. Here the visual predominates; the ideological caption expands and deepens our perception. It is intriguing to note that the controversy aroused by the fountain has to do with Moore's open usage of historic imagery. His borrowing does not differ from those of his New York Five colleagues, except that he has leapt back into the Beaux-Arts and before, while they discover their imagery within near-history.

The historicism of Charles Moore, Robert Venturi, Philip Johnson and Robert A. M. Stern should provide us with a visual richness which has, on the whole, been lacking in architecture since 1945. My own hope is that these practitioners will gently push architecture back into a traditional stance of concentrating on readable visual images. On images which have the complexity of layering so that they can assume visual/ideological meaning for a wide audience.

By Richard B. Oliver

I regard the most interesting influence on architecture today to be the return to favor of a view of the architectural past as a living tradition, a creative resource and a treasure trove. This renewed interest in tradition has been heavily touted as an esthetic reawakening, and has been one of the cornerstones of the "postmodern" discussions. But, in fact, architectural tradition can inform us about issues as diverse as ornament, construction and energy conservation. Ultimately, this viewpoint suggests that the designer can fuse the lessons and even the forms of the past together with a set of contemporary concerns into a new architecture.

For most of this century, modernist architectural theory has disdained tradition, and has discouraged a review of the past as an aid to designing contemporary buildings. Buildings were valued for the degree to which they departed from traditional precedent. Not surprisingly, one powerful building type to emerge from modernist thinking has been the most different of all: the hermetically sealed, minimalist glass box which, not incidentally, has been a profligate consumer of energy. This modernist view of the past could be likened to fission.

By contrast, the recently renewed influence of tradition, of precedent, of the "tried and true" has opened up many avenues of exploration in areas of ornamentation, energy use, materials, construction, landscape. Suddenly, the whole of architectural history has been opened up as a literal sourcebook. Particularly ironic has been the discovery that there is considerable license to be original within a traditional architectural approach. This view of the past could be likened to fusion, a view which fuses the past and the present into a useful and liberating sense of continuity.

This renewed value of tradition has an ironic twist to it. While the main thrust of younger theorists and practitioners has been to reconnect with late 19th and early 20th century styles and with contemporary vernacular idioms, the fact remains that the buildings and the style which are popularly regarded as modern constitute one

Richard B. Oliver is an architect and curator of contemporary architecture and design at Cooper-Hewitt Museum in New York City. of the most powerful traditions within which we all work. That is why the word fusion is such an appropriate phrase, because the reawakening ought not to be just another so-called revolution that rejects one style in favor of a new style. Instead, the most liberating lesson from the past ought to be the validity of a multiplicity of styles and approaches to contemporary building.

By Bruce C. Webb

Architecture currently is exhibiting an intense fascination for the architectural medium and a rage for the media event which transforms pale realities into vivid images. The emphasis on architecture as communication has rekindled an interest in the linguistic analogy as a model for exploring the architectural medium and parallels the interest in the medium in certain modern, critical theories in poetry. In the poetry of this century we see a vigorous interest in the analysis of poetic structure and experimentation with the language medium itself, a shifting of interest from what a poem means to how a poem means. A poem is not about something; it is something. "The poet has but a particular medium to express," T. S. Eliot wrote. "A medium which is only medium."

The situation in poetry is only a more manageable illustration of the wider effects of media orientation. The pervasive spread of media technology into all aspects of contemporary life has created a world of altered perceptions where traditional distinctions between illusion and reality are no longer valid. The interests of the medium are for the peculiar and unexpected forms which the medium uses to give shape to experience. Television provides us with a particular point of view which has nothing to do with verisimilitude but rather with the issues surrounding the television medium itself. We are caught up in questions of how far can they go before the frame surrounding the medium cracks; how can the media detective unravel the crime and get the girl in the 10 minutes left to the show.

The fascination with Disneyland-Disney World, which seems to be the premier community planning image-model for postmodern architecture, comes not from how closely the theme parks resemble other realities but rather how closely they resemble other media, particularly film, not only in the way they establish a particular, esthetic point of view but also by the way in which events of the amusements are made to follow a kind of experimental action line like the plot of a film.

Architecture has participated in the propagation of powerful illusions which are both a fundamental part of the architectural art and also a kind of souped up commodity which can be marketed to extend certain social, cultural and political mythologies. Magnificence can be celebrated whether the conditions for the celebration are authentic or not. Just as the poet laureate was called upon, on a regular basis, to use the poetic medium to surround ordinary events with an aura of magnificence. "The making of illusions which flood our experience," Daniel Boorstein wrote in *The Image*, "is the business of America."

Marshall McLuhan brought to popular consciousness the pervasive effects of the media

Bruce C. Webb is an associate professor, college of architecture, University of Houston.

work-over. Media, according to McLuhan, were not simply the explainer of some basic human environment; rather, they were actually creating a new new environment, one which drastically alters the way in which we perceive and react to things. "Any understanding of social and cultural change," McLuhan wrote, "is impossible without a knowledge of the way media work as environments."

The media environments which McLuhan describes are more pervasive and more capricious than the environments which architects have traditionally created. They surround and vibrate through all experiences including the architectural, creating a primary orientation to the medium and a preference for the pseudo-event. In front of the TV, we can be everywhere by being nowhere, involved through detachment. You don't turn your head to look behind; the camera does it for you.

Architecture presents a rather different situation. Its realization is in terms of real materials doing real work, as primary signs indicating actualities of space and experience. Its explicit content is the shape of human activities. Postmodernism by reflecting on these actualities is engaging in a kind of self-referencing activity which draws attention away from the primacy of the experience by focusing on the medium which gives shape to experience.

To our previously content-oriented world, the idea of actually looking at the medium is at first a bit disorienting. Utility and function have been made the apologists for the media event in architecture for a long time. Postmodernism simply helps to persuade us that this is so. I have never found very satisfying the argument that the effusiveness of postmodernism is simply a reaction to the stiff, ideological and stylistic conventions of doctrinaire modern architecture. Influences run deeper. Somewhere in the late

'Official culture is striving to make the new media do the work of the old. Architecture is in full reaction, trying to see what can be done by reworking yesterday's tools.'

'60s architects began to lose their claim to the extravagant idea that architecture could or should change the world.

Without substantial changes in the way societies organize themselves and conduct their business, architecture is left, like the poet, with a medium which is only medium. And one might as well be about the business of celebrating and exploiting that medium. The fact that capping off a highrise with a Chippendale pediment may be a cultural pseudo-event is simply not an issue for the medium.

Where previously the form was expected to be a unifying statement of completed synthesis presenting a singular experience, now the architectural code is dissected in metalinguistic and metacommunicative explorations, revealing the way buildings organize and communicate meaning. Function may be deliberately subverted to call attention to the duality of form and content. Anachronistic images are inserted into buildings as iconic decoration. Other images are quoted from high style and vernacular sources,

continued on page 273

he American Institute of Architects pays tribute annually to design excellence, bestowing honor awards upon selected projects completed in the past seven years. Judged in two categories by separate juries, the honor awards recognize both new structures and older buildings brought back to a life of usefulness. In 1979, 15 designs are honored.

The nine premiated designs in the new buildings category show an array of styles, influences, techniques, materials, costs and purposes. Ranging from an 18-foot-square cabin to a 48-story office tower, the architecture led the jury to comment that good design is independent of either its size or cost. Two winners are modest homes, both respectful of their Washington state sites and both the homes of architects. Far from unpretentious are two office buildings. One is a horizontal structure in a rural area of surpassing beauty in Colorado; the other is vertical, appropriate for its site in land-scarce Manhattan. Both have slick aluminum skins. Two winners were designed by the same firm—the only architect in 1979 to achieve this double honor. One of these designs is a highly colorful art center in Spain; the other, a welcoming but dignified science center at Harvard University. Two other institutions of higher education are owners of award winners: a high-tech athletic facility in Indiana and dormitories in Rhode Island. And there is a transit mall in Oregon which exemplifies, said the jury, that architecture is both a "temporal and spatial experience in everyday life."

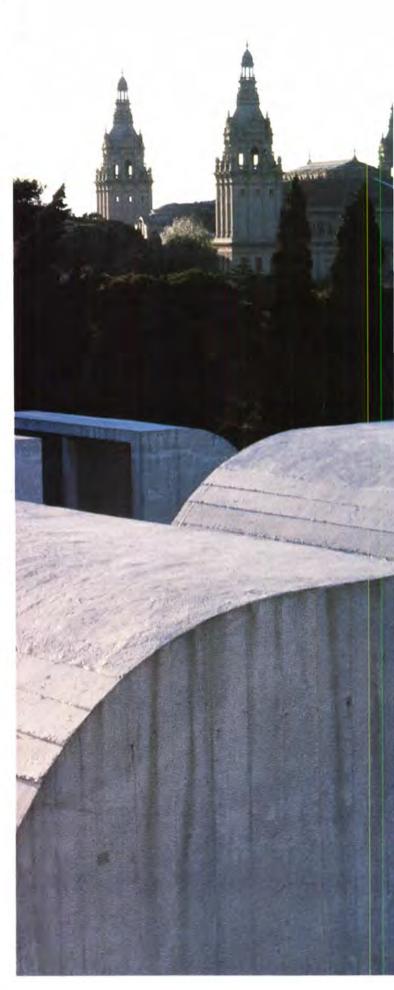
The jury for newly built designs was chaired by William W. Caudill, FAIA; other members were Gunnar Birkerts, FAIA; Robert L. Geddes, FAIA; Alan R. Lauck, associate AIA member; Ian Mackinlay, FAIA, and George T. Rosenbury, student at

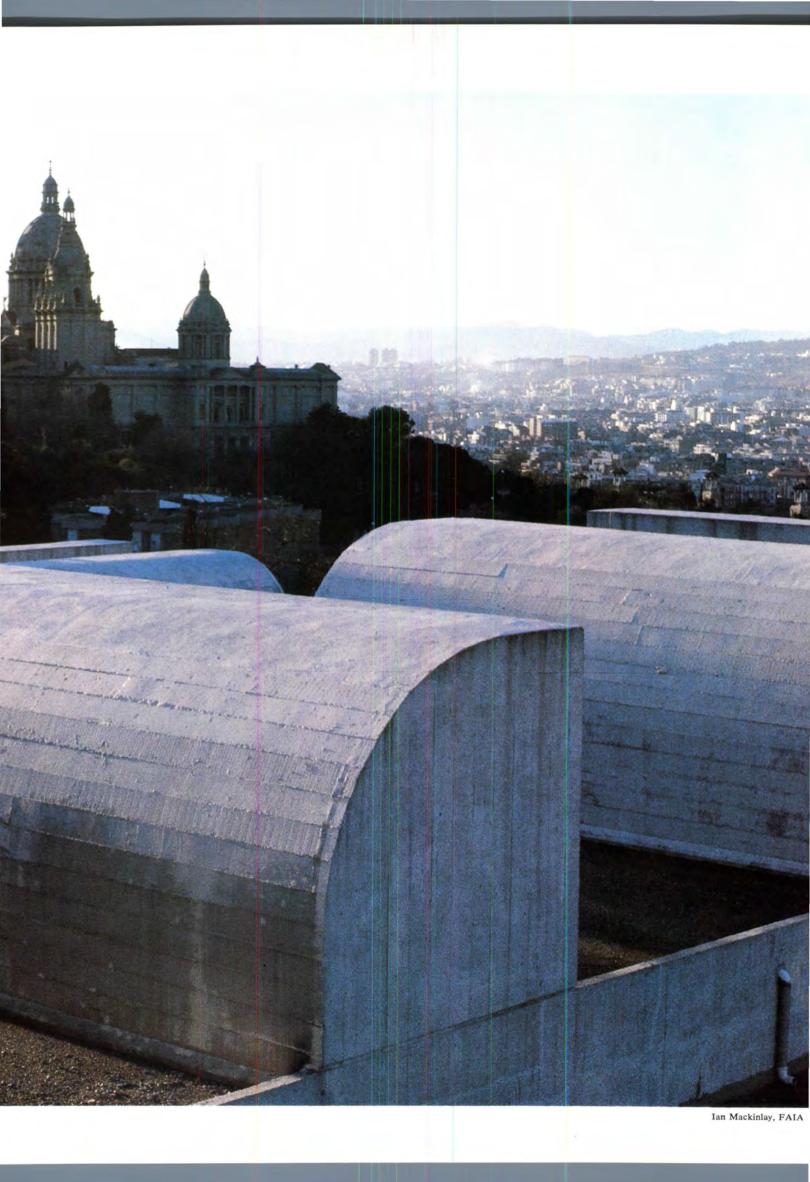
Mississippi State University.

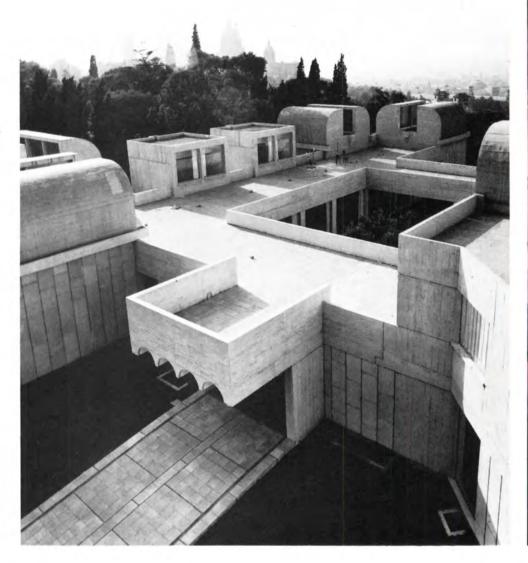
Hugh Newell Jacobsen, FAIA, chaired the jury on extended use of older buildings. He pointed to two basic ways to approach the design of recycled structures. One method sets new materials in bold contrast with the old, a complete visual separation; the other "evokes the original spirit of the building, hiding all new incursions." This year's award winners, he said, "represent the best of both schools of thought." Serving on the jury with Jacobsen were Peter Blake; Boyd A. Blackner, AIA; Stephen Kertis, student at Virginia Polytechnic and State University; William G. McMinn, AIA; Martha Jo Ramsay, associate AIA member, and D. N. Unthank Jr., AIA.

One of the six premiated recycled buildings is a natural science and history museum on Louisville, Ky.'s historic waterfront, which already is bringing new economic life into its area, as is another winner, a renovated concert hall in Worcester, Mass. Another design pays tribute to its Beaux-Arts heritage, while bringing vigor into a once deteriorating 70-year-old museum of art in St. Louis, celebrating anew the glories of the 1904 World's Fair. Also of the same era is the Chicago Public Library and Cultural Center, now rejuvenated to serve a variety of civic purposes. Unusual is the award-winning design at Yale University which sublimates itself to nearby architecture while providing underground for extended galleries and lecture hall, preserving old trees and creating new spaces without any readily discernible changes at all. Finally, an office building in Princeton, N.J., keeps its older architectural shell but turns interiors into a lively world of space and color. Mary E. Osman

The 1979 AIA Honor Awards



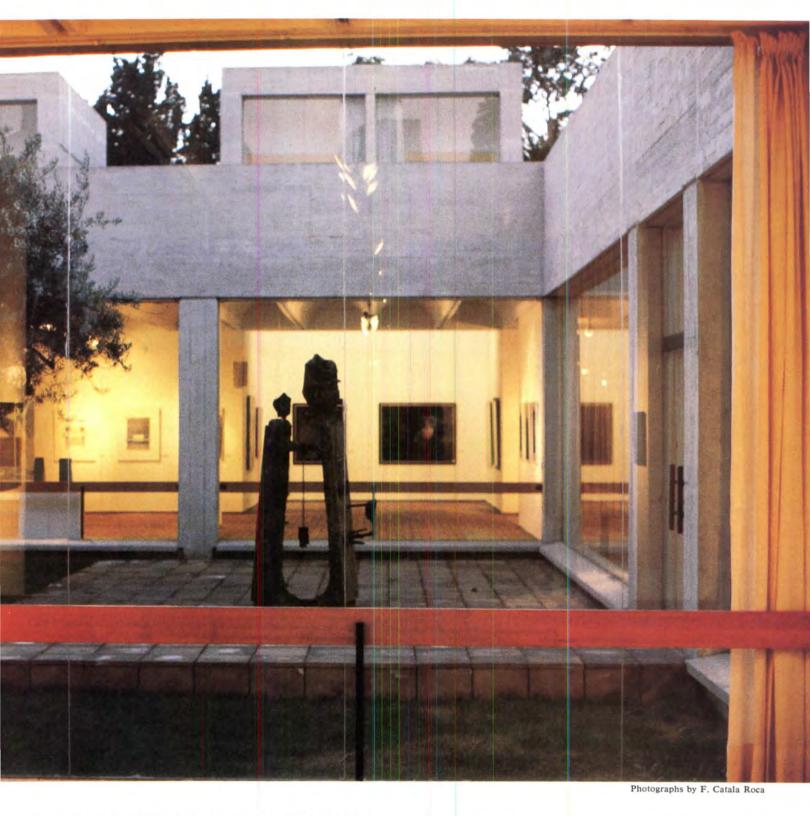






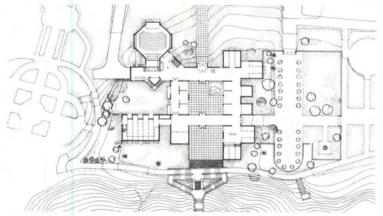
An Art Center Around a Luminescent Core

The Joan Miró Foundation/Center for Studies of Contemporary Art in Barcelona, Spain, brings to Sert, Jackson & Associates, Inc., Cambridge, Mass., the distinction of being the only firm in 1979 to win two honor awards. The structure gives form to the words of José Luis Sert, FAIA, who said in 1934 to the alumni of the Barcelona school of architecture: "We must stand up for an architecture of climate, a Mediterranean architecture designed for an intense sun, a limpid atmosphere and a friendly countryside. . . . If we analyze the work done along the coasts of this sea,

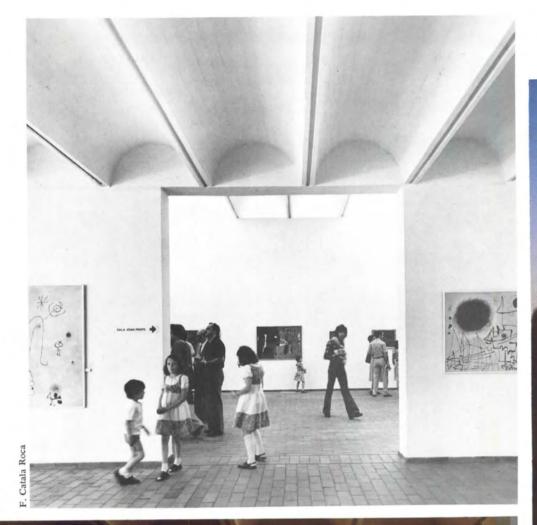


in different countries of the Mediterranean, we will see that these creations of spirits of different eras are all linked by certain constants, repeated from generation to generation for thousands of years." These constants are revealed in this work of art and architecture.

Sert is a life-long friend of Joan Miró, both having been born in Barcelona. Miró gave a large collection of his art and books to the city, and Sert donated his architectural talents for a building that would serve two functions: the exhibition and storage of the artist's works and a center for the encouragement of artistic expression where artists without means could show their works. Together, Sert and Miró chose the magnificent site—on a hillside park overlooking the city. The building blends into and complements the landscape, underscoring Sert's premise that the architect is a "designer of environments."



AIA JOURNAL/MID-MAY 1979 167





Ian Mackinlay, FAIA



Similar to many houses in southern Spain, the emphasis of the plan is upon long views through several rooms or into courts and gardens. Courts, roof terraces and gardens are linked with galleries into a continuous line of circulation; different levels are connected by ramps. Exhibit areas are more than doubled by the use of outdoor areas and roof terraces for the display of art. The four courtyards are different and yet harmoniously unifying.

Work and research spaces are in a three-story octagonal building—a form reminiscent of Catalonian architecture that serves at the same time to assert the independence of this area from exhibition spaces. On the top level is a library; an auditorium is on the lower of the three floors. Other facilities in the center proper include offices, a shop and a meeting room.

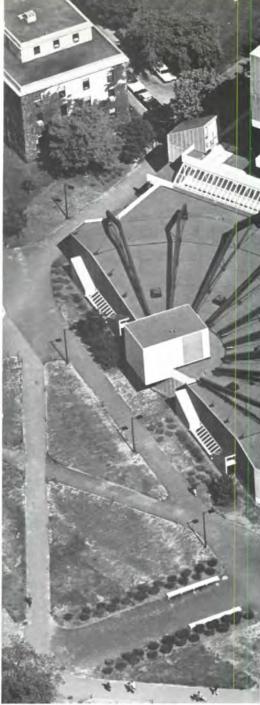
The building is designed to make the most of the advantages

of this mild climate. Natural light is used in two ways—through the glass areas that open onto courts and gardens and through skylights in half-barrel vaults thrust above the roof. Ceilings of major areas are barrel-vaulted with ribs that carry recessed light tracks. Frameless glazed doors open to courtyards, roofs, terraces and gardens to provide ventilation. The masonry enclosure walls, with cavity brick partitions, provide for insulation.

The center, said the jury, has an "inner transparency." As the visitor walks through, "all of the art in the building is reflected in the glass core, as interior spaces dissolve." The building's "extraordinary forms reflect those native to Catalonia."

Client: Joan Miró Foundation and the city of Barcelona. Associated architect: Anglada, Gelabert & Ribas. General contractor: Piera, S.A. Completed in 1974.





A Science Center That Is Also a 'Street'

The program for the Undergraduate Science Center at Harvard University emerged after faculty members suggested that interest in the sciences could be heightened by a teaching concept that would provide for cross fertilization through close proximity of the various disciplines. The physical setting, designed by Sert, Jackson & Associates, Inc., Cambridge, Mass., reflects this concept by providing interiors that are an "appropriate science environment, attractive to students," the jury said.

The large multipurpose building is sited where north and south campuses meet. To unite and relate the two, the architect designed the main entry to open onto pedestrian paths which are "pulled" inside the building and become a system of streetlike, glass-roofed, double-height arcades opening directly into cafeteria, library and lecture and demonstration rooms. Three elevators provide accessibility to all parts of the complex.

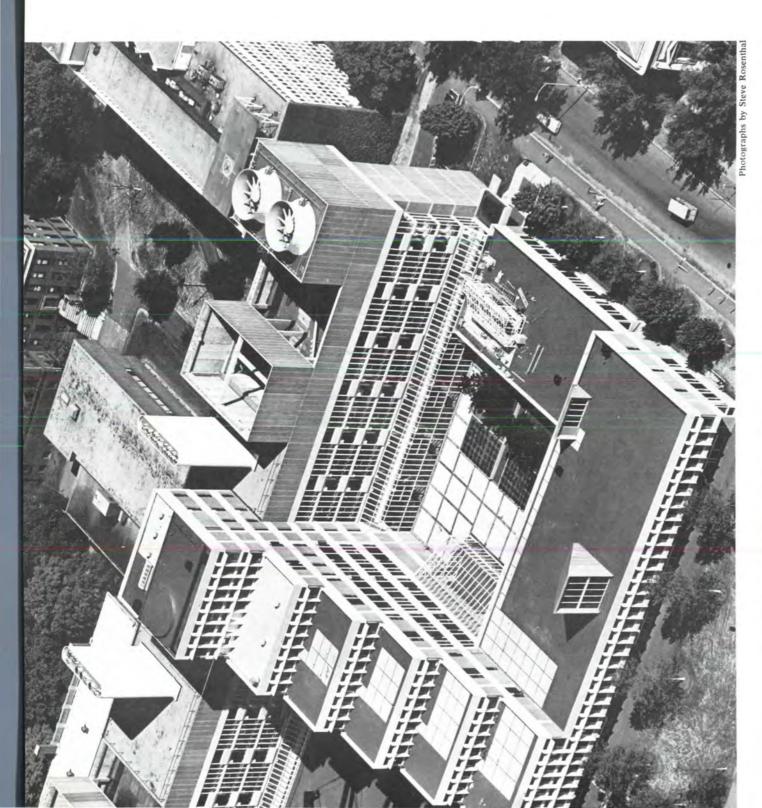
On the north, a five-story building houses laboratories and a mechanical loft. On the south, the spaces for offices and class170 AIA JOURNAL/MID-MAY 1979

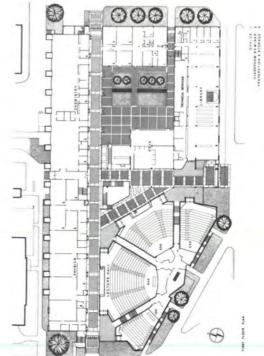
rooms establish a relationship in scale with the 18th and 19th century buildings of the south campus block. Auditoriums in a semicircle are in the angle between the north and south elements. The design, said the architect, follows the consideration of an urban campus as a "microcity."

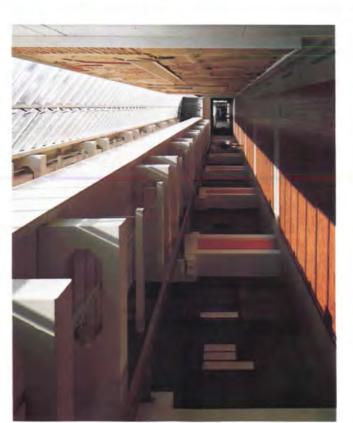
Precast concrete is used for columns, beams, planks, shafts and exterior panels. The foundations of poured-in-place concrete and the lecture halls, where a tied truss system in weathering steel is used, are exceptions. In the laboratory wing, precast girders are perforated to allow pipes and ducts to penetrate. The jury commended the "masterful handling of the assemblage of building components."

Below grade, a chilled water plant occupies 58,000 square feet, serving the needs of the building as well as nearby structures. Windows open for natural ventilation in temperate weather. There are sunshades on the southern facades, and reflective and heat-absorbing glass was used selectively.

Client: Harvard University. Acoustical consultant: Bolt, Beranek & Newman. Landscape architect: Sert, Jackson & Associates, Inc. Structural engineer: Lev Zetlin & Associates, Inc. Mechanical and electrical engineers: Syska & Hennessy, Inc. General contractor: Turner Construction Co. Completed in 1973.









A Tower with a **Distinctive Top and Base**

"A gift of public space," said the jury of Citicorp Center, a condominium development in New York City, which combines on one site a 914-foot-high office tower, an urban church, a lowrise structure containing stores and boutiques and restaurants and a landscaped courtyard on the lowest level which connects with an existing subway mezzanine under 53rd Street. Designed by Hugh Stubbins & Associates, Inc., Cambridge, Mass., with Emery Roth & Sons, New York City, the tower is supported on four large piers located at the mid-point of each face of the tower. The complex, with its multiple uses, is a "welcoming, invigorating gathering place for people," the jury said. "It is more than a building; it is an act of urban design.'

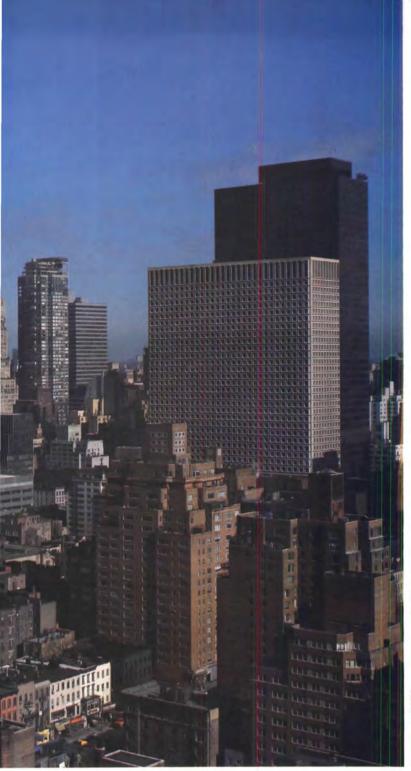
The tower is set back from the street and elevated 114 feet above the rock-like church. Each of the tower's 46 floors has an area of 24,400 square feet, and the absence of columns within the 45 feet from the central core to each exterior wall provides for flexible office space. A seven-story skylit atrium or galleria rises within the lowrise portion of the complex. Surrounding it on three levels are shops and restaurants. The four upper levels around the galleria provide for executive offices; access is by means of a through-block arcade.

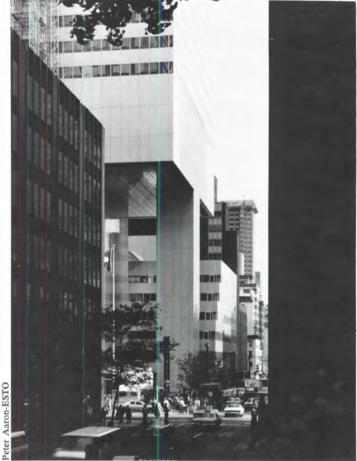
Except for the church, which is finished in gray granite, the entire complex is clad in reflective aluminum panels and doublepane insulating glass. The structural steel frame uses a series of chevrons for wind bracing and the transfer of loads to the four

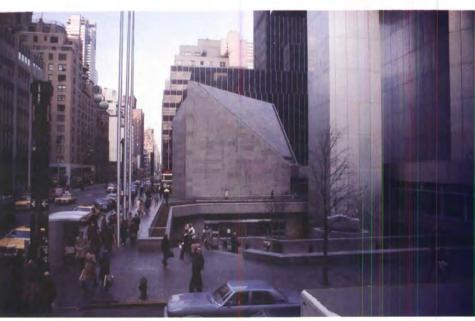
large columns located at each side of the tower.

The angled top that is one of the building's most distinctive features was designed for a solar collector, later deemed economically infeasible. Still, the architect claims, energy conservation techniques save 42 percent of the energy consumed by an

172 AIA JOURNAL/MID-MAY 1979





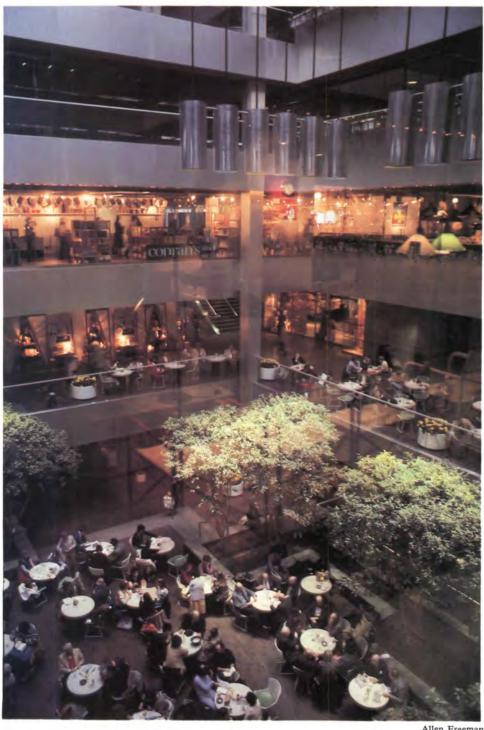


Allen Freeman

equivalent structure designed to conventional standards. Heat is reclaimed and circulated through induction units at the perimeter. This system provides sufficient heat for the entire building until there is an outside temperature of 30 degrees. The bright aluminum spandrels reflect much of the heat that would be absorbed by a darker structure. A specially designed light fixture uses only 1.85 watts per square foot.

The jury said that the honor award "recognizes the vision of the client and the excellence of the program as much as the

Client: First National City Corporation. Landscape architect: Sasaki Associates. Structural engineers: LeMessurier Associates and the Office of James Ruderman. Mechanical and electrical engineers: Joseph R. Loring & Associates, Inc. General contractor: HRH Equity Corporation. Completed in 1977.





Corporate Headquarters In the Foothills of the Rockies

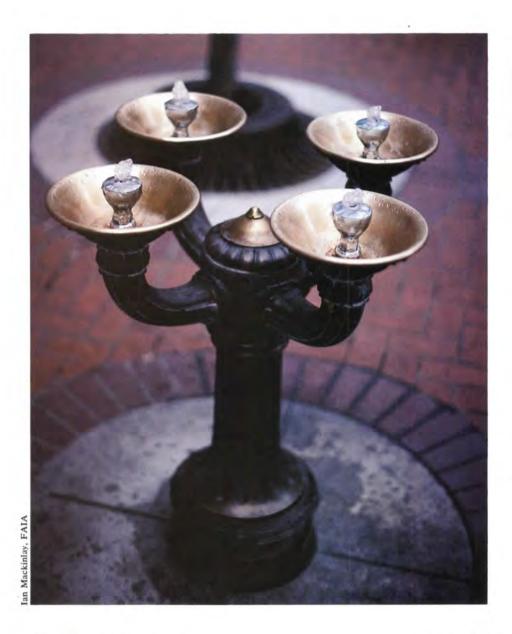
Wishing to consolidate its international operations in a structure that would reflect its corporate image and meet the highest environmental standards, the Johns-Manville Corporation held a limited competition for the design of its world headquarters building to be sited on a 10,000-acre ranch of magnificent beauty in southwestern Colorado. The competition was won by The Architects Collaborative Inc., Cambridge, Mass. (see Mid-May '78, p. 106). The structure, located within a designated area of 400 acres at the edge of the foothills, leaves the valley unharmed. The jury commented that TAC perceived "nature could not be fought against." There was "no way to blend," so the choice was "to contrast." The results, it said, are "thrilling and stunningly beautiful.'

The view from the air was emphasized in the competition program since company executives and customers often come and go by helicopter (the building is more than 20 miles from Denver, the nearest city). As the view indicates, TAC made a conscious decision to "welcome the automobile" in its design. There are 1,700 parking spaces on the roof and in a natural amphitheater against the hills behind the building.

Entering by car, the visitor actually penetrates the building on a driveway that runs between its two parallel rectangular wings. This division of the building reflects another aspect of the competition program: It called for a very large ratio of perimeter to interior spaces. TAC, in fact, succeeded in convincing the competition jury, chaired by Harry Weese, FAIA, to relax the ratio somewhat. This earned TAC the honor awards jury's praise for "succeeding against heavy odds."

The eight-level building accommodates a permanent population of 1,900 in 750,000 square feet. On lower levels are large public areas including space for training and conferences involving the corporation's worldwide staff. The projecting element in the foreground of the photograph is a terraced cafeteria. In the original design there was to be a second projection to its left in the form of a greenhouse, but it has never been added.

Client: Johns-Manville Corporation. TAC staff: Joseph D. Hoskins, AIA; William Geddis, FAIA; John P. Sheehy, AIA; Michael Gebhart, Vernon Herzeelle. Interior design: Space Design Group. Landscape architect: TAC. Structural engineer: LeMessurier Associates. Mechanical engineer: Cosentini Associates. Electrical engineer: Eitingon & Schossberg, General contractor: Turner Construction Co. Completed in 1976.







Transit Loop Made into a Lively Mall

The Portland, Ore., Transit Mall is a one-way bus loop transversing 22 blocks of the city's retail core, designed jointly by Skidmore, Owings & Merrill of Portland and Lawrence Halprin & Associates of San Francisco (Byron McCulley, project manager; Satoru Nishita, designer) as the hub of a regional transit system and a "lively streetscape" in an often rainy climate.

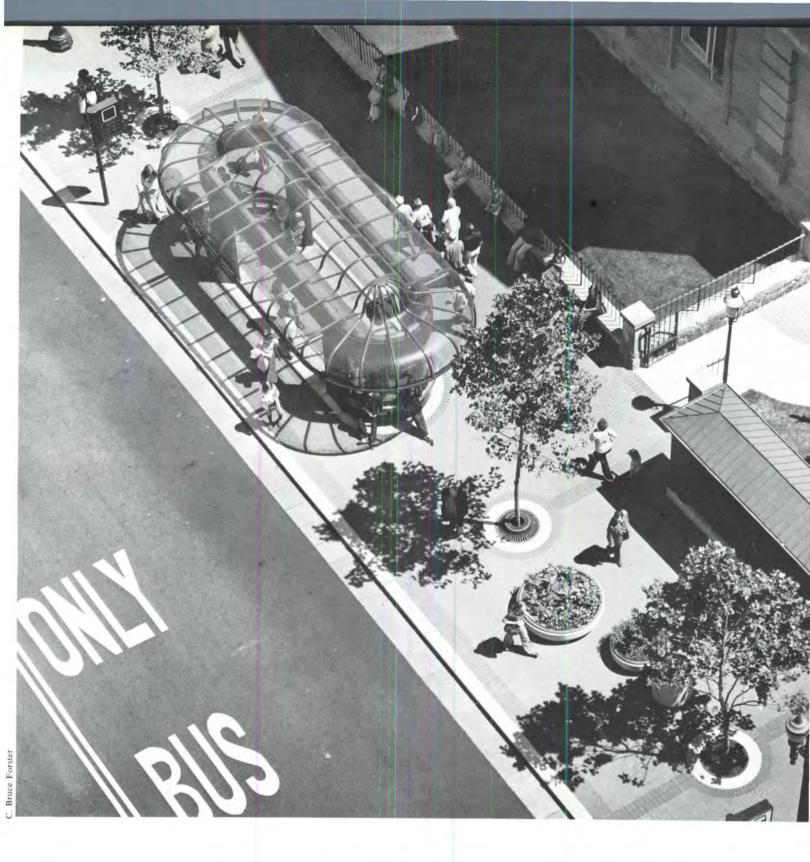
Each of the 31 bus stops along the mall has a walk-through shelter. Generous sidewalks are landscaped with more than 300 maples and flowers and shrubs in 100 planter tubs. Other focal points along the way are benches, display kiosks, the city's flavorful, original drinking fountains and light standards, other

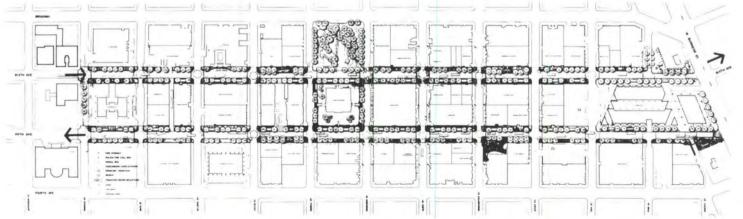
fountains and 11 pieces of sculpture by Northwest artists.

A closed circuit television system screens bus arrival and departure times in each shelter, a first for this country. And at eight locations along the mall, riders can punch their route numbers into keyboards in trip-planning kiosks and receive on a closed circuit screen the locations and times of bus stops. The kiosks also have free telephones linked with an information line.

The mall "has stimulated ridership for the bus system, but also private development in the heart of the downtown area along the transit spine," report the designers. Every individual element is part of an overall design plan that demonstrates "architecture's contribution to the ecological as well as the visual values in life," the jury commented.

Client: Tri-Met and the city of Portland. Structural engineer: Moffatt, Nichol & Bonney, Inc. Mechanical and electrical engineers: SOM. General contractor: Hensel Phelps Construction Co. Completed in 1978.





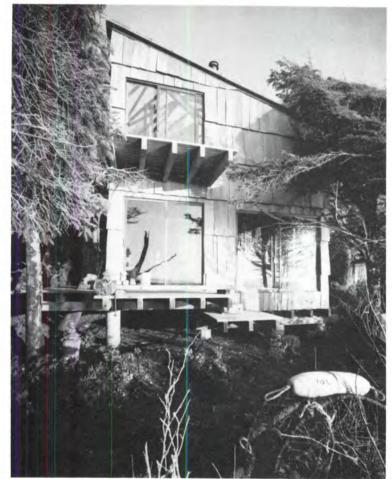


A Tiny Cabin 'Thoreau Might Have Loved'

Located on a peninsula in the state of Washington above a Pacific Ocean beach, this cabin was designed by Arne Bystrom, AIA, of Seattle for his family of four to use year-round for varying periods—longer stays in summer and autumn, shorter visits in winter and spring. Of paramount importance to the family was that the site be left as it was, except for minimal clearing of underbrush; at the same time, the cabin's design and orientation were to accentuate the dramatic views. Remote and difficult to approach—the nearest road is 10 miles away—the site afforded no such conveniences of modern man as utilities, unless sun and







Arne Bystrom, AIA

a wood stove can be considered as such. Water is supplied by the river, and roof run-off is collected in a tank at the corner of the cabin. Thoreau would have loved it, the jury said.

Designed for easy building and minimum maintenance, the cabin has spaces for cooking, eating, conversation and sleeping. Each of these four functions has its own distinct and isolated space, differentiated by changes of level and screen partitions. Although the structure is only 18 feet square, the smallness is forgotten because the spaces flow together both vertically and horizontally, giving a subtle feeling of larger accommodations.

The cabin is designed as a passive solar collector and rarely requires the use of the stove to warm the interior. On a cool winter's morning in this wet but mild climate, the upper sleeping bunks are warm and cosy, says the architect-owner. Even on gray days-so frequent in western Washington-the heat gain is adequate for comfort. On sunny days, the cabin temperature is



controlled by opening upper and lower doors. The structure's vertical shape, which encourages the flue-like circulation of ocean breezes, provides further coolness and fresh air. Bathing facilities are a Finnish sauna; butane gas is used for both cooking and refrigeration.

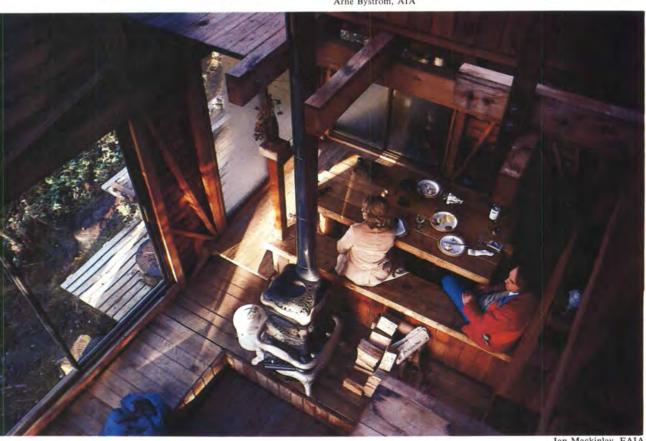
The roof, a truss in the horizontal plane, is entirely of clear Plexiglas. The structural framing of local cedar (most of the building materials are from the site) is visible on the interior; also visible is the system of diagonal bracing. The exterior cladding is of four-foot-long cedar handsplit shakes.

Said the jury of this energy-efficient, relaxed and relaxing cabin, "Nothing was left out; nothing more is needed." Every inch of the cabin "was designed functionally and esthetically."

Client: Arne Bystrom, AIA, and family. General contractor: Arne Bystrom, AIA.



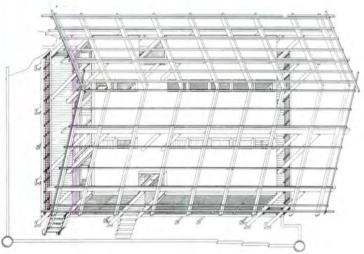
Arne Bystrom, AIA



Ian Mackinlay, FAIA







Waterfront House Under a Translucent Umbrella

"Japanese in form, Miesian in attention to detail," said the jury of this double-roofed house designed by Morgan & Lindstrom. A home for a family of four at Bainbridge Island, Wash., the house is sited on a high-banked, wooded waterfront. Oriented to water and woods, the dwelling is elevated for minimum interference of the site and for isolation from such man-made distractions as traffic and noise.

The architect says that the program called for respect for the site, maximum sun exposure and a structuring of the functional elements of the house "to assert independent-dependent, private-public, work-nonwork characteristics."

The top roof is a protecting umbrella (there are 200 inches of rain annually) that shelters the deck and keeps water off the walls. The orientation of the house, the use of materials and the

spatial massing permit the character of the site to shine through, provide unobstructed views of woods and water and give sun exposure to work areas.

The house is described by the architect as a "structure within a structure; a habitation box within an independent post and beam structure of traditional form and proportion." The flowing and inclusive nature of the plan is revealed in the subtle progressive movement of woods to outer structure to the inner box's organization of the functional elements of a home. Skylights relate the inner box to the outer structure, and a gravel moat leads from the outer structure to woods and water, with trees establishing the place of the house in the landscape.

All walls inside and out are cedar, finished with a natural tone stain; all other finish wood and the deck boards are of Douglas fir. The outer structure has glue-laminated components and translucent Fiberglas roof planes. Heavy gauge metal gutters extend the full length of the house, and water from the gutters empties into graveled catch basins.

Client: Mr. and Mrs. R. D. Lindstrom. General contractor: Walt Johnsen Construction. Completed in 1978.







Jonathan Green

College Dorms Ringing an Inner Court

The Pembroke Dormitories at Brown University, Providence, R.I., were designed to provide appropriate housing for students and to meet the demands of a corner site where a college shopping street converges on one side and an established residential street on another. Designed by MLT/Moore, Lyndon, Turnbull, San Francisco, and Lyndon Associates Inc., the dormitories, said the jury, are an "outstanding example of weaving an institution into the urban fabric." The complex "successfully maintains the scale and activity of the shopping street and, simultaneously, creates with great integrity a center of its own forms."

Existing dormitories in this sector of the campus have long double-loaded corridors and large lounges; the new complex offers an alternative similar to apartment living, having fewer common service areas and more small group living arrangements.

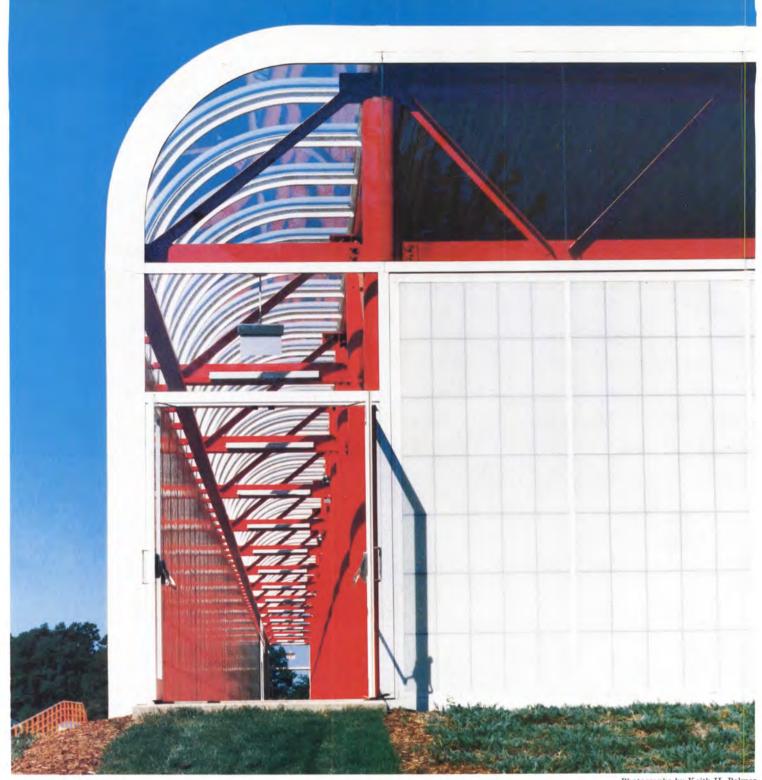
The dormitories surround a large terraced central court with a tall sculpture as its core. Opening from the courtyard are seven ALA JOURNAL/MID-MAY 1979

entries that are the organizing elements of the plan. Each of the multilevel entries has a kitchen/lounge and outdoor deck. Around them are grouped various combinations of single and double deck rooms in various arrangements on three floors, housing from 26 to 34 students. The variations are intended to give a distinct identity to each entry cluster, just as the courtyard is intended to give identity to the entire complex. The jury praised it for "the integration of social and behavioral factors into physical design."

The outer edges of the complex are related to the neighborhood. The street on the north, dominated by large setback houses, is rhythmically continued by a configuration of walls, bays and windows. The character of the commercial street on the east is maintained by stores along the ground floor of the complex, with the varicolored glazed brick facade drawing a "distinction between the street commercial life and the dormitory above and behind," the architect says.

Client: Brown University. Partner in charge: Donlyn Lyndon, FAIA; associate, Marvin Buchanan. Sculptor: Alice Atkinson Lyndon. Lighting consultant: Richard C. Peters, AIA. Structural engineer: Weidlinger Associates. Mechanical engineer: Dubin, Mindell, Bloome Associates. General contractor: J. L. Marshall & Sons, Inc. Completed in 1975.





Photographs by Keith H. Palmer

Athletic Facility In an Articulate Enclosure

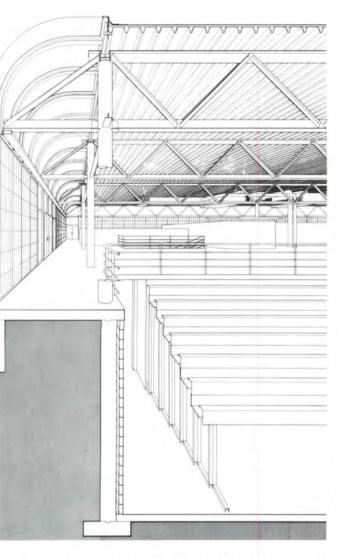
A dramatic departure from the Gothic style of the older campus architecture, the colorful and highly functional Angela Athletic Facility at St. Mary's College, Notre Dame, Ind., is a "refreshing contrast," the jury said. Designed by C. F. Murphy Associates, Chicago, the building contains two flexible multipurpose areas, two racquetball courts, lockers, faculty offices, student lounge and common support and utility space. The racquetball courts are on two floors at one end of the building. Adjacent is a highbay area for such activities as tennis and basketball. In a low-bay area at the other end are accommodations for fencing, dance, gymnastics and similar sports. Bleachers, entered from the upper level, seat 1,800 spectators at sports events and for special occasions, including graduations and concerts. Along the perimeter of the upper level, two circulation trunks connect the building's functional elements and establish an order for expansion.

The substructure is reinforced concrete; the superstructure, exposed structural steel with prefabricated spanning trusses cantilevered at each end. All elements are exposed and painted bright colors to differentiate functions. Walls are transparent Fiberglas panels to admit as much light as possible. A juror who visited the building reported that "they almost never have to turn the lights on." The jury described the interior as "delightful," saying its organization is "clean and clear."

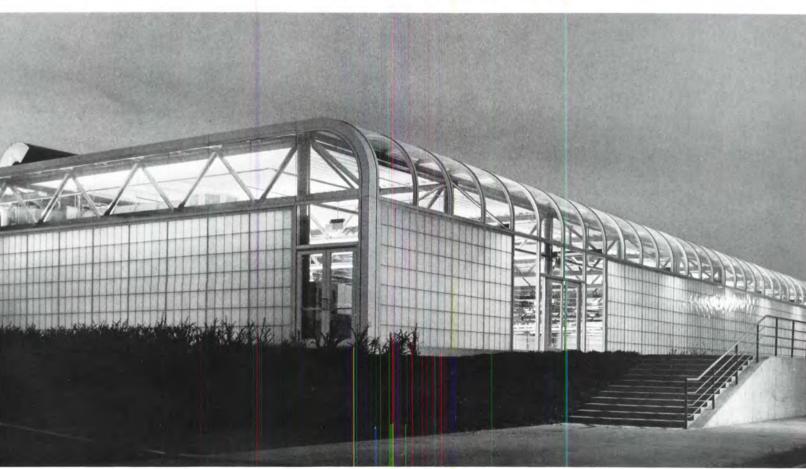
Heating and cooling are by eight single-zone, factory-built units suspended from the roof. Roof-mounted exhaust fans are interlocked with supply systems. Roof, walls and the open plan reduced requirements for extensive zoning of HVAC equipment.

Client: St. Mary's College. Structural, mechanical and electrical engineers: C. F. Murphy Associates. General contractor: Hickey Co. Completed in 1977.

184 AIA JOURNAL/MID-MAY 1979









Laurin McCracken



Michael Graves, FAIA, of Princeton, N.J., was commissioned by a venture capital investment firm, Gunwyn Ventures, to renovate the two upper floors and attic of a building of the 1890s and create functional office space. The building, with its Beaux-Arts Flemish facade, is located on a main street in Princeton. The space, previously altered, was devoid of architectural distinction. So successful was the renovation that the jury called the office "an art form for our time."

The program called for private offices for three partners, with provisions for two future junior partners. There was to be an open arrangement to allow the partners easy access to each other; also the partners were to share a centralized secretarial 186 AIA JOURNAL/MID-MAY 1979



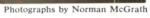
service. A conference room—the most private space of all—was for meetings of the principals and their business associates. Access to the renovated portion of the building, whose facade faces south, is through an existing stair which opens onto the street.

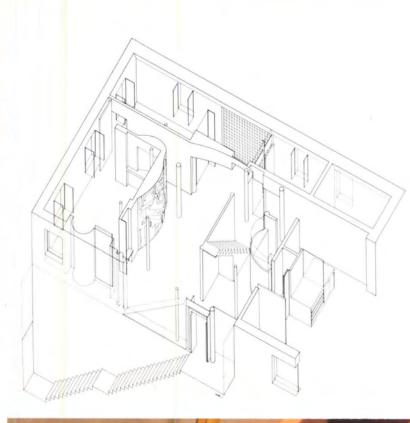
The architect removed major sections between the top floors and roof and erected an independent column and beam assembly. Loadbearing walls support the pitched roof and reinforce the primary axis. Existing skylights and windows let the natural light penetrate all the spaces through the use of glazed interior partitions. Limited interior construction prevented major energy conservation measures, but insulated walls and roof and operable windows make the offices more energy efficient. "Respectful of its older shell," the jury said, "the interior space becomes a private world of studied relationships" of form and color.

Client: Gunwyn Ventures. Structural engineer: Willis O. Klotzbach. Mechanical engineer: Stratton & Farley. Electrical engineer: Michael Graves, FAIA. General contractor: Santo Tocco. Completed in 1972.













Adding Space to a Classic Without Disruption

The premise that "only God can make a tree" was carefully adhered to in the expansion of Yale University's Center for American Arts. Three existing giant elms in a historically significant sculpture court were saved by restoration architect Herbert S. Newman Associates by keeping a 20-foot radius around each tree and rootpruning them before excavation occurred. Preservation of the trees and retention of existing elevation, materials and textures of the court and the placement of a new 400-seat lecture hall, with modern audiovisual capabilities, underneath the court give the impression that nothing has been changed or added. The solution also pays respect to the adjacent landmark, Louis I. Kahn's art gallery of the early '50s.

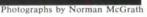
A two-story-high lecture hall was split into two one-story
188 AIA JOURNAL/MID-MAY 1979

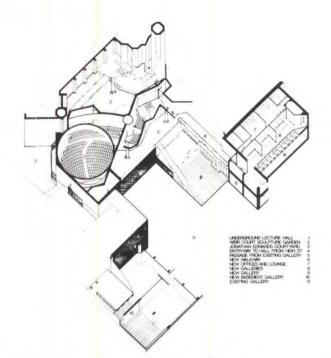
spaces for needed exhibition galleries. Also, the sunken sculpture court on the west side of the museum was converted to gallery space by an enclosing skylit roof. For circulation, there are existing winding stairs, passageways and moats leading to the sculpture court. The new hall can be used when the galleries are closed by the provision of an entrance from an adjacent street.

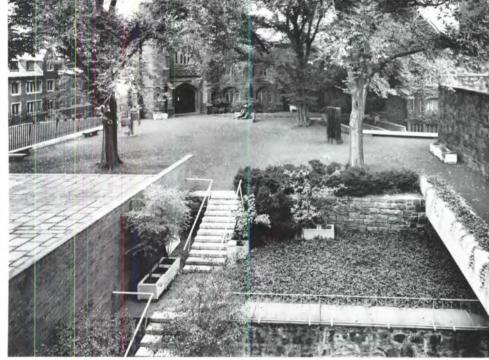
The jury said: "While the conversion of its main lecture hall into exhibition space at once reflects and reinforces the two architectural styles of the museum complex, the resultant new lecture hall beneath the surface of an existing sculpture court is a grand example of respect through sublimation." The project also demonstrates that dense, urban campuses can expand without harm to existing buildings or beautiful spots.

Client: Yale University. Acoustical consultant: Bolt, Beranek & Newman. Landscape architect: Zion & Breen. Lighting design: Sylvan R. Shemitz & Associates, Inc. Structural engineer: Spiegel & Zamecnik, Inc. Mechanical engineer: Van Zelm, Heywood & Shadford. General contractor: W. J. Megin, Inc. Completed in 1976.















Michael Webb





Michael Webb

Retaining the Facade of a Civic Landmark

Remaining the key element in the city's historic riverfront, the Louisville Museum of Natural History and Science is located in a complex of five contiguous buildings designed by C. J. Clarke and constructed in 1878. Louis & Henry, Inc., restoration architect, was praised by the jury for the "sensitive" manner in which the neglected landmark—the first to be restored on the city's waterfront—has been adapted to an entirely different use (phase 1 is premiated).

The jury termed the building a "civic symbol," saying that if it had been lost, the whole ensemble probably would have disappeared as well.

The museum's interior is organized around a sunken, land-

scaped court opening five stories to the skylit roof. It is the focal orientation point for visitors who circulate through exhibits on the many levels. A plaza was created by locating the main entrance several bays behind the existing front and removing two floors above the space, thus exposing the original cast-iron facades on both sides. An arcade forms an open "tunnel" through the complex at the Main Street level, providing passage to a newly created parking area to the north under an expressway. The central building—it has larger floor areas—serves as the prime exhibit space; side structures form a protective U and "feed in" ancillary support services. Monochromatic colors unify and neutralize the interior, giving the exhibits appropriate emphasis over the architecture.

Client: City of Louisville-Jefferson County, Ky. Landscape architect: Louis & Henry, Inc. Structural engineer: Senler, Campbell & Associates. Mechanical and electrical engineers: E. R. Ronald & Associates. General contractor (construction manager): Dahlem Construction Co. Completed in 1977.





Restoring a Library And Expanding Its Uses

Designed in 1894 by Shepley, Rutan & Coolidge, the building which housed the Chicago Public Library had become functionally obsolete. The structure was treasured as a landmark, however, containing some of the finest mosaic work of the 1890s and Tiffany stained glass domes. Extensive studies led to the decision to restore the building, converting it into a popular library and cultural center, and the Chicago firm of Holabird & Root was commissioned for the renovation. In addition to preserving and highlighting the existing notable features of the building, the program called for the expansion of public areas, the addition of of central airconditioning, the installation of more efficient lighting in all areas and the creation of a fully integrated circulation system.

Partitions and corridors were removed and dead spaces were converted into accessible stacks and reading areas. The Tiffany domes, covered over for 40 years, were backlighted; mosaics and ornamental plaster work were restored. To aircondition the structure without harm to mosaics and domes, avoiding dropped ceilings, existing vertical shafts were coordinated with new shafts. Windows were replaced and sealed, using laminated, tinted heatabsorbing glass to reduce solar heat gain. A new centrally located ramp system serves all seven levels, connecting the building's wings. Except for the installation of energy conserving glazing and an addition facing the service court to house mechanical systems, public facilities and circulation ramps, the exterior was left unchanged. The jury cited the manner in which new functional elements are subtly integrated with the handsome craftsmanship and materials of the past, "making it difficult to identify the new from the old."

Client: Public Building Commission of Chicago. Structural, mechanical and electrical engineers: Holabird & Root. General contractor: Paschen Contractors, Inc. Completed in 1977.





Photographs by James Norris



Randolph Langenbach



Steve Rosenthal



Steve Rosenthal



Meeting Safety Standards In a Historic Concert Hall

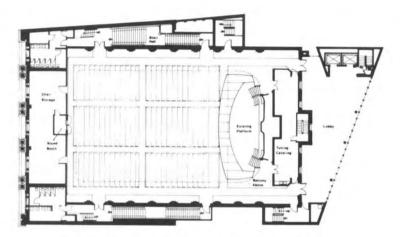
Mechanics Hall, which stands on Main Street in Worcester, Mass., has made a valuable contribution to the downtown since 1857. It was here that people throughout the region flocked to hear such musical celebrities as Caruso and Paderewski. In 1973, however, the structure was condemned and faced the wrecker's ball because of its deteriorated condition and inability to meet contemporary safety standards. Saved by a concerted community effort, the hall has been restored by Anderson Notter Feingold Inc., of Boston, and once more it has status as the town's cultural center. Already, the renovated hall has sparked new eco-

nomic life for the downtown. "Remarkable acoustical qualities" are retained, the jury said, and Mechanics Hall "has been reborn... Modern environmental systems and life safety requirements are respectfully integrated within the distinguished 19th century interior spaces."

The restoration architect's major design problem was to provide life safety requirements for a concert hall holding as many as 1,500 people on the third floor of a wooden structure. The solution was to construct a new lobby at the building's rear, opening from the parking area. The lobby projects out at an angle following the property line to make room for two independent stairs and elevator access for the handicapped. The lobby's wall is of glass, and at night the highlighted original facade is highly visible. A new public arcade within the building connects the Main Street entrance to the lobby at the rear.

Major interior spaces-grand staircases, lobbies and main hall

AIA JOURNAL/MID-MAY 1979 195



-were restored to their original condition. Cast-iron details, lost in the passage of time, were replaced by Fiberglas castings. Wooden storefronts were rebuilt according to 19th century photographs. Careful research was done to make the color and details of interior finishes as similar to the original as possible. Special care was given in the installation of new mechanical and electrical systems to maintain existing acoustics.

Client: Worcester County Mechanics Association. Preserva-tion consultant: Society for the Preservation of New England Antiquities. Acoustics: William Cavanaugh. Lighting: Don Bliss. Structural engineer: Brown Rona, Inc. Mechanical engineer: Environmental Design Engineers. General contractor: R. L. Whipple Co., Inc. Completed in 1978.



Steve Rosenthal



Returning a Museum To Its Original Grandeur

Hardy Holzman Pfeiffer Associates, New York City, used a "sophisticated vocabulary of contemporary technology" in the reaffirmation of the "timeless qualities of this grand public space," the jury said of the restored St. Louis Art Museum. The original stone building, designed in the Beaux-Arts manner by Cass Gilbert for the 1904 World's Fair, was once linked to three wood and plaster pavilions. After the removal of these temporary structures, doors at either end of the main axis of the permanent structure were sealed. The subsequent years were not kind to the art objects which the building housed. They were located in "pseudo settings whose inaccuracy denigrated the art," the archi-

tect says. Moreover, air pollution and temperature changes were damaging to the objects. Curatorial work was difficult to conduct and administration was "haphazard" because support activities, undreamed of when the building was designed, were located in all kinds of nooks and crannies.

The restoration architect re-established the four monumental axes of the building, extending them by new glazed areas into the outside park. To emphasize the variety of the galleries, stylistic ornamentation of other periods that obscured walls, floors and ceilings were removed. Detailing, similar to the original building, was reinstated, pointing up the differences in ceiling heights and making color and the intensity of light more evident. To provide the most advanced systems of environmental controls, it was necessary to rebuild two-thirds of the museum, but mechanical, electrical and plumbing systems are concealed and the fabric of the original building appears unchanged.

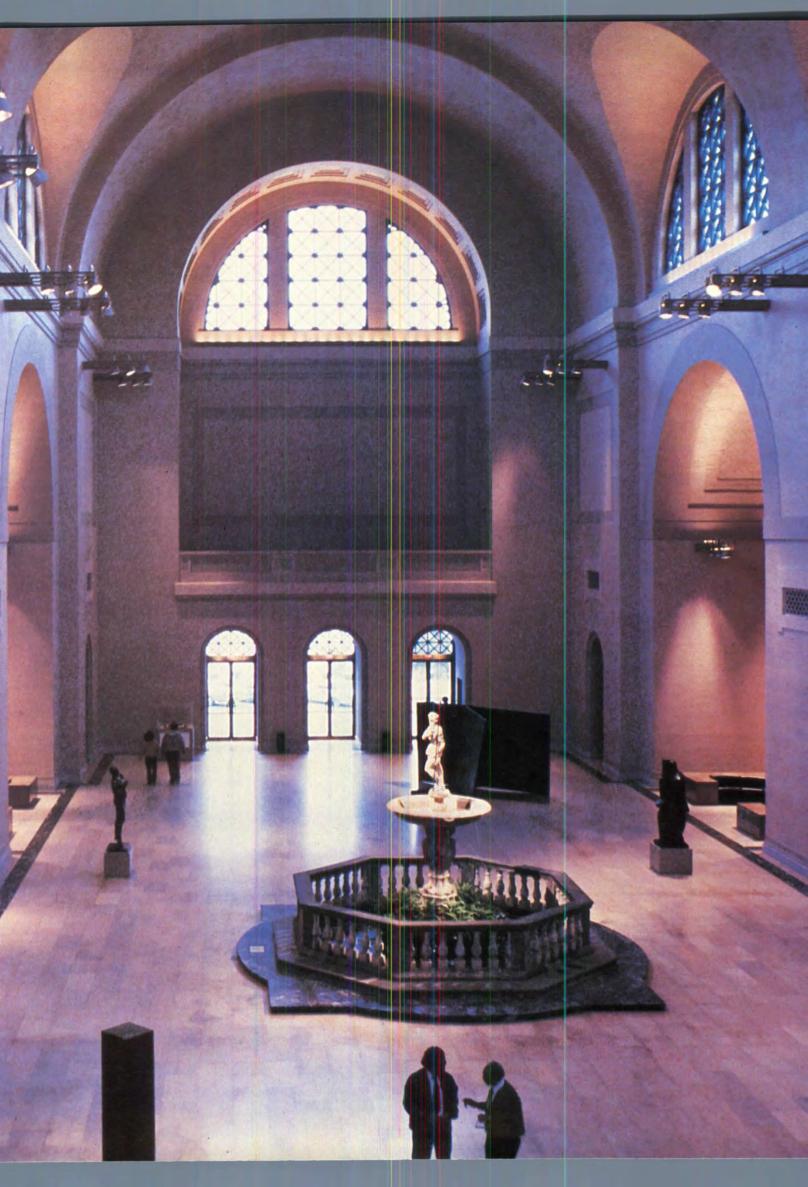
New skylights, whose upper glazing consists of thermal glass,



control daylight and conserve energy—the top layer is heatabsorbing glass and the bottom layer is opalescent annealed glass. The airconditioning is multizoned, and each zone has its own thermostat; heating and cooling on a space-by-space basis are computer-controlled for energy conservation. The insulated roof is also energy efficient, and the covering membrane makes the roof waterproof and also permits the release of water vapor. Gallery walls are covered with dense sheets of plywood that are capable of holding heavy objects and yet can be easily patched and refinished for new exhibits.

Client: St. Louis Art Museum. Project manager: Alec Gibson; project architect: C. E. John Way. Lighting consultant: Jules Fisher & Paul Marantz, Inc. Structural engineer: LeMessurier Associates. Mechanical engineer: Crawford & Witte. Electrical engineer: Van & Vierse, Inc. General contractor: Dickie Construction Co. Completed in 1977.







The Von Duprin Futuristic 33 exit device adds a touch of class and efficiency to your high traffic areas. The 33 touch bar eliminates traditional lever arms and crossbars. The latch is actuated with only slight pressure at any point along the reversible touch bar. As an added safety feature, the large area of the touch bar keeps hands away from glass.

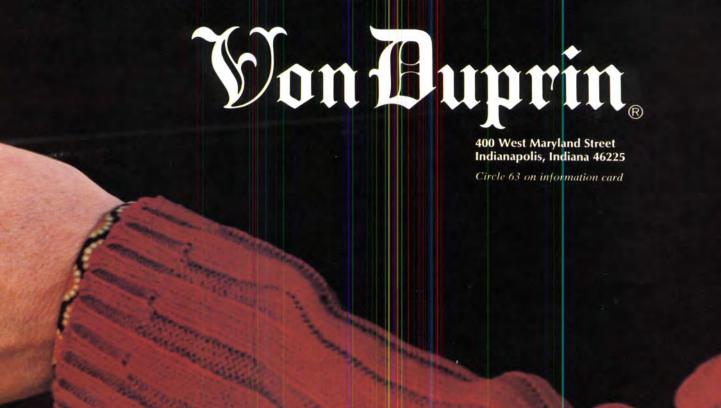
One-point positive dogging for pushpull operation requires only one-eighth turn of a dog key. One-point cylinder dogging is optional for use with any standard diameter mortise cylinder.

The 33 devices are available in rim, surface or concealed vertical rod models, and can be equipped for electronic actuation of the latch bolt on doors from 2'6" to 4' wide with stiles as narrow as 13/4".

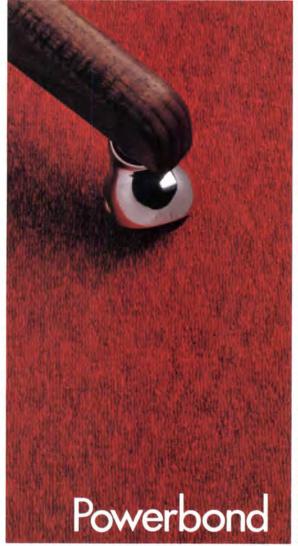
Find out how the Von Duprin 33 can give you an elegant, efficient solution to the ins and outs of your exit hardware problems. Request Bulletin 774.



No-cost finish options include anodized aluminum with stainless steel touch bar surface . . . bronze anodized aluminum with bronze touch bar surface . . . duranodic dark bronze aluminum with black or walnut-grained vinyl-covered touch bar.



FLOORING FOR TOMORROW



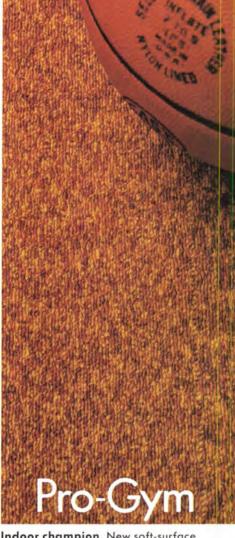
The tough one. Only permanent soft-surface pile vinyl flooring. Powerbond® gets extraordinary strength from a unique construction of super-dense tough pile yarns backed with vinyl cushioning.

Soil resistant.

Excellent appearance retention. With wear guarantees. In architectural and designer color palettes.



The functional one. Soft-surface modular flooring system with easily removable 18" Tex-Tiles® squares to get at under-floor duct systems, or to modify design. Each square a dense tough pile yarn with vinyl backing for maximum wear in high traffic areas, and for low maintenance. In colors and natural heather effects coordinating with Powerbond.



Indoor champion. New soft-surface concept in gym flooring replacing hardwood—Pro-Gym®. Good ball bounce and traction. Easier on legs and knees—less injuries. Installs over concrete, tile, or wood. A dense soil-hiding nylon and solid vinyl backing that vacuums clean. No buffing or refinishing. Costs 50% less to maintain than wood.

Collins & Aikman
COMMERCIAL FLOOR SYSTEMS—ALWAYS A STEP AHEAD
210 Magison Avenue, NY, NY, 10016 (212) 578-1217

Circle 64 on information card





A beautiful, time and money-saving alternative to masonry. And other facing materials.

aced with stringent budgetary limiations, project architects for the Von traun Civic Center, Huntsville, Ala., elected a dry-built masonry exterior vall system using Johns-Manville stonehenge™ architectural panels.

-M panels not only provided the esired stone-like appearance, but lso permitted quick and easy faceastening to steel studding. As a result, rection time was cut almost 25 perent and costs cut almost one dollar er square foot over conventional hasonry. And the job was finished in time and within the budget.

Performance of the wall system has been excellent, resisting high winds, eavy rain and other weather extremes without problems. And the J-M Stonehenge panels have kept their bugged natural stone beauty despite onstant exposure to the elements.

When your job calls for lasting beauty hat faces up to almost anything, you'll nd a J-M wall system that's just right or the job.

for details, consult Sweet's or contact Dave Lucy, Johns-Manville, Ken-Caryl Banch, Denver, Colorado 80217, AI–5 03-979-1000.



-M Stonehenge architectural panels cover 0 per cent of the exterior of the Center, providing an attractive, stonelike appearance that will not change due to climate conditions



he J-M panels were face mounted to steel tudding, requiring about 25 per cent less histallation time than conventional masonry yall techniques.

JM Johns-Manville Economy from page 96

this year by 9 percent, to \$67.5 billion. The number of dwelling units, the fore-casters say, will decline by 16 percent. The Department of Commerce has predicted a drop of 10 percent in the construction of houses and apartment buildings. The Associated General Contractors has said that residential construction, the least able to compete for money, will probably be the hardest hit sector of construction in 1979.

For the first time since early in 1978, housing starts dipped in January below a two-million level. Government figures showed a decline in housing starts in February to 1.4 million starts—down from 1.6 million starts in January and below December's rate of 2.06 million.

These drops in January and February do not reflect the impact of steps by the government to reduce the impact of the six-month money market certificates, which, it would seem, will bring housing starts still lower. Although winter weather may have had adverse effects on housing starts, it is generally agreed at this time that the decline in residential construction, now started, will probably last through 1980.

Recently released Bureau of Census figures reveal that building permits for single-family homes, considered by economic experts as an indicator of future activity, fell 3 percent in February, to an 814,000-unit annual rate from the previous month's revised 841,000. Multifamily permits, however, rose 13 percent.

The "hottest" market in the construction industry just now is commercial and industrial building, says Dodge/Sweet's. Although "in no immediate danger of collapse," such construction will be "indirectly inhibited to the extent that antiinflationary restraint slows the economy's growth later in the year."

Certainly, there seems no disagreement that in 1978 inflation became the most serious domestic problem, going from tolerable to intolerable. But a decided factor in President Carter's anti-inflation fight is the failure of the U.S. economy to slow down. On April 6, the government published figures that White House officials said show conclusively that the economy is overheating. This development is revealed in a Labor Department report which showed the unemployment rate in March to stay at a steady 5.7 percent of the work force. According to the report, employment in the construction industry in March rebounded after falling off in January and February. One commentator said that this figure raises new doubts about whether the housing industry is really cooling off or is "merely a fluke."

In late April, there was a Department of Commerce report issued that indicates how all the "signs are mixed," as Commerce Secretary Juanita M. Kreps told a press conference. The Commerce figures show that in this year's first quarter the economy had slowed more than expected. The slower growth rate reached an annual rate of only 0.7 percent, compared to 6.9 percent in the last quarter of 1978. Also, according to Commerce, inflation, measured by the gross national product price index, rose in this year's first quarter at an annual rate of 8.7 percent, up from 8.2 percent in the previous quarter.

Profits before taxes rose 9.7 percent in 1978's final quarter, an annual rate of about 45 percent. Over the entire year, profits rose 26.4 percent, to an annual rate of \$225.3 billion, up from \$205.4 billion. After tax profits grew 9.7 percent, to an annual rate of \$130.7 billion. These figures from the Department of Commerce revised the "real" gross national product figure to an annual rate of 6.9 percent in 1978's fourth quarter, compared to the 6.1 percent reported previously.

Some policy makers appear to be alarmed with all this evidence of an overheated economy. Some of the measures proposed to cool it down will certainly affect construction if they are put into effect, one suggestion being to make interest rates still higher. Certainly, at the end of the first quarter, the predicted recession had not come and did not seem likely to arrive in the second quarter. If the economy's growth in the second quarter of this year goes up more than 2.5 percent, said William Miller, chairman of the Federal Reserve Board, the government may "need to consider some further restrictive monetary action." The Commerce Department's deputy chief economist predicts a growth rate of about 3 percent in the second quarter.

Those who earlier had predicted a recession in 1979 currently find the economy better than expected—and inflation worse than anticipated, all of which has consequences for the construction industry. In this time of economic unpredictability, as one economic writer said, forecasters are apt to wind up "with eggs on their chins, if not a custard pie in the face."

In the past, this magazine has used figures supplied by the New York Chapter/ AIA as a kind of barometer of the economic health of the architectural profession. Recently, the chapter asked its member firms to report on the total number of people employed at the ends of the years 1975 through 1978. The respondents reported: 1975, 909 employees; 1976, 938; 1977, 1,078; 1978, 1,183. In other words, employment at the end of 1978 was up 23.2 percent over 1975. The firms who were willing to guess what the percentage rate at the end of 1979 would be over 1975 gave an estimate of a whopping 35.6 percent.

VICRTEX* introduces Rainfall ...a new vinyl wallcovering There are 17 "palette" colors to enhance the subtle texture of Rainfall... the newest creation in the extensive VICRTEX collection.

All are virtually indestructible, enjoy excellent resistance to soil, stains and mildew

DISTRIBUTED BY: VICRTEX SALES DIVISION

New York, Atlanta, Chicago, Dallas, Los Angeles

San Francisco, Boston, Minneapolis, Toronto, Montreal

HOWELLS, INC., Salt Lake City/PAUL RASMUSSEN, INC., Honolulu

and the highest fire-safety rating awarded. Request swatches.

Wall Sculptors to the Industry

L.E. CARPENTER and Company A Dayco Company

206 AIA JOURNAL/MID-MAY 1979

170 North Main Street

Wharton, New Jersey 07885

(201) 366-2020/NYC (212) 751-3565 Circle 68 on information card

AIA Component Awards

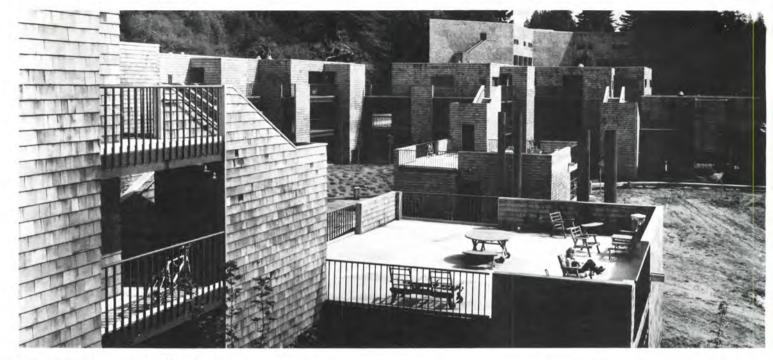


Many of AIA's 265 state and local component organizations conduct their own annual awards programs. A sampling of recent award winners, chosen for a range of building types and locations, is seen here and on following pages. Nora Richter

Idaho Chapter. Hagadone Newspaper Building, Coeur d'Alene; R. G. Nelson, AIA, Coeur d'Arlene (above). The fourstory, 11,000-square-foot building was built on an existing 1880s railroad pier. The interior space is arranged vertically around an atrium. Large spaces are in the center and smaller, quieter, individual offices are on the periphery. The jury commented, "An elegant and imaginative solution for an unusual problem. Expertly executed and beautifully detailed. A Medici palace on the edge of an Idaho lake." Julius Shulman, photographer.

Northern California Chapter. Venetian Park Apartments, Stockton; Bull Field Volkmann Stockwell, San Francisco (right). On 16 acres, 279 apartment units are surrounded by a system of canals and green spaces which link with adjoining residential and shopping areas. Richard Hixson, photographer.





Northern California Chapter. Housing, Oakes College, University of California, Santa Cruz; MBT Associates, San Francisco (above). Apartment-style housing for 330 persons is located on a sloping grassland next to a redwood canyon, with fine views of the coastal plateau and Monterey Bay. The typical residence is a fourbedroom apartment with kitchen, living/eating area and two bedrooms. Apartments open onto small courtyards. Jeremiah O. Bragstad, photographer.

Ocean house, Monterey; Donald Sandy Jr., AIA, James A. Babcock, San Francisco (center). The 84 rental apartments of various sizes are on a four-and-a-half-acre beach property on Monterey Bay. The site is trapezoidal in shape, entirely sand, and slopes diagonally down to the water. The wood frame buildings with wood post and block foundation were designed to produce harmony with the natural environment.

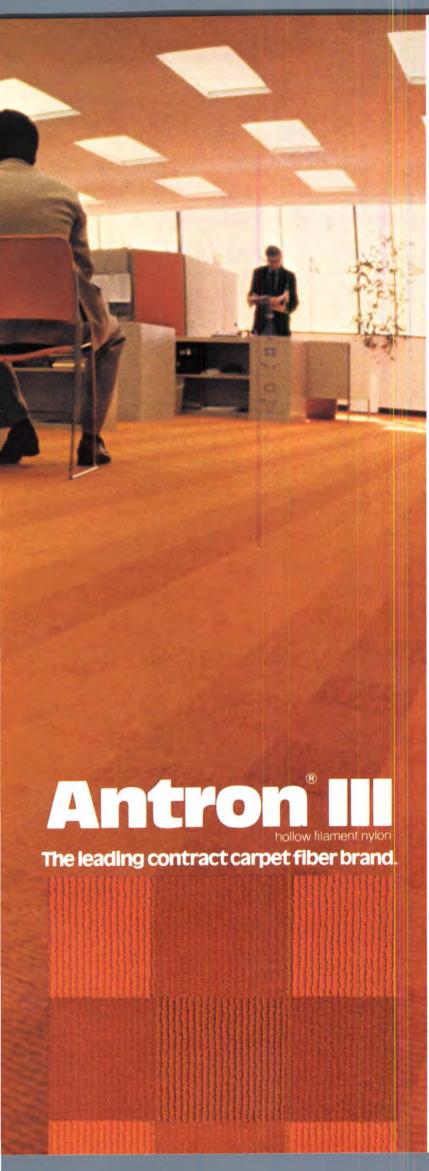
Southern California Chapter. Malibu Multiple, Malibu; William Adams, AIA, and Carl Volante (right). A stepped-back configuration allows the two buildings (five and seven units) to fit the 60x-80-foot site and to provide an ocean view. The average apartment is 860 square feet. The materials are a redwood/plywood exterior with red painted windows and industrial sash. "A superb solution to a difficult site combined with a repetition of simplistic forms produced a very handsome project. Interior spaces are exciting and unusual for a rental project," said the jury. Glen Allison, photographer.











Carpeting of Antron[®] III resists dirt better, stays new-looking longer.

The secret: Unique hollow-filament fibers.

Antron* III nylon is the only carpet fiber with a rounded hollow-filament structure. So it resists dirt better than other nylon fibers. The smooth exterior shape of Antron® III minimizes dirt entrapment, and the hollow-filament structure scatters light to make dirt less apparent. So the carpet stays new-looking longer than

ordinary nylon carpeting.

Antron® III is durable. Pile of Antron® III resists crushing and abrasion even in heavytraffic areas. Keeps its fresh, new look.



Magnification 250X of Antron® III nylon showing hollow filaments and round, anti-static filament.

Antron® III controls static shock. Gives you protection that won't wear out or shampoo out—because it's built right into the fiber.

That's why Fluor E&C used carpeting of Antron® III nylon to cover over 1,100,000 square feet in its Southern California Division in Irvine, California. And why your next contract carpet should be Antron® III nylon.

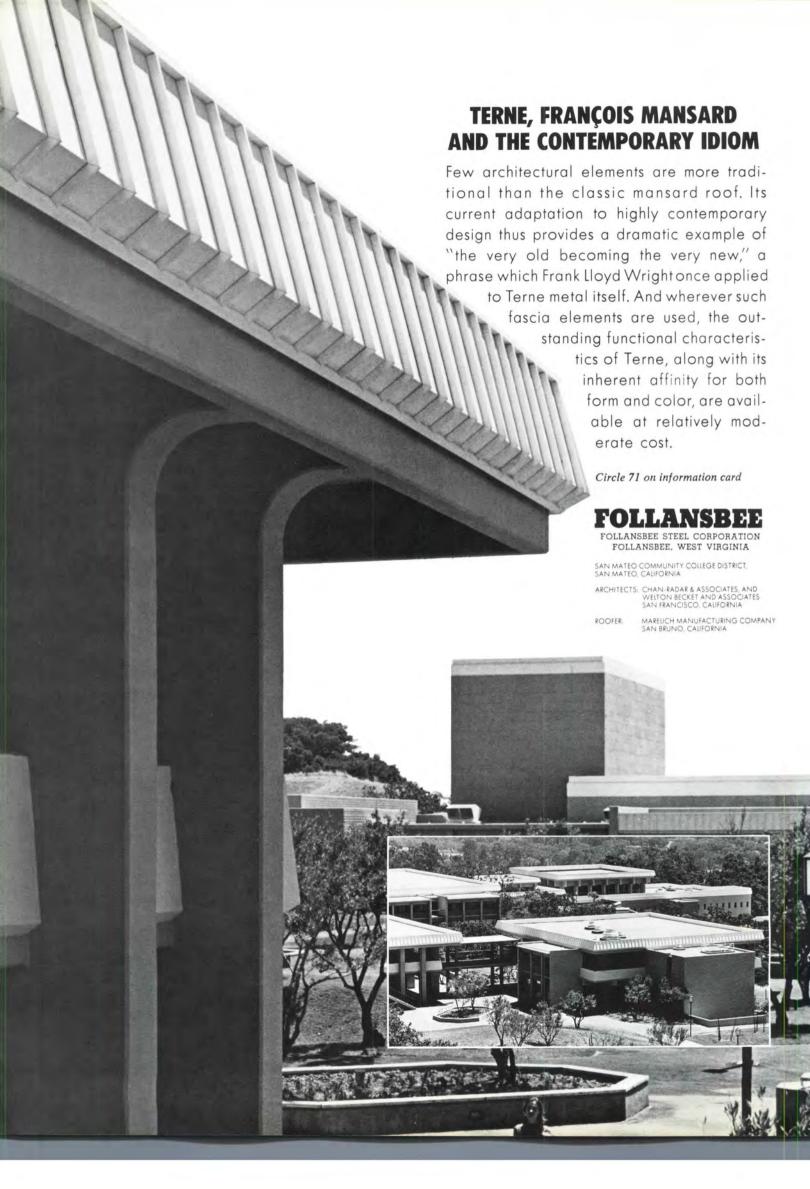
Write for Specifiers' Information Kit: Du Pont Company Room 37229 Wilmington, Delaware 19898

Installation: Fluor Corporation Engineers and Constructors, Inc., Irvine, Calif.

Architect: Welton Becket Associates, Los Angeles, Calif.
Carpet Consultant: William Schuler & Associates, Los Angeles, Calif.
*Du Pont registered trademark for nylon fiber. Du Pont makes fibers, not carpets.

Circle 70 on information card



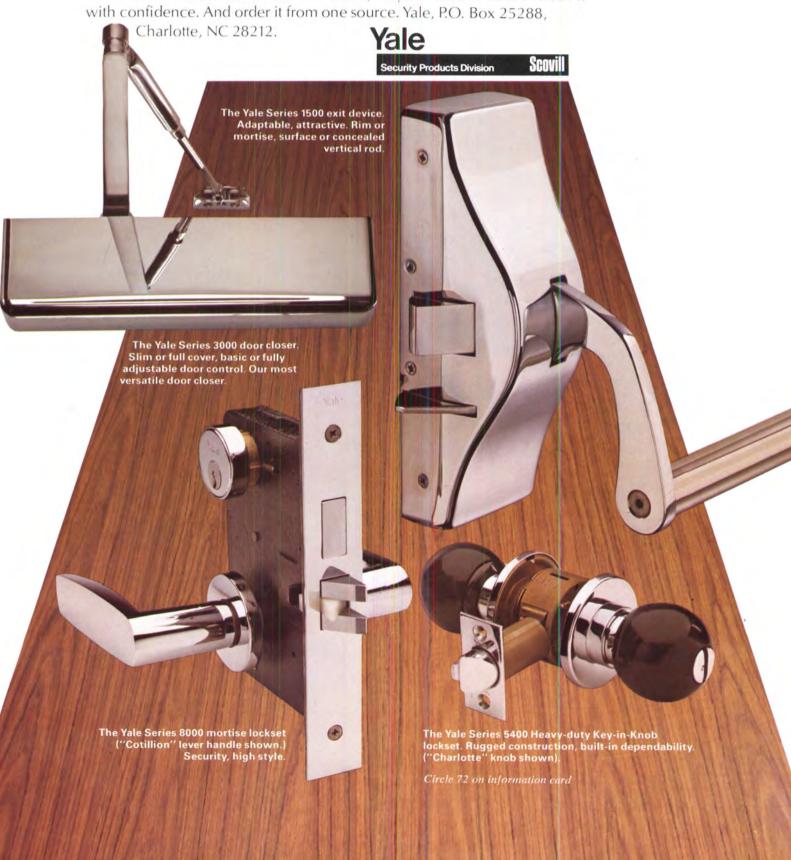


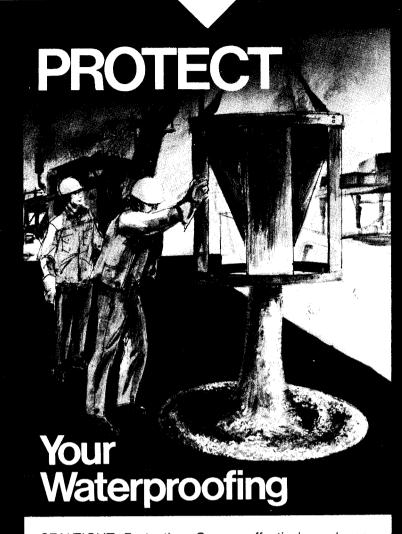
The Door. It belongs to us.

Yale hardware products open it; they close it; they lock it. They make the door what it is.

To architects and specifiers, distributors and installers, this means one thing: from mortise, cylindrical and monolocksets to holders and closers, from auxiliary locks and exit devices to fire hardware...

If the hardware carries the Yale brand, they can recommend and sell it





SEALTIGHT Protection Course effectively and economically protects delicate membrane waterproofing systems. Tough, durable panels isolate the membrane from penetration by sharp aggregate during backfill and settlement. Fully absorbs concrete impact and the normal job-site traffic. Fibre glass reinforced for greater flexural strength. Offers superior protection . . . the integrity of your membrane is not violated.

Economical SEALTIGHT Protection Course is compatible for all vertical and horizontal waterproofing systems—above grade, on grade, below grade. Lightweight panels are easy to install. Available in two types...PC-2 Heavy Duty and PC-3 Super Heavy Duty Protection Course.



For complete information, call or write for Catalog 6A.

W. R. MEADOWS, INC.

2 KIMBALL ST. • P.O. BOX 543 • ELGIN, IL 60120

Other Plants

HAMPSHIRE, IL / ATLANTA, GA / YORK, PA FORT WORTH, TX / BENICIA, CA / WESTON, ONT.

Circle 73 on information card



Circle 74 on information card

We put the finishing touches on Frank Lloyd Wright's masterpiece.

Despite the concerned and diligent efforts of the Western Pennsylvania Conservancy, decades of intense weathering and constant exposure to water had taken a heavy toll on Frank Lloyd Wright's famous "Fallingwater". A five-year-old coat of paint was blistered and peeling, and much of the concrete was pitted and spalled.

Because of its artistic and historic value, restoration architects Curry, Martin and Highberger took the absolute strongest corrective and protective measures possible. They specified that

Thoro System Products be used throughout.

After sandblasting, contractors Mariani and Richards brought the surface back to its original form with Thorite, a non-slumping, quick-setting patching material (mixed with Acryl 60 for enhanced bonding and curing).

Then the entire home was covered with Thoroseal. Thoroseal is harder and more wear-resistant than concrete, 100% waterproof, and bonds so tenaciously that it

becomes an actual part of the wall. Permanently locking out moisture and dampness.

To match the original architects' color specification, a coat of Thorosheen masonry paint was applied over the Thoroseal.

An ounce of prevention and a pound of cure.

We're Thoro System Products, and when it comes to restoring or protecting an architect's designs in masonry and concrete, we've been doing it better and more often than anybody else for over 65 years.

For further information, write, detailing your specific needs.



Standard Dry Wall Products . Dept. AIA 795 Main Office: 7800 N.W. 38th Street, Miami, Florida 33166 Western Office: 38403 Cherry Street, Newark, California 94560

Circle 75 on information card





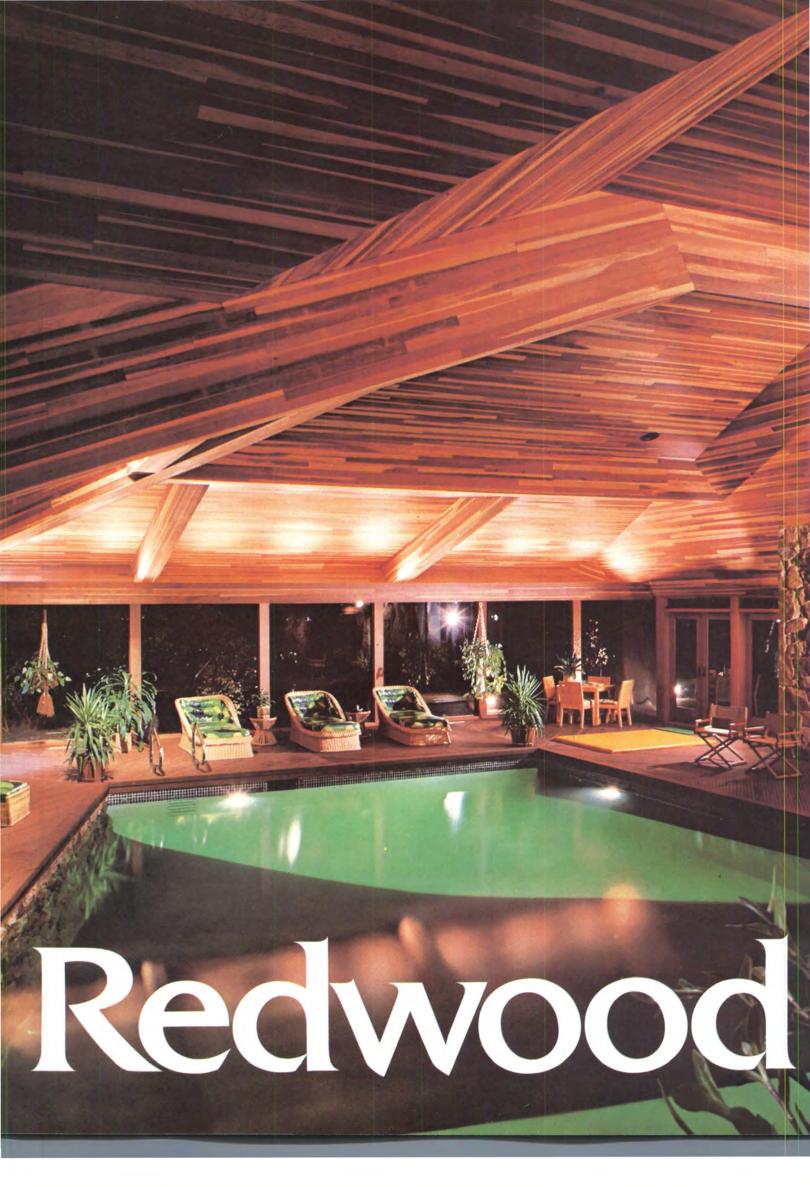


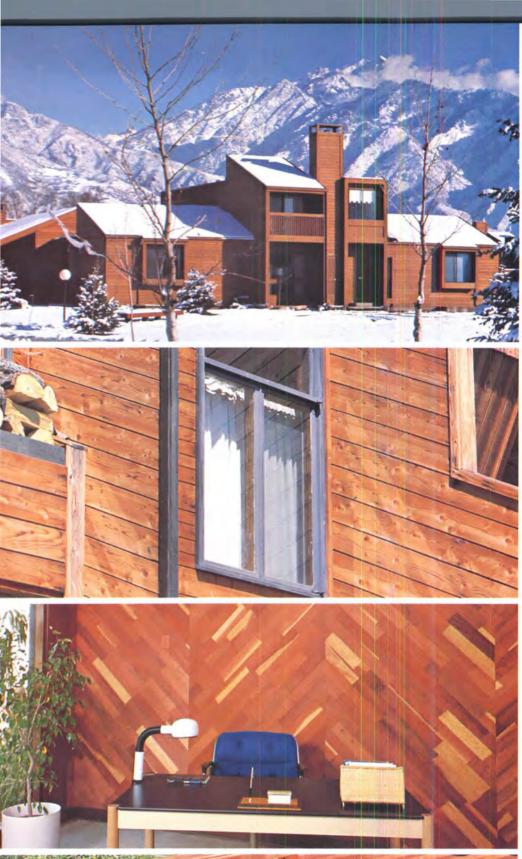






Thoroseal, Acryl 60, Thorite and Thorosheen are registered Trademarks of Standard Dry Wall Products. @1979. Standard Dry Wall Products







Redwood comes in a much wider variety of grades, shades, textures and types than most people think.

Redwood, as the work shown here clearly demonstrates, is not only beautiful, it's versatile. Redwood can be warm and rich. It can be bright and colorful. Redwood can be smooth and handsome. It can be rough and striking. Redwood has almost infinite possibilities.

And redwood adds enduring value to whatever you design or build. No other wood weathers like redwood. No other wood is as resistant to warping, checking, and age. No other wood takes and holds a finish better, or needs a finish less. Redwood insulates against heat, cold and noise. Redwood resists flame spread.

Redwood. There is, literally, no other wood like it.

Credits:

Clear grade residential ceiling Architect: Norman Jaffee, AIA Interior: Maurice Weir, FASID

Clear All Heart siding, multi-unit Architects: Fisher-Friedman Associates, AIA

Knot and sap textured siding, multi-unit Architect: Kermit Dorius, FAIA Architects and Associates

Finger joint interior accent wall Architect: Richard E. Huston Architect, Incorporated

Garden grades deck Designer: Elsebet Jegstrup



One Lombard Street San Francisco, California 94111

Redwood—A renewable resource Circle 76 on information card

SOMETHING TO THINK ABOUT BEFORE YOU SPECIFY YOUR **NEXT FIXTURE**

THE PAST, PRESENT, AND FUTURE OF MODERN LIGHTING

Showrooms: New York • Chicago • Los Angeles San Francisco • Dallas Atlanta • Miami • Cincinnati

940 Third Ave., New York 10022 • 1245 Merchandise Mart, Chicago, Illinois 60654 • Pacific Design Center, 8687 Melrose Ave., Los Angeles, Calif. 90069

The Chrome Finish

There's only one right way to get a good, durable chrome finish on steel, and that's by applying a layer of copper and a layer of nickel under the chrome. With each layer thoroughly buffed before the next is applied. This kind of quality gives Koch+



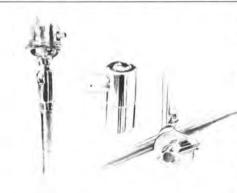
The Brass Finish

Koch + Lowy lamps that look brass are brass. Thirty-one years of experience has taught us how to slow the natural brass tarnishing process. We coat the polished brass with a special clear lacquer, and then bake it to a hard finish.



The Glass

All glass used in Koch + Lowy lamps is hand-blown. This allows for specialized design. And subtle nuances of texture, tone and color in the glass itself. Obvious quality your clients will see and recognize.



The Swivel

Koch+Lowy swivel lamps have a superb enclosed swivel. With all parts of solid brass. Completely machined so they're free of sand holes and cracks. Koch + Lowy swivels are virtually indestructible. They will never sag, droop or flop. Never need adjustment. And they are noiselessly-smooth thanks to nylon seating-rings. One more reason why Koch + Lowy lamps are a lifetime value. As functional as they are beautiful.

The Wiring

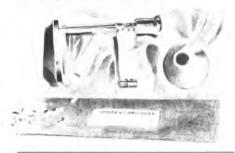


The Heft

The quality that goes into every Koch + Lowy lamp can be felt when you pick one up. Try the "heft-test" against one of our competitors. Feel which is heavier. Then judge for yourself.

The Arrival

Each Koch + Lowy lamp is specially packed in foam, shrink-wrap or other cushioning material. Then they're carefully boxed and shipped.



A Final Reminder

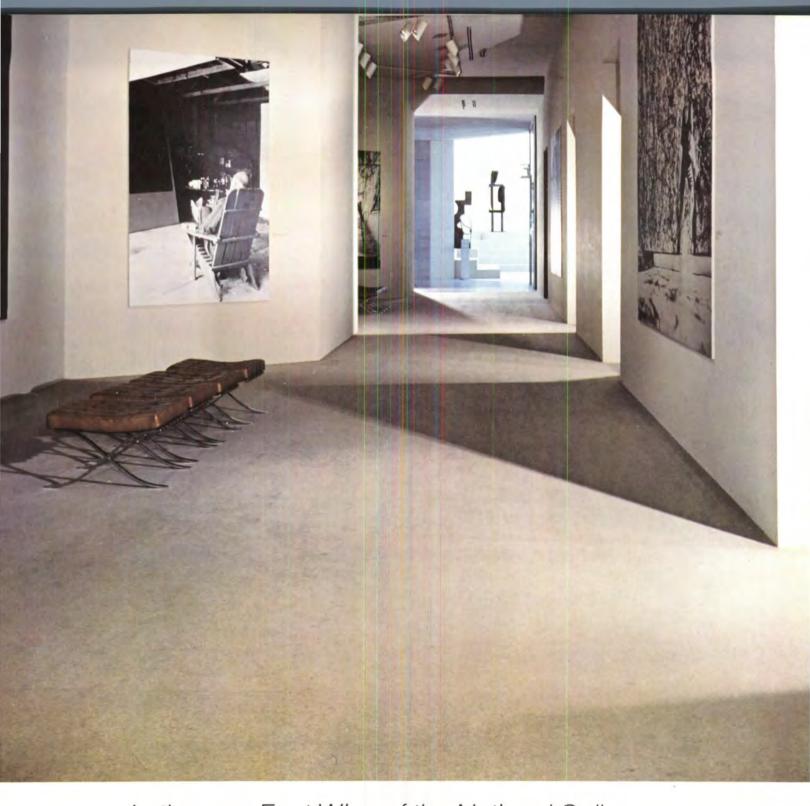
Don't confuse wattage with lighting. In the right lamp even 30 watts can provide sufficient lumens for reading. Proper lamp design can utilize the wattage to its fullest. For brightness. For special effects. Or as an art form. And no one does more with lighting than Koch + Lowy.

The Koch + Lowy collection of classic lighting is designed to coordinate with traditional and contemporary decor. Inspect it at our showrooms around the country or write under your letterhead for our 136 page catalogue. For your special large-scale lighting requirements we can start with your designs or ours, and do all the contract work

At Koch + Lowy we do it all right here in the U.S.A.



Circle 77 on information card



In the new East Wing of the National Gallery... THE CARPET WON'T GIVE YOU ANY STATIC

Bloomsburg's cut velvet carpet in the viewing areas was woven to order in unobtrusive browns and beiges so the splendor of exhibits is undiminished. Construction specs, anticipating the heavy daily traffic of visitors, were engineered to ensure maximum resistance to abrasion and crushing under the severest conditions. One important construction feature is the Bekitex® yarn containing hair-like stainless steel fibers plied with the pure wool pile yarns for permanent, reliable static



STATIC CONTROL YARN

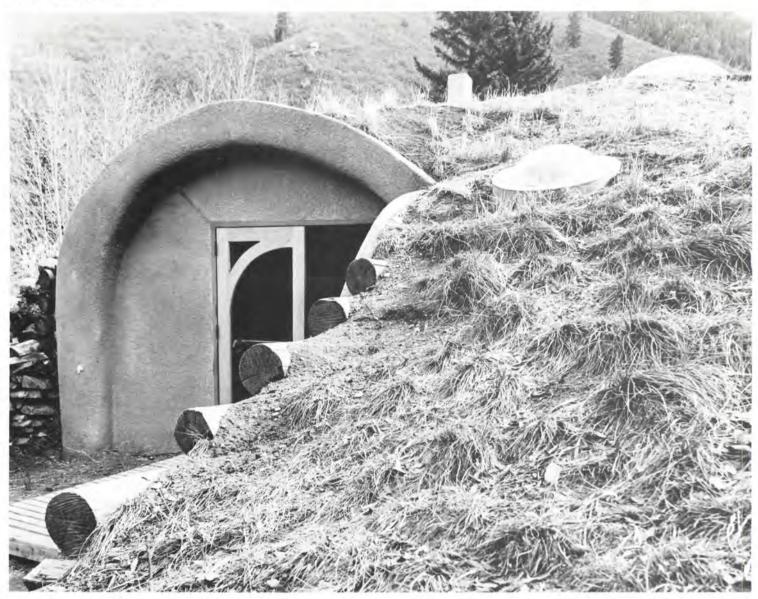
control. Visitors are guarded against static shock which could disturb their concentration and enjoyment, or even cause accidents among the hypersensitives. Moreover, much less air-borne dust is drawn into the pile, keeping the appearance level higher between routine cleanings.

Carpet specially woven with thoroughlyexperienced concern for commercial and institutional needs is Bloomsburg's stock-in trade. To learn more about us, call or write:

Bloomsburg Carpet INDUSTRIES

919 Third Avenue • New York, N.Y. 10022 • (212) 688-7447

Circle 78 on information card



Colorado Society. Wildwood School, Aspen; Pielstick Gibson & Associates, Aspen (above). The client requested an underground building for this preschool so the students would learn to appreciate the natural environment. The 35,000-square-foot interior is divided into two main classrooms, smaller work areas and a central barrel vault for administrative offices. The jury commented: "A kind of nonarchitectural solution which almost defies criticism in the traditional architectural sense. A unique solution providing an environment in close keeping with the state program requirements."

Henry Toll residence: Carl Worthington Associates, Boulder (right). Extending along the front of the tilted-cube house are windows offering a magnificent view. The 20,363-square-foot interior has a sunken living room with fireplace, adjoining kitchen, master bedroom and loft sleeping space. The jury commented: "The plan—lucid and straightforward—provides a variety of spaces... detailing, materials and color selection [are] also done with a kind of crispness and clarity that distinguishes this award winner." Wayne Thom Associates, photographer.



220 AIA JOURNAL/MID-MAY 1979

NONSTOP

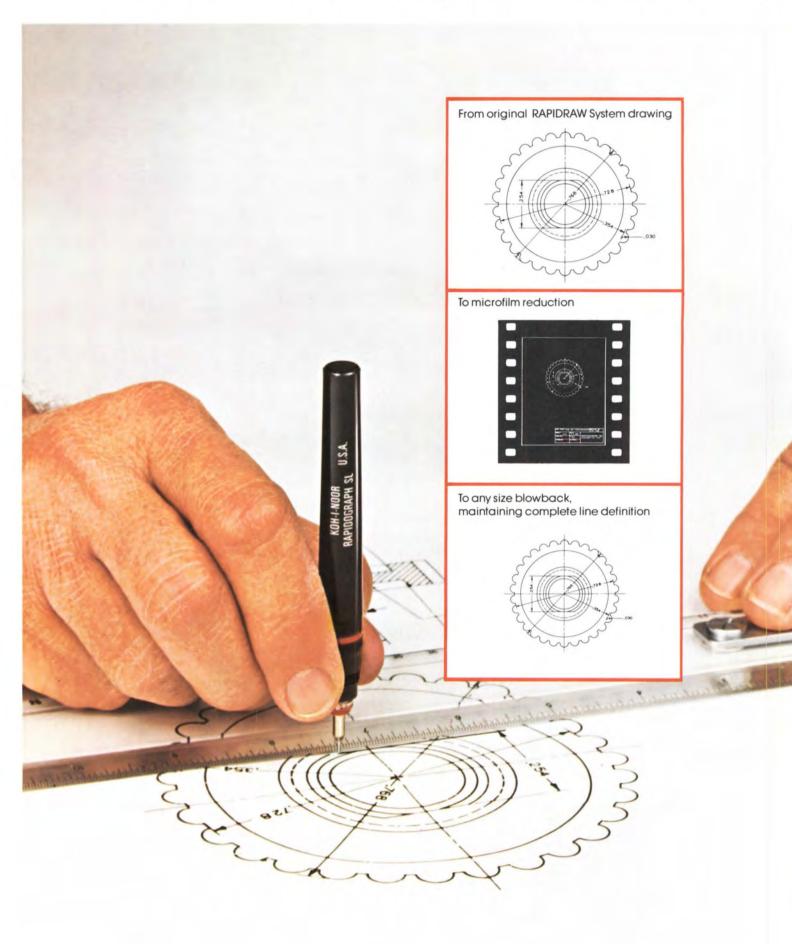


Stendig

NONSTOP from the Stendig* deSede Designer Collection New York: 410 East 62 Street. Chicago: 950 Merchandise Mart. Los Angeles: 201 Pacific Design Center. Other showrooms in Atlanta, Denver, Detroit, Miami, St. Louis, San Francisco, Seattle. Representatives in major cities, write or call Stendig Inc., 410 East 62 Street, New York 10021 (212) 838-6050. Stendig Inc. a subsidiary; B&B America, a division of Stendig International, Inc.

Circle 79 on information card

What makes The "RAPIDRAW"



ystem faster and easier?

"RAPIDRAW" INK-ON-FILM TECHNOLOGY provides 8 major advantages:

- Ink drawings on film can be transferred directly to microfilm without costly retouching or redrawing.
- . The quality of ink lines on film is superior.
- Ink-on-film drafting can be accomplished faster and easier than a comparable square foot of pencil drawing on paper.
- Ink lines can easily be erased from drafting film without leaving a "ghost" or other photodetectable traces of erasure.
- The Rapidograph Technical Pen is easy to handle, producing ink lines of predetermined, consistent width and uniform density.
- Ink-on-film drawings retain highest quality through successive generations of photographic reproductions.
- Ink-on-film drawings provide maximum dimensional stability and are virtually indestructible.

To know what The RAPIDRAW Sytem of direct ink drafting on film can do for you, send the coupon below for a free copy of our new RAPIDRAW System manual. (Or call toll free 800-631-7646; in New Jersey, collect 201-479-4124; in Canada, toll free 1-800-361-0252, or collect 514-636-9635.)

RAPIDOGRAPH SL 3076...OR
RAPIDOMETRIC 3095

PELIKAN AND KOH-I-NOOR INKS

RAPIDRAW DRAFTING FILM

RAPIDRAW SYSTEMS

ACCESSORIES SYSTEMS







Address ___



YOU GET MORE FROM KOH-I-NOOR

The "Breakthrough" Company

Koh-I-Noor Rapidograph, Inc., 100 North St., Bloomsbury, N.J. 08804

In Canada: Koh-I-Noor Rapidograph, Inc. 2355 43rd Ave., Lachine, Quebec H8T 2K1

Circle 80 on information card

For immediate reply to a request for our RAPIDRAW System manual . . . fill out, clip out and mail this coupon to Koh-I-Noor Rapidograph, Inc., 100 North St., Bloomsbury, N.J. 08804.

Name ______(Please print or type)
Title _____
Company _____

City _____ State ____ Zip ____

AIA-5-79







SCHO

A Norton Unitrol Door Control does more than cushion the shock of an opening door. It ABSORBS it!

No question about it. When today's in-a-hurry crowds slam through a door, they can put a tremendous strain on the door, the frame, the door control and the door's hinges. And that can lead to trouble... quickly.

If you're specifying hardware for doors that will get hard use, you have two alternatives. You can cushion the shock... with a closer's backcheck and an arm-mounted stop. Or you can use a shock absorbing Norton* Unitrol* door control.

The Norton Unitrol door control is a heavy-duty spring-loaded shock absorber. It isn't just a door stop...it's a heavy spring, two inches long, that brings the door

to a cushioned stop during the last 5° of door travel.

Impressive, but that's not all. The Norton Unitrol door control is a total control ... with a reliable hold-open mechanism you can engage when a holder is needed.

Unitrol door controls are available with a variety of Norton closers as their basic control component: the Traditional Surface Closer, the Series 1600, 7700 and

8000. They're also available with the Series 7500 and 8501, both fully adjustable from a closer size 2 through 6. All but the Traditional Surface Closer are available for top jamb installation. We can even provide a Unitrol door control without the holder capability... for fire labeled doors.

We'd like to talk with you about your door control problems. We have door control solutions. Ask your Norton representative or contact us at Scovill Security Products Division, PO Box 25288, Charlotte, N.C. 28212.

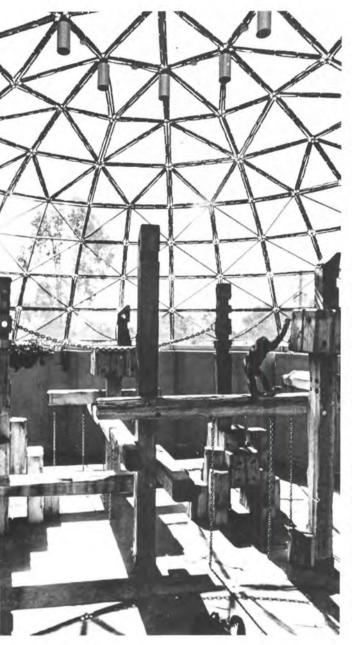
We're specialists in the field.

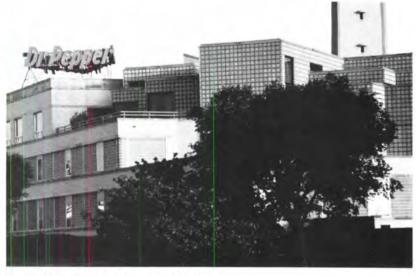
Norton

Security Products Division

Scovill

Circle 81 on information card





Texas Society of Architects. Addition to Dr. Pepper Co. Headquarters Building, Dallas; Environmental Space Design, Inc., Dallas (above). Twin 7,500-square-foot glass block additions were constructed at a 45-degree angle on the east and west stepped roofs of the 1947 building. Arizona Society. Phoenix Zoo Orangutan Exhibit; Drover, Welch & Lindlan, Phoenix (left). The 70,000-square-foot exhibit is covered with a shade screen and steel half-dome. Visitors watch from behind a wall. The jury praised it "for empathy for the needs of animals and spectators."

Alaska Chapter. Plywood Supply Home Center, Fairbanks; G. D. M. & Associates, Inc., Fairbanks (below). Designed as a retail store for a firm expanding to a comprehensive home center, the building includes a basement level of mostly unfinished warehouse space, a first level retail sales section and a second floor with a barrel-vaulted clerestory.





Versacor multi-layer protection. Because the beauty you depend on now may not be enough.



As corrosive factors in the environment continue to intensify, many simple paint finishes—even finishes that now seem adequate—may not be able to take the punishment.

A better kind of beauty.

That's why Robertson developed Versacor—a new multi-layer protective system for metal walls and roofs. Versacor's beauty is tough enough to handle even the most aggressive building environments. And that's just as important for commercial and institutional buildings as it is for industrial structures, because the more your building is going

to be seen, the more it needs to retain its original appearance.

Beauty that can handle acid rain.

In addition to the damaging effects of sun and weather, the contemporary environment poses a new and growing problem: acid rain.

Normal rain water, combined with pollutants in the air, now carries the effects of harsh environments hundreds of miles from their source—no building site is immune.

Beauty that's proven in the field—and in independent tests.

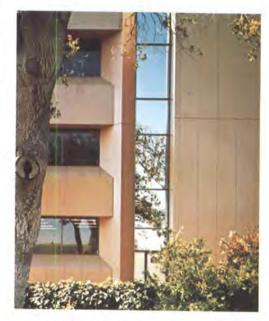
Already, Versacor has proved itself in a full decade of applications throughout Scandinavia, where rain has been recorded at 50 times normal acidity. Moreover, Versacor has demonstrated

its superiority to other finishes in a battery of independent tests.*

Beautiful freedom in design.

Versacor's striking profiles, flatwall panels, and unlimited range of colors let you design the building you want—at a cost your clients will appreciate. And Versacor looks even better when you consider lifecycle economies.

For additional information and independent test results, write: H. H. Robertson Company, Dept. J-5, 400 Holiday Drive, Pittsburgh, PA 15220.



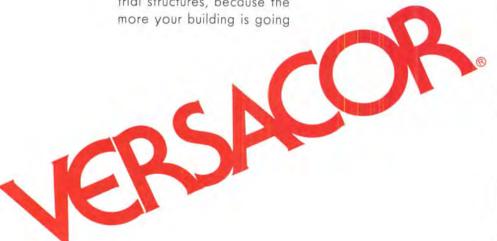
You'll find that Versacor truly is a better kind of beauty.

*Standard ASTM, EMMAQUA, and Kesternich tests designed to measure fading, chalking, salt fog damage and moisture penetration—were conducted by the Pittsburgh Testing Laboratory, Carnegie-Mellon University and Desert Sunshine Exposure Tests, Inc.

The Robertson projects shown here were completed before Versacor's introduction in America. They would look identical if finished in Versacor.



Circle 87 on information card



Talk is cheap. Our figures speak for themselves.



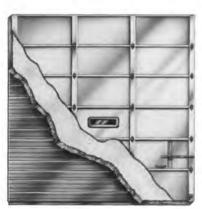
It seems a lot of people in the industry can talk a good game on the subject of saving energy. But when it comes to results, there's likely to be more confusion than conservation. That's why at the Overhead Door Corporation we use a consistent set of standards and methods to determine energy efficiency. Reliable because they're ASTM—the same ones used by architects and engineers.

Take our Commercial Insulated Sectional Steel Door. It has an R 6.43 value you can depend on. Inside we've added noisedampening, thermally-efficient polystyrene foam insulation that's proven cost-effective.

And as on all our commercial sectional doors, our Posi-tension® drum is a standard feature.

But our door is only the beginning of energy savings. We have an entire "package" ranging from seals, shelters and strip doors to a full line of electric door operators for more energy efficient Loading Dock operation.

We back our commitment with a nationwide network of over 400 distributors. They sell, install, service and provide warranty protection for all our products. They're ready to work with you to help close the door on energy waste. And, best of all, they speak your language.





Circle 88 on information card







Nebraska Society of Architects. The Black Elk-Neihardt Park Shelter, Blair; Dana Larson Roubal & Associates, Omaha (above). Underneath the steel, laminated wood deck and cedar shingle park shelter is a recessed fire pit with fireplace, washroom facilities and a 28-foot radius concrete floor. The jury commented that "the column-free design provides a panoramic view of the surrounding park." The city of Blair is also in sight.

Michigan Society of Architects. Detroit Science Center; William Kessler & Associates, Inc., Detroit (left). Built initially as a 36,000-square-foot space theater with related exhibit areas, the total project will be 500,000 square feet when completed. The design uses multisized exhibit halls. Provision has been made on all floors to accommodate preplanned expansion in future years. Balthazar Korab, photographer

Wisconsin Society of Architects. Navy and Marine Corps Reserve Center, Green Bay; Brust-Zimmerman, Inc., Milwaukee (below). The reserve training center contains classrooms, specialized training rooms, small medical facility, conference rooms and a gym. Three sides of the building are glass, steel and masonry and the fourth is masonry. Mike Huibregtse, photographer.





East Building, National Gallery of Art, Washington, D.C. Architect: I.M. Pei and Partners, New York City.

Rambusch adds lighting to a structure that reaffirms a nation's commitment to excellence.

The National Gallery's new East Building, by architect I.M. Pei. A spectacular addition to our national heritage.

Combining enlightened philanthropy with architectural genius and painstaking craftmanship...it reflects a profound regard for, and insistence on ... excellence.

Rambusch is pleased to have engineered and manufactured the quadruple cylindrical fixtures that illuminate the monumental expanses of the museum's walls.

40 West 13th Street, New York, N.Y. 10011 (212) 675-0400

By day, they supplement the natural light from the skylight roof. By night, they maintain the integrity of its design while efficiently fulfilling the building's complex lighting requirements.

Rambusch is proud to add this 'crown jewel' to its own eighty year heritage of excellence.

lighting/stained glass/metal/wood/painting/refinishing ocnsultation/planning/design/fabrication/installation

Circle 90 on information card







Pyr-A-Larm® Detectors For Every Need.

For over 25 years, Pyrotronics has set the standards for early warning fire detection throughout the industry. Our systems protect many Fortune 500 companies, hospitals, museums, schools — even the NASA computer center. When property and lives are at stake, the name is Pyrotronics. Our full line of early warning fire detectors includes • Ionization detectors

- Photoelectric detectors Thermal detectors Infra-red flame detectors
- · Ultra-violet flame detectors

Monitor™ System for Central Data-Gathering and Control.

Here's the simple solution to the complex problem of supervising fire protection, intrusion and building maintenance functions. It's designed to adapt to any need; upgrading requires little or no additional hardware • Uses existing telephone lines or any single two-circuit wiring • Oversees up to 1,024 points simultaneously from a single control station • Displays status of each monitored point • Provides hard-copy record of all functions (optional)

 Permits two-way communication between all points

Pyr-A-Lon® 1301 Extinguishing System.

This system can provide complete compatibility of equipment and single-source responsibility for both detection and suppression. It uses Halon 1301 – the fastest extinguishing agent known to snuff out fire without damaging equipment, papers, or people. All without human intervention and with minimal interruption of service.

Protection beyond detection:





Pyrotronics administration stratus

System 3 Universal Alarm Control.

System 3 is designed to meet your precise needs today, whatever the size of your facility. Modular design makes future expansion a simple and relatively inexpensive matter. System 3 offers total protection. • Detects fire at its earliest stages • Monitors all building system functions • Supervises alarm signals • Controls doors, elevators, fans, waterflow • Supervises sprinkler system

· Reacts to manual alarms

Sentracon® for Card Access Control.

Sentracon means total protection — against intrusion as well as fire. Sentracon provides the ultimate protection against unauthorized access to high-security areas. This patented electronic coding system defies deciphering by even the most sophisticated techniques including external electrical and magnetic tampering. Unique card code permits selective access clearance, ensuring complete security control of all employees.

You know our reputation as the leader in early warning fire detection. But our expertise reaches far beyond fire detection to include highly sophisticated systems for virtually any fire protection requirement. And now, we're also offering Sentracon — a unique access control protection system.

As our line continues to grow, you can continue to expect the ultimate in design and engineering from Pyrotronics. Whatever the scope or nature of your protection needs, you'll get unparalleled reliability, flexibility and economy. Most important, you'll get it all from the single source you know and trust.

Detection? The best. But that's just the beginning. For Pyrotronics — and for you. Get the full details by contacting Harry Lein, Pyrotronics, A Baker Industries Company, 8 Ridgedale Avenue, Cedar Knolls, NJ 07927. (201) 267-1300



Specify the Best!Ibac One-Piece Seamless

Acrylic Globes



Clear as crystal. Ibac's patented forming process allows manufacture of one-piece, seamless acrylic spheres, which are optically better than glass.



Color stability. Compare lbac's acrylic globe (right) with butyrate, polycarbonate or polyethylene. Ibac's acrylic globes never yellow.



Compare Strength. Ibac (right) is the only globe manufacturer that quarantees minimum wall thickness for more heat and impact resistance. (Unretouched photograph.)



The One-Piece Seamless Acrylic Globe People

Call or write for complete specifications on entire line: Ibac Industries, Inc.

1511 12th Street, Princeton, Minnesota 55371 Phone: (612) 389-1560

Circle 92 on information card

BANG IT. BUMP IT. WHACK IT THUMP



McGUIRE TRAFFIC DOORS STAND **UP TO HARD KNOCKS AND** COME BACK SWINGING.

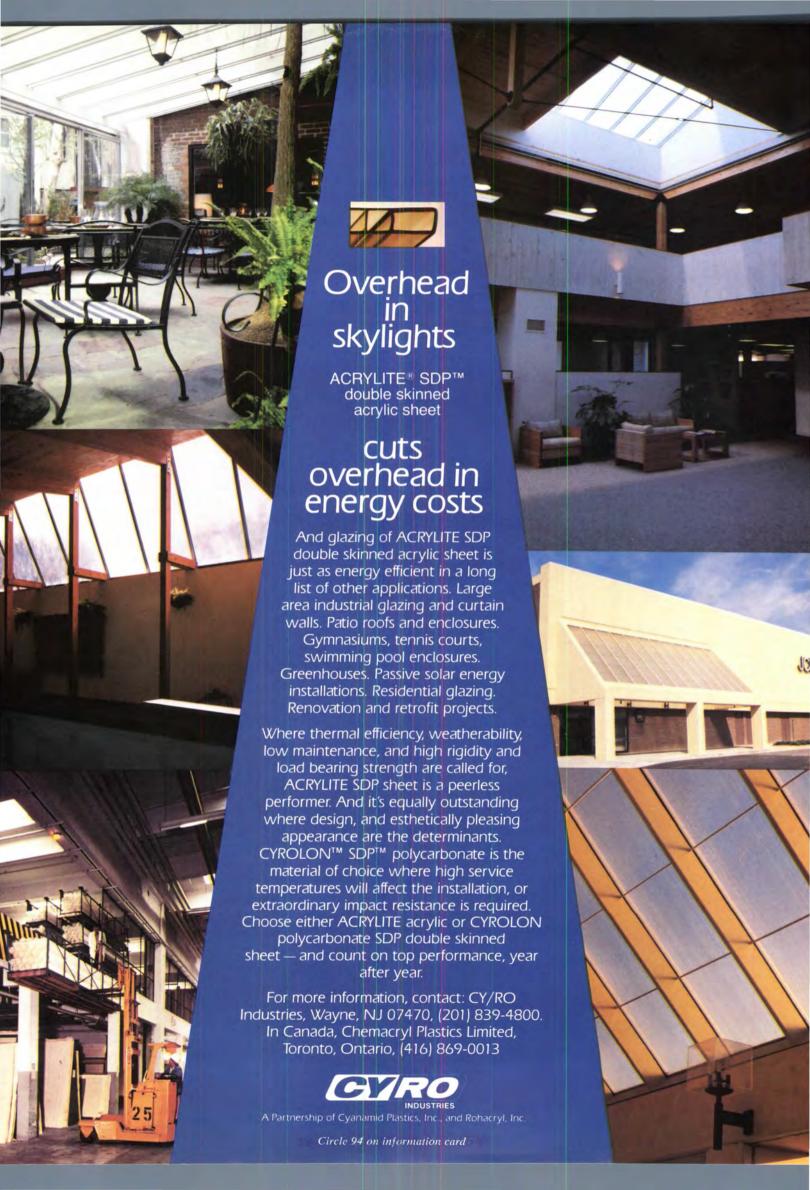
Designed to conserve energy, McGuire's Fendor features welded tubular steel frame construction, large Lexan® vision areas, insulated panels, double gasketing, massive V-Cam gravity action hinges, thick wall hinge posts, and formed 1/2" thick rubber centerpointed bumpers.

For all your traffic door requirements, contact your McGuire rep or W. B. McGuire Co., Inc., 1 Hudson Avenue, Hudson, N.Y. 12534. (518) 828-7652, AUTODOK, Telex: 145-490 HUON



Prepared for W. B. McGuire Co., MG 79-4, by R. T. Blass, Inc., Old Chatham, N.Y., (Plant Engineering

Circle 93 on information card





CORIAN® makes your most imaginative ideas suddenly practical.

With opalescent beauty. Easy care. Wood-like workability.

CORIAN® building products are your ideal choice for interior horizontal and vertical surfacing applications where you need a combination of beauty, durability and easy care.

Add to this a workability that approaches that of a fine hardwood, and you can quickly see that many of the imaginative customizing ideas you may have considered and abandoned are now beautifully practical with CORIAN.

All this is possible because CORIAN, unlike laminated or coated synthetic products, is solid, with color and pattern all the way through.

The result is a deep, opalescent quality...a smooth, pleasing touch...exceptional stain and impact resistance...plus simplified care and repair.

Quite simply, CORIAN brings you "practical elegance"...practicality with a flair. And isn't that really at the heart of every design problem?

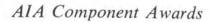


CORIAN* is available in sheet stock for kitchen and bath countertops, wall wainscoting, bathtub and shower surrounds and custom surfaces. One-piece molded tops and bowls of CORIAN for kitchen, bath or bar also available. For more information, write: Du Pont, Room 37282, Wilmington, DE 19898.

*CORIAN is Du Pont's registered trademark for its methacrylate building materials.



Circle 94 on information card





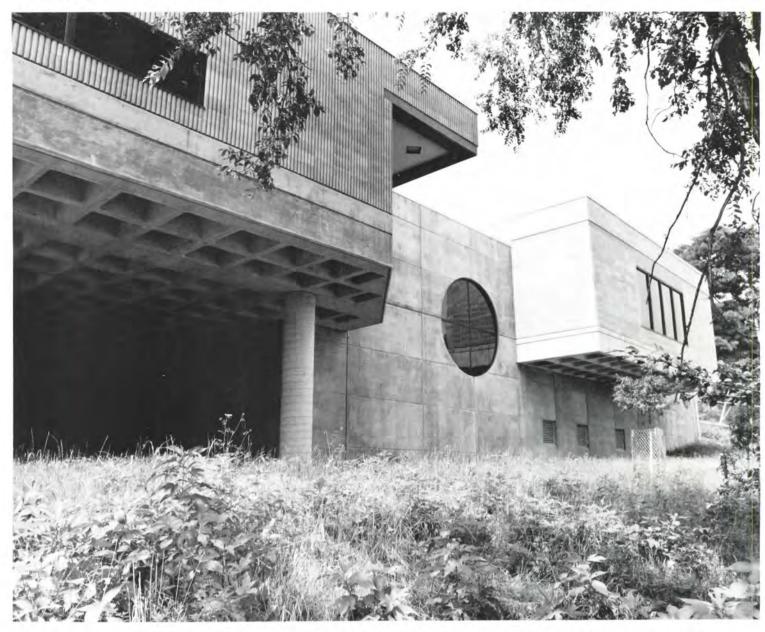
Minnesota Society. Glass Cube, Amery, Wis.; Ralph Rapson & Associates, Minneapolis (above). A transparent glass vacation house allows for magnificent views of the western Wisconsin meadowlands, dramatizing its close relationship with its handsome site.

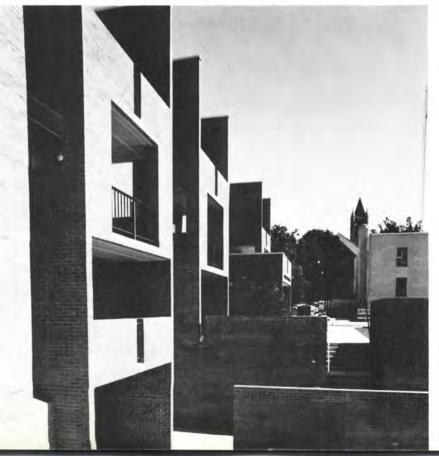
Addition to the Northwestern Bell Telephone Co., St. Paul; Ellerbe Associates, Inc., Bloomington (right). The addition to the company's 1966 and 1934 buildings houses mainly telephone equipment and switchgear. The jury called the structure a "striking addition to an urban skyline."

The School of Home Economics, University of Minnesota, St. Paul; The Hodne/Stageberg Partners, Minneapolis (below). Three existing buildings, dating from 1896, 1918 and 1955, were renovated. A new building connecting all three provides circulation (climate controlled pedestrian streets), a student commons and laboratory space. The new construction became "the keystone that fits and connects the three disjointed pieces of architecture both in style and function," the jury commented.



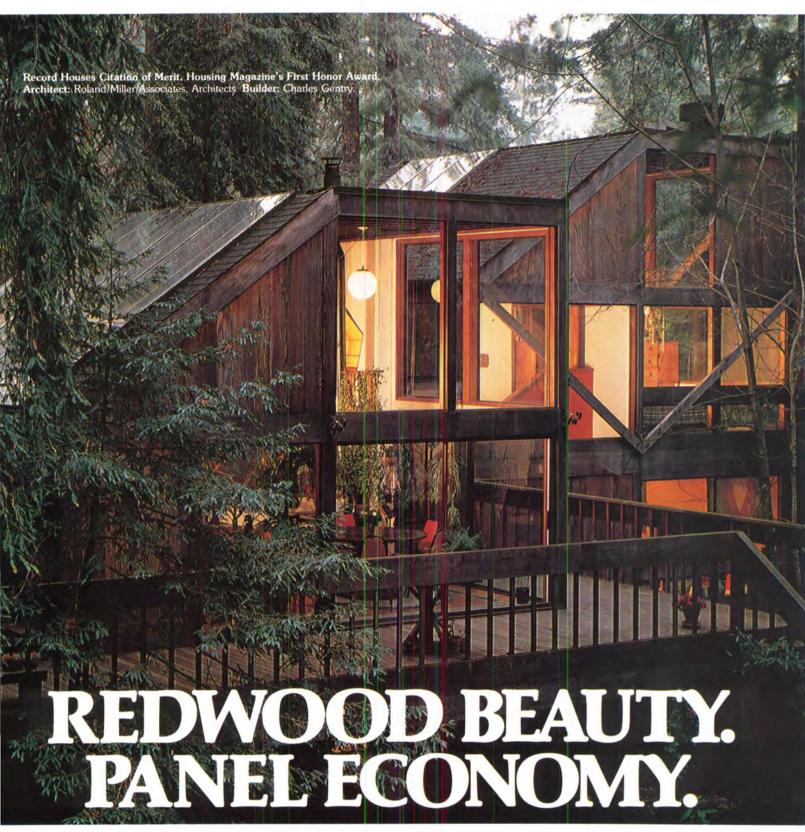






Architects Society of Ohio. English Woods Civic and Child Development Center, Cincinnati; Glaser & Myers & Associates, Inc., Cincinnati (above). The center is owned by the Metropolitan Housing Authority and operated for the benefit of tenants of a large public housing development. Ribbed concrete block and exposed concrete with accent panels of brightly colored smooth block were the principal building materials. The brilliant colors are carried inside and combined with skylights, framed views and liberal use of texture.

Maggie McKnight Apartments, Xenia; Richard Levin Associates Inc., Dayton (left). The 25 HUD housing units for the elderly were built on renewal land, one block from the center of the town of 28,000. The exterior materials are brick, bronze anodized aluminum and bronzetinted glazing. The architect achieved variety and residential character through the use of balconies, entries, screenwalls and the recessed activity courtyard.



As you can see, Simpson Redwood Plywood is every bit as beautiful as redwood lumber. That's because it is redwood, real redwood. But it's plywood. So it's a lot more economical to use than lumber.

Simpson Redwood Plywood weathers beautifully. It resists surface checking and takes stain beautifully. No other wood holds a finish any better.

Redwood plywood boosts home sales too. The natural beauty of redwood automatically increases curb appeal wherever you build with it.

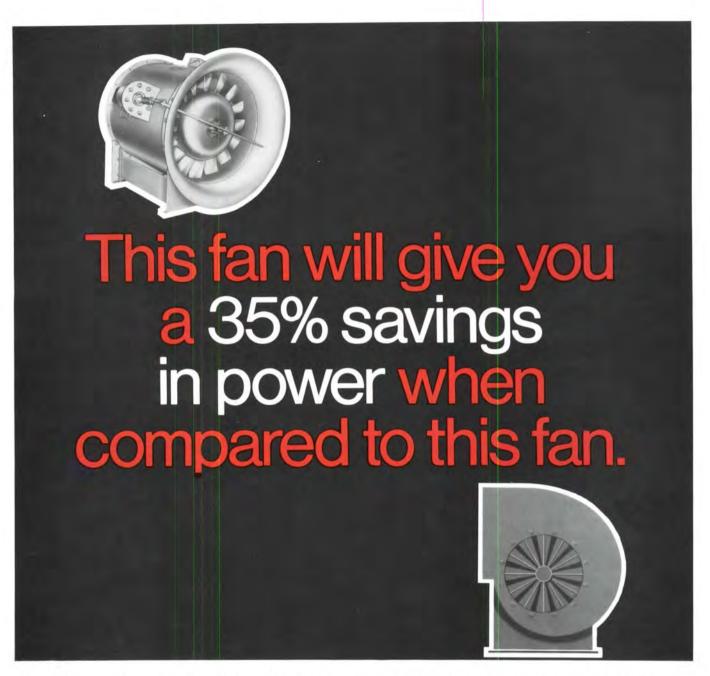
And you don't have to wait for Simpson Redwood Plywood. It's available now.

Why not contact your Simpson Representative now or write Simpson Timber Company, 900 Fourth Avenue, Seattle, WA, 98164.

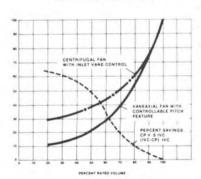


Simpson
Redwood is a renewable resource.

Circle 95 on information card



PERCENT OF FULL LOAD BRAKE HORSEPOWER, AND APPROXIMATE PERCENT OF INPUT KILOWATTS PERCENT SAVINGS IN POWER



It's true. When comparing a typical volume varying installation operating at 60% volume flow, Joy Controllable Pitch axial fans require 35% less power than an inlet vane-equipped centrifugal fan.

Today, more than ever, we are faced with the responsibility of conserving energy. The Joy Controllable Pitch Axivane $^{\tiny{(i)}}$ fan meets the challenge.

Joy Controllable Pitch fans automatically supply your VAV system with just the right amount of air. In response to a control signal, the blade angle changes while the fan is operating. Air volume flow can be adjusted to meet changing system requirements in seconds. In addition, they offer all the advantages inherent in the vaneaxial fan. Lightweight, compact design, ease and ecomomy of installation in any position.

For complete information on fan power savings write Joy Manufacturing Company, Air Moving Products, New Philadelphia, Ohio 44663. In Canada: Joy Manufacturing Company Ltd., Alpha Fan Division, Winnipeg, Manitoba.

Offices and plants throughout the world



JOY

Circle 96 on information card

AIA Component Awards



Arkansas Chapter. Metrocentre Mall, Little Rock; Cromwell Neyland Truemper Levy & Gatchell, Inc. and Blass/Riddick/Chilcote, both of Little Rock (left). A group of property owners and merchants wanted a mall that would bring life back to the city. The disorganized six blocks were transformed into a closed mall with one large fountain, fired clay pavement, landscaping, a 50-square-foot pavilion and a Henry Moore sculpture.

South Carolina Chapter. Deas Hall, The Citadel; Lucas & Stubbs, Charleston (below). The physical education facility is designed to blend with the Spanish-Moorish architecture on this military college campus. It houses two gyms, six handball courts, locker room, Olympic size pool and observation area, classrooms and weight lifting rooms. Gordon H. Schenck Jr., photographer.

Florida Association. Private residence, South Dade, Lemuel Ramos, AIA/Associates, Miami (bottom). An addition was designed to provide more entertaining space, a master suite and studio. The entry was moved to one side and the driveway was wrapped around the house.





Award winning buildings

include Bilco products.

No surprise.

Bilco quality helps make every building a "winner."



The Bilco Company, Dept. AJ-69 New Haven, Connecticut 06505











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

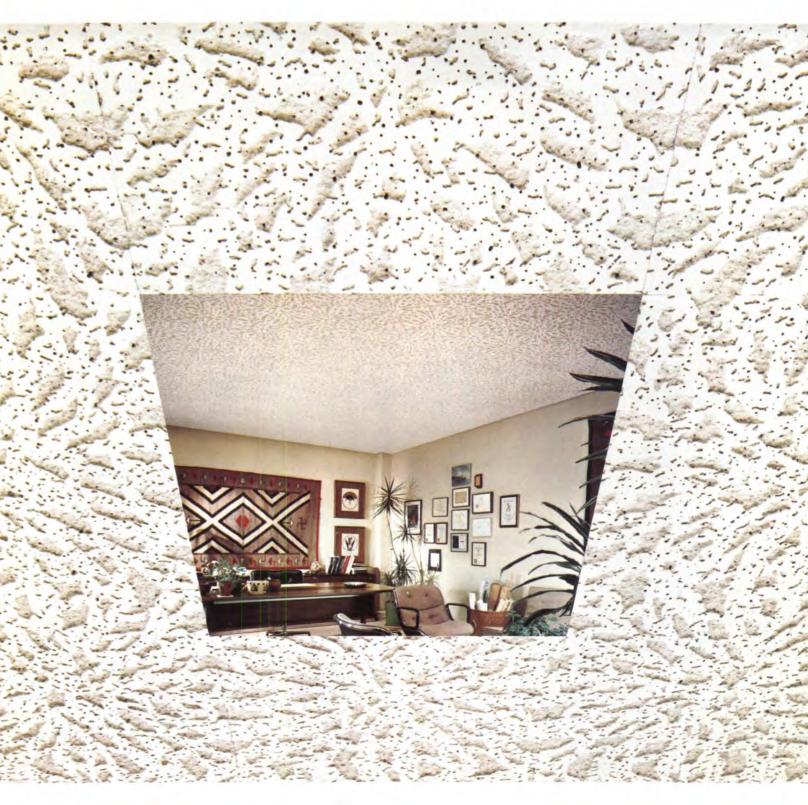
Watertight doors in single or double leaf design, rugged steel or aluminum plate construction. Eight standard sizes or special sizes to order. Tubular compression spring operators afford smooth, easy operation.





Georgia Association. Honeywell Headquarters Building, Atlanta; Thompson, Ventulett, Stainback & Associates, Inc., Atlanta (above). The Honeywell building is to be the "flagship office building" in the future Honeywell Center. It is located on a small mountain overlooking Peachtree Creek. The building curves around the hill and stands 400 feet long and six stories high on the downhill side. It is shorter and only five stories uphill. The boomerang-shaped building is made of precast concrete and glass. The jury found it to be a "beautifully detailed, crisp, tight-skinned building."

Tennessee Society of Architects. Addition to the Massachusetts Eye and Ear Infirmary, Boston; Walk Jones & Francis Mah, Memphis (left). In planning the addition to the 142-year-old hospital, the 29,614-square-foot site had severe limitations to be overcome. It is bound on two sides by another hospital and by major streets on other sides. The solution was to build over the existing complex. Four massive columns, 85 feet in length, support the deep steel trusses which span the existing structure. The steel structure rises 250 feet and is clad with precast concrete; aluminum windows are glazed with thermopane. Nick Wheeler, photographer.



Corona. Above all, elegant.

It's the new designer ceiling from Conwed. And it's beautiful. The deeply eroded pattern is completely registered for a truly monolithic look. The multidirectional sculptured design creates a radiating pattern which is visually intriguing from any angle or viewpoint. The warm ivory tone and subtle shadows produce a look that builds the elegance and

strength of your best designs.
When you want beauty above all, you

want Corona. From Conwed. Available in standard 12" x 12" concealed tiles and 2'x2' reveal edge tiles or U.L. Time Design Fire Rated, all manufactured to assure excellent dimensional stability and acoustical control, as well as aesthetic appeal. For more information, write or call

Conwed Corporation, Ceiling Products Division, 332
Minnesota Street, P.O. Box

43237, St. Paul, Minnesota 55164. Phone: (612) 221-1184.



Circle 98 on information card



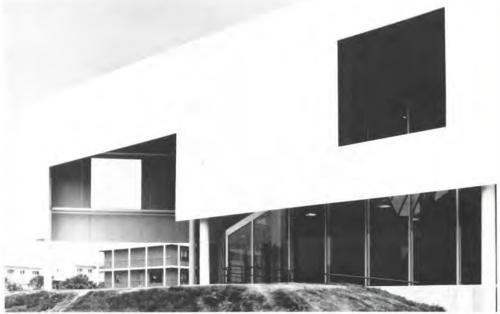
AIA Component Awards

Chicago Chapter. Bradford Exchange, Niles, Ill.; Weese Seegers Hickey Weese, Chicago (right). A discount store was transformed into an office and display space for a mail-order business. Underneath the new 20x108-foot skylight is a sunken garden with a fountain and running brook, which is used for conferences and dining. Open web joists and ducts are exposed. The jury was "greatly impressed by the architect's ability to transform a commonplace strip building into a unique people-oriented office and display space." Phil Turner, photographer.

National College of Chiropractic, Student Center, Lombard, Ill.; Hinds, Schroeder, Whitaker (center). The student center is a flexible building that can adapt from lecture hall seating to assembly competition or intramural activities by means of sliding screenwalls. The ancillary functions are placed below the lecture room tiers and are oriented toward the forecourt retention pond (for marine life). The jury commented, "An interesting use of metal panels that hang like a wrap on the outside of the building; a playful expression of an inert mass." Ron Gordon, photographer.

Iowa Chapter. The Public Library of Des Moines, South Side Branch; Charles Herbert & Associates, Inc., Des Moines (below). The building is cut into a slope close to a tree-filled valley near the east side of the site. The two levels of reading and study spaces are separated from service areas and book stacks by a circulation spine. The latter are located in the windowless west side. The jury commented: "A practical and delightful addition to the public realm. Instead of being an institutional lump, this building suggests that the world of books can be inviting and a joy in which to be included. The choice of a space frame for a structural system neatly combines both pragmatism and poetry."







"We figured we could save the MGM Grand Hotel \$8,000,000 in future energy costs.

Only E CUBE had the capability to confirm our analysis."

That's the conclusion of Consulting Engineer Frank T. Andrews of Fullerton, California, who's had long experience in dealing with Las Vegas hotel complexes. When he was given the MGM Grand Hotel energy-saving assignment, Andrews knew that because of the many variables and intricacies involved, the job required a computer solution with a flexible input format and almost unlimited scope. After investigating several energy analysis programs, he selected E CUBE because it was the best way to:

· Quantify energy saving techniques.

 Measure life cycle dollars saved by conserving energy.

 Analyze existing buildings and systems, allowing them to be modeled exactly.

 Critically examine large complex buildings.

 Model exactly an infinite number of zones with complex exterior surfaces.

- Accomplish the energy analysis at low computer running cost.
- · Secure impartial results.

Future savings: \$8,000,000.

In recommending the best program for MGM Grand, and simulating the most appropriate series of conservation options, Frank Andrews was able to verify that:

 Chilled water pumping horsepower could be increased to adequate size and controlled to reduce electric consumption.

Oversized variable air volume system in low rise building areas was wasteful and should be renovated.

· Existing fan coil units for tower

guest rooms were inadequate for optimum guest comfort.

 Economy cycle cooling for public spaces in conjunction with airside balancing should be implemented.

 Modifications to air conditioning procedures in some of the Hotel's 53 individual zones were indicated.

With these and other improvements, the savings in energy costs to the MGM Grand, taking inflation factors into account, is projected to be in the area of \$8 million over a 25-year life cycle.

Other advantages of E CUBE.

Saving money is an

important reason for using E CUBE, but not the only one.

E CUBE is private—your project data and results are never seen by a third party.

E CUBE is a comprehensive system—it computes the hour-by-hour energy requirements of your building, or planned building for an entire year, taking into account all weather, design, operation and occupancy factors.

E CUBE allows the design engineer to control the results by his input of performance efficiencies.

E CUBE is extremely accurate and inexpensive to use.

E CUBE is proven-with thou-

sands of customer runs.

To find out how you can capitalize on this timely and effective program, or for information on Seminars for new and advanced E CUBE users.



contact your gas company, mail in the coupon, or call David S. Wood at (703) 841-8565. And American Gas

David S. Wood, Mana Energy Systems Analy American Gas Associ 1515 Wilson Boulevan Arlington, Va. 22209	vsis ation
☐ Send more information of	
NAME	
ADDRESS	
CITY	
STATE	ZIP
ENERGY CONSEIUTILIZING BETTE	RVATION ER ENGINEERING

Louisiana Architects Association. Office for a small architectural practice (the architect's own office), Baton Rouge; Newman & Grace (right). The 1,650square-foot building is of redwood siding, exposed wood structure, wood decks and extensive glazing. Light enters through tinted windows protected from direct sunlight by deep overhangs. Blending with the site, the office also provides a pleasant interior with its natural lighting and hanging ferns.

Kentucky Society of Architects: Private residence, Mount Sterling; Chrisman/ Miller/Wallace, Inc., Lexington (center). The redwood sided house forms a squared-off Q to conform with the geophysical confines: pond, swamp, trees, stagecoach roadbed. The interior is designed as three or four distinctively separate pieces joined by corridors. The jury praised the manner in which the house relates to its site, saying that the plan "takes advantage of existing tree and terrain" so that "privacy becomes natural." Alabama Council of Architects. Community Center, Elkmont; Joyce, Pearson & Prout, Huntsville (below). The building serves Elkmont Rural Village, a new planned community in north central Alabama. The large meeting room lends itself to a variety of uses, and features a display area containing color-coded components











"If the Open Plan System is to effectively solve the problem of creating a highly productive office environment in the face of constantly changing conditions, it must respond in design and application to the essential components of interior space; the space itself, the people who occupy the space, the activities that take place. the changes that occur and the energy used to bring the space to life."

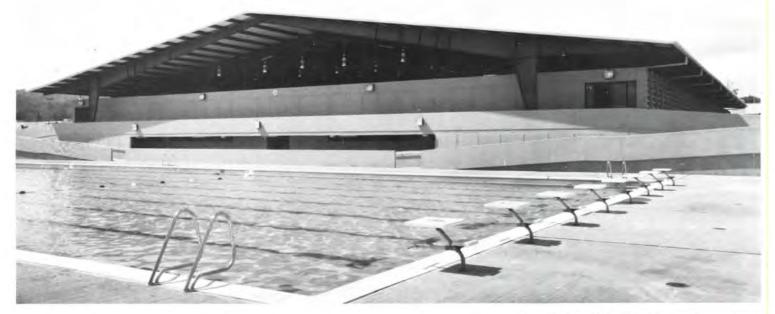
The GF Open Plan
System addresses itself to
the productive use of
space... and does it
beautifully. It helps you
manage your client's
office environment with
a comprehensive array of
engineered components
designed to control
acoustics and lighting,
improve communications,
and create highly
specialized working
conditions.

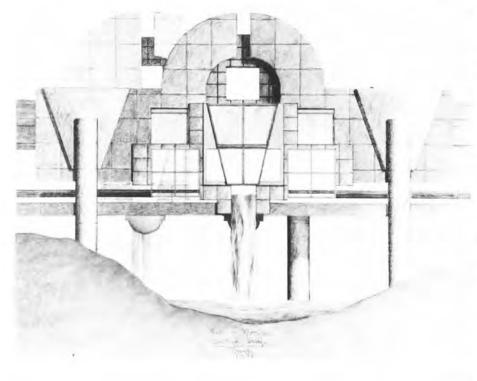
If you'd like to see how the GF Open Plan System can make SPACE work more productively for you call your GF Dealer or visit our showroom.



Circle 100 on information card

AIA Component Awards





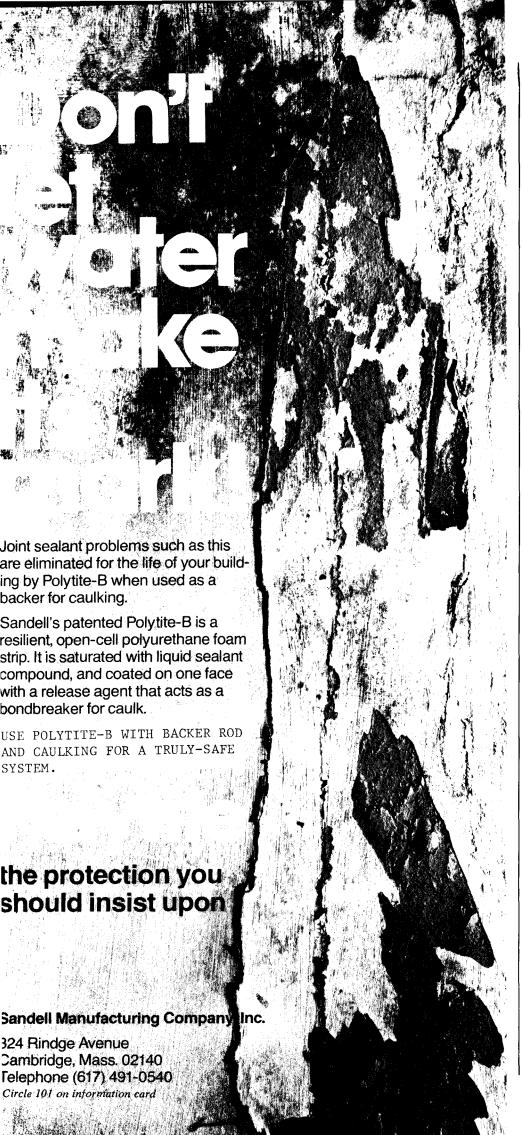


256 AIA JOURNAL/MID-MAY 1979

Puerto Rico Chapter. Multipurpose physical education building and swimming pool, University of Puerto Rico, Humacao; J. E. Amaral & Associates, Hato Rey (above). The building houses office and classrooms for the physical education department, gymnasium, basket/volleyball court with seating for 1,300 spectators, medical offices, towels and uniforms service room and locker rooms. The relation to the existing topography permitted sinking the level of the basketball court. Showers are supplied with solar heated hot water. The 50-meter, eight-lane swimming pool is adjacent to the building. Pedro Martínez, photographer. New Jersey Society of Architects. Cultural

Center, Fargo, N.D., and Moorhead, Minn.; Michael Graves, FAIA, Princeton (center). This design for a cultural center that would ford the Red River of the North which separates twin cities in two different states, said the jury, is a "celebration of culture, with floor plans that are beautiful, functional and exceptionally clear and ordered." Linking the two communities symbolically, the center would provide for an art museum, connecting existing concert hall and public radio and television stations on one side with a history museum on the other. "The sculptural elements of the building are in themselves works of art," the jury said. New York State Association of Architects, Inc. Sewage Pumping Station, Staten Is-

New York State Association of Architects, Inc. Sewage Pumping Station, Staten Island; Warren W. Gran, AIA, Brooklyn (left). The reinforced concrete building pumps sewage to nearby treatment plants and screens solid wastes. Given the site, function and absence of a building typology, the architect chose to simply abstract the functional requirements into a form which delights the eye. The jury commented, "A uniquely interesting and fun design which is expressive of its function; an architectural solution to a mechanical problem." Ramsay Dabby, photographer.



You Don't Have to be a Fire Fighter to Fight Fires.

Join the NFPA -A Private Firesatety standards-Writing Association.

Active NFPA Membership:

The National Fire Protection Association offers you a unique and satisfying experience — the chance to participate in the cause

Everything we do-research. bnplic aud fechuical equestion, firesafety training and standards development centers around the preciousness of life and property and the tragic waste fire can

Our proposition to you is make of it. simple. By becoming a member now you not only help yourself professionally, but through your contributions - both in dollars* and personal commitment you help the cause of safety to life

Consider the professional Advantages:

- Bimonthly Fire Journal
- Fire News, 10 times annually
- Voting Privileges
- Special Architects and Code Official Section Membership
- Exclusive Member-only discounts on a wide range of NFPA products and

•Membership dues; \$40.00 annually

For Membership Application write: rui memueranip application write.
National Fire Protection Association National Fire Protection Associa 470 Atlantic Avenue Boston, MA 02210 Attn: Membership Department



"I CAN STRETCH YOUR HORIZONS, BUT NOT YOUR GROUND ROUND."

I can recite poetry to you on a mountain top and sprinkle flowers at your feet in the spring. But if you live on more than love alone, consult the Consumer Information Catalog.

It's published by the Federal Government and lists over 200 booklets you can send away for. Over half are free. And all are wise. With tips on everything from installing solar energy to stretching your food budget.

So send for this free catalog. Write: Consumer Information Center, Dept. B. Pueblo, Colorado 81009. Poetry and music may be the "Food of Love," but a little meat loaf goes further at dinner.

THE CONSUMER INFORMATION CATALOG

A catalog of over 200 helpful publications.



Houses of Good Repute



on commercial street and residence lane wear Featherock® natural stone veneer facings. Distinctive. Decorative. Lasting. A surprisingly inexpensive dress. Ton-for-ton light weight Featherock goes farther — as much as five times more coverage than other prestigious stones. Labor saving too. No footings, no ties are needed. Pre-sawed flat back Featherock lays up fast. Featherock colors and styles offer many personalities. You'll find dealers everywhere. Consult Sweet's architectural file or B.S.I. stone catalog. Write to us for complete specifications.



featherock.inc. Dept. FVK
2890 Empire Street, Burbank, CA 91510

890 Empire Street, Burbank, CA 91510 (213) 843-8553

Circle 105 on information card



They don't mention this during black heritage week

High blood pressure is a part of black American life they don't celebrate during Black Heritage Week.

High blood pressure is a potential killer. And, black Americans are one and a half times more likely to have it than white Americans.

High blood pressure can result in stroke, congestive heart failure and increases the risk of heart attack.

High blood pressure usually shows no symptoms. The only way you can tell if you have it is to have your

blood pressure checked. Contact your doctor, clinic or local Heart Association for information on where you can have your blood pressure checked. If you have high blood pressure, a program of medication and some dietary changes could prevent premature disability or death from the possible consequences of this disease.

Have your blood pressure checked. If it's high, see your doctor and follow the doctor's orders. We want you to be here next year to celebrate Black Heritage Week.

Circle 103 on information card





New York State Association of Architects, Inc. Kislevitz residence, Westhampton; Gwathmey Siegel, New York City (above). The Spanish-style residence was renovated and expanded for a family with six children. The three-story entry, with a partially capped skylight, is the major gathering space. "Successful blend of the old and the new, affording panoramic views of the bay and ocean," said the jury. Norman McGrath, photographer.

C.A.B.S. Nursing Home and Health Related Facility, Brooklyn; William N. Breger Associates, New York City (left). The facility includes a 160-bed nursing home, gerontological rehabilitation and recreational spaces for patients and a protected outdoor landscaped area. The jury said: "A successful deinstitutionalizing of a health facility and nursing home." Gilamiaga, photographer.

Connecticut Society of Architects. U.S. Coast Guard Academy Visitors' Information Pavilion, New London; Sturges Daughn Salisbury Inc., Providence (below). The pavilion has three display areas, each 2,400 square feet: a natural plateau of rock atop a cliff, a space frame covered deck area and the "hull," an enclosed space. The jury called the pavilion "well achieved with a festival character." Warren Jagger, photographer.



AIA Component Awards

Connecticut Society of Architects. Addition and renovation of the New Haven Chapter of the American Red Cross; Gilbert Switzer & Associates, New Haven (right). The main building, or former residence, had to remain essentially unchanged to preserve the character of the street. It was reorganized to provide administration and social service functions. The carriage house was renovated to house an emergency operations center, and a connector was built to accommodate the blood program and afford a formal entrance. The jury saw "a sensitive marriage between two previously unconnected buildings that provided some delightful interior spaces."

Residence, Block Island, R.I.; Donald Watson, AIA, Guilford (center). The house is sited on top of a knoll so that the horizon is not disrupted. The house plan is organized around a 9-foot square matrix. For views of the pond that borders the site and for passive solar heating, the major openings are oriented to the south. The belvedere at the top of the house offers natural lighting and ventilation and a 360-degree view of the island. Robert Perron, photographer.

Tai Soo Kim house; Tai Soo Kim, AIA, Hartford (below). The main level of the house is essentially one room for adults. The children's rooms are on the lower level. The jury commented, "Very good use of a difficult site. The architecture has simplicity and clarity and showed an economy of means." Nick Wheeler, photographer.







CLEANS UP NEW MASONRY PROBLEMS



- **>SUREKLEAN**>'S job proven system handles any masonry cleaning problem efficiently and economi-
- SUREKLEAN> is simple to use: Pre-wet, brush on, let stand ... and then rinse. It's that easy!

 SUREKLEAN products are job-
- suited to fit your new masonry needs.

>SUREKLEAN>

For most masonry surfaces

>SURE KLEAN > Vana-Trol

For cleaning and treating new masonry subject to vanadium and manganese stains.

SUREKLEAN>
Specialty Stain Removers For unusual cleaning problems on new masonry.

For older buildings:

UREKLEAN > RESTORATION **CLEANERS**

Remove dirt, grime, and oil from older buildings. Special products strip layers of paint, prevent and remove graffiti, and clean off smoke black

>SUREKLEAN> WEATHERSEAL **PRODUCTS**

Provide a complete line of abovegrade masonry water proofers, both clear and color stained.

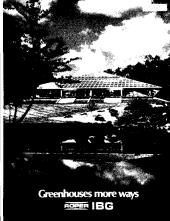
For more **>SUREKLEAN**> information, call or write today.

ProSoCo, Inc.

913-281-2700







Skylighting more award-winning ways

IBG skylighting helped win awards for the distinguished architects who designed—

Denver's Johns-Manville Building New York State's SUNY Dance Pavilion New York City's Turtle Bay Towers

Before you start on your next award-winning skylighted project, send for the appropriate IBG Design Portfolio.

All six are listed on the back covers of our Sweet's Catalog File brochures, index numbers 7.8/lb and 13.6/lb.

If you'd like a desk copy of either or both of these brochures, write us. We'll be glad to send them to you.

Roper IBG, Box 100J, Wheeling, IL 60090. For immediate information call (312) 634-3131.









Connecticut Society of Architects. Summer house, New York State; James V. Righter, AIA, New Haven (above). The house is raised three feet above the ground and turned on the diagonal so that the majority of rooms looks up and down the coastline. The exterior and the interior are of rough- and smooth-cut cedar. The jury remarked that the house was "delightful, fanciful and done with considerable skill. It is an appropriate response in the tradition of seaside architecture."

Pennsylvania Society of Architects. Ice Skating Facility, Wilkes-Barre; Bohlin Powell Brown, Wilkes-Barre/Pittsburgh (center). The 85x200-foot skating rink is located in a 32-acre park. The aluminum ribbed roof supported by black-painted tubular steel beams pitches up from the south toward the north and is supported by steel pipe trusses. An earth mound that helps screen the skating area from the adjacent softball field. Joseph W. Molitor, photographer.

Boston Society of Architects. West Fitchburg Wastewater Treatment Plant, Fitchburg; DiNisco Associates, Inc., Boston (right). The building configuration and location of on-site treatment structures is a specific response to site limitations of a low lagoon and flanking two-sided railroad tracks. Materials used are structural steel, metal panels and glass and bright red filter tanks. "A building type where design is usually ignored has been turned into a clear strong architectural statement," said the jury. Steve Rosenthal, photographer.







SCH LAGE.

The World's Most Respected Name in Locks.

*Courtesy of the Schlage Antique Lock Collection.

BOOKS

From 'Post' to 'Super': A Study of the 'Gurus'

Supermannerism: New Directions in Post-Modern Architecture. C. Ray Smith. New York: Dutton, 1977, 354 pp. \$9.95,

paperbound.

Few occupations are as rewarding as that of historian of the recent past. This author's course lies between the Scylla of the glib—instant analysis—and the Charybdis of the stale, which may be defined as that which is not yet nostalgia, camp nor the subject of a retrospective at the Museum of Modern Art. How much more attractive is the role of the historian of the immediate future!

Of necessity dealing with much the same material, this person picks more obscure examples, arranges them to form Emerging Trends and gives them labels which, if they stick, may accomplish the magic illusion of history written before the fact. As Alan Chimacoff observes, noting the emergence of architectural postmodernism in the writing of Charles Jencks and Robert Stern to be considerably in advance of its debut in the form of actual buildings, this trick is an inversion of the old fairy tale: clothes but no emperor.

Of these two tailors of the architectural future, Jencks offers the stronger parallels to the C. Ray Smith of Supermannerism. The two share a love of the freshly coined label, the alternate gift and curse of total recall, and a collaged way of organizing ideas and pictures that suggests bulging manila folders and cascades of 3x5 file cards.

They also share several stylistic and ideological preferences. Jencks, however, is a critic in the grand manner, delighting and infuriating, attempting with some success to propel the architectural profession into his chosen future by sheer force of wit. Smith is a journalist, for nine years an editor of *Progressive Architecture*. His first talent is for telling us what happened, with the detail and enthusiasm of someone who obviously enjoyed being there.

"There" is Northeastern academia in the late '60s and early '70s, the fabled New Haven-Philadelphia axis, often bent to include Vermont, California, Houston or London. The principals include Charles Moore, Robert Venturi, Hugh Hardy and a cast of talented youngsters who, in the age of Pop, often seemed to be going after Warhol's 15-minute fame. The seminal invention—understandably for Smith, who invented the term—is supergraphics, a way of performing powerful architectural transformations at minimal expense, representative of a whole series of experiments with scale, color, layered space, decoration and symbolism that added up to a good-natured "revolution" against the teachings of standard modernism.

Someone—I suspect the publisher lunged at the chance to equate this 10year-old revolution with "postmodernism," a designation which appears nowhere beyond the cover and title page. While this compound noun may sell books, it is simply not the subject of this one.

This mislabeling is unfortunate, because Smith has written a genuinely useful journalistic account of a fascinating few years



in the artistic, social and political life of American architecture. While Jencks or Stern, who cover their tracks carefully, may be slicker and, for some, more fun to read, Smith performs the needed service of showing where these and other gurus of postmodernism are coming from. At the very least he deserves praise for taking the old dictum literally and writing what he knows.

Smith's doggedly inclusive, enthusiastic approach also contributes to Supermannerism's several failures. If, as the author admits, Progressive Architecture was often the "Yale Alumni Magazine," then this book is a kind of 10th reunion scrapbook. It is less a history or a book of criticism than it is a memoir, with the entertaining, intimate freshness of a good memoir often spoiled by the rambling, windy, disjointed, ingrown quality characteristic of alumni notes. Most of the coinages ("campopo," "garblegraphics") just don't work; like other parts of the text, they emit the faint odor of recycled magazine articles. While there is nothing wrong with a cut-and-paste job, Smith could have sealed the joints more neatly and thrown away at least some of the scraps.

It may be too much to know that 45degree angles were called "zaps" at Princeton and "zoots" at Penn, to see color photos of all 12 supergraphic elevator cab projects from Yale or to know the names and dates of 15 Italian Mannerists. The resulting index is for the reader a discovery akin to finding a humming, highly polished engine room in the bowels of a rusty freighter ("L'Enfant, Pierre Charles ... Lévi-Strauss, Claude ... Lichenstein, Roy . . . Lillie, Beatrice . . . Little, Arthur D. . . . Lloyd, Harold . . . Lobell, John . . . Long Island University . . . Lord, Chip"). But even here there are lapses: "Drury, F.R.R." and "Drury, Ralph" are, however improbably, the same person.

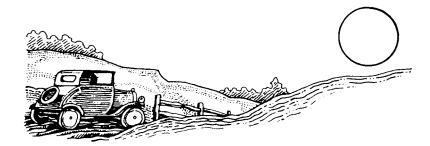
After a hard day out on the cutting edge with the New York City critical establishment, though, C. Ray Smith is just the ticket. Supermannerism, for all its awkwardness, conveys the real, faded flavor of the '60s, the Revolution. Charles Moore's Project Argus, the silver mylar bridge thrown across the jury space in Rudolph's Art and Architecture Building -students called it the Horrendogram. And those elevators-after 12 coats of supergraphics, they never could get the paint off. And the protest meeting to restructure the lunchroom-and then there was the time. . . . R. Leonard Miller, an architect in Washington, D.C., has written numerous articles of architectural criticism.

The Plan for Restoration and Adaptive Use of the Frank Lloyd Wright House and Studio. Restoration Committee of the Frank Lloyd Wright and Home Studio Foundation. Chicago: University of Chicago Press, 1979. 82 pp. \$25.

If ever the first architectural all-American city were to be named, it should be Oak Park, Ill. Most of its character and importance is due to Frank Lloyd Wright. It is no mere coincidence that the influence of this architect on his community is deeply felt. Wright was always motivated by a constant quest for what was germane to an American culture, a way of life, all under the umbrella of "Democracy."

When Wright settled in Oak Park in 1889, the electric light bulb was a novelty, the automobile rarely used. And it would take some 25 years before Germany would be rid of the last Kaiser. By 1909, when Wright left his domain in Oak Park forever, he would leave to work in Germany to publish his work, which would startle

Books continued on page 267



YOU CAN AFFORD TO IGNORE SOLAR ENERGY AND DAYSTA ABOUT AS MUC AS BUGGY W MANUFACTUR 1913 COULD AFFOR TO IGNORE T **AUTOMOBILE AND A FELLOW NAMED FORD.**

Put our claims to the test. Contact Daystar.

SolarThermal Systems

Division EXON Enterprises Inc

90 Cambridge Street Burlington, Mass. 01803 (617) 272-8460

Featuring DAYSO Solar Products

WE FIT IN

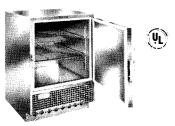
STAINLESS STEEL UNDER COUNTER LAB REFRIGERATORS AND FREEZERS





UC-5-BC refrigerator has a blower coil cooling system with automatic off-cycle defrosting and condensate evaporator in condensing unit compartment. Two adjustable stainless steel shelves are provided

UC-5-F-BC freezer is equipped with automatic timer electric defrost Capacity-5.4 cu. ft. (155 ltr.)



UC-5-CW* refrigerator with cold wall cooling system is equipped with push-button defrost, automatic reset and condensate evaporator. Capacity-5.4 cu. ft. (155 ltr.)

UC-5-F-CW* freezer is equipped with manual hot gas defrost. Capacity--4.6 cu. ft. (130 ltr.)

UC-5-CW-E refrigerator has the same interior features as the UC-5-CW but modified to make it *totally explosion-proof.* Capacity-4.9 cu. ft. (140 ltr.)

*With explosion proof interior only





UC-5 features a two-tray ice cube cooling system with manual defrost and stainless steel defrost water tray. The cooler section has two adjustable stainless steel shelves. The entire UC-5 series features polyurethane insulated thin wall construction and air-tight neoprene thermo-break door seals. Capacity -- 5.4 cu. ft. (155 ltr.)

Jewett also manufactures a complete line of blood bank. biological, and pharmaceutical refrigerators and freezers as well as morgue refrigerators and autopsy equipment for world wide distribution through its sales and service organizations in over 100 countries



Refer to Sweet's Catalog 11.20/Je for quick reference

Circle 110 on information card

The Wellco Business Carpet



Jack Stalzle, Contract Mgr., State Distributing, Indianapolis, Indiana; La Verne Williams, Design Coordinator, MAB Paints; and Robert Reed, Manager Best Western motel, Terre Haute, Indiana. Wellco showed Best Western of Terra Haute how to use 1000 square yards of carpet without an inch of waste.



Working with Robert
Reed, Best Western's manager,
and La Verne Williams, a Wellco dealer, we
came up with the perfect solution for Best
Western's six floors of corridors.

First we split 12-foot rolls of Deca-Point down the middle for corridor areas between the rooms.

Then we cut the room entryway areas out of color-coordinated Decathlon II . . . and used the balance of the carpet as accent strips along the baseboard.

Best Western got a tough, high performance carpet, and a custom look for the same money they would have spent on an ordinary carpet.

And you can too.

Simply by joining up with the people who know their business well enough to help you with yours.

The Wellco Problem Solvers.

Vectra

WGICOBusiness Carpet

Wellco Carpet Corporation, Box 281, Calhoun, GA 30701 A wholly owned subsidiary of Mannington Mills, Salem, NJ.



Call Jack Stalzle, State Distributing, or one of our other problem-solving distributors:

ALABAMA
Rubin Brothers
Birmingham
ARIZONA
Butler-Johnson Ford
Phoenix
ARK ANSAS

L. D. Brinkman Little Rock

Little Rock
CALIFORNIA
Valley Floor Covering
El Monte
Butler-Johnson

Butler-Johnson Fresno Sacramento

San Jose Western Wholesale San Bernardino

San Bernardino San Diego COLORADO

L. D. Brinkman Denver National Carpet Distributors

GONNECTICUT

David Rosenthal

East Hartford

David Rosenthal East Hartford FLORIDA Cain and Bultman

Jacksonville Miami Tampa Rubin Brothers

Pensacola GEORGIA Rubin Brothers

Rubin Brothers Atlanta HAWAII

Pacific Home Furnishings

Construction Supply Boise

ILLINOIS Raiph S. Bowman Chicago Floorco

Floorco Peoria Decatur Quincy

INDIANA State Distributing Indianapolis

McKee Enterprises Cedar Rapids

KANSAS Modern Warehouse Kansas City KENTUCKY Bruce Distributing Lexington

LOUISIANA L. D. Brinkman

L. D. Brinkm Harahan Shreveport

MAINE NRF

Augusta MARYLAND

Norman Deitch

Hyattsville MASSACHUSETTS

Joseph Silverman & Co. Boston MICHIGAN

Gerlinger Equipment Sterling Heights Great Lakes Sales Grand Rapids

MINNESOTA McKee Enterprises St. Paul

L. D. Brinkman Chinton

MISSOURI
Brightman Distributing
St. Louis
Cook Paint and Varnish

Kansas City NEBRASKA

McKee Enterprises Omaha NEW JERSEY

Kane Carpet Kearny NEW YORK

Kane Carpet Albany Rochester

NORTH CAROLINA George T. Wood

Charlotte Goldsboro High Point

NORTH DAKOTA McKee Enterprises Fargo

OHIO
Gerlinger Equipment
Toledo
C.D.C. Carpet Dist.

Dayton Cincinnati Tecca Distributing Cleveland OKLAHOMA

L. D. Brinkman
Oklahoma City
Tulsa

Vickery Oklahoma City

OREGON LaSalle Deitch

Portland PENNSYLVANIA

Allied-Eastern Erie Norman Deltch

Philadelphia I. H. Herschner Wilkes Barre

York Pennsylvania Floors Monroeville

SOUTH CAROLINA

George T. Wood Charleston Columbia Greenville

TENNESSEE
Allied Wholesale
Johnson City
Knoxville

Fitzgerald & Riggs Memphis TEXAS

TEXAS
L. D. Brinkman
Dallas
Fort Worth
Houston
Lubbock
San Antonio
Vickery

Vickery Dallas Houston

UTAH Robison Distributing Salt Lake City

VIRGINIA Design Carpets Richmond George T, Wood Roanoke

WASHINGTON
Westlake Carpet
Seattle
Sunset Sales

WEST VIRGINIA.
Smith Floor Covering

win a carpet for a room of your choice
win a carpet for a room of your choice
win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation)

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your choice
no installation

win a carpet for a room of your chole

win a carpet for a room of your choice

win a carpet for a r

Wellco Carpet Corporation, Box 281, Calhoun, GA 30701 A wholly owned subsidiary of Mannington Mills, Salem, NJ.

Circle 111 on information card

Books from page 264

the world. Published in the nondemocratic empire! Our democracy would not offer such publication possibilities.

Life in the Oak Park days was not all sweetness and light for this creative architect. His contemporary architects, members of the then-Establishment, would ridicule and denigrate his efforts. This was training to toughen the genius who would be scorned and despised by the followers of the Beaux-Arts on through the followers of the Bauhaus. While his contemporaries in his 70 years of practice would gain large commissions, he had to be satisfied with the "minors." His table was too often bare.

Wright might be pleased to know that a group of local architects, along with his son Lloyd and grandson Eric, extended their labors to produce an excellent visual background of the history of the original Wright domicile and studio. The document is profusely annotated with names of dozens of participants—but Wright would wonder why they did so much drawing, since he claimed that most of Taliesin was detailed by himself on an occasional wood shingle, at the site, at the moment.

The few of us fellowship apprentices who had the fortune to drive through Oak Park with Wright would always remember his startling retentive memory of the different conditions he described in building in almost every instance. The difficulties perpetrated by the contractors, workmen, unions—and the banks (who wouldn't make loans for those "crazy houses"). Those crazy houses in Oak Park have contributed to keeping the city from being redlined.

Architect Donald G. Kalec, now research center director of the House and Studio Foundation and former Taliesin apprentice, has written a moving and appreciative text on the historical section of the house. The original photographs by Wright give a sense of charm and grace that the architect sought. The plan for restoration is exciting.

All that is now needed is funding to complete the project—where else is such an opportunity? It should rank above eclectic architect Jefferson's restoration and England's Sir John Soane's preservation. Is there any other architect's early abode more worth saving?

This document not only gives historic background, but also a thorough master plan for the continuity of restoration. As Wright would say, at less than the cost of one obsolete light military tank, one fighter plane or one impact study, the restoration could be completed. Edgar Tafel, AIA, author of the McGraw-Hill book on Wright, "Apprentice to Genius."

Books continued on page 269

The American Institute of Architects

Energy Planning for Buildings

Michael M. Sizemore AIA Henry Ogden Clark AIA William Ostrander PE

Building owners expect their architects and engineers to have the practical knowledge it takes to translate energy theory into a reliable form of practice.

This book, written by two architects and an engineer who have hands-on experience in energy-conscious building design and redesign, does just that. It presents a proven process that design professionals can use (or adapt) to study the present energy performance of a building, uncover opportunities for energy-conscious improvements, evaluate those opportunities, and see to it that they are carried out to the owner's best benefit.

The book describes in detail a manual technique for calculating energy usage and shows in a sample problem how that technique can be applied. This allows the reader to evaluate any energy design solution, including solar assisted alternatives. It also provides a basis for understanding computer-aided energy estimating techniques.

In developing their work, the authors have recognized that non-energy related concerns such as user comfort, environmental impact and visual appearance are as important in an energy-related design as energy performance itself, and they urge designers to iden-

tify these at the outset of a project and to keep them in mind to the end.

An opening chapter offers a look at the basic concerns of energy planning, including such concepts as comfort; illumination and daylighting; the building envelope; heating, ventilating and airconditioning; and the very concept of energy itself.

Chapter 2 takes up the roles and responsibilities of the team needed to carry a project through to a successful end. Team members discussed include the owner, the architect/engineer, the building users and operators, energy suppliers, product manufacturers and building officials.

Chapter 3, a key part of the book, shows how to study a building's present performance (or, in the case of a new building, analyze a set of building plans) so the energy planner can examine the impact of any proposed changes suggested as a way to greater energy efficiency.

Chapter 4 pinpoints those opportunities, describing the best way of identifying them. The following Chapter 5 then shows how best to narrow the list of possibilities to those that make the most sense in terms of cost, time, payback and technical feasibility. Two levels of evaluation are given—"quick" and "detailed."

Chapter 6 shows what is needed to carry out the recommendations stemming from the evaluation, and offers much sound advice to the energy planner and owner for monitoring the results and maintaining the renewed building at a peak of performance.

This chapter is followed by a sample problem which illustrates the procedural steps presented in the various chapters.

Finally, an appendix includes discussions on system response and cost benefit analysis.

There is also a glossary and a practical reference list.

ENERGY PLANNING FOR BUILDINGS fills a serious need for a practical, process-oriented book which energy planners can use, and owners can refer to, as they embark on a new building project or go about redesigning an existing one for greater energy efficiency.

156 pages, 120 charts and illustrations.

\$40 AIA Members \$44 Others

	100000	The second second
The American		
Institute of Architects		
Yes, I would like copy (copies) of ENERGY PLANNING FOR BUILDINGS (#4M-720) Enclosed is my check for		
Mail to: Manager, AIA Publications Marketing 1735 New York Avenue, N.W. Washington, DC 20006		
NAME		
FIRM		
ADDRESS		
CITY, STATE, ZIP		
IDENTIFY AIA MEMBER		
	Contract of the Contract of th	

Books from page 267

People in Places. Jay Farbstein and Min Kantrowitz. Englewood Cliffs, N.J.: Prentice-Hall, 1978. 182 pp.

Ever wonder why a kid builds a tree house or makes a cave of blankets? Or how a granny feels hobbling through an oversize shopping center? Or notice that the decor of some fast food joint deliberately discourages you from lingering?

If you fancy yourself an architectural programmer or architectural designer (or better yet, both), or are a plain old architect who believes that the places you design for people could be better if you knew more about them, then you should own this book. Own it so you can reach over as needed and delve into a point you want to find out more about after the first easy reading.

The subtitle is "Experiencing, Using and Changing the Built Environment." I would have preferred something like "Understanding More About the People Who Use the Places You Design." Because this is what most of the book is all about from an architect's viewpoint. The book is very adult in nature, but a child could enjoy reading some of it, and understand it. Maybe this is why I was so delighted with the book. Most books that attempt the elusive goal of relating architecture and the social sciences and user needs make for pretty heavy reading. This one is much more fun.

Broken into bite-size pieces averaging four short pages each, half text and half pictures, the book discusses 42 concerns. Some of them: sensing the place, a secret place, a place that works well, what places say, sharing places, conflicts of making places. Grounded in architecture, planning, teaching, philosophy and psychology, the authors don't give you the answers. They whet your appetite by first opening your eyes in a brief discussion of each concern, putting it into perspective with the others. Collectively, you can learn a lot just from this awareness trip about experiencing, using and knowing places, how they work, what their "politics" are and opportunities for changing them.

To permit you to go deeper, each concern is treated as a project. The introductory discussion leads into ways you can become involved by a program of experiences. For example, suggested under "sensing the place" is a short exercise of sitting still in a place of your choosing, gathering a general impression, then focusing on and recording sensations received by each major sense, and finally testing your notes on a group to see if they can identify the place. (See drawing above.) Others may sense the place differently, it is important for you to know this.

If you are hooked after doing the exercise, the authors have a paragraph on



interpreting each concern to enable you to go further. Then they will suggest more experiences, such as sensing the place with one or more senses closed off or reversing roles to see how the place reacted to having you there. Each concern has a couple of reading references as well as a way of relating this concern to several others.

The whole approach is a self-learning experience that you can take in any depth and piece by piece, remembering that you retain much more of what you do than of what you merely read. The ultimate objective is for you to learn how to make more good places that suit the people using them, which is what architecture is all about. Robert Allan Class, AIA, Director of Practice Programs at the Institute. Books continued on page 270

Granite.

Beautiful for heavy traffic areas.

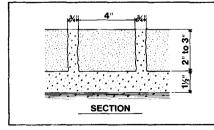


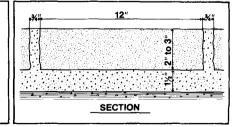




Architects: Lawrence Halprin & Associates

Architect: Joe Karr & Associates, Chicago, IL





Cold Spring granite is a natural for landscape applications. Its warm colors and natural textures blend beautifully with the environment. And at the same time, granite provides the designer with the flexibility he needs to create areas of unusual and lasting beauty.

At Cold Spring we now have a wide variety of Module Pavers and Durax Blocks available. For more information, plus a packet of full color literature illustrating our products in use, call toll free 800-328-7038. In Minnesota, call (612) 685-3621. Or write to the address below.



Cold Spring Granite Company, Dept. AIA-5B 202 South 3rd Avenue, Cold Spring, MN 56320

Books from page 269

The Country Railroad Station in America. H. Roger Grant and Charles W. Bohi. Boulder, Colo.: Pruett Publishing Co., 1978, 183 pp. \$22.50.

The last decade or so has witnessed a burgeoning interest in railroad stations. This has taken several forms: the founding of an historical society devoted to railroad stations; major efforts at preservation because of architectural interest, e.g., Grand Central Station in New York City, and numerous instances of reuse. Accompanying this interest has been an increasing volume of literature.

Although there have been pictorial works that offered numerous illustrations of the country railroad station, this book is, to my knowledge, the most detailed in its consideration of their significance

and more particularly the factors which prompted variations in design in various parts of the country.

Following an initial chapter pointing out the social significance of the small town railroad station during the 19th century and the early part of the 20th century, before the automobile became prevalent, the authors comment on the quest for better depots. By 1916, more than 85,000 stations had been built in the U.S., of which some 80,000 were smaller buildings, costing \$25,000 or less. Some were even portable, being moved from one site to another. The authors discuss the frequent use of standardized plans, especially on Western railroads.

The bulk of the text and illustrations are presented in part 2, "The Making of the Country Station"—the two main chapters of which present the standard combination station east, and west, of the Mississippi River. This standard station contained a waiting room, office and a freight/express room. Numerous variations are mentioned—notably provision of an apartment for the use of the station agent, especially in the West, and in northern climes the addition of a "warm room" to keep perishable freight from freezing.

The basic presentation is by individual railroad and includes in several instances reproductions of the road's standard plans and elevations. Frequent reference is made to the use of decorative elements that were often applied to the structure, thus making the same standard plan less monotonous when seen from the train. A chapter on Canada notes variations of treatment found there, and a concluding chapter is on "The Future of the Country Depot," which is bleak indeed. The point is emphasized by a small city contemporary Amtrak station which is much less pretentious than many of the smaller town stations shown earlier in the book.

The illustrations, numbering more than 300, are both historical and contemporary, so there is considerable variety in the manner of presentation.

Although probably intended primarily for the railroad station aficionado, the book should appeal to the architectural historian as well, as a good survey of a specialized building type that has nearly passed out of existence in this country. George E. Pettengill, Hon. AIA

The Craftsman: An Anthology. Edited by Barry Sanders. Salt Lake City: Peregrine Smith, Inc., 1978. 328 pp. \$9.95.

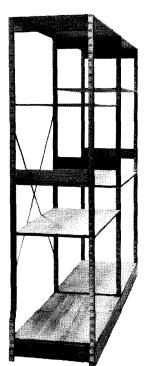
The first issue of *The Craftsman* was published in October 1901. Edited by Gustav Stickley-inventor, designer, writer, publisher and editor, businessman and political thinker—the aim of the magazine was to educate the public in the arts and crafts movement, "the most important revolution in esthetics in America," says Sanders. Stickley himself said the magazine was devoted primarily to the "encouragement of handicrafts in this country.'

Before the magazine folded in December 1916, Stickley published articles on architecture, interior decoration and city planning and beautification. Stickley said that he did all in his power "toward the development of a national spirit in our architecture."

This anthology of articles from *The* Craftsman reveals the magazine's wide interests. There are articles on beautiful books, a craftsman house design, Rodin sculptures, Hopi Indians-and poems by Robert Frost and Amy Lowell. There is also an article by Louis Sullivan on "Form and Function Artistically Considered."

Books continued on page 272

UPGRADE YOUR STORAGE. DOWNGRADE THE COST



With MEG's Solid Wood Shelves.

MEG's wood and plywood shelves hold up to 500 pounds on each shelf. With solid wood shelves, you can avoid the problems of bowing and formaldehyde leakage that come with particle board systems.

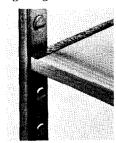
Our Shelf Space system is so quick and easy to adjust that you utilize every inch of available space. It takes just one person to make a change in shelf position. It's modular, too. Add more capacity as needed.

For all this, MEG Shelf Space Systems are priced as low as other storage systems offering fewer features.

For shelving and a complete line of accessories including hang rod

assemblies, back panels, drawers and light fixtures, choose MEG.

For a free folder, write Merchandising Equipment Group, Inc., Dept. AIA5-79 100 Bidwell Road, South Windsor, CT 06074. Or phone (203) 289-8267.





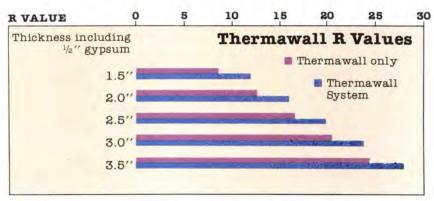
KIDDE MERCHANIDISING EQUIPMENT GROUP

Putting up Rmax Thermawall means tearing down a few old ideas.

Conventionally, commercial wall insulation and finishing has consisted of three things. Studs, batt insulation and gypsum board. At Rmax, we have an approach that is slightly unconventional.

And simply fantastic.
Rmax Thermawall. A
rigid urethane core permanently bonded to gypsum
board and wrapped by highly
reflective aluminum foil.

Together, it combines the most efficient insulator available with a practical, time saving method of installing finished drywall. Resulting in unsurpassed savings. Both in installation costs and future energy bills.



Our unique Thermawall Fastening System (patent pending) eliminates common studs and batt insulation. It's thinner than conventional stud walls, so you gain floor space. And at the same time solve an old problem of in-

creasing square footage for tenants.

We're helping solve a new problem, too.

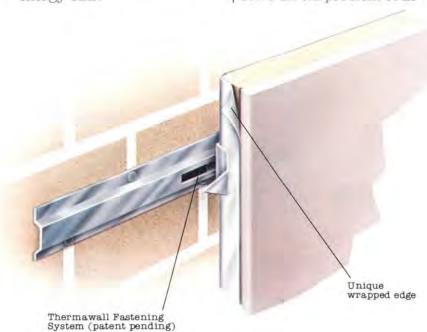
Rmax Thermawall is perfect for insulating residential cathedral ceilings. It's efficient enough to achieve maximum insulation value when used with standard 2 x 6 roof rafters and R19 batts. Which eliminates the need to change construction techniques. And in turn, saves money.

Call Rmax about an unconventional look at your insulation needs. By tearing down a few old ideas, we can help you build in more value.

Thermawall by Rmax

Rmax, Inc., 13524 Welch Road, Dallas, Texas 75240 214/387-4500

Rmax also manufactures a complete line of rigid urethane insulation for commercial roofing and sheathing requirements.



We're proud to be part of the best



The PARKER washroom

The new Lecture Hall at Yale University's Center for American Arts, the recipient of a 1979 AIA Honor Award, includes this handsome Parker washroom. Parker stainless steel dispensers, waste receptacles and mirrors provide complete washroom convenience at the Lecture Hall, and we believe that the quality of our products is in keeping with the quality of the building's design. All Parker units are durably constructed of the finest materials and will stand up beautifully to constant use. So, although Parker can't really share in the award the Lecture Hall has received, we have the satisfaction of knowing our units will continue to enhance the design and utility of this outstanding building for many years to come.

See our catalog in:



Building Products Catalog



Sweet's General Building File 10.16/Pa



290 PRATT ST., MERIDEN, CT 06450 TEL: 203-235-6365 272 AIA JOURNAL/MID-MAY 1979 Books from page 270

The Run of the Mill: A Pictorial Narrative of the Expansion, Dominion, Decline and Enduring Impact of the New England Textile Industry. Steve Dunwell. Boston: David R. Godine, 1978. 312 pp. \$30.

This curious book looks more promising than it really is. The first of its two parts, "As It Was—The Story," is a narrative history of the textile industry in New England from the late 18th century to the present, and is illustrated with 250 line drawings and engravings of mill towns, mill buildings, textile machinery and mill owners. The second part, "As It Is—The Legacy," comprises 105 photographs of mills and mill workers, all taken by the author over the last several years and bound together by a casual narrative and brief comments excerpted from interviews with the subjects of the photographs.

Dunwell's book suffers from two crippling problems. First, he is unsure of his audience. The historical account is probably too detailed for the lay reader; there are repetitive individual histories of many companies and undefined technical terms. On the other hand, anyone with an elementary knowledge of the subject will learn little that is new here. The second major fault is that Dunwell is unsure of the focus of the book, Aiming, apparently, at a comprehensive treatment of the textile industry, his history is the standard chronology of inventors and industrialists. It all seems so smooth and inevitable in his version—one man invents a machine and another devises an efficient business organization to extract the maximum profit from it. There is little room for false starts, dead ends, disagreements and other vagaries which make history complex. This simple tale is recounted within the framework of a biological analogy. The New England textile industry was born, matured and grew senile. Unfortunately for the author, it is not yet dead enough to make a tidy ending to the story.

Dunwell claims to be interested in the workers; his book is dedicated to them in fact. But their agency in the history of the textile industry is presented as peripheral and mostly reactive to changes initiated by management and as a weak and relatively late arrival on the industrial scene. Little attention is given to the long history of mill workers' independence of owners' paternalism or to their early organization of unions and strikes. The effect of these factors on the industry's development is reduced to a claim that they prompted industrialists to turn first to immigrant labor and then to move South for cheap, tractable employees. Improvements in the life of the mill hand seem to Dunwell always to have been the work of sympathetic outsiders.

Given this view of labor history, it was inevitable that the contemporary textile workers encountered in the second part of the book should appear as victims and relics. The uncertainty of their tenure and the danger of their work are emphasized. Many of the photographs are accompanied by simple phrases such as "Laid off."

The treatment of labor history could have been improved by closer attention to the valuable new work being done in the field. But Dunwell has overlooked even standard aspects of the canonical history of textiles in New England. In a "pictorial narrative" filled with illustrations of mills and mill related buildings, the architect and the architectural historian will be disappointed to find nothing about their physical history or development. Neither William H. Pierson's pioneering work of the 1940s, cited in the bibliography, nor more recent research by Richard Candee, Gary Kulik or Theodore Sande (not listed) are incorporated into this account. This is all the more surprising since Dunwell states that the buildings are the most lasting of the industry's legacies.

The book is plagued by minor faults as well. The bird's-eye views of mill towns, which the author rightly recognizes as both valuable research tools and intrinsically interesting documents, are printed too small and sometimes too faintly to examine closely. Several of the other historical illustrations suffer from the same fault and many of them are undated and inadequately captioned. Dunwell includes a bibliography, but obvious items like John Borden Armstrong's book on Harrisville are excluded. Finally, the maps showing the location of many small villages that are mentioned in the text appear at the end of the book, where one comes across them after having finished it. Dell Upton, architectural historian, Richmond, Va.

Passive Solar: State of the Art. Edited by Don Prowler. Philadelphia: Mid-Atlantic Solar Energy Association, 1978. 3 volumes. \$20.

The three volumes which comprise this work are devoted to the proceedings of the second national passive solar conference held in March 1978 at the University of Pennsylvania. The conference was sponsored by the Department of Energy and the American section of the International Solar Energy Society. The first volume is on buildings; the second on components, simulation and testing and the third on policy, education and economics. Many of the papers will be of great interest to architects. The volume on buildings, for example, contains papers on such subjects as thermal storage walls, roof mass and comfort and underground architecture. Efforts by the AIA Research Corporation resulted in a "miniconference" within the larger conference on solar utilization and cities.

Webb continued from page 163 not as substantives of the architecture but as adjectives, modifying what is primary. Buildings deliberately express the peculiarities of the architectural problem in a language which has its own peculiarities and ambiguities. Illusions die hard, especially the illusion that architecture is not about illusions. It's an easy architecture to like. But when one wants to love it, it seems to require some effort.

In the name of progress, McLuhan wrote, our official culture is striving to make the new media do the work of the old. Architecture, like poetry, is in full reaction, trying to see what can be done by reworking yesterday's tools in today's terms. The present, most actively influential group of architects, those in their 40s and 50s, have survived the media revolution with enough

'Illusions die hard, especially the illusion that architecture is not about illusions.'

of a perspective to be able to hold the line against the predicted emergence of a new architecture much anticipated by the McLuhanesque visionaries of the '60s. They are examining the meaning of the architectural language with a cool detachment which would have infuriated the intellectual and social radicals of the past decade. The explorations are written in the buildings, struggling with the artistic limitations and potentials of the medium with its peculiarities, its ambiguities, its inconsistencies and its

delights. Architecture about architecture. But one must have some concern for the next generation, the one which will be fully reoriented, which might take the witty and very considered musings of the present as the message rather than the medium.

By Ibsen Nelsen

I believe that the most important influences on contemporary architecture are mostly negative. I must apologize for taking this unfortunate view; it would be more enjoyable to celebrate the genuine achievements in the late 20th century architecture. And they are numerous—the revival of interest in historic architecture, the renewed vitality in some of our cities, the easier relationships many architects have with 20th century materials, etc. But there are difficulties and we ought not forget them.

First of all, what is contemporary architecture? A lot of smart people think it is the work of our best architects, the work we see in the magazines. But rather it is what historians of the future will say is the architecture of our time. It is everything we build: our houses, factories, places of work, towns, cities. Taking an inclusive view, it consists generally of a hodgepodge of structures, generally offensive to look at and usually inappropriate to purpose. In almost any city, wherever you find yourself, on close examination there is little to reward the spirit. Al-

Ibsen Nelsen is an architect and planner in Seattle.

ATTACH

LABEL

HERE

though this is a gloomy assessment, it is also true that the best contemporary architecture in the world is in the U.S. But we also have the worst, and the worst is vastly more prevalent.

The trouble with our best contemporary architecture is that it is practically invisible. In almost any city you need a guide to find it. But the worst is not hard to find. It is everywhere, and the truth is that our "contemporary architecture" is mostly an offense to Mother Earth certainly not fit for man. We are not talking about the occasional excellent building, the suburban corporate palaces complete with lake and swans, the outstanding house where thoughtful client and able architect have created something worthy of our own time. The architecture of our time consists of the endless suburban shopping centers, the sprawling thousands of merchant built houses, the immobile mobile homes, the cacaphony of urban streets filled with schlock buildings, billboards and garish signs. Across the street from where I write this is a new "motel." The style is "motel modern." pink stucco (with rocks), set off by chocolate brown painted concrete, and on the corner at the intersection there are six illuminated signs. each of which says "Regency Motel." It is not necessary to describe the rest of the surrounding buildings. In the entire block front, only two of them would be worth saving, both built in the 1920s, one a four-story brick apartment, the other a recycled garage used as offices. Yet this is probably one of the better streets in our downtown, its ugliness mitigated by 15-year-old London Plane street trees and fairly wide sidewalks. continued on page 275

Questions About Your Subscription

To insure fast service on inquiries concerning your AIA JOURNAL subscription, please include the address label from the most recent issue received.

Change of Address

Four weeks' notice required for change of address. Include address label from most recent issue and new address information in space provided below.

NEW SUBSCRIPTION

 Please check here if you wish subscription rate information.

Name		_
Address		_
City		_
State	Zip	_

MAIL TO:

AIA JOURNAL Circulation Dept. 1735 New York Ave., N.W. Washington, D.C. 20006

When a tree burns, here's what goes up in smoke.

MAGAZINES-ROCKING CHAIRS-KITCHEN CHAIRS-LADLES-HIGH CHAIRS-BASEBALL BATS-BARRELS-BOOKS-PENCILS-AXE HANDLES-TABLES-APPLE CRATES-VARNISH-CANOES-SHOE POLISH-CARDBOARD-NOTEBOOK PAPER-PANELING-RAYON-MAPLE SYRUP-GLUE-SKIS-BROOMS-BRIQUETTES-SHINGLES-SAUSAGE CASINGS-TENNIS RACKETS-LADDERS-SHATTER PROOF GLASS-PHARMACEUTICALS-CLARINETS-PICTURE FRAMES-WINDOW FRAMES-PLASTICS-SPOOLS-TOILET PAPER-NEWSPAPER-TISSUE PAPER-DESKS-OARS-DOWELS-WORKBENCHES-LINOLEUM FILLERS-MATCHES-DISPOSABLE DIAPERS-SCREW DRIVERS-RAILROAD TIES-HATCHES-BOBBINS-MANDOLINES-CEILINGS-BASSOONS-DOORS-SAILBOATS-DARTS-FLOORS-PIANOS-OILS-WALLS-TEA-DYES-LABLES-DINGIES-ACIDS-YACHTS AND RIBBON

Now just imagine what happens when a whole forest burns.





New from







STANDARDIZED ACCOUNTING FOR ARCHITECTS

(2M705) Alan B. Stover, AIA, Esq.

153 pages, softcover, illustrated

Understand Accounting? Here's HELP . . .

Recognizing the need for practitioners to understand architectural accounting, essential to any firm's operation, The American Institute of Architects has published a comprehensive guide to accounting and financial management procedures.

The new STANDARDIZED ACCOUNTING FOR ARCHI-

TECTS book is a completely revised version of the 1950 manual and its 1954 revision. Extensively updated to bring the accounting system into conformity with the entire AIA Financial Management System, this publication is designed to provide a simple record-keeping procedure that will yield appropriate financial data for routine tax and accounting purposes and for monitoring the operations of a firm. The double-entry system of bookkeeping employed in this book allows the use of either the cash basis or the accrual basis for accounting.

Subjects covered include . . . Basic accounting principles . . . Standardized accounting procedures . . The basic system and the cash journals . . . Adjusting and closing cash journals . . . Payroll and project expense accounting . . . Glossary of terms.

Designed primarily for the proprietorship or partnership form of organization, the system is also applicable to corporate enterprises.

ARCHITECT'S GUIDE TO INTERNATIONAL PRACTICE

(2M715) Nancy Ball, Editor

107 pages, softcover

If you'd like some "Petro \$\$" in your pocket, you'll need all the HELP you can get.... and here it is.... ARCHITECT'S GUIDE TO INTERNATIONAL PRACTICE

"Excellent" opportunities may await U.S. architects in Saudi Arabia, Venezuela, Indonesia, and Korea. Prospects are "good" in Egypt, Ivory Coast, Hong Kong, and Singapore.

These job potentials and other pertinent facts on 29 nations are detailed in AIA's newest publication. Prepared by the Institute's federal agency liaison program, this document acquaints design professionals with ... Complexities and legal/financial considerations for practicing abroad Differences between foreign and domestic markets.

A godsend to those investigating the possibility of working with clients in other countries, the guide . . . Presents indepth world market profiles on 29 nations — Contains seven chapters presenting a general overview of international practice . . . Reviews the use of overseas representatives . . . Pros and cons of establishing an overseas presence with a local firm.

Manager,	Publications	Marketing/Sale
The Amer	rican Institute	of Architects
1735 New	York Avenu	e, N.W., Dept.
Washingto	on, D.C. 200	06

Please send me ____ copies of STANDARDIZED ACCOUNTING FOR ARCHITECTS (2M705) @ \$20 ____(Non-member) each \$16 ____ (AIA member) each

Payment must accompany order. D.C. residents add 5% sales tax.

Total enclosed \$_____

ATTN

ADDRESS

CITY, STATE, ZIP_

SIGNATURE.

FIRM

Manager, Publications Marketing/Sales The American Institute of Architects 1735 New York Avenue, N.W., Dept. J Washington, D.C. 20006

	Washington, D.C. 20006
	Please send me copies of ARCHITECT'S GUIDE TO INTERNATIONAL PRACTICE (2M715) @ \$20 (Non-member) each \$16 (AIA member) each
-	Payment must accompany order. D.C. residents add 5% sales tax.
	Total enclosed \$
	FIRM
•	ATTN
	ADDRESS
1	CITY, STATE, ZIP
	SIGNATURE

This subject is much too big for a brief statement, but I believe it is the most serious architectural problem of our time. It would be unfair to blame architects entirely for the mess which surrounds us although we as a profession, to say the least, certainly are implicated. If any group in our society is to share the blame, it is the educated upper middle class of managers, educators, governors and communicators. When those who give direction determine that we should create a better man-made environment, a truly "contemporary architecture," it can begin to happen. There are enough good architects around to do the job. I am optimistic, though not overly so, for even if we are asked to get on with it, the principles of town planning and city building are by no means widely appreciated, let alone agreed upon, even by our best architects.

By Timothy Wood, AIA

If one were attempting to identify significant external forces influencing current architectural thought, one would have difficulty confining a simple list of them to the prescribed limits of this essay. However, asked to select one among them all as being the most "interesting," one is drawn irresistibly toward the one which, in our own time and culture, ultimately qualifies all the rest. I'm speaking of the magic mirror of media.

A medium is defined as an agency; and in this context, as in the context of our narcissistic culture, the agent-metaphor can only be that seductive and omniscient reflection of architecture, the media-mirror.

As art has been for so long a means for mankind to discover or assert meaning in life, existence, reality or what have you, it has also been its own agency of communication. Man has direct contact with "reality," and can cope with

'Whereas before architecture was its own agency for man's perception and reinterpretation of 'reality,' it now has another agency superimposed on it.'

it as such. But to understand its meaning, he has been obliged to step back and erect a mechanism between himself and "reality" through which to organize, interpret and possibly understand things inaccessible through direct contact.

Whereas before, architecture was its own agency for man's perception and reinterpretation of "reality," it now has another agency superimposed on it, whose role it is to interpret or decode for us some meaning or significance to the world of architecture.

This condition has induced some remarkable social and cultural phenomena which, conditioned as we are, we tend to take for granted. For example: It used to be that a great architect could spend his life building a few great things and die known but to relatively few people in a relatively small area. Now it is possible for an architect and his work (both meritorious, I would hope) to be known by a great many people over a very large part of the world—and he needn't ever have built anything at that; or,

Timothy Wood, AIA, is an assistant professor, graduate school of architecture and planning, Columbia University, New York City.

With time, certain forms became part of the shared system of cultural meaning. . . . Much the same thing happens with media.'

a work of architecture can be deeply studied and widely discussed, even though it was conceived primarily for media dissemination rather than for habitable use.

Architecture has always relied upon its symbolic content in connection with its cultural role as an agency of meaning. Some symbolism has been structural, or built into the basic physical and spatial forms, and some has been applied as a separate system of form. With time, certain forms became part of the shared system of cultural meaning or language. When used properly, the architect could, with these forms, impart to his public a sense of the world and their place in it.

Curiously, much the same things seem to happen now with media. There has grown up a body of ideas, words and images relative to architecture which have become themselves a language. One stretches the point a bit, perhaps, but I believe it is possible to make an analogy between, say, a classical pediment (take your pick) and a certain green, white and blue photograph of Richard Meier's Douglas house, which seems to be so pervasive in media phenomena these days.

The point is that it is now possible for a massproduced image of something architectural to evoke a perception about a state of being in relation to that which exists to alter, literally and symbolically, that state. Therefore, it has become possible to manipulate, through images and words, the interpretation of architectural form. So if art (architecture) is a mirror held up to life, then media is a mirror held up to architecture.



Zip Code and the rising cost of dating.

"... and everything has gone up since you were a student here, dad. farticularly dating. So, could you see your way to letting me have a little extra, by return mail, please...?

Make sure your urgent appeals carry the <u>right Zip Code</u>. It speeds things up *for everybody and makes* your letter travel better.



Space for this ad has been contributed as a Public Service by this publication.

ADVERTISERS

Michael J. Hanley Publisher	Acme Brick Company	Cold Spring Granite Co 269 Kerker & Associates
Michael M. Wood	AIA Research Corporation 22	Collins & Aikman 202
National Sales Director	A. I. Furniture	Dancer, Fitzgerald & Sample
George L. Dant	Corinthian Communications	Columbia Lighting 36
Manager, Production and Business	Alcan Building Products Cov. 3	Devine, Miller, Carson &
1735 New York Ave. N.W.	The Marschalk Co.	Donaldson
Washington, D.C. 20006 (202) 785-7300	Allied Chemical	Conwed Corporation 251 Stevenson & Associates
ADVERTISING SALES OFFICES	Aluminum Company of America. 90-91 Creamer, Inc.	Copperweld Tubing Group 17 Alex T, Franz
Washington, DC. (202) 785-7271 Michael M. Wood	American Air Filter 7 Doe-Anderson Advertising	Crouse-Hinds Co
1735 New York Ave. N.W. Washington, D.C. 20006	American Gas Association 253 J. Walter Thompson	Cy/Ro Industries 241
New York (201) 729-4937	American Olean Tile 61	Hazard Advertising
Thomas R. Crow	Lewis & Gilman, Inc.	Dallas Market Center 278
46 Main Street	American Seating	Admakers, Inc.
Sparta, N.J. 07871	Hanish Associates, Inc.	De Soto, Inc
New England/New York State	Armstrong Cork Company 2	Geoffrey W. Layton
(617) 632-8185	Marsteller, Inc.	Dover Corp. Elevator Div 29 Caldwell, Bartlett, Wood
Robert L. Tagen	Badische Corporation 23	Dupont, E. I. de Nemours 32-33
87 State Road West	Millennium Design Communications	BBD & O 210-211
Westminster, Massachusetts 01473	Belgian Linen Assoc 100	DuPont Corian
Chicago (312) 887-1171	Bigelow Sanford	N. W. Ayer
Robert M. Brown	AC&R Advertising	Eastman Kodak 41
201 E. Ogden Avenue	Bilco Company 249	Rumrill-Hoyt
Hinsdale, Illinois 60521	Ben Mochan Assoc.	Elkay Manufacturing Co 214
St. Louis (314) 569-3210	Bloomsburg Carpet 219	Post, Keyes, Gardner
Richard D. Grater	Arleo Advertising	Featherock
1466 Summerhaven	Brick Institute of America 12	Sierra Advertisers
St. Louis, Missouri 63141	Henry J. Kaufman & Assoc.	Flour City Architectural Metals 62-63
San Francisco (415) 348-8222	Bruning Div. of Addressograph	Follansbee Steel Corp 212
Jules E. Thompson	Multigraph Corp 31	Group Marketing & Communications
1290 Howard Avenue #303	Campbell Mithun	Formica 97
Burlingame, California 94010	Buckingham Virginia Slate 275	Fahlgren & Ferris
Los Angeles (213) 378-8361 Bert Charlton	Riddick Advertising California Redwood Assoc 216-217	General Electric (Silicone) 19
2560 Via Tejon		Ross Roy/Compton
Palos Verdes Estates, California 90274	Foote, Cone & Belding/Honig Carpenter, L. E	Georgia Marble Co
Subscriptions: for those who are, by title, architects, architectural employees and to those in architectural	Ceco Corporation	Georgia-Pacific 209 McCann-Erickson
education (faculty, schools and students), and to	Celotex Corp 20-21	G. F. Business Equipment 255
libraries, building construction trade associations and building products manufacturers: basic rate \$12 a year;	Mike Sloan 92-93	Pitt Studios
\$8 to ASC/AIA affiliate members and student chapters (bulk orders) in the U.S., its possessions and Canada.	Ceramic Cooling Tower Co 59	
For all others; \$18 a year in the U.S., its possessions	Bartlett Advertising	
and Canada; other countries to those who are by title, architects: \$18 a year. All others outside the U.S., its	CM, Inc 85, 86, 87	
possessions and Canada: \$30 a year. Single copies: \$2.50	Ogilvy & Mather	
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.		

Granco (Nat'l. Steel)
Rives, Smith, Baldwin & Carlberg
Hager Hinge Co 226-227
Stolz Advertising
Haws Drinking Faucet Co 70
Pacific Advertising Staff
Homestead Fabrics 228
Ibac Industries 240
Hoshal Advertising
Inryco, Inc 66
Melrose Advertising Assoc.
ITT Outdoor Lighting 225
John Malmo Advertising
Jewett Refrigerator Co 265
Bowman, Block, Fatin & Cook
Johns-Manville Holophane Div 11,
Broyles, Allebaugh & Davis 204-205
Joy Manufacturing Co 247
Covey & Koons
Kalwall Corporation 28
SynerJenn Advertising
Kawneer Architectural Products . 26-27
Garrison, Jasper, Rose & Co.
Knoll International
William C. McDado, Inc.
Koch & Lowy
Ribaudo & Schaefer
Val. I Nam Donidonoph 222 222
Koh-I-Noor Rapidgraph 222-223
KR Advertising
Kohler Co
Koppers Company 49 thru 54
The Advertising Center (TAC)
Levolor Lorentzen 56-57
Muller, Jordan, Herrick
Libbey-Owens-Ford 77
Campbell-Ewald
Marathon Manufacturing 101
Glenn, Bozell & Jacobs
Marvin Windows 24
Discovery Designs
McGuire, W. B 240
R. T. Blass
MEG (Merchandising Equipment
Group) 270
Minz & Hoke
Milliken & Co 98-99
Pringle, Dixson, Pringle

National Electrical Contractors Assoc. 40
Vansant Dugdale
National Fire Protection Assoc 257
NFPA Advertising
Nucor (Vulcraft) 14-15
Faller, Klenk & Quinlan
Olympic Stain Cov. 4
Kraft Smith
Otis Elevator Co 94
Poppe Tyson
Overhead Door Corp 234
Kerss, Chapman, Bua & Norsworthy
Owens-Corning Fiberglas Corp 4-5
Ogilvy & Mather 74-75
Ogilvy & Mather 74-75 Owens-Illinois 44-45
Howard Swink Advertising
Parker Co
Les Lowe Advertising
Pen Ply
Soderberg & Bell
PPG Industries (Glass) Cov. 2, 2A
Ketchum, MacLeod & Grove pg. 1
ProSoCo, Inc
Lisoc Advertising
Pyrotronics, Inc 238-239
Keyes, Martin & Co.
Rambush
Johns/Presser Associates
R-Max 271
R-Way Furniture Co 71
R-Way Advertising
Rixson-Firemark 64
Motivation Dynamics
Robertson, H. H 232-233
Creamer, Inc.
D /IDC
Roper/IBG
John E. Rosio & Assoc.
John E. Rosio & Assoc.
John E. Rosio & Assoc.

Sandell Mfg. Co 257
Sandoz 43
RJM Advertising
Schlage Lock Co
Martin Advertising
Scovill Security 224
Colarossi/Griswold-Eshleman
Shand, Marahan Co 76
Hakanson & Associates
Simpson Timber Co 245
Kraft Smith
Sloan Valve Co 16
Yer/Buchen, Reincke
Solar Thermal Systems 265
Decatur Associates
Standard Dry Wall 215
Martin Ruoss Creative Group
Stark Ceramics 82
Ira Thomas Associates
Steelcase 80-81
Aves Advertising
Stendig International 221
Allisam Productions
Stow/Davis
Tri-Guard 273
Unistrut/GTE/Sylvania 95
Doyle, Dane, Bernbach
United States Gypsum 65
Marstrat, Inc.
United States Steel Co 8-9
Compton Advertising
Von Duprin 200-201
McQuade Bloomhorst
Wellco Carpet 266-267
Gray & Rogers
Western Wood Products 229
McCann-Erickson
Weyerhaeuser Co 68-69
Cole & Weber
Widelite 78
W. R. Meadows
Conner-Sager
Yale 213
Colarossi/Griswold-Eshleman



In Dallas we're ready to do business when you are!

At the Dallas Market Center you'll find the most oustanding and complete display of contract and residential furnishings and accessories anywhere.

For you—the architect—many of our showrooms are open 52 weeks of the year so you can shop the resources you need to—when you need to.

It's market time year around at the world's largest wholesale merchandising mart complex, over 4.8 million square feet quickly expanding to 7 million plus. (The World Trade Center addition is scheduled for completion in October, 1979)

WORLD TRADE CENTER DECORATIVE CENTER HOMEFURNISHINGS MART TRADE MART

Dallas Market Center

2100 Stemmons Freeway Dallas, Texas 75207, 214/655-6100

SUMMER HOMEFURNISHINGS MARKET JULY 8-13, 1979

WINTER HOMEFURNISHINGS MARKET JANUARY 13-18, 1979

CONDES 80 JANUARY 16-18, 1980

For buyers pass or hotel reservations call toll-free: 1-800-527-2730 outside Texas, or 1-800-492-6618 in Texas.

TENTER



What goes on at John Deere is secret, thanks to Alcan PLANAR Ceilings.

Alcan PLANAR Ceilings keep secret what has to go on in modern office buildings.

They hide the clutter of technology - air diffusers, air returns, speakers and sprinklers - all the things that have to go on, to make working conditions safe and comfortable.

The result is a neat, clean overhead design — one that marries right into the graceful grand plan of the new West Office Building at the John Deere organization's world headquarters in Moline, Illinois.

A triumph of Kevin Roche John Dinkeloo and

Open space, inside and out. Trees, gardens, plenty of sky. Lighting fixtures built into the furnishings, rather than into the ceilings. In other words, everything easy to look on and live with.

Including an Alcan PLANAR Ceiling System that buffers the view of distracting paraphernalia - and pleases the senses with its serene beauty of uninterrupted design.

Alcan PLANAR is the only complete ceiling system that offers utmost versatility in lighting and ventilation, to architects and designers seeking to stretch their creative muscles. It solves problems in 16 low-gloss colors also in custom colors and three bright finishes.

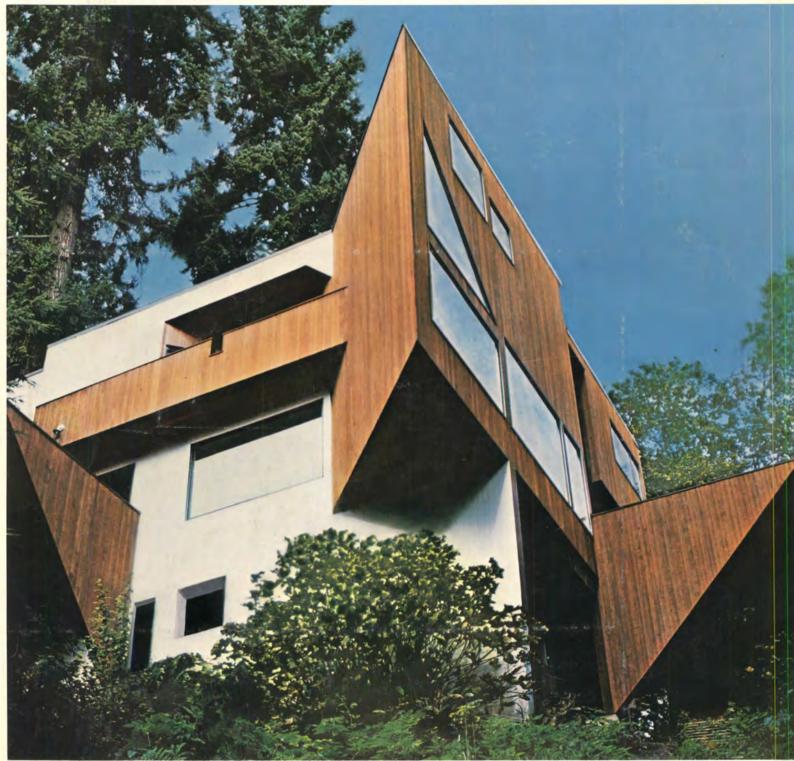
For more complete information, please write to "PLANAR," Alcan Building Products, P.O. Box 511, Warren, Ohio 44482.

Alcan Building Products



Circle 145 on information card

Beauty that's more than skin deep.



Architect: Wendell Lovett, FAIA, Seattle, Washing

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 Penetrates to 1979 Sweet's Catalog. Or write Olympic: Dept. P, P.O. Box 1497, Bellevue, WA 98009.

Physical Penetrates to 1979 Sweet's Catalog. Or write Olympic: Dept. Potect wood beautifully.