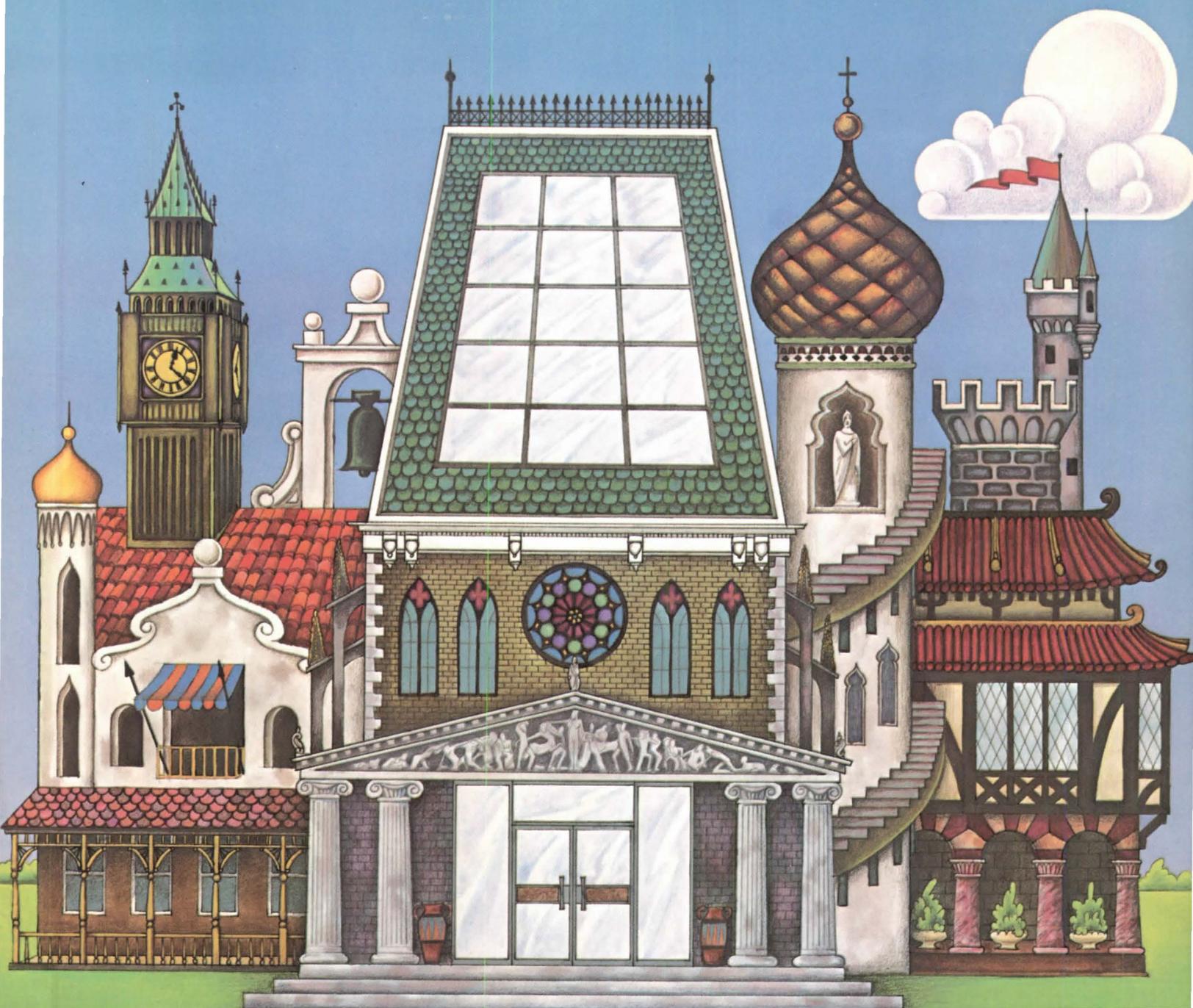


# AVANTAGE





## Howmet makes store fronts and entrances for even the trickiest designs.

When it comes to getting top quality store fronts and entrances, Howmet comes through. Because Howmet offers you more.

Our large selection of store front designs includes width variations of 1" to 2½", and depth variations of 3" to 8½". So there's one ready for just about any job. Or we can fabricate the perfect size and type extrusions for your most specialized needs.

Howmet makes the most of beauty and durability with such features as unexposed screws, and flush glazing for clean sight lines. Plus an advanced energy efficient thermal system that successfully controls both air and water infiltration.

Variety is the word for Howmet entrances, too. From thin, narrow, medium to wide stiles—each door is designed for trouble-free, lasting service. An example of Howmet's leadership in research and development is our Nightwatch™ Panic Door. Its

exclusive "turnstile" action takes care of security problems by preventing unwanted objects from penetrating the special interlock.

Howmet's in-house finishing capabilities provide the perfect final touch with our exclusive Endura-nodic™ integral color hardcoat Bronze or Black, as well as all conventional clear anodic finishes. Plus a variety of painted finishes for custom jobs.

And because Howmet inventories a complete line of store fronts and entrances, you can always count on speedy delivery.

So even if your next project calls for something a little tricky, call Howmet (214-563-2624), where you get the most in aluminum store fronts and entrances.

### HOWMET ALUMINUM CORPORATION

**HOWMET** A Member of the Pechiney Ugine Kuhlmann Group  
ARCHITECTURAL PRODUCTS DIVISION  
P.O. Box 629, Terrell, TX 75160

WHERE IDEAS AND IMAGINATION ARE ONLY THE BEGINNING.

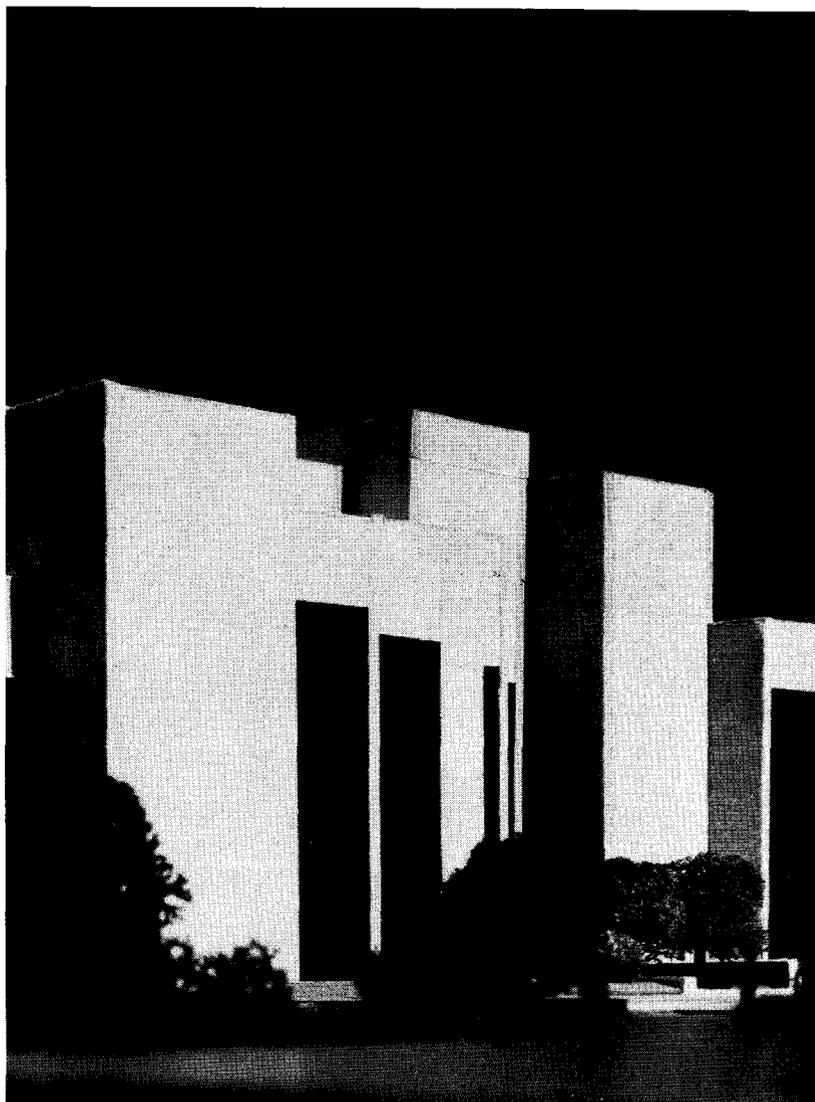
# Architects and Engineers E&O.

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.



**SM** Shand, Morahan & Company, Inc.  
EVANSTON, ILLINOIS

# How do you design the

## You start with Owens-Corning

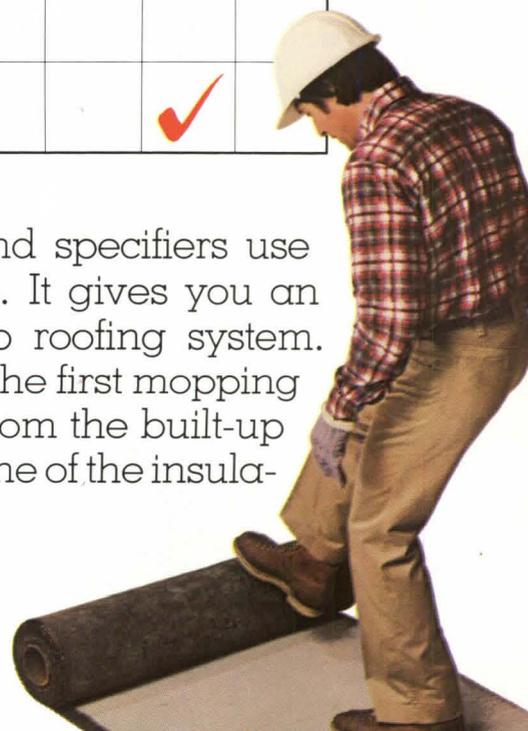


**S**tart with Owens-Corning Fiberglas\* Roof Insulation. It's the best base for your built-up roof. Check it against all the other bases on the market. Feature by feature, Fiberglas Roof Insulation wins going away. The comparison chart below should be proof enough.

WHY OWENS-CORNING FIBERGLAS ROOF INSULATION IS THE BEST BASE FOR BUILT-UP ROOFING

Base for BUR	Conforms to minor deck irregularities	Resilience	Ventable	Large sizes up to 4' x 8'	Easy to fabricate (in field)	Not damaged if wet (short term)	Excellent for covering old roofs	Stable "K" factor	Dimensional stability
Owens-Corning Fiberglas Roof Insulation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Owens-Corning Fiberglas Furi®	✓	✓	✓		✓	✓			✓
Perlite								✓	✓
Urethane				✓	✓	✓			
Composites									
Wood Fiber								✓	

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



# best roofing system? and end with Owens-Corning.

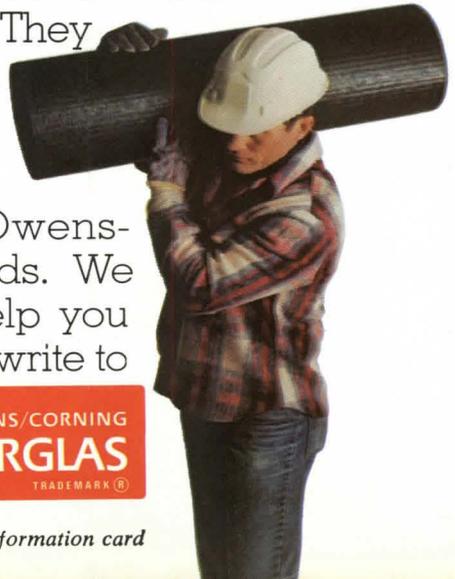


**N**ow is the time for Owens-Corning Fiberglas PermaPly-R\* membrane. Simply the best built-up roofing felt you can buy. The strong inorganic membrane is the result of Owens-Corning's unique patented continuous glass strand process. The felt lays flat and stays flat. Perma Ply-R felt helps reduce fishmouthing,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



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

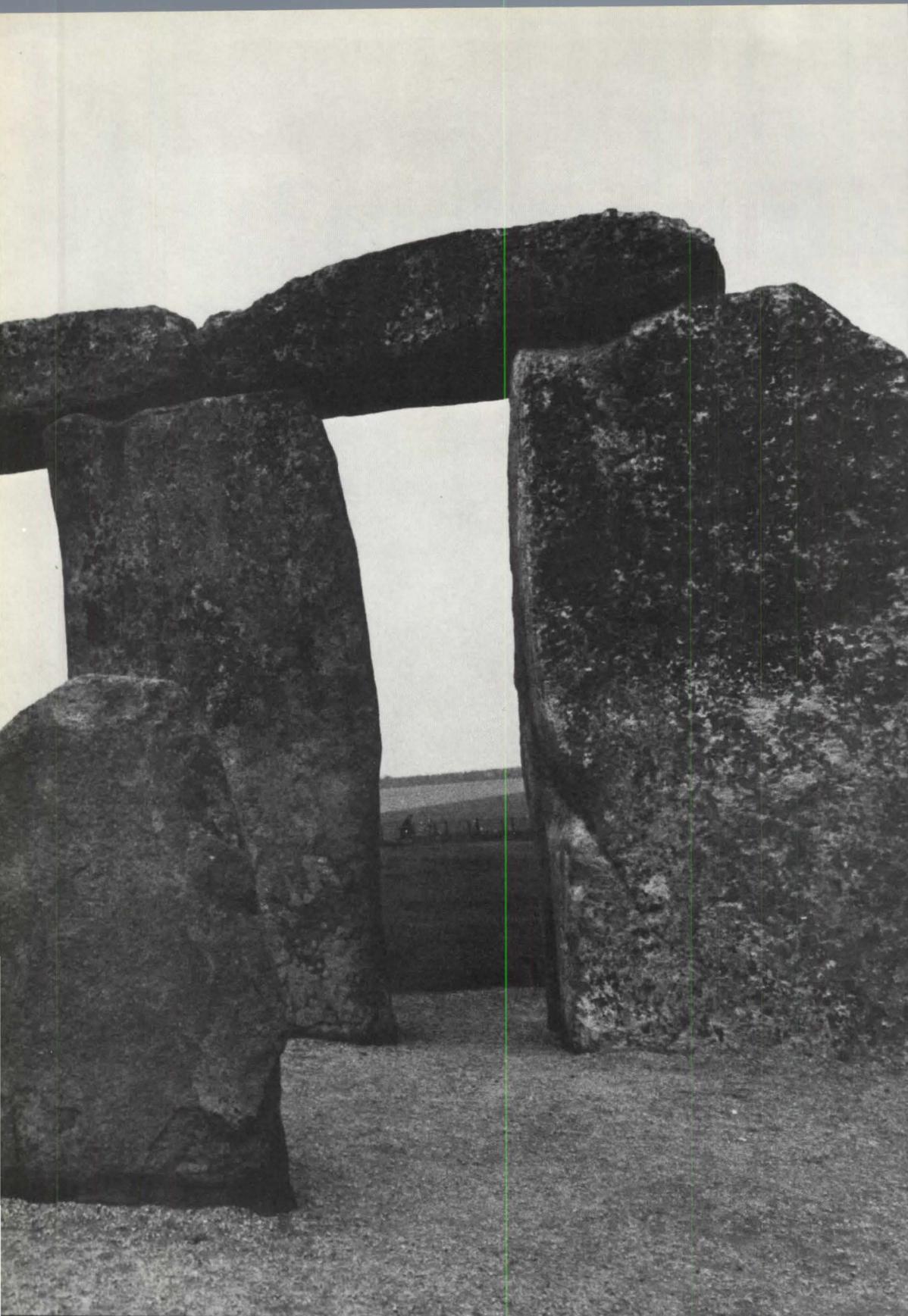
**Y**ou start with Owens-Corning, you end with Owens-Corning. But that's not where Owens-Corning ends. We are ready with the products and experience to help you design the best roofing system. Contact us today. Or write to C. Meeks, Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.



OWENS/CORNING  
**FIBERGLAS**  
TRADEMARK ®

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

Circle 3 on information card

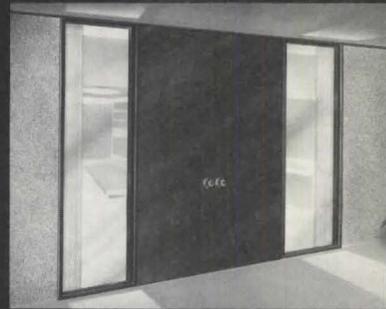


With Howmet's new aluminum interior door frame your construction problems are ancient history. Unlike hollow metal frames, Howmet's lightweight, one-piece aluminum frame installs easily while the walls are going up.

Once installed, it's durable enough to last a lifetime. And since it never needs repainting you can say good-bye to maintenance headaches.

Choose from two models — ceiling height and ceiling height or less. Each comes ready to install in our standard bronze paint finish. Other finishes are available on special order. Matching sidelite material is also readily available. Both the frame and sidelites are fully demountable.

For more information, contact David Nipper or Jimmy Parker at (501) 234-4260. Learn how you can have a bright future with Howmet door frames.



**HOWMET ALUMINUM CORPORATION**



A Member of  
The Pechiney Ugine Kuhlmann Group

**SPECIALTY PRODUCTS DIVISION**

P.O. Box 40 • Magnolia, Ark. 71753

**Where Ideas and Imagination  
Are Only The Beginning**

# Howmet takes the door frame out of the stone age.

# CONTENTS

## The American Institute of Architects

### Officers

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)

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*  
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*  
James R. Nelson, AIA ('81), *Middle Atlantic*  
Gridley Barrows, AIA ('79), *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*  
Jay W. Barnes, FAIA ('79), *Texas*  
Theodore S. Maffitt Jr., FAIA ('81), *Texas*  
Pat Y. Spillman, FAIA ('81), *Texas*  
Gerald L. Clark, FAIA ('79), *Western Mountain*  
John B. Rogers, FAIA ('81), *Western Mountain*  
Harold C. Fleming, Hon. AIA, *ex officio, Public Director*  
Richard Martini, *ex officio, President, ASC/AIA*  
Des Taylor, *ex officio, Chairman, Council of Architectural Component Executives*

### Headquarters

David Olan Meeker Jr., FAIA, *Executive Vice President*  
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*  
Francis X. Brown, *Administrator, Conventions*  
Muriel Campaglia, *Administrator, Public Relations*  
James E. Ellison, AIA, *Administrator, Education and Professional Development*  
Arnold J. Prima Jr., AIA, *Administrator, Government Affairs*  
James A. Schuping, *Administrator, Component Affairs*  
David Olan Meeker Jr., FAIA, *President, AIA Corporation*  
Jeanne Butler Hodges, *President, AIA Foundation*  
Charles R. Ince Jr., *President, AIA Research Corporation*  
John H. Schruben, FAIA, *President, Production Systems for Architects and Engineers, Inc.*

- 
- The University of California at Santa Cruz**  
34 *Site and planning: Text by Daniel Gregory with photographs by Ansel Adams*  
42 *The architecture: An overview. By John Pastier*  
48 *Kresge College: An evaluation. By John Pastier*  
55 *Kresge postscript. By Glenn Robert Lym*
- 
- 56 **Where Architects and Behavioralists Meet**  
*The 10th annual conference of the Environmental Research Design Association. By Ellen Perry Berkeley*

- 
- 58 **Adaptive Abuse**  
*Examining some perils of (and to) the preservation movement. By Arthur Cotton Moore, FAIA*

- 
- |    |                           |    |                    |
|----|---------------------------|----|--------------------|
| 8  | <b>Events and Letters</b> | 76 | <b>Books</b>       |
| 13 | <b>News</b>               | 88 | <b>Advertisers</b> |

---

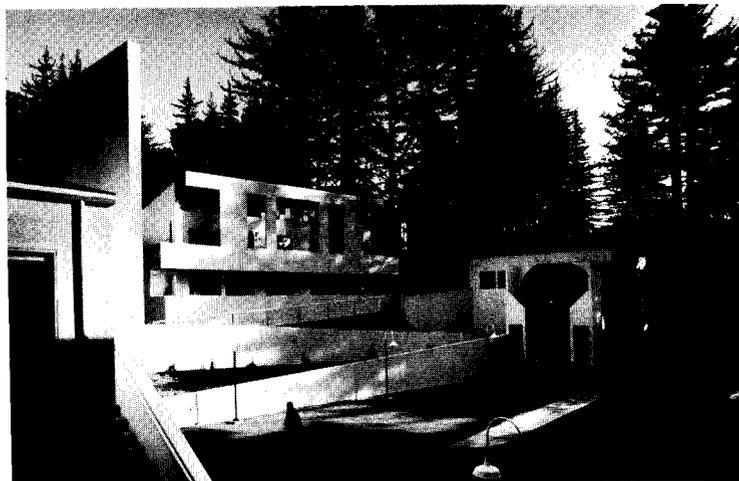
**Cover:** Photo by John Pastier at Kresge College, University of California at Santa Cruz (see page 48).

---

**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; **Lisa Garrigan**, Editorial Assistant; **Michael J. Hanley**, Publisher; **Michael M. Wood**, National Sales Director; **George L. Dant**, Production and Business Manager; **Gladys O. McIntosh**, Circulation Manager; **Lisa Moore**, Administrative Assistant.

---

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. 9.



Kresge College, UCSC

Morley Baer



# Double dribble.

Keeping the water off the roof. And off the floor.

That's the name of the game.

And the reason why it pays to specify Johns-Manville—the first name in lasting built-up roof protection.

With J-M, you get expertise based on over 120 years of solving roofing problems. You get quality that's consistently tops throughout a complete

line of roofing products, components and systems. Plus technical assistance from America's most experienced team of roofing specialists. And a degree of roof guarantee coverage that tops any in the industry.

Score with the built-up roof that offers real protection. For details, consult Sweet's. Or contact George Constantin, Johns-Manville, Ken-Caryl Ranch, Denver, Colorado 80217, 303/979-1000.

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



**Johns-Manville**

*Circle 5 on information card*

## EVENTS

**Sept. 5-8:** Alabama Council of Architects/AIA annual convention, Grand Hotel, Point Clear, Ala.

**Sept. 5-8:** Western Mountain Region/AIA annual convention, Keystone, Colo.

**Sept. 6-8:** AIA Central States Regional Conference, Wichita, Kan.

**Sept. 10-13:** National Material Handling Show/Seminar/Forum, Chicago. Contact: Material Handling Institute, 1326 Freepoint Road, Pittsburgh, Pa. 15238.

**Sept. 10-14:** Value Engineering Training Workshop (approved by AIA), San Francisco. (Repeat workshops: Oct. 15-19, Atlanta; Nov. 12-16, Dallas.) Contact: Arthur Beard Engineers, Inc., 6900 Wisconsin Ave., Chevy Chase, Md. 20015.

**Sept. 12-13:** Institute on Outdoor Athletic and Recreational Facilities, University of Wisconsin, Madison.

**Sept. 12-16:** National Association of Women in Construction annual convention, Hyatt Regency Hotel, Houston. Contact: NAWIC, 2800 W. Lancaster, Fort Worth, Tex. 76107.

**Sept. 13-14:** Metric Management Workshop, Los Angeles Hilton, Los Angeles. (Repeat workshop: Nov. 29-30, Dallas North Park Inn, Dallas.) Contact: American National Metric Council, 1625 Massachusetts Ave. N.W., Washington, D.C. 20036.

**Sept. 14-15:** Interstitial Space Seminar, McMaster University Medical Center, Hamilton, Ontario, Canada, sponsored by Health and Welfare Canada and the Royal Architectural Institute of Canada. Contact: T. M. Ogrodnik, Health Services and Promotion Branch, Health and Welfare Canada, Ottawa K1A 1B4, Canada.

**Sept. 16-20:** Annual Illuminating Engineering Society of North America technical conference, Boardwalk Regency Hotel, Atlantic City, N.J. Contact: IES, 345 E. 47th St., New York, N.Y. 10017.

**Sept. 17-19:** Photovoltaic Advanced R&D Annual Review Meeting, Stouffer's Denver Inn, Denver. Contact: Solar Energy Research Institute, 1536 Cole Boulevard, Golden, Colo. 80401.

**Sept. 17-20:** Conference on Design: Models, Machines and Morality, sponsored by the Design Research Society, University of Bristol, England. Contact: Roger Gill, DRS, 91 Woodland Road, Bristol BS8 1US, U.K.

**Sept. 19-22:** Tennessee Society of Architects/AIA annual convention, Chattanooga.

**Sept. 24-25:** Conference on Fuels Use Planning: New Strategies, Continental Plaza Hotel, Chicago. Contact: Energy Bureau Inc., 41 E. 42nd St., New York, N.Y. 10017.

**Sept. 24-25:** International Seminar on Community Participation in Comprehen-

sive Social Facilities, AIA Headquarters, Washington, D.C., sponsored by the International Union of Architects' working groups on educational spaces, sports and leisure. Contact: Barbara Mendelssohn, AIA International Relations, 1735 New York Ave. N.W., Washington, D.C. 20006, (202) 785-7238.

**Sept. 26-29:** AIA Northwest Regional Conference, Wailea, Maui, Hawaii.

**Sept. 26-30:** Industrial Designers Society of America annual conference and trade fair, Hyatt Regency on Capitol Hill, Washington, D.C. Contact: IDSA, 1717 N St. N.W., Washington, D.C. 20036.

**Sept. 27-28:** Virginia Society of Architects/AIA fall meeting, Fredericksburg, Va.

**Sept. 27-28:** Institute on Designing Architectural Interiors to Support Task Performance, University of Wisconsin, Madison.

**Sept. 27-28:** Seminar on Life Cycle Costing, New York City. (Repeat seminar: Nov. 15-16, Houston.) Contact: Association of Energy Engineers, 464 Armour Circle N.E., Atlanta, Ga. 30324.

**Sept. 27-30:** Illinois Council/AIA annual convention, Sheraton Hotel, Oakbrook, Ill.

**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.

**Oct. 22-23:** Conference on Architectural Management, Brown Palace Hotel, Denver, sponsored by AIA's practice management committee. Contact: Robert Allan Class, AIA, Director of Practice Programs, Institute Headquarters, (202) 785-7257.

**June 1-4, 1980:** AIA annual convention, Cincinnati.

their own affairs and to avoid automatic adoption of large-city inspired solutions to their problems.

If you are involved with or know of a project in a town under 50,000 which you think might be of interest to other communities, the Small Towns Institute would like to hear from you. Send a brief description of the project along with the name and address of a person who can be contacted for more information.

Among the things the STI wishes to identify are significant small community design projects in the areas of architecture, landscape architecture and design of public spaces.

More information is available from me.

*JoAnne Sperry  
Small Towns Institute  
P. O. Box 517  
Ellensburg, Wash. 98926*

**Postoccupancy Evaluation:** Valid postoccupancy evaluation is, as Ellen Perry Berkeley notes in the April issue (p. 58), problematic at best, given the complexity of variables dealt with and the mixed objectives of architects, clients and users, and architectural critics.

Based on our firm's own work in this area, using a graduate seminar class to evaluate one of our hospitals, we found that it was impossible to evaluate in one study the wide range of variables addressed in Berkeley's article.

I feel that Berkeley's evaluation would have been much more successful had she isolated some of the initial concepts the architects had used, and tested the actual functioning of the building against these parameters, rather than combining esthetics/function/experimental factors.

Finally, I reacted personally to the disdain Berkeley shows for the students. Perhaps the perceived poor quality of the students' responses was due to the fact that they consider environmental/architectural factors only when they significantly enhance the quality of their day-to-day experiences or significantly inhibit them.

Clearly, there is still much work to be done in the area of postoccupancy evaluation.

*Julia Thomas  
Bobrow/Thomas & Associates  
Los Angeles*

**Corrections:** Mr. L. B. Miller, AIA, noted in the lists of deaths in the June issue (p. 99) as having lived in Santa Monica, Calif., resided in Berkeley, Calif. The photograph of downtown Wilkes-Barre, Pa., on page 159 of the Mid-May issue was incorrectly credited. Joseph W. Moliator was the photographer. Also in Mid-May, the color photograph of the David Smith gallery in the National Gallery of Art (page 111) should have been credit to Ezra Stoller-ESTO. We regret these errors.

## LETTERS

**Design Projects in Small Towns:** The Small Towns Institute has been awarded a grant by the National Endowment for the Arts to develop a guidebook for design projects in communities under 50,000 in population. The study will focus on projects which contribute to greater awareness of design principles in the natural and built environment of small towns and rural areas, and which can serve as models for other small towns.

The study will be based on the premise that American small towns and rural areas today are experiencing pressing problems related to the planning and design of community environments. Rapid growth, moderate growth and community decline each challenges local citizens and officials to make decisions about design matters in the face of limited professional expertise and funding. At the same time, American communities under 50,000 understandably want to become more self-sufficient, to have more control over



**now...  
light frosting  
over dark tones**  
adds rich, deep, ceiling dimension!

Exciting ACOUSTONE® ceiling panels offer you a brand new prestige look in sound control overhead. The elegant frosty finish outside over deeply-carved texture inside is getting a warm welcome for several reasons. Dimensional effect is dramatically enhanced by white-over-darker background colors; minimizes the need for touch-up due to accidental damage. And being mineral wool, these Glacier-pattern ceilings combine high fire resistance with a sound-absorbing .60-.70 NRC. You'll find ACOUSTONE FROSTED ceiling panels come in two sizes: 2x2 ft. or 2x4 ft., and six base colors: blue, brown, green, red, yellow and black. And they're all foil-backed to help cut energy costs. ■ See your U.S.G. Representative. Or write to us at 101 S. Wacker Dr., Chicago, Ill. 60606, Dept. AJ89A

**new Acoustone® Frosted**  
ceiling panels by

**UNITED STATES GYPSUM**   
BUILDING AMERICA



Acoustical Contractor:  
Northwest Acoustical, Inc., Southfield, Michigan

Circle 6 on information card

# **PPG GLASS, ITALIAN GRANITE AND HISTORIC BOSTON. A FITTING COMBINATION THAT SAVES ENERGY.**

Owner/Developer: Cabot, Cabot &  
Forbes, Boston. Architects: Skidmore,  
Owings and Merrill, Chicago.



Sixty State Street. More than a powerful juxtaposition of granite and glass, this Boston tower stands as a thoughtful statement on the responsibility of growth in an area rich in historical significance.

That the building succeeds is due in no small part to PPG *Solarban*® 575-20 glass. The dual-paned glass, together with specially designed lighting and HVAC systems, enabled the

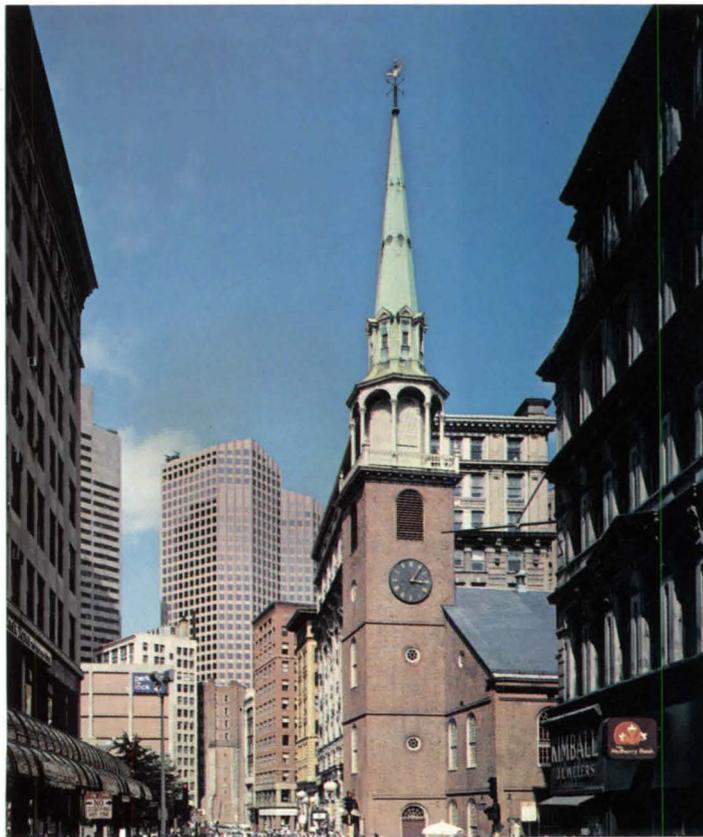
developer, Cabot, Cabot & Forbes, to realize an energy savings of approximately 40 percent per square foot over the neighboring properties.

But energy savings aren't the whole story. Tenants are. And Sixty State Street's tenants like the spectacular views of Boston harbor that the large-sized glass affords. Other tenant benefits include brightness reduction of as much as 75 percent in

the building interior, precision temperature and humidity control, and excellence as an acoustical barrier.

To find out which of PPG's *Solarban* reflective insulating glasses will work in your next building, see Sweet's 8.26Pp. Or write directly to PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222.

PPG: a Concern for the Future

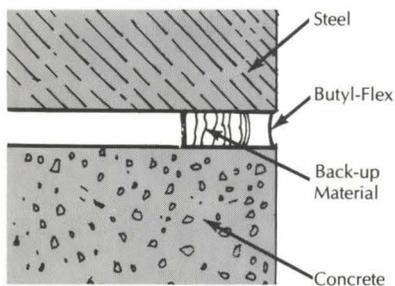


# Depend on Butyl-Flex<sup>®</sup> for tough architectural sealing jobs ordinary caulks can't handle.



Butyl-Flex delivers up to 5 times the service life of ordinary oil base caulks.

A versatile, intermediate sealant, Butyl-Flex Caulk assures tenacious adhesion with excellent weathering and flexibility for most general caulking requirements. Meets or exceeds Interim Federal Specification TT-S-001657, Type I.



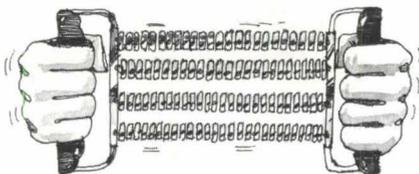
Withstands stress in joints between similar and dissimilar materials.

Butyl-Flex Caulk maintains positive, flexible seals between aluminum, steel, glass, marble, plastic and most other commonly-used construction materials over a service range of -40°F. to +180°F.

Recommended for many curtain wall installations.

A combination of non-oxidizing, non-polymerizing, non-migrating ingredients, Butyl-Flex makes excellent seals between clean, dry surfaces, with or without primer. No special preparation is needed.

Normal expansion and contraction won't displace it.



Butyl-Flex Caulk prevents the passage of air or moisture when joint movement does not exceed plus/minus 10%. Withstands exposure over its normal temperature range.

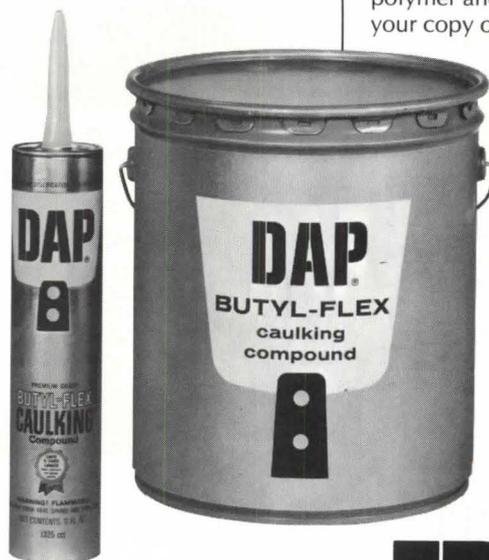
Butyl rubber base assures excellent flexibility.

DAP manufactures its own butyl rubber solution for Butyl-Flex to assure complete quality control in every compounding process. That's why Butyl-Flex stays flexible, maintains an air and watertight seal as joints expand and contract.



Seals out wind, water and weather.

Butyl-Flex provides long term protection in caulking joints that compares favorably with liquid polymer and acrylic sealants. For your copy of the informative DAP Architectural Sealants Catalog, write to DAP Inc. at the address below.



DAP is a trademark of DAP Inc.  
© 1979 DAP Inc.  
DAP Inc., General Offices:  
Dayton, Ohio 45401  
Subsidiary of  
Plough, Inc.

Architectural Sealants by



Circle 8 on information card

## Energy

# AIA Backs President's Broad Conservation Goals

AIA has publicly endorsed President Carter's policy of energy autonomy enunciated in speeches in mid-July. The President aims to cut U.S. dependency on foreign oil by half by 1990. He pledged \$142.2 billion for the effort, with nearly all the money to come from proposed "windfall taxes" on oil company profits.

The proposed program, in brief, would establish an energy security corporation to direct the development of domestic energy production capacity; establish a solar bank to provide subsidized loans to encourage the development of solar energy sources; encourage the development of shale oil deposits in the West, giving producers a \$3 tax credit for each barrel of shale oil produced; encourage the development of natural gas from new sources, with a tax credit of 50 cents per 1,000 cubic feet of gas derived from such sources.

Also, the program would provide grants and loans to utilities to cut current oil use; would give an interest subsidy for loans to owners of oil-heated residential and commercial buildings to aid them in the installation of conservation measures or conversion to natural gas; would invest money in improving mass transit and to help improve automobile efficiency. Low-

income people would be assisted in coping with the rising costs of energy. Tax credits would be provided for residential and commercial solar construction.

Ehrman B. Mitchell Jr., FAIA, president of the Institute, said that the architectural profession "has the will and the knowledge to reduce the nation's energy demands in the built environment through the use of energy-conscious design." He praised the aspects of the President's proposed program which would back a strong energy conservation effort, involving every person in the nation. The President has asked Congress to pass mandatory state-by-state conservation goals in order to save 4.5 million barrels of oil a day by 1990.

Mitchell pointed out that AIA has advocated a strong energy conservation program since the early 1970s. In 1974, its task force on energy conservation called for new energy conservation procedures in the built environment, outlining ways in which to achieve energy savings. A 1975 report by AIA's energy steering committee urged that "all" buildings be energy efficient by 1990.

"Through design," Mitchell said, "architects today have the ability to create buildings that will conserve 40 percent more energy than those designed in 1975-76 and completed in late 1978 or early '79. Architects, using energy-conscious design methods, can redesign buildings built prior to the 1973 oil embargo, and still save up to 50 percent or more of their current energy consumption. By 1990, these energy efficient buildings could save millions of barrels of oil every day."

Capitol Hill watchers predicted, and congressmen have told the President, that Congress won't get around to all of Carter's proposals until fall. (Congress is in recess until Sept. 5.) Some of the measures are already incorporated in various pieces of legislation now pending.

Meanwhile, President Carter has chosen Charles W. Duncan Jr., former president of the Coca-Cola Co. and deputy secretary for defense for the past two and a half years, to replace James R. Schlesinger

Jr. as administrator of the Department of Energy. Duncan said at a news conference that he intended to run DOE "in the best managerial style" in order to "implement the policy objectives" of the President. He said that the energy crisis could be resolved by achieving the President's goals in energy conservation and by cutting oil imports. Duncan holds a degree in chemical engineering from Rice University.

In other Cabinet changes, President Carter announced that Patricia R. Harris, secretary of HUD, would become secretary of the Department of Health, Education and Welfare, replacing Joseph Califano. Also, President Carter accepted the resignation of Brock Adams as secretary of Transportation.

## Carter Seeks \$1.03 Billion For Renewable Energy Sources

Prior to the comprehensive energy proposals, Mr. Carter recommended a \$1.03 billion program to create a national solar bank and provide new tax credits to stimulate solar technologies, incentives for gasohol use and additional money for research and development of renewable resources. The aim of the program is to raise renewable energy sources to 20 percent of the nation's total energy use by the year 2000. Renewable resources now account for about 6 percent of the nation's energy needs, the bulk of it hydroelectric power.

The announcement of the proposal was coupled with the dedication of a solar hot water heating system installed on the roof of the west wing of the White House. At the dedication Carter said, "There is no question that solar power is feasible and cost effective," and called his plan "a long-term commitment to a society based largely on renewable sources of energy." The program calls for a 29 percent increase in fiscal year 1980 over 1979 appropriations for renewable resources—solar, biomass, wind, ocean currents.

Under Carter's proposal a national  
*continued on page 16*

<b>Energy</b>	
<i>AIA endorses Carter objectives</i>	above
<i>Money for renewable resources</i>	right
<i>States' solar legislation</i>	16
<i>Largest wind turbine</i>	16
<b>The Institute</b>	
<i>A ruling against 'supplanting'</i>	21
<i>Support for design-build/contracting</i>	21
<i>Management conference planned</i>	22
<i>New at headquarters</i>	22
<b>Practice</b>	
<i>NCARB and 'minimum competence'</i>	22
<i>Spouses and tax deductions</i>	25
<i>Plywood design awards</i>	25
<i>Another Berlin exhibition</i>	25
<b>Government</b>	
<i>A plea to coordinate federal design</i>	26
<i>Urban development action grants</i>	26
<i>Freeman assumes GSA helm</i>	26
<i>Raising design consciousness</i>	29
<i>'Thinking small' in transportation</i>	29

# HOW VULCRAFT DELIVERED TO

When plans called for steel joists, joist girders and steel deck in the new Fort Wayne post office, the steel fabricator called on Vulcraft for all three.

Because now, Vulcraft manufactures steel deck along with joists and joist girders. And we're the only company in the country making them all.

Like the builders of the Fort Wayne post office, you can come out on top when you look to one source for all three.

You save time by combining the engineering, design and detailing functions.

You shorten construction schedules, because we can deliver joists, joist girders and steel deck all in one shipment, with our own fleet of trucks.

You solve problems quickly, because you have access to Vulcraft's nationwide sales and service force.

You save paperwork by dealing with only one company.

And you can rely on Vulcraft quality, because our deck is produced with the same high standards and reliability that we've established in the joist business.

For these reasons, there's no reason for you to look beyond Vulcraft when you're ready to order joists, joist girders or steel deck.

We stand ready to deliver all three.

Just contact your local Vulcraft representative. Or write Vulcraft, P.O. Box 22046, Charlotte, North Carolina 28222, for our steel deck and joist catalogs.



# THE FORT WAYNE POST OFFICE



Vulcraft now manufactures a broad line of steel deck along with steel joists and joist girders.



The simplicity and light weight of Vulcraft joists and joist girders make erection fast and easy.



Economies result from fewer columns being needed with Vulcraft joists and joist girders, because of their ability to span longer bays.

## VULCRAFT

A Division of Nucor Corporation.

P.O. Box F-2, Florence SC 29502 803/662-0381  
P.O. Box 169, Fort Payne, AL 35967 205/845-2460  
P.O. Box 186, Grapeland, TX 75844 713/687-4665  
P.O. Box 59, Norfolk, NE 68701 402/371-0020  
P.O. Box 1000, St. Joe, IN 46785 219/337-5411

Architects and Engineers: Schenkel & Schultz, Inc.  
General Contractor: Hagerman Construction Company  
Steel Fabricator: Engineered Structural Products Corp.  
Steel Erector: Martin Steel Erection

Circle 8 on information card

### Energy from page 13

solar bank would be funded at \$100 million annually out of the energy security trust fund, revenues generated by the windfall profits tax. Officials estimate that more than 100,000 new and retrofitted solar units would be financed by the bank in the first year. The bank would be authorized to provide subsidies for interest on home improvement loans and mortgages for residential and commercial buildings. Subsidies would also be paid to banks and other lending institutions to be used for loans and mortgages for solar investments at interest rates below the market rate.

Other proposals include:

- 20 percent tax credit up to a total of \$2,000 for passive solar systems in new homes and credits for passive solar in commercial buildings;
- 25 percent tax credit for agricultural and industrial heat uses of solar energy (compared to the current investment tax credit of 10 percent);
- permanent exemption of gasohol from the federal gasoline excise tax;
- tax credit of 15 percent of cost for purchasers of airtight woodburning stoves for use in principal residences.

These new incentives, said Carter, along with the decontrol of domestic oil and gas prices, will "provide much-needed incentives to encourage maximum exploration and production of our domestic resources . . . and will help solar and renewable technologies compete as the prices of oil and natural gas begin to reflect their real market value."

Solar advocacy groups criticized the plan for relying on the windfall profits tax for funding. They maintain that solar energy is so important that measures to encourage it should be funded directly. Solar energy advocates have called upon Carter and Congress to adopt a program that would enable the country to obtain 25 percent of its energy from the sun and other renewable resources by the year 2000 (see May, p. 86).

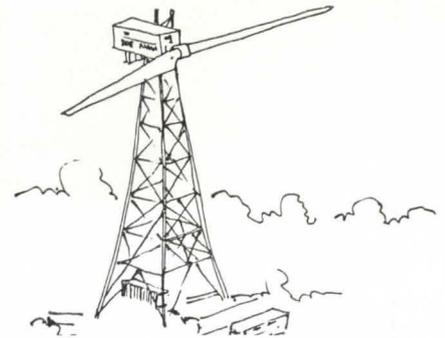
## From Assessments to Zoning, States Enacting Solar Laws

In 1974-75, the states had passed only 34 pieces of legislation pertaining to solar energy in buildings; in 1977 alone, 33 states passed 72 separate bills and by the end of 1977, 40 states had adopted one or more solar-related legislative proposals.

Comprehensive information on state-passed solar legislation is contained in a recent National Bureau of Standards report entitled "State Solar Energy Legislation of 1977: A Review of Statutes Relating to Buildings." Undertaken by the NBS center for building technology with funding by HUD and the Department of En-

ergy, the report summarizes solar legislation in the following categories:

- **Real property tax incentives:** In 1977, 10 states passed tax incentive bills, bringing the total number of states with such programs to 27. For example, North Carolina provides a property tax assessment exemption for all equipment used exclusively for solar purposes, and Maine exempts solar energy equipment from property taxation for five years.
  - **Income tax incentives:** A total of 17 states have such legislation, nine having passed bills in 1977. Wisconsin, as an example, provides a corporate business deduction of all costs of an alternative energy device or an individual income tax credit on a sliding scale of from 30 to 8 percent, depending on the year of installation and whether installed in a new or existing building.
  - **Sales tax incentives.** In 1977, Arizona, Connecticut and Texas passed sales tax incentives, bringing the total number of states to have such legislation to six.
  - **Zoning or easements:** Maryland, New Mexico, North Dakota and Kansas passed bills in 1977, with the total number of states brought to six.
  - **Standards, certification and codes:** There are 13 states to provide this type of legislation, eight having enacted laws in 1977.
  - **Solar research and development:** Fourteen states at the end of 1977 provided for solar research and development, promotion or investigation, four having enacted legislation in 1977.
  - **State buildings and life cycle analysis:** Activities provided in acts or resolutions in nine states range from studying costs to a mandate in California for supplemental solar water heating on state-owned new construction, unless exempted by the state architect.
  - **Loans, utilities and solar:** Massachusetts, Minnesota and Oregon have passed legislation pertaining to solar loans; Hawaii, Illinois and Oklahoma have legislation relating to utility rates and solar energy. Arkansas gives the public service commission broad authority with regard to utilities and the use of solar and other energy related technologies.
- The report contains abstracts of laws, legal citations and the names of responsible state agencies and officials. The full text of laws, in most cases, is given in the report's appendices, as well as supporting forms and documents. There are maps indicating which states have passed various pieces of legislation and a chart that pinpoints state solar laws enacted from 1974 through 1977, with a breakdown by state and by type of law.
- While supplies last, single copies of the report are available from Robert Eisenhard, BR B226, NBS, Washington, D.C. 20234.



## Largest Wind Turbine Provides Test Data in North Carolina

The world's largest wind turbine generator was dedicated in July near Boone, N.C. It has blades as long as the wing span of a Boeing 747. The turbine begins to generate electricity at winds of 11 miles per hour; at winds of 25 miles an hour or more, it is capable of generating 2,000 kilowatts, the amount of electricity required by 500 average homes. The turbine also will provide the Department of Energy with research data. The test data will be collected for DOE by the Blue Ridge Electric Membership Corporation, helping to determine the future design, location and operation of wind energy systems.

The turbine uses a propeller-type rotor 200 feet in diameter mounted with the transmission train and alternator on a tower 140 feet above ground level. Wind direction is monitored by a control system which rotates the turbine so that it aligns with the wind. The system controls the turbine to operate at a constant 35 revolutions per minute when wind speed is between 11 and 35 miles an hour. At a speed lower or higher, the rotor blades are feathered to shut down the system.

DOE has constructed three other experimental wind turbines, but the one at Boone has a peak power output 10 times greater than the others. A turbine at Clayton, N.M., was put into operation in January 1978; one at Culebra Island, Puerto Rico, went into action in July 1978; another at Block Island, R.I., was dedicated in June of this year.

Said Donald Kerr, acting assistant secretary for energy technology at DOE: "The wind is one of the alternative energy sources that we consider most likely to be economically attractive within the next few years. Our goal is to develop better and less expensive wind turbines that can generate electric power at costs no greater than conventional power plants." He said DOE is testing small turbines suitable for rural home and farm use.

The turbine at Boone was designed and constructed for DOE by the General Electric Co., under the technical management of the Lewis Research Center of the National Aeronautics and Space Administration. Its blades were built by the Boeing Engineering and Construction Co. of Seattle. *News continued on page 12*

---

# 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.

## FORM 4

---



columbia  
lighting  
inc

GTE SYLVANIA

north 3808 sullivan rd ■ ta box 2787 ■ spokane washington 99220 ■ (509) 924-7000

---

Circle 10 on information card



## **The Acoustic Open Office by Owens-Corning. 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



Circle 11 on information card

# When you need information on steel doors, Ceco has the answers.



*the high  
performance  
door  
people*

On fire door requirements. Security. Installation. Hardware. Colors. Ceco has answers on every aspect of steel door selection and use. Our high performance door specialists are professionals. They have the background training to make sure you get the right door for your needs — right on time. And they're backed by a knowledgeable, nation-wide team of distributors who keep the quality doors you need in stock.

Ceco's been developing, building and testing steel doors for over 30 years. So we know what it takes to meet nationally recognized standards, as well as your specific job requirements.

When you need answers on any facet of steel door selection and use, talk to a Ceco high performance door specialist. He's a good guy to know. See the Yellow Pages for the Ceco distributor near you. Or see us in Sweet's. For the new Ceco catalog, write: The Ceco Corporation, 5601 W. 26th Street, Chicago, IL 60650.



**CECO**

*"The door people"*

*Circle 12 on information card*

# AIA Held in Antitrust Violation For Stand Against 'Supplanting'

Judge John F. Sirica ruled in an interim order issued on June 25 in the U.S. Court for the District of Columbia that AIA's ethical standard prohibiting "supplanting" is in violation of the Sherman Antitrust Act and that the Institute is liable for damages to a Washington, D.C., architect suspended from membership for an alleged violation of the standard.

The ruling came in the form of a partial summary judgment on the first of six counts of a civil suit brought against the Institute and Seymour Auerbach, also of Washington, in July 1977 by Aram Mardirosian.

The suit arose from an ethical controversy between the two architects involving conversion of Washington's Union Station into a national visitors' center, for which Auerbach was the original architect. Mardirosian was consultant to the National Park Service on the project and eventually replaced Auerbach as architect for the visitors' center.

Auerbach brought proceedings against Mardirosian before AIA's national judicial board, charging Mardirosian with violation of ethical standard 9, which stated: "An architect shall not attempt to obtain, offer to undertake or accept a commission for which the architect knows another legally qualified individual or firm has been selected or employed, until the architect has evidence that the lat-

ter's agreement has been terminated and the architect gives the latter written notice that the architect is so doing."

The judicial board found against Mardirosian on grounds that he had entered into negotiations with the National Park Service and started work while Auerbach's contract was still in effect without giving Auerbach notice that he was doing so, according to Judge Sirica's ruling. After Mardirosian appealed to the AIA executive committee, a penalty of a one year suspension for violation of standard 9 was published.

Judge Sirica accepted Mardirosian's contention that "censure, or suspension of membership by the AIA injures an architect's reputation, standing and ability to obtain projects and other employment." In doing so, he noted that "membership in AIA is a valuable asset which enhances . . . ability to compete for and obtain architectural business." The ruling specifically did not deal with the amount of damages due Mardirosian, which will be determined by jury trial.

Judge Sirica ruled that the supplanting standard "both on its face and as applied" was an "unreasonable . . . and unlawful restraint of trade." His decision was based largely on the Supreme Court's 1978 ruling that the National Society of Professional Engineers violated the antitrust laws in promulgating its ethical standard prohibiting competitive bidding. In that

case the court said that the determination of whether an ethical rule violated the Sherman Act should be based solely upon its effect upon competition.

In an emergency meeting on July 9, AIA's executive committee approved the recommendation of antitrust counsel that the Institute not appeal Judge Sirica's interlocutory decision at this time. It also formally suspended ethical rule 605 on supplanting, the almost identically worded successor to standard 9. In the spring, the board of directors had suspended enforcement of the rule pending resolution of various legal challenges, including the Mardirosian case.

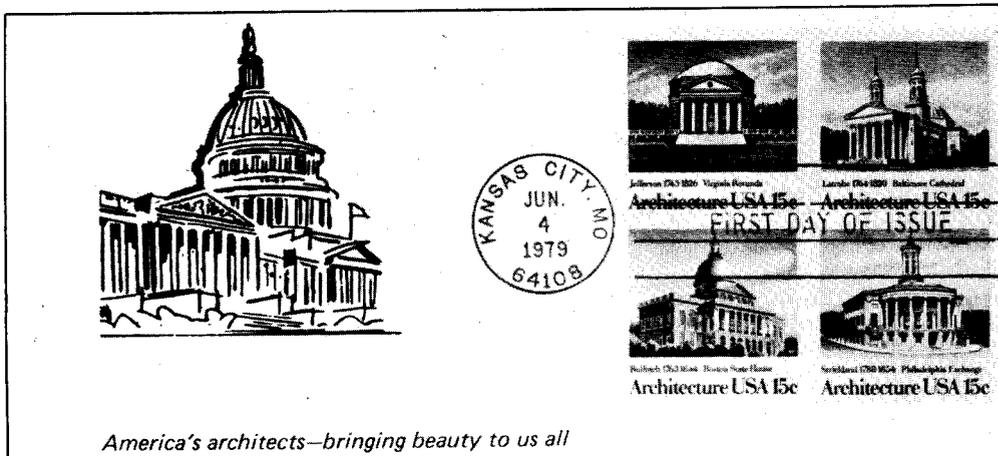
## Support Found Among Firms For Design-Build/Contracting

Only a relatively few firms are participating as contractors in design-build/construction contracting (D-B/CC), but those that are involved "are most supportive" of the concept and "believe that it will improve the quality of building without weakening the professional status of the architect." These comments are made in a report of the AIA task force which is monitoring the three-year experimental period during which Institute members are permitted to participate in construction contracting. The task force (Herbert E. Duncan Jr., FAIA, chairman; Rex Whitaker Allen, FAIA, and William Marshall Jr., FAIA) notes that owners are becoming "more and more interested" in the concept (see July, p. 14).

During the first year of the experimental period, the task force disseminated an AIA firm questionnaire. Preliminary results have been computerized and evaluated by Opinion Research Corporation of Princeton, N.J., a subsidiary of Arthur D. Little Co., and consultant to the task force on monitoring activities.

Through May 14, 3,682 firms had returned the questionnaire. Of this number, 3,308 indicated no experience with D-B/CC, and 374 firms, or 10.2 percent of those reporting, said that they had had some experience with the process. The task force report says that 60 percent of the firms without experience "strongly support the concept." Firms with experience support D-B/CC by an 8 to 1 majority. All the firms reporting do not perceive of the concept "as serving any particular building type more than any other."

According to 71 percent of the firms without experience, D-B/CC "will not weaken the project delivery process," while 85 percent of those with experience are of the same opinion. Seventy-five percent of the experienced firms say that D-B/CC will improve building quality; 64 percent of the firms without experience



America's architects—bringing beauty to us all

First day commemorative covers for four stamps celebrating American architecture are offered by the International Stamp Collectors Society. The covers are hand-cancelled and stamped with the initial block of four stamps and carry a line drawing of the U.S. Capitol, with a caption that reads, "America's architects—bringing beauty to us all." First day of issue ceremonies were held at AIA's convention in Kansas City (see July, p. 21). The covers, in a limited edition of 1,000, are \$3.95 each. They may be ordered from: Architecture, ISCS, 6253 Hollywood Boulevard, Hollywood, Calif. 90028, (213) 469-1193.

believe that building quality will not be improved.

According to the majority of the firms, owners "prefer to work with an architect rather than a general contractor." Greater numbers of owners, the firms believe, favor D-B/CC and "more and more are in favor of architect control" of a D-B/CC project.

One-half of the firms without experience indicated that the "professional status of the architect is weakened by participation in D-B/CC, while 75 percent of the firms with experience felt that the professional status of the architect is *not* weakened by participation. . . ."

## AIA Plans National Conference On Management of Firms in '80s

AIA will hold its first national architectural management conference on Oct. 22-23 in Denver. The conference, "Managing the Architectural Firm of the '80s," will examine current and future management techniques for architectural firms. Authorities will lead discussions on marketing, profit and strategic planning, growth management and economics.

During the two-day conference, case studies will be presented on such topics as negotiating compensation, marketing strategies and preparation for ownership transition.

The conference is sponsored by AIA's practice management committee and is open to all persons concerned with the management of architectural offices.

The registration deadline is Sept. 30. For more information, contact: Robert Allan Class, AIA, director of practice programs at the Institute, (202) 785-7257.

### Practice

## NCARB Plans Study to Define Minimum Competence Standards

Delegates to the 58th annual meeting of the National Council of Architectural Registration Boards voted unanimously to fund a study "to analyze and define the knowledge, skills, abilities and functions necessary for minimum competence for the practice of architecture" in this country. Findings of the study will be applied "to an evaluation of the current NCARB examinations, internship standards, education standards and practice standards."

The study will be carried out by a steering committee of NCARB regional

## New Staff and Promotions At Headquarters in Washington

The government affairs division has announced a new director of congressional liaison and a new director of public policy. Davis Tomasin, director of congressional liaison, formerly worked as assistant to the secretary of state of Maryland and sought the Democratic nomination to the U.S. House of Representatives from the 5th Congressional District of Maryland. He holds a B.A. degree from the University of Maryland.

Stanley L. Kolbe Jr., director of public policy, formerly worked as a research analyst in federal relations for the U.S. Conference of Mayors. He has a B.S. degree from Cornell University and a M.A. degree in legislative and public policy from George Washington University.

Richard C. Van Os Keuls, who has been in architectural practice in Cleveland and Washington, D.C., for several years, has been appointed deputy director of professional interest programs. He received an architectural degree from Case Western Reserve University.

Dale Ellickson, AIA, has been promoted from the position of assistant director, practice division, to the position of director, issues and policies, in the codes and standards division. He will be responsible for preparing the "Codes and Standards Bulletin" and for developing code policies. Ellickson is a licensed architect and attorney.

Richard L. Martini, a student at the Boston Architectural Center, is the new president of the Association of Student Chapters/AIA; Kimberly Stanley, from Clemson University, is vice president.

leaders, chaired by Patrick Meconi, AIA, of Wilmington, Del. Preliminary findings are to be reported to NCARB's annual meeting in 1980, with detailed recommendations made a year later.

"This study," said John R. Ross, AIA, of San Luis Obispo, Calif., NCARB's incoming president, "will attempt to determine what exactly a registered architect should be expected to know, and what he should be expected to do, as a practitioner responsible for protecting the public's health, safety and welfare."

NCARB's outgoing president, Lorenzo

D. Williams, FAIA, of Minneapolis, told the delegates from 55 registration boards that the "profession's credibility as a major force in shaping this society has never been subjected to greater skepticism. The winds of change are blowing with gale force."

Indeed, several states, such as California, have recently experienced attacks on licensing and on the validity of the registration examination. Critics have charged that the licensing examination ignores such things as climate and energy conservation and does not direct itself to what architects are called upon to do in today's society. Meanwhile, the state's Senate and House subcommittees have restored the \$400,000 budget requested by California's board of architectural examiners and have provided an additional \$252,000 to help the board in enforcing and evaluating the law. Governor Brown has been unsuccessful in finding a sponsor for the bill to repeal the registration law.

The "winds of change" to which Williams referred at the NCARB meeting have also been felt in other states, such as Wisconsin, where the examining board employed an independent consultant to evaluate NCARB's examinations. In Illinois, a committee has studied the state's licensing examinations and procedures and recommended that the state eliminate or change licensing of professionals. The committee charged that NCARB's design examination is too subjective, and recommended that architects be certified rather than licensed.

The registration law in Florida came close to expiration, but was saved by architects in the final hours who succeeded in getting the registration law and board re-established.

In his address to the NCARB delegates at the meeting in Cambridge, Mass., Williams met the charges of critics head on, saying that NCARB has not been "as one body on the question of examinations." He urged the period of examination of the entire process "so that when we have completed our study, we may achieve consensus on the purpose, form and grading of NCARB examinations."

He said that "minimum competence" in architectural practice too often has been equated "with the mastery of hard facts and figures. . . . We tend to overlook the architectural reality that there must be a minimum competence in dealing with so-called esthetic considerations. . . ." He called upon the profession to accept as a "legally sanctioned opportunity" recent court decisions which have ruled that a state need not confine its attention to whether a building may stand or fall. "In short," he said, "if it is true that the public expects more of architects, we can surely work harder to satisfy those

*continued on page 25*

**Vecta Contract  
Ginkgo Biloba Tables.**  
Uniquely designed  
cast aluminum base,  
beautifully polished  
or coated in 16  
Thermoset colors,  
6 table-top shapes,  
37 standard sizes.  
Veneers and laminates.  
With solid wood, vinyl  
or self edge, 2" or 1 1/4"  
thick. Carefully scaled  
and designed by  
Gunter Eberle for  
today's architecture.



# **Vecta Contract**

SUBSIDIARY STEELCASE INC.

Call toll-free for literature:  
800-447-4700;  
in Illinois,  
800-322-4400.  
Vecta Contract, Inc.,  
740 W. Mockingbird Lane,  
Dallas, Texas 75247.  
Ginkgo and Ginkgo Biloba are  
trademarks of Vecta Contract®  
patents pending.

**Circle 13 on information card**

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

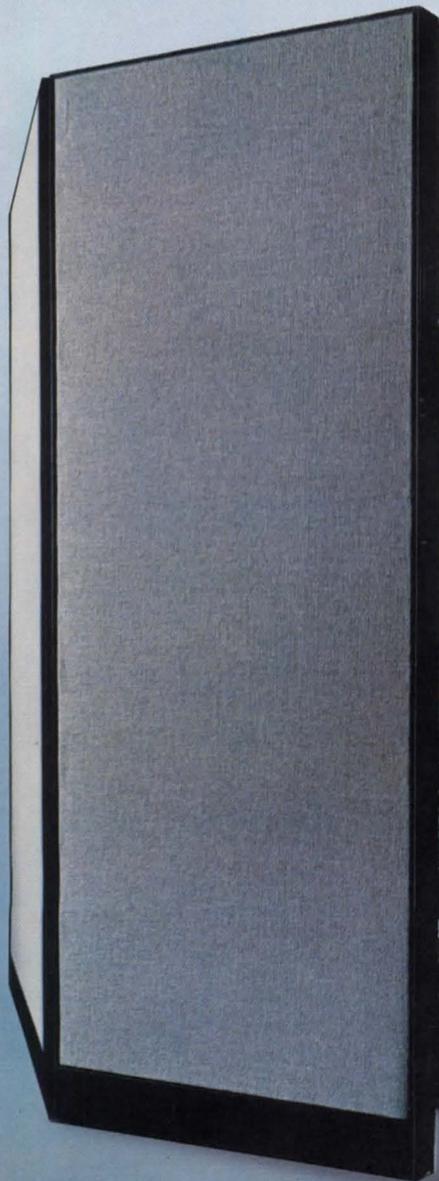
No open office system is complete without privacy. American Seating understands this. They've designed an acoustical panel that is functionally superior in absorbing sound...Privacy 2.

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.

Circle 14 on information card

### Practice from page 22

expectations. If the public is appealing to us for an esthetically coherent environment—and that environment contributes to the emotional and spiritual well-being, as well as to the physical safety—then we no longer have any excuse for not serving the public interest on our own historic terms as architects.”

In addition to John R. Ross, AIA, as NCARB's president, other newly elected officers are Dwight M. Bonham, AIA, Wichita, Kan., first vice president and president designate; Thomas H. Flesher, AIA, Oklahoma City, second vice president; Ballard H. T. Kirk, AIA, Columbus, Ohio, secretary, and Julian W. Goodrich, AIA, Burlington, Vt., treasurer.

Meanwhile, at its meeting preliminary to the AIA convention, the Institute's board of directors authorized the establishment of a registration law/regulation study to support components in the review and revision of registration laws and in the consideration of such related matters as license renewal proposals. The project is under the direction of AIA's state component affairs department. The board also adopted a policy statement that AIA, in its positions on architectural registration matters, will endeavor to facilitate entry into the profession, promote competition and discourage market restrictions, encourage public participation in the registration process and promote competence and accountability to the public for those providing architectural services.

## Role of Spouse at Conventions Governs Tax Deduction Status

If you want to take your spouse to a professional convention and to claim the expense as a tax deductible business expense, you will be interested in some recent rulings by the U.S. Tax Court and the Internal Revenue Service. If the spouse's role is just socializing, forget the deduction. And the fact that a spouse may have attended conventions in the past is no reason to expect favorable treatment either. It is increasingly clear that to get a tax deduction, the spouse must engage in bona fide business functions and that attendance is “appropriate and helpful” in serving the business interests of the primary participant in the meeting.

The U.S. Tax Court has ruled that the spouse has to be a registered participant and that duties involved relate directly to the primary participant's role at the meeting. Conventions cannot be considered as vacations and cannot be preceded or followed by a vacation along the way.

If the spouse does qualify, then it is recommended that a daily log be kept of all convention activities, with hourly en-

tries made. A record should be kept as well of the location of activities attended and who conducted the programs, in addition to expenses involved. It is also suggested that published photographic records be kept, as well as name badges and any educational materials dispersed—just in case tax records are questioned.

## California Architects Win Top Plywood Design Honors

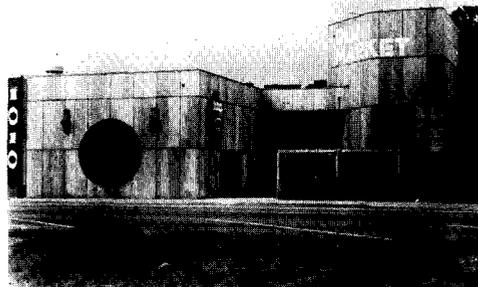
Architects of projects to win first honors or citations of merit in the eighth annual plywood design awards program were honored during AIA's convention in Kansas City in June. Sponsored by the American Plywood Association and *Professional Builder* magazine, the program recognizes “outstanding esthetic and structural uses of softwood plywood.”

In the commercial/institutional category, Thomas Williamson, AIA, of San Diego won top honors for a two-story frame addition to the Old Market in Encinitas, Calif. (photo below). A special citation of merit in this category was awarded to Sumner Schein, AIA, of Brookline, Mass., for a building in a 12-acre shopping center redevelopment project.

Citations of merit in this category were given to Roland/Miller/Associates, Santa Rosa, Calif., for the college union building on the campus of Sonoma State University; to E. James Smith, AIA, Toledo, Ohio, for the Buehner Walking Center, an open air visitors' center in the Oak Openings Preserve Metropark, and to Pederewski-Dean-Albrecht-Stevenson, San Diego, for the Avion Medical-Dental Office Building in that city.

In the residential/single-family category, top honors were won by Robert Swatt, AIA, and Bernard Stein of Berkeley, Calif., for a three-level speculative home in the Berkeley Hills area. Citations of merit went to Don Doman, AIA, of The Mithun Associates, Bellevue, Wash., for a private home overlooking Lake Washington and to Donald K. Olsen, AIA, Sausalito, Calif., for a private residence that straddles a flowing creek.

Two citations of merit were given in



the vacation homes category: to Davidson/Johnston, Vancouver, B.C., Canada, for Whiksi Jack condominiums near the Whistler ski slopes, and Paul A. Zorr, Berwyn, Ill., for a house he built for himself and his family in the Green Lake, Wis., area.

This year, an “out-of-category” citation of merit was won by developer Joseph M. Whelan's Portola Valley Associates for a cluster housing development in Portola Valley, Calif. Architectural firm for the project was Don Knorr, FAIA, & Associates and land planning was by Anthony Guzzardo & Associates, both of San Francisco. There were no awards or citations in the residential/multifamily category.

Jurors were Richard J. Bertman, AIA, Boston; John D. Bloodgood, AIA, Des Moines, Iowa, and Robert L. Durham, FAIA, Seattle. For information about next year's awards program, write: Plywood Design Awards, P.O. Box 11700, Tacoma, Wash. 98411.

## Inner City Living Is Theme Of 1984 Exhibition in Berlin

Berlin has been the scene of three major international building exhibitions which have had a significant influence on the development of urban planning. In 1911, the theme was on the organization of a great metropolis; in 1931, the emphasis was upon the social aspects of housing; in 1957, the accent was on the reconstruction of a ruined city. A fourth international exhibition is planned for 1984, and its theme will be the inner city as a residential area.

A recently issued prospectus says that once again the city of Berlin will be the exhibition grounds, with nine demonstration areas, differing in history, function and architectural structure. All have “typical urban problems for which city planning solutions will be developed within the framework of the exhibition, solutions that may be applicable elsewhere.”

According to the prospectus, international competitions will be used to obtain ideas and designs for site planning. Town planning solutions for the demonstration areas will be documented and made available to interested persons.

Conventions, summer institutes, seminars and special exhibitions will be organized to take place not only in 1984, but also preparatory to the exhibition, beginning in 1980/81. The West German Senate plans for the Gropius Building (formerly the Kunstgewerbemuseum) to be rebuilt to house special exhibitions.

For further information, write: Senator für Bau-und Wohnungswesen, Württembergische Strasse 6-10, Berlin-Wilmersdorf, German Federal Republic.

# Coordinated, Clear Design Policy Is Sought from President Carter

A federal task force on design recommends that President Carter coordinate fragmented federal design activities.

The federal government will spend \$20 billion next year on design-related projects and probably twice that amount in subsidies for design-related state and local projects. Each agency works independently with its own design goals, objectives and standards, a situation the task force calls "inefficient." Furthermore, says the task force, there is no mandate for federal design review, no central information and education resource and lack of overall commitment to design excellence.

Earlier this year, the task force examined federal design activities as part of a review of federal cultural policy (other task forces concentrated on careers in culture, cultural facilities and resources, international cultural programs and media in culture). Chaired by GSA and consisting of staff from the Departments of Defense, Health, Education and Welfare, HUD, Interior and Transportation and the National Endowment for the Arts, the Advisory Council on Historic Preservation and the Council on Environmental Quality, the task force recommended that a "clearly delineated" federal design policy be established. A recent study by the National Science Foundation reveals that more than 150 federal statutes, 100 federal regulations, 88 presidential documents and 85 reports, manuals and guidelines pertain to the quality of the built environment and more than 200 federal agencies and offices within agencies play a role in physical construction.

Other recommendations include:

- a clearly defined method to monitor and coordinate design policy;
- a design management group within each agency to serve as the link to the policy oversight and design council;
- a comprehensive program for design education;
- a comprehensive federal design communication program;
- design research recognized as a critical factor in the success of the federal design policy;
- a federal awards program for design;
- a strong link between federal spending for major projects and programs and the design process.

In line with this last recommendation, the Environmental Protection Act of 1970

states that "all agencies of the federal government shall . . . utilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment."

Commenting on the recommendations, David R. Dibner, FAIA, assistant commissioner for construction management at GSA, said he expected "a significant impact" on federal design (see April, p. 11). He emphasized the need to adopt a comprehensive approach to design in federal agencies. "Unfortunately," he said, "if the effort boils down to the design awards [which seem to be receiving the most attention] it doesn't mean anything. Emphasis must be placed on what leads up to it."

Because of changes in the Carter Administration and the pressing problems of inflation and energy shortages, neither the Administration nor Carter has acted on the recommendations. Dibner hopes for an executive order incorporating all of the recommendations.

Some of the programs which the task force uses as examples of incorporating good design policies are the planning and design program of the Department of Defense; the office of facilities engineering of the Department of Health, Education and Welfare; the community development block grants and urban environmental design programs of HUD; the Department of Interior's national historic preservation act grants program; GSA's art-in-architecture program; the Department of Transportation's design, art and architecture in transportation program and the National Endowment for the Art's planning and design program grants.

## Urban Development Grants: Status Report after the First Year

A key element of President Carter's national urban policy—the urban development action grant (UDAG) program—is meeting its goal of encouraging joint public-private development in severely distressed cities, states the program's first annual report. The report estimates that \$2.9 billion in private investment will be "leveraged" by the 236 action grants awarded in fiscal year 1978. That averages

out to \$5.95 in private funds for each UDAG dollar committed.

The UDAG program was authorized under the 1977 Housing and Community Development Act for a three-year period at \$400 million annually. The program's goal is to assist severely distressed cities and urban counties in alleviating physical and economic deterioration through stimulation of commercial and industrial development and reclamation of deteriorating neighborhoods. HUD regulations require firm private sector commitment to a project before any UDAG funds are awarded.

Of the 123 projects surveyed, 70.7 percent had been planned prior to the enactment of the UDAG program. Almost all of these projects' sponsoring agencies reported that the private investment required would not have been secured without the attraction of an action grant.

The survey also estimated that UDAGs would create more than 211,653 jobs, 87,061 (41.1 percent) of them permanent. An estimated 15,000 housing units will be constructed under the projects and 11,503 units rehabilitated. The projects receiving preliminary application approval show a balance among the industrial category (36 percent), commercial (35.6 percent) and neighborhood (28.4 percent).

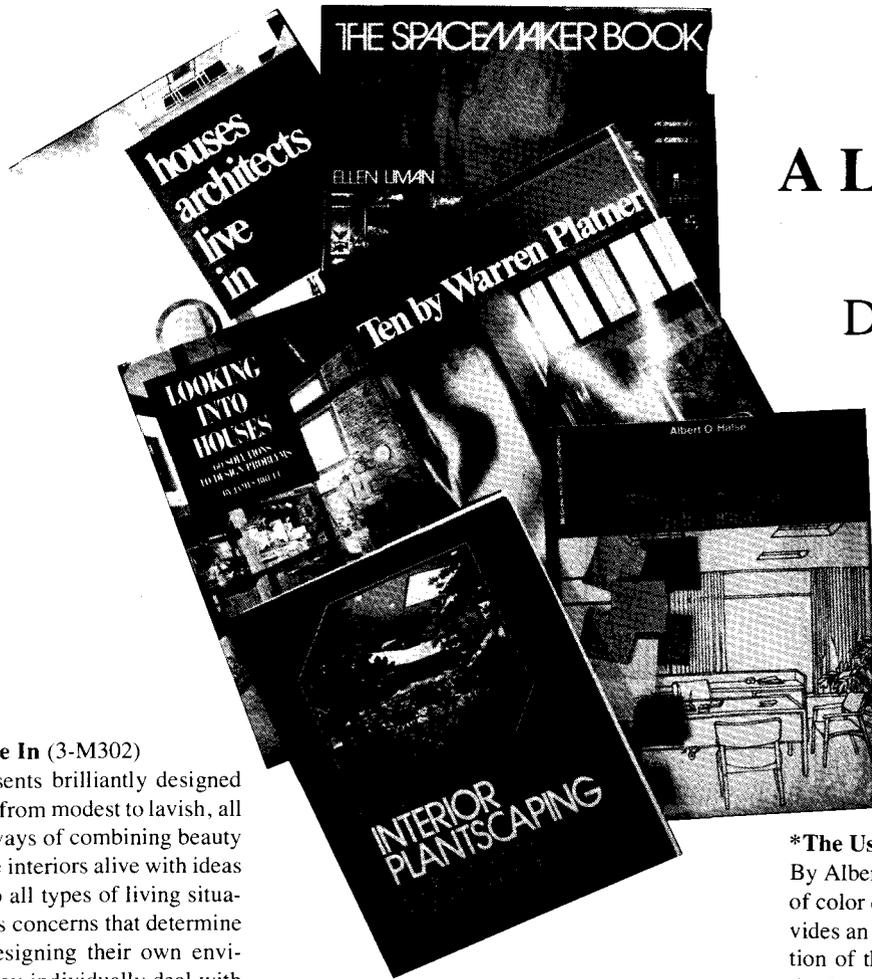
The report also describes how the projects were developed: the role played by various elements of the local community in the planning process, the types of incentives offered by cities to attract private investment, the nature and extent of financial participation by private and other public sources, the characteristics of project location and the role of UDAG in the local economic development process.

## Navy Veteran Rowland Freeman Confirmed for the Helm of GSA

On June 27, the Senate confirmed Rear Admiral (Retired) Rowland G. Freeman III to become the 11th administrator of GSA. He has assumed his duties as head of the third largest independent federal agency, having been nominated by President Carter last March to succeed Jay Solomon.

Freeman for the past two years has been commandant of the Defense Systems Management College, which trains procurement experts at Fort Belvoir, Va., to purchase goods and services efficiently. The 37-year Navy veteran has had combat experience as a fighter pilot. He holds a master's degree in business administration from Harvard University. He has spent a third of his career in finance, procurement and management.

*continued on page 29*



## A LOOK INSIDE

### Design Solutions for Living Spaces

**\*Houses Architects Live In (3-M302)**

By Barbara Plumb. Presents brilliantly designed houses and apartments—from modest to lavish, all emphasizing ingenious ways of combining beauty and practicality. All have interiors alive with ideas suitable for adaptation to all types of living situations. The author reviews concerns that determine architects' choices in designing their own environments, noting how they individually deal with such matters as situation, space, scale, balance, color, and light to create a home that meets their needs and interests. Hardcover, 168 pages, 168 color illustrations (1977). \$17.95 Non-member, \$16.15 AIA member

**\*Interior Plantscaping: Building Design for Interior Foliage Plants (3-M301)**

By Richard L. Gaines. Gives complete guidelines for use of this increasingly important element of interior design. Includes information on physical requirements of plants, what conditions they need, and how to select plants that do best indoors. A special full-color section displays and discusses over 75 of the most popular varieties for indoor use. An invaluable reference for anyone interested in plantscaping homes and offices. Hardcover, 200 pages, 150 illustrations (1977). \$22.95 Non-member, \$20.65 AIA member

**\*Looking Into Houses: 60 Solutions to Design Problems (3-M294)**

By James Brett. A photographic portfolio of some of America's most personable homes, selected for the problem-solving skill and ingenuity shown in creating inviting living space. Case studies include one-room houses, compacts, townhouses, and barns transformed into houses; and concludes with crown's nests and green rooms. Hardcover, 192 pages, 225 illustrations (1976). \$22.50 Non-member, \$20.25 AIA member

**\*The Spacemaker Book (3-M295)**

By Ellen Liman. The author analyzes every aspect of creating (and more efficiently arranging) adequate space in which to eat, sleep, dine, plan, and live. More than 300 specifically detailed illustrations pin-point innovative solutions to the commonly encountered traumas of modern living arrangements. Hardcover, 128 pages (1977). \$9.95 Non-member, \$8.95 AIA member

**\*Ten by Warren Platner (4-M276)**

By Warren Platner. Presents ten projects by Mr. Platner, one of the United States' best-known architects, interior designers, and furniture designers. Sumptuously illustrated, printed and bound, this magnificent volume will be an informative and delightful gift for the graduate as well as an addition to libraries of architects and non-architects alike. Hardcover, 224 pages (1975). Only \$15.00

**\*The Use of Color in Interiors (3-M372)**

By Albert O. Halse. Unique in its broad treatment of color design, this richly illustrated volume provides an overview and complete, detailed description of the principles and procedures involved in the determination of color plans. Discusses various methods and materials that may be used to solve any interior architectural color problem. With this information, architects and interior designers can arrive at results that are uniquely individual, but which incorporate all elements to be considered when developing a color plan. Hardcover, 164 pages, 32 pages in full color (1978). \$27.50 Non-member, \$24.75 AIA member

\*Denotes books published by organizations other than AIA; may not be in accord with AIA policy.

#### TO ORDER

Send letter with item number and quantity you wish to order, including payment, to: Manager, AIA Publications Marketing, 1735 New York Avenue, N.W., Washington, D.C. 20006.

Furnish firm name, correct mailing address, and name of person to receive order.

Checks may be made payable to The American Institute of Architects. District of Columbia residents add 5 percent sales tax.

Foreign orders must be accompanied with check or money order made payable in U.S. dollars, and include 20 percent of total amount of order for postage and handling.

## 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 today's architecture. Solutions which were unthinkable only a few years ago.

The real beauty of Engineered Brick Design is in

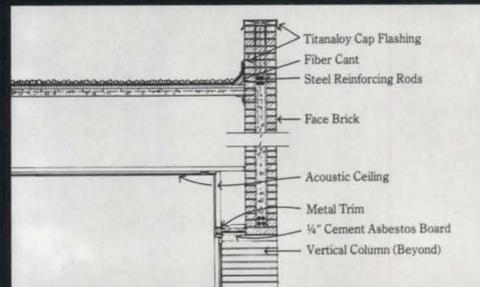
how it provides maximum function and design with minimum cost. Walls are not only structural, but are also energy-conserving, fire resistive, sound attenuating, and finished both interior and exterior with no "hidden" costs.

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.

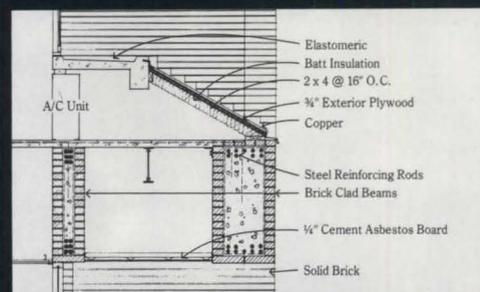
Whether you consider cost, flexibility, or beauty, no other system can match the total performance of Acme Brick and Engineered Brick Design. It's the best all-around choice for your next building commission.

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

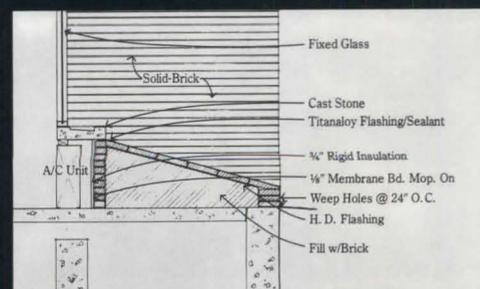
## ACME BRICK. THE BEST ALL-AROUND BUILDING MATERIAL.



The tower is terminated by a flush reinforced Acme Brick parapet beam supported on loadbearing walls.



A reinforced Acme Brick clad beam carries the load of the recessed loadbearing walls above and offers a transition element.



Sloping Acme Brick sills soften the effects of the deep set voids at the building's entry.

The Fred Parris Tower, Little Rock, Arkansas;  
Architect-Engineer: Wittenberg, Delony & Davidson, Little Rock, Arkansas;  
General-Masonry Contractor: Pickens-Bond Construction Company, Little Rock, Arkansas

Circle 16 on information card

## Government from page 26

At a press conference soon after his nomination as head of GSA, Freeman said that his first concern at GSA would be to work with the Justice Department and GSA's inspector general in completing ongoing investigations of alleged GSA corruption. "As this investigation is conducted," he said, "I want to rebuild GSA into an efficient and effective support agency. I will build on previous studies of GSA problems—and call together experts from the public and private sectors and the academic community to help. . . . I will establish firm goals and objectives for GSA, goals and objectives which GSA employees can understand and meet through hard work and imagination. . . . I want to be absolutely sure . . . that any wrongdoing in GSA is ended."

## Funds Go to Local Governments To Raise Design Consciousness

The National League of Cities has received a \$360,000 grant from HUD to try to raise local governments' design consciousness. This is the first grant under HUD's urban environmental design (UED) program, which calls for an interdisciplinary approach to environmental/design decisions.

The National League of Cities will first try to determine which cities are using an interdisciplinary approach to environmental/design decisions in housing, transportation, pedestrian systems and other physical settings. Forty cities will be examined by public opinion surveys, photographic evaluation, environmental psychology research, user evaluations and performance evaluations. From among them, 10 to 12 cities will be chosen as model cities. An additional 10 cities will bid for participation in training programs: two- to three-day clinics focusing on a UED approach to decision making.

Mention of an interdisciplinary design decision-making process is included in the National Environmental Policy Act of 1969. The real breakthrough came in March '78 when UED was included in HUD's revised community development block grant regulations.

The problem has been that too often local governments make design related decisions without any input from design professionals, according to Andrew Euston, AIA, HUD's urban design program officer. Consequently, city managers often take the least costly approach, with lack of design amenity.

Forty localities around the country have adopted interdisciplinary design concepts, and will be examined in a forthcoming HUD publication "Community Development Through Urban Environmental Design—Technical Assistance

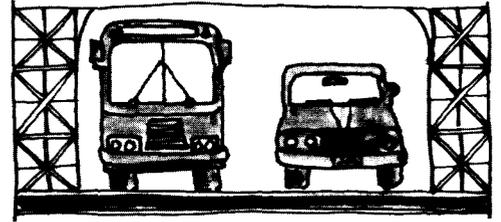
Guides." A few examples: The Dallas city planning agency works with other agencies to initiate physical development programs, zoning and environmental control ordinances, ecological data systems, among others. The office of architecture and urban design in Cincinnati has shifted concentration from urban renewal to public works in an effort to increase the quality and efficiency of design/development management. Seattle and Baltimore have widely dispersed design review, preservation and development activities administered by interdisciplinary staffs. In New York City, the mayor's development offices, staffed by urban designers, coordinate the design and development activities of the dozens of agencies involved with planning and construction.

Other programs promoting urban environmental design include the following: A research project is underway at HUD to clarify the administration of design ordinances, design review systems and overall design administration frameworks. Urban environmental design related research is being performed at the National Science Foundation environmental design program. And HUD and the Department of Health, Education and Welfare are jointly supporting the Association for the Study of Man Environment Relations' feasibility study for a national information service on funds available in the social and health sciences related to the built environment.

## Small Scale Transit Systems Proposed as Urban Alternatives

More cities, perhaps, should "think small" about public transportation rather than contemplating huge expenditures for subway systems. A "responsive bus system," for example, has its advantages, said Richard S. Page, administrator of the Department of Transportation's urban mass transportation administration (UMTA), at a 1978 conference which brought together 180 people to discuss how low-cost, small-scale schemes can complement a neighborhood's character and aid in its revitalization. This first national conference on transportation's effect upon the quality of life in city neighborhoods was called by the Conservation Foundation and funded by UMTA.

The conference proceedings are contained in a recent report entitled "Thinking Small: Transportation's Role in Neighborhood Revitalization," authored by Phyllis Myers and Gordon Binder. In the foreword, William K. Reilly, president of the foundation, says that "thinking small" about transportation is a fairly new concept. "The conventional imagery of transportation is of ribbons of highways, supersonic aircraft, high-speed



trains," he says. But "our increased understanding of the importance of livability" and recent urban trends make it imperative to rethink transportation policy needs in order to adjust the focus "to think small as well as big," he says.

In the first section of the report, Myers points out that urban transportation traditionally has concentrated on the city as a marketplace and workplace. But with the revitalization of neighborhoods, a new set of demands is created for small-scale transportation strategies. They may be modest in cost and reach, she says, but they have "broad implications for lessening dependencies on automobiles, reducing pollution, increasing the market for transit and helping create more livable neighborhoods."

Myers tells of street management schemes in which some communities are experimenting with ways to discourage through-traffic in neighborhoods by closing off streets completely to automobiles through the installation of barriers or diverters, the creation of cul-de-sacs and the construction of grassy medians. She discusses such strategies as preferential parking systems in which parking on neighborhood streets by commuters is deterred.

The report also covers small-scale transportation initiatives such as jitneys, vanpools and Dial-A-Rides and of concepts that create an atmosphere in which people want to walk. All the schemes call for citizen involvement, and the report tells how to organize for a constructive partnership between citizen and government.

The second section of the report contains case studies on neighborhood transportation projects in Boston, St. Louis and Seattle. In St. Louis, for example, a community tramway helps people get around easily to various parts of the neighborhood in the Central West End, and street closings have made "safer, pleasanter residential streets." In Boston, also, citizen groups have advocated the control of through-traffic using diverters, street narrowings and closings and barriers. In Seattle's Pike Place Market district, there are new amenities for streets, and more room for pedestrians.

The report is available for \$8, including postage and handling, from: National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22151.

*News continued on page 86*

# ANNOUNCING CRSI DESIGN AWARDS V



An open invitation to all design professionals to join our distinguished honor roll of winners.

Concrete Reinforcing Steel Institute announces a Call for Entries in Design Awards V. This is the fifth such national program honoring design professionals for their creative achievements. For the first time, a new optional feature of the Program will be special recog-

nition of a new category of achievement: Energy-conserving design.

Awards are given to those cast-in-place concrete structures which use conventional reinforcing bars as the predominant reinforcement.

**How to enter** The following requirements correspond to those of the AIA Honor Awards Program. Entries prepared for the AIA Program may be submitted in duplicate to the CRSI Design Awards Program. However, please also include the descriptive data sheet specified in item 4. All other entries should be prepared as specified in items 1 through 5. No entry forms are required.

**1. BINDER**—All material must be contained in an 8½" x 11" binder.

**2. PHOTOGRAPHS AND SLIDES**—For every project, submit sufficient photographs (either black and white or color), slides, and plans to properly illustrate the design solution. All architect and project identification must be removed from all such submitted materials. Minimum requirements are set forth below:

#### Exterior

■ One 8" x 10" print showing each exposed side of the building.

■ One additional 8" x 10" print showing the immediate environs of the building as these about the selected side being shown (may be omitted if environs are included in above).

For a group of buildings or an urban project (or segment thereof), one 8" x 10" photograph of the project sufficient to illustrate the concept including relationship to its environs.

#### Interior

■ One 8" x 10" print.

#### Slides

A minimum of five 2" x 2" 35mm color slides must be included for each entry—three exterior views and two interior views. They are to be of com-

pleted buildings and emphasis should be on adequate effective slides which show the merit of the project and each facade of the building.

**3. PLANS**—Site plan—at small scale, showing the project and its immediate environs. Floor plan or plans and one or more sections—sufficient to explain the solution. Plans must be at scale, but may be shown in any medium. Scale at discretion of entrant, as large as practicable. Scale must be shown graphically.

Plans must be on 8½" x 11" sheets placed in transparent window sleeves.

**4. DESCRIPTIVE DATA**—To preserve anonymity during judging, submit the following data type-written on plain white 8½" x 11" paper.

- Description of type of structure.
- Size of structure in total square footage.
- Date structure was completed or scheduled for completion.

#### IMPORTANT:

Please provide complete information on the following three sections.

- a. Structural framing system: Indicate which portions of system are conventionally reinforced, prestressed, or precast concrete. (Remember, structure must be predominantly site-cast and conventionally reinforced.)
- b. Unique structural and/or architectural design features: Describe any that deserve special consideration by the jurists.
- c. Reasons for choosing reinforced concrete: Please be specific and include comparisons with other structural systems where applicable.

**5. CONCEALED IDENTIFICATION**—All information requested here *must* be included on a separate typed sheet. Please be certain that *all* spelling and *all* punctuation are absolutely accurate.

- Proper name of structure.
- Name, address, and phone numbers of:
  - Architect
  - Engineer
  - Contractor
  - Owner
- All titles or other designations such as consultant, associated architects, project architect, architect in charge, associate architect, etc.
- All city and state locations.

**THE WHAT, WHO, WHEN, AND WHERE OF THE AWARDS. Categories of Awards**—The program is open to site-cast reinforced concrete structures of all types.

**Criteria of Awards**—Esthetic expression, engineering achievement, functional excellence, or economy (or any meritorious combination of these qualities).

**Architectural Award**—Several Awards will be presented, each equally acknowledging excellence of achievement. Each Award will consist of (1) engraved commemorative plaques for architect, engineer, and owner, (2) publication of the winner's story and structure in print advertising sponsored by CRSI, and (3) presentation of the Award at a special ceremony at the CRSI annual convention held at the Hotel Del Coronado, San Diego, California in May, 1980. From each firm submitting a winning entry, one representative (and spouse) will be invited to attend the Award presentation ceremony as CRSI's guests. Appropriate local award ceremonies will be arranged for the remaining members of the winning design firms.

# Winners CRSI design awards IV

## NATIONAL PERMANENT BUILDING—Washington, D.C.

Owner and General Contractor: The Lenkin Company, Bethesda, Maryland. Architect: Hartman-Cox Architects, Washington, D.C. Structural Engineer: KCE Structural Engineers, Washington, D.C.

## A COUNTRY ESTATE—Rancho Santa Fe, California

Owner: Roland Sahn, Rancho Sante Fe, California. Architect: Fred M. Briggs A.I.A., Laguna Beach, California. General Contractor: Harry Wanket, Carlsbad, California.

## WILLIAMSON HALL—Minneapolis Campus, University of Minnesota

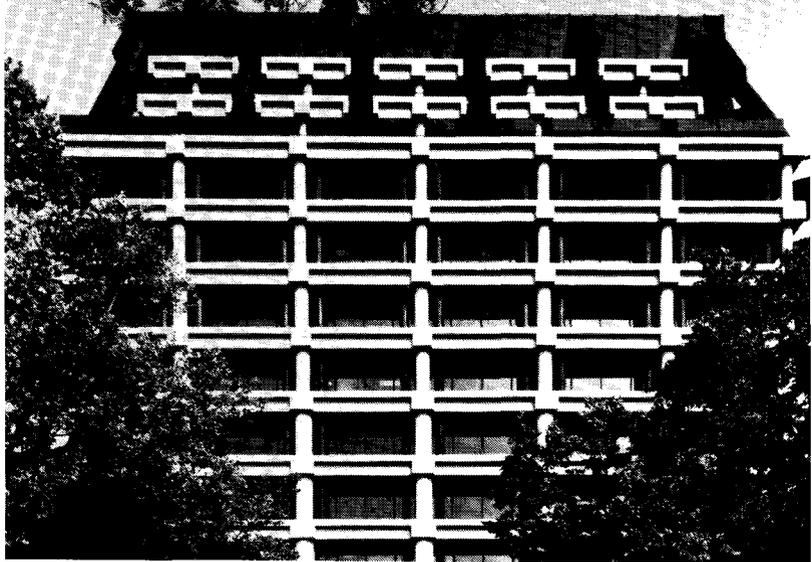
Owner: University of Minnesota, Minneapolis Campus. Architect: Myers and Bennett Architects/BRW, Edina, Minnesota. Structural Engineer: Meyer, Borgman and Johnson, Inc., Minneapolis, Minnesota. General Contractor: Lovering Associates, Inc., St. Paul, Minnesota.

## HUNTER MUSEUM OF ART—Chattanooga, Tennessee

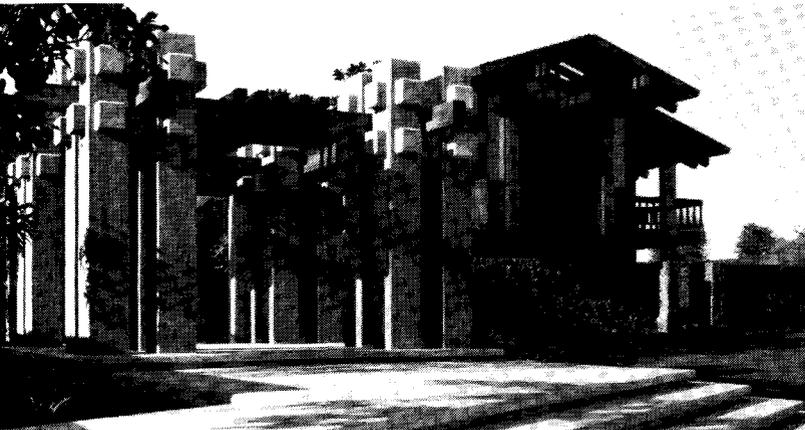
Owner: Board of Trustees, Hunter Museum of Art, Chattanooga, Tennessee. Architect: Derthick & Henley, Architects, Chattanooga, Tennessee. Structural Engineer: Bennett & Pless, Inc., Atlanta, Georgia. General Contractor: Raines Brothers, Inc., Chattanooga, Tennessee.

## GRAND RAPIDS FISH LADDER—Grand Rapids, Michigan

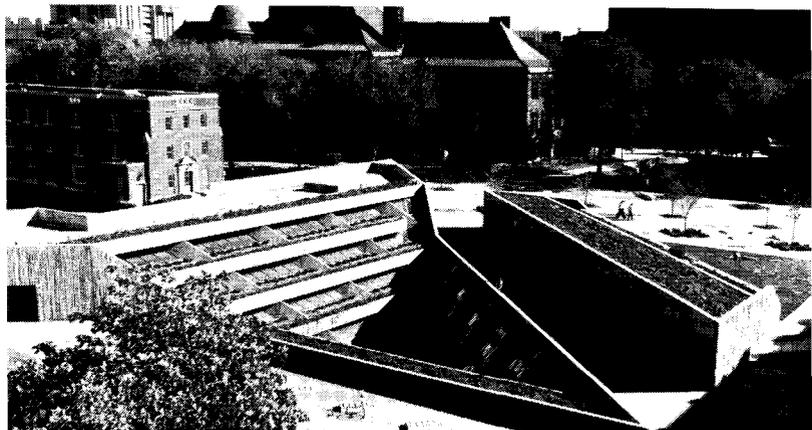
Owner: City of Grand Rapids, Michigan. Architect and Structural Engineer: W.B.D.C., Inc., Grand Rapids, Michigan. Sculptor: Joseph E. Kinnebrew IV, Grand Rapids, Michigan. General Contractor: Triangle Associates, Inc., Grand Rapids, Michigan.



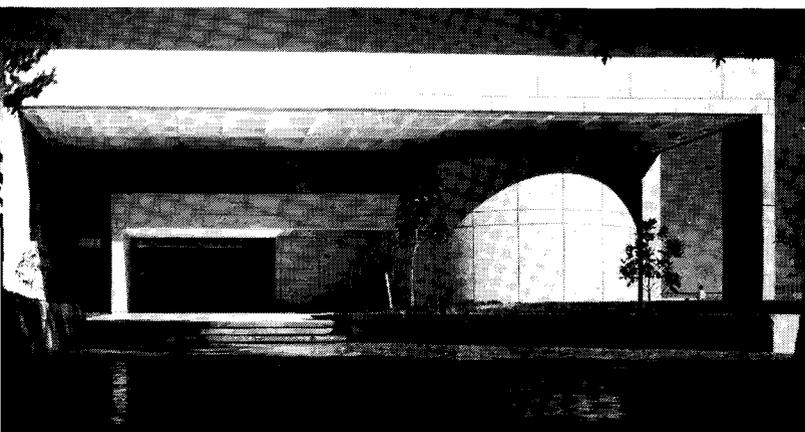
NATIONAL PERMANENT BUILDING—Washington, D.C.



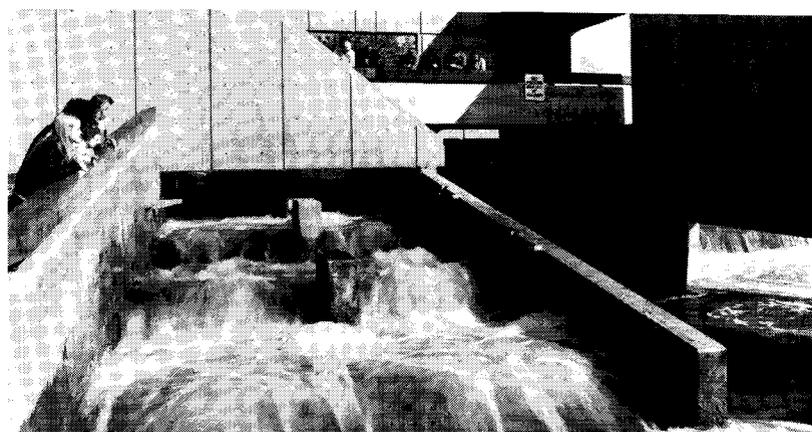
A COUNTRY ESTATE—Rancho Santa Fe, California



WILLIAMSON HALL—Minneapolis Campus, University of Minnesota



HUNTER MUSEUM OF ART—Chattanooga, Tennessee



GRAND RAPIDS FISH LADDER—Grand Rapids, Michigan

## Energy Conservation Award (optional feature)—

A maximum of one energy conservation award (if warranted) will be given per Program. The award will be presented at the annual convention described herein. The jurists will give major emphasis to energy conservation achieved by the judicious use of the structural elements rather than HVAC systems. Items such as heat transfer through the building envelope, shading, positioning, and/or special sizing of windows, etc., are of prime interest.

Supporting documentation illustrating compliance with ASHRAE 90-75 (or similar) specifications is encouraged.

**The Jurists**—A distinguished panel of recognized professional architects and engineers from throughout the United States will select the winners.

**Who is Eligible**—The CRSI Design Awards Program

is open to all registered architects and engineers (entrants may be individuals or teams). Eligible structures must be located within the continental United States and have been completed since January 1, 1977, or essentially finished by October 29, 1979.

**AIA Approval**—This program has been approved by the American Institute of Architects and is patterned after the AIA Honor Awards Program.

**Announcement of Winners**—To be made as soon after judging as practical.

**Ownership and Publication of Entries**—All entries shall become sole property of CRSI. No materials will be returned. CRSI reserves the right to use or publish all entries and accompanying materials in CRSI advertising, CRSI publications or for any and all editorial purposes and by entering, entrant grants a royalty-free license to CRSI to use any copyrighted

materials. Such right includes publication of photographs and names of Award winners without compensation to winners.

**Jurists' Decision Shall be Final**—Upon entering the CRSI Design Award Program, entrants waive their right to make a claim against the panel of jurists (or any member thereof), or to make a claim against Concrete Reinforcing Steel Institute (or any member thereof).

**deadline** All entries must be received no later than **OCTOBER 29, 1979** at CRSI headquarters (address below).

For information on the CRSI Professional Membership Program, write to Director of Marketing.

mail entries to



**CONCRETE REINFORCING STEEL INSTITUTE**  
180 North LaSalle Street, Room 2111D  
Chicago, Illinois 60601  
Attention: Victor A. Walther, Jr.  
Director of Marketing

Circle 17 on information card



now! capture  
the natural textures of  
desert sands and costly woods!

## NEW TEXTONE® Vinyl-faced Gypsum Panels

offer you six striking new wall patterns inspired by the spectacular effects created by nature itself.

Visualize an interior finished with the fresh fine-grained look of Sand Stripe. A dimensional, "dune-like" pattern available in colors of elegant Indian Pearl or distinctive Dawn Gold. Or take your cue from the towering forests. Check out TEXTONE panels in our new richly-defined simulated woodgrains. We've added prestigious Palace Teak, dramatic Heritage Walnut, impressive Royal Oak and warm Natural Pecan. This gives

(L. to R.): Natural Pecan,  
Palace Teak, Indian Pearl, Dawn Gold,  
Heritage Walnut, Royal Oak.



you a choice of 29 luxurious wall treatments in all. You'll find TEXTONE Vinyl-Faced Gypsum Panels are as functional as they are aesthetic. They go up quickly to do away with costly scheduling delays. Matching mouldings are available to expedite installation. And complete washability helps avoid major redecorating problems in the future.

■ Call your U.S.G. Representative. Refer to Sweet's Architectural File, Sec. 9.12. Write to us on your letterhead for a sample swatch folder. 101 S. Wacker Dr., Chicago, Illinois 60606, Dept. AJ89

**UNITED STATES GYPSUM**  
BUILDING AMERICA 

Circle 18 on information card

# AIA JOURNAL

**M**any magazines, in and out of architecture, regularly publish previews of coming attractions, sometimes extending as long as a year into the future. This is not our habit, for a couple of reasons. One is that we do not solicit subscriptions, and therefore have no need for this kind of self-promotion.

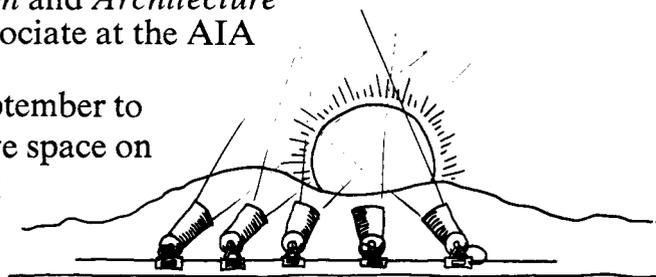
Another is that we like to maintain a certain amount of flexibility and spontaneity, like to be able to respond to the unexpected. A good example of the benefits of that approach is Glenn Robert Lym's excellent "postscript" to our multifaceted examination of Kresge College and the University of California's Santa Cruz campus (which is, incidentally, the most extensive evaluative treatment we have yet given a single subject). Dr. Lym's material arrived a week before this issue was due at the printer, a total surprise and coincidence. We did not know the material existed and he did not know that we were doing anything on Kresge.

We were delighted to be able to shift things around and get it in, since it added a significant dimension to the treatment. Had the issue's content been frozen a year or so in advance, we couldn't have done so. A certain amount of planning is necessary, but too much of it too far in advance can lead to a kind of editorial rigor mortis.

All of this is by way of introducing a preview of a coming attraction that we are anticipating with special eagerness. It is our September issue on natural light, a subject of fundamental significance to architecture, and one given new urgency by the need for energy-conscious design. The issue will examine the subject in all of its aspects, from considerations of form to hard-core technology.

It is an issue that took a good deal of advance planning and an unusual amount of research, since very little has been published on the subject in recent years. We are fortunate to have as consulting editor for the issue Marguerite Villecco, former technology editor of *Architectural Forum* and *Architecture Plus* and later a research associate at the AIA Research Corporation.

So save some time in September to read about daylight, and save space on a shelf for what we hope will be a reference work of lasting value. *D.C.*



# U. C. Santa Cruz: Site and Planning

*Text by Daniel Gregory. Photographs on  
pages 34-39 by Ansel Adams*

The Santa Cruz campus of the University of California took shape as a kind of Western Walden Pond, where a dramatic but previously inhabited natural landscape—the 2,000-acre redwood studded Cowell Ranch overlooking the curve of Monterey Bay—acquired new uses and meanings while retaining its original character. Like Thoreau, the planners of the Santa Cruz campus saw more than meadows and trees: They saw a ready-made Arcadian environment which might symbolize the highest ideals of contemporary society and which might give the student a measure of “self-reliance” even as it stimulated the free exchange of ideas. In a sense, the university was simply another kind of ranch whose resources would be insights and expertise instead of pastureland and lumber. And if, during the student’s years here, he or she acquired a desire to help preserve the world’s natural resources, so much the better.

The story of the planning of this campus is the story of several strong willed, idealistic personalities, from regents of the university to college administrators, to architects and landscape architects, who joined forces to produce one of California’s largest public examples of environmental design. These individuals, some of whom possessed houses designed by William Wurster and gardens by Thomas Church, two of California’s most famous early modernists, shared the conviction that this campus could reflect the traditions of outdoor living, respect for site, free use of natural materials and carefully planned understatement which had become hallmarks of the Bay Region style.

Significantly, Wurster and Church, who became involved in planning the UCSC campus, had begun their careers in the 1930s only a mile or two away from the Cowell Ranch at a residential golf course community called Pasatiempo. This subdivision included some of Wurster’s first well-publicized modern ranch houses sporting courtyard plans, glazed galleries and free adaptations of vernacular styles. Church supervised all the early landscaping for this development and took the view that the existing oaks, redwoods and fern-draped ravines comprised a ready-made park. Consequently, he saw his job as one of reinforcing that parklike quality by judicious pruning, careful siting and perhaps the occasional addition of native shrubbery. In the early 1960s, as the consultant landscape architect for the new campus, Church took a similar approach and convinced the regents that the architecture should not try to compete with the beauty of the site, but remain subordinate to it.

But the story of the campus really begins with the regents’ first inspection of the site in 1961. University demographers and academic planners had decreed that a new UC campus would be needed to meet student population projections for the 1970s and 1980s, and that the central coast counties of California would be the best place to put it since no other university existed in the area. The regents reviewed about 90 sites before narrow-

---

**Mr. Gregory** is a doctoral candidate in architectural history at the University of California at Berkeley. He will teach at Carnegie-Mellon University this fall.

**Mr. Adams** photographed the site of the Santa Cruz campus before construction of the university. The three resulting photographs shown here are reproduced through the courtesy of special collections, the McHenry Library, University of California at Santa Cruz.





ing the field to two: Almaden, on the southern edge of the Santa Clara Valley below San Jose, and Santa Cruz.

One day the regents rode a bus down from San Francisco to visit both sites. They saw Santa Cruz first. As Dean McHenry, the first chancellor at UCSC, tells it, the fog had just rolled back to sea leaving the morning cool, crisp and clear. The scent of evergreen left a tang in the air. In short, the Cowell land dazzled the visitors. But as the day wore on it grew hotter, and the Almaden site lay inland, away from ocean breezes. The air-conditioning in the bus broke down and the vehicle could not negotiate the hill; everyone had to get out and hike in the 95 degree heat. Tempers began to wear thin. Finally, a regent from southern California declared in exasperation, after surveying the dry chaparral and dust: "Why, it would cost a fortune just to aircondition a campus here." Santa Cruz won the contest.

Though the weather must have influenced the site selection, other factors contributed. The Almaden site consisted of 60 separate parcels which would take a long time to assemble, and risked the possibility that some parcel-holders might refuse to sell. The Santa Cruz site, on the other hand, comprised one piece of property owned by a single entity, the Cowell Foundation. This foundation sweetened the pot considerably by offering the ranch to the regents at \$1,000 an acre with the proviso that the foundation would donate part of the purchase price back to the university. Needless to say, the regents voted to accept.

Now planning could begin in earnest. Clark Kerr, who was president of the University of California, had undertaken a planning program for several new campuses at this time. He asked his planners to "make them seem small even as they grow large." Chancellor McHenry subscribed wholeheartedly to this philosophy and decided that one way to preserve a sense of community would be to avoid ordinary shoebox dormitory units. He and Kerr decided to combine academic and living units at Santa Cruz, after the manner of the college systems at Oxford and Cambridge or Harvard and Yale, where classrooms and living quarters formed one architectural unit.

Dean McHenry was especially well suited for the job of developing a university campus on a spectacular site. A political scientist by training who had been Kerr's chief of academic planning, McHenry grew up on a farm near Lompoc, Calif. He combines a search for innovation in teaching with a real devotion to the land. Now retired, McHenry still keeps an eye on the beloved campus from his vineyard and solar-heated house a few ridges away. He is a straightforward, forceful man who watched over the development of his campus with the same hard work and dedication that he now lavishes upon his vines. Chancellor and rancher may indeed be two sides of the same coin.

McHenry and Kerr planned for a campus which would some day contain about 28,000 students (equivalent to UC Berkeley's current enrollment), and they wanted to avoid any impression of overcrowding. Today's enrollment at UCSC is about 7,000 and signifies a radical shift in planning objectives as well as an adjustment to new demographic projections. McHenry and others feel that at its present size the campus seems somewhat scattered and diffuse.

The new chancellor was determined to avoid the "single hand" approach of a Charles Luckman or William Perrera in his campus architecture because he wanted to ensure a diversity of forms and ideas. He felt each college should be designed by a different architect in order to reflect its character as a unique collection of students and scholars with its own particular emphasis, from liberal arts to social sciences. In his words: "I want the colleges to be as diverse as the houses are in a residential neighborhood." Each college is meant to be a miniature Swarthmore or Reed, only without laboratories or trustees. Fittingly, McHenry saw the general library as the central focus for the campus.

With these ideas in mind, the chancellor and the regents hired a design team. The architects and planning consultants for the





first master plan were all northern California firms: John Carl Warnecke & Associates, Anshen & Allen, Theodore C. Bernardi (partner in the firm of Wurster, Bernardi & Emmons) and Ernest J. Kump. The consulting landscape architect, as mentioned above, was Thomas Church. These men met every week or so with the university architect, Jack Wagstaff (another protege of Wurster); Donald T. Clark, the university librarian, and the campus planning subcommittee of the regents, which consisted of Donald McLaughlin, William Roth and Mrs. Edward Heller. The early debates on campus design occurred at these meetings, either in San Francisco or on the site itself.

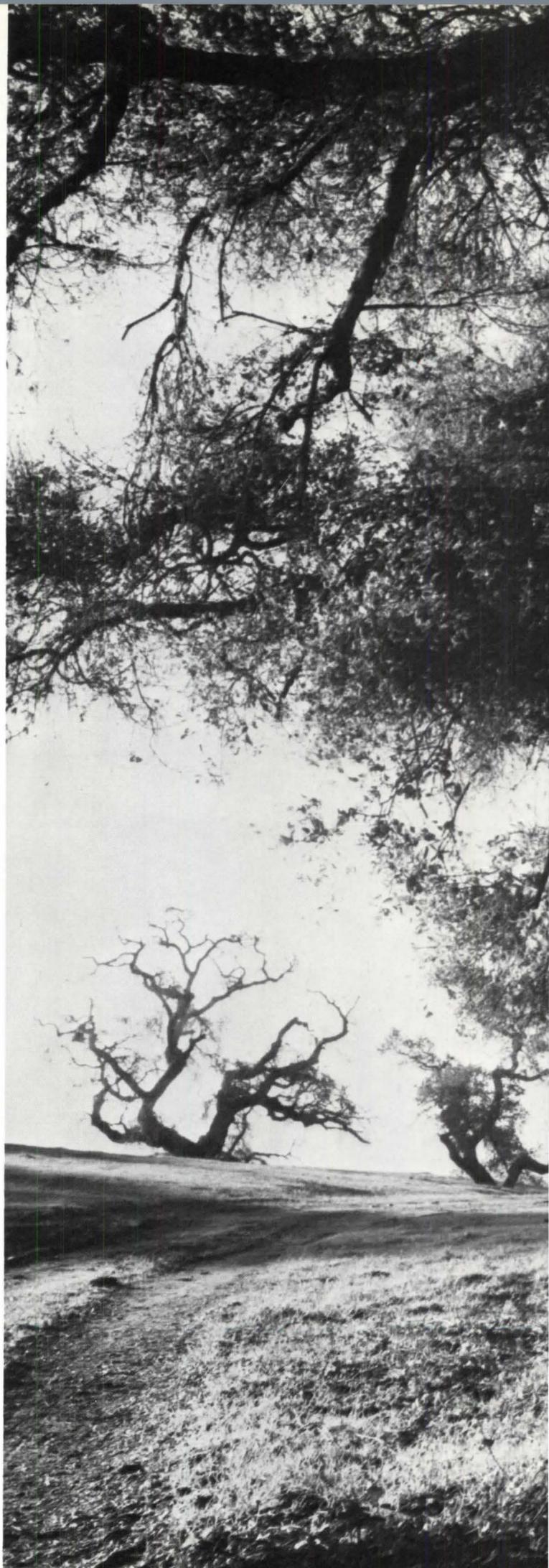
One of the most important debates involved placement of the first buildings and the entire philosophy of building-site relationship. Redwoods, oaks and dense undergrowth cover most of the land, but near the main entrance the trees give way to a large sloping meadow where cattle graze to this day. The following question immediately arose: Should the university build in the meadow or preserve it as open space and put the buildings in the trees? Those who wished to use the meadow argued for economy because of lower clearing costs and proximity to city services. Then Thomas Church pointed out that the university would have to landscape all the buildings out in the open, which seemed a rather large redundancy when such spectacular landscaping already existed elsewhere. Church suggested that the first colleges be built in the area known scientifically as the ecotone, where two ecological systems, forest and field, intersect. Placing the buildings at the edge of the meadow would allow a glimpse of the university from the town below and would also preserve the ranch character of the site.

Church, or "Tommy" as he was known to friends, was the most articulate and persuasive member of the planning committee. He always wore khaki shirts and pants and usually carried a pair of pruning shears in his back pocket, and if you were talking to him on the site he might quietly snip away at a tree or bush while he listened. Architects and businessmen alike admired his forthright, unassuming approach. The planning committee accepted his advice.

Church outlined the architectural principles which would guide the development of the entire campus. He argued for architectural restraint in a brief text which became required reading for every new architect at UCSC. He wrote: "To a greater extent than any of us have faced heretofore, the buildings are less important in the visual composition than the trees." He went on to explain: "These towers of trees are 'outscale' and more related to the rugged knolls and deep ravines than they are to an academic landscape. They are therefore to be thought of less as trees to enhance, screen and shelter buildings (although they do so) than as great vertical elements of the topography with form, mass and density against which to compose the architecture. . . . It would be foolish to think that a new, startling architecture will appear here. Any design attempt to compete in grandeur with this site is doomed to failure." McHenry's interest in architectural diversity complemented Church's conception of the redwoods as the major unifying element.

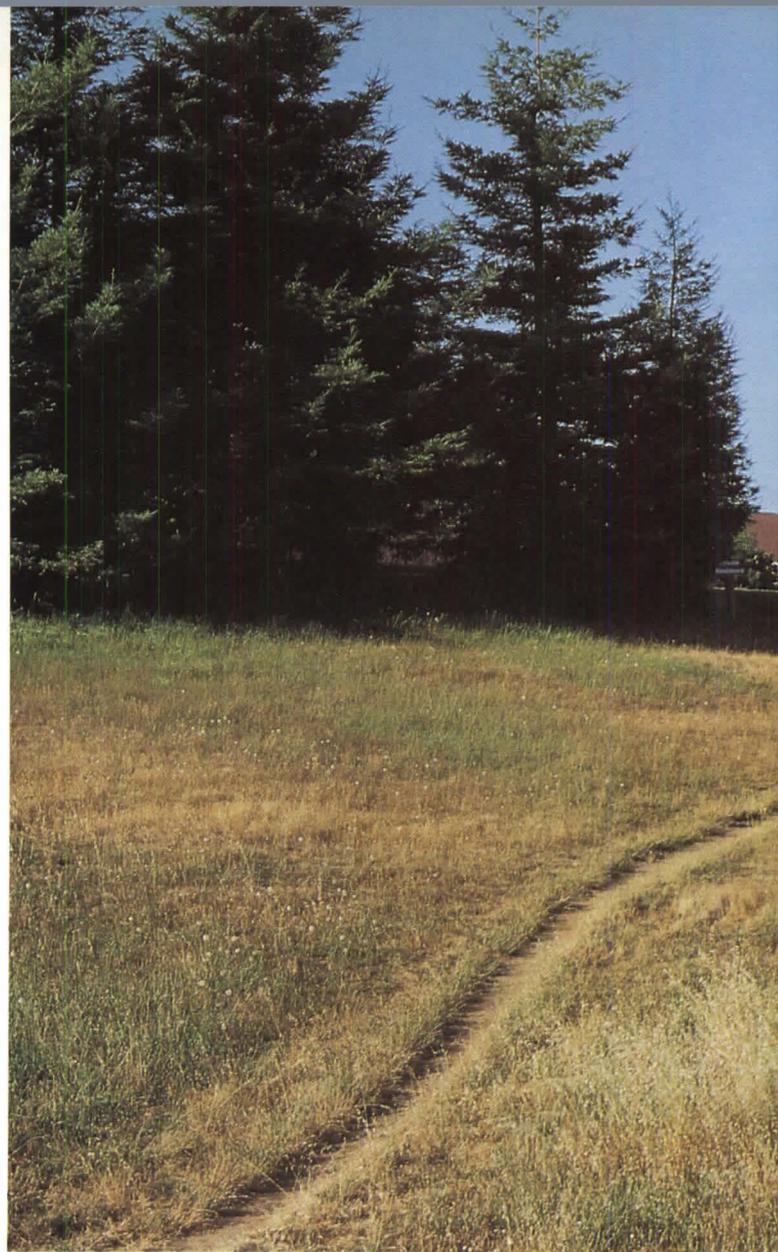
With this advice in mind, the master plan listed four major guidelines for campus design: First, concrete should be the basic material expressed in columns, wall panels and all structural elements; second, roofs should reflect a certain consistency in design and materials; third, bases of buildings should be treated as unifying elements which strongly express transitions from building to ground by means of terraces and flat areas, and fourth, a color palette of earth tones with bright accents should be used to unify the designs and help relate them to the landscape.

These guidelines also reflected the point of view of another early consultant on the campus plan, Ansel Adams. The regents commissioned California's most famous nature photographer to record the special qualities of the site before construction started, and he set down his thoughts at that time. He wrote:





- 1 Cowell College
- 2 Stevenson College
- 3 Crown College
- 4 Merrill College
- 5 College Five
- 6 Kresge College
- 7 Oakes College
- 8 Main Entrance
- 9 West Entrance
- 10 Student Apartments



*Buildings sited unobtrusively where meadow meets woods.*

“Remove an absolute minimum of trees, shrubs, branches; nature and use will take care of the rest. Consider public safety but also consider the basic mood of the place. Any manicuring of this area will produce a commonplace effect. Build many trails, reveal many places where a student, or a teacher or an administrator could sit in a quiet hour with only redwoods, the grass, the pack-rat nests and the dead twigs intruding upon his solitude. There are few places on earth where such a phenomenon might occur—other than in national parks and remote wildernesses. To have this opportunity on a campus of a great university is a priceless event.” Thus in the eyes of many the campus had already been designed. It remained for architects and planners to figure out how to make it habitable for thousands of students.

Church even took the idea of an almost symbiotic relationship between student and landscape to its logical extreme by suggesting that the university let the students determine the paths between buildings. And the chancellor believed so strongly in the importance of preserving as much of the landscape as possible that he would allow no tree trunk over 10 inches in diameter to be cut down and removed without his permission.

Legends have grown up around this affectionate concern for fields and trees. One day McHenry discovered a redwood stump which had been knocked over by a bulldozer operator. The chancellor replaced the ferns which had been uprooted and immediately ordered that all redwood stumps required his approval to be removed as well. The next day he was delighted to discover the stump back in place along with a hand lettered



Joshua Freiwald

and rather individualistically spelled sign which read: "Chancellor's Stump: Do Not Molest."

The chancellor and the first campus officials always delighted in showing off their land. I can remember numerous treks through dense brambles and poison oak to one or another grove of redwoods—which McHenry called "cathedrals"—where, say, the university librarian might point to a sun-dappled corner and announce proudly: "My desk is going to be right over there next to that stump!"

Not everyone considered this particular natural landscape appropriate for a university campus, however. One critic reminded Mrs. Heller about the great distances between buildings and asked how the university could let all its men and women students wander into the woods together without proper chaperones. Mrs. Heller, who had herself walked and timed the distances between the sites for the first colleges and the library to make sure no two points were more than 15 minutes apart, coolly replied: "Why worry? The poison oak will take care of everything."

The general attitude toward the site remained pragmatic and romantic at the same time. Church himself reminded the planners that "one of the inevitable results of building in a forest is that as man enters, nature recedes." But for the most part the campus planning committee believed that sensitive collaboration between the designer and the environment would produce an extraordinary university. Several individuals, like the chancellor, Thomas Church, the librarian and Mrs. Heller, to name only a few, were willing to fight for their convictions. As an example, they managed to ensure that roads passed around trees and, where necessary, split into separate lanes. The one-lane entrance

to the library protects a cathedral of redwoods by running through it instead of over it.

Campus planners employed the principle of adaptation to local conditions most graphically in their rehabilitation of several existing ranch structures. Instead of razing the turn-of-the-century cookhouse, carriage house and various barns, which people suggested, the university decided to keep them as mementoes of an earlier age. This decision also pleased the Cowell Foundation. Besides, several buildings could be very cheaply renovated as offices. The cookhouse became a suite of administrative offices for the very reasonable sum of \$9 per square foot. These rustic, stone and board, vernacular farm structures, of the type that had inspired several generations of California architects, from John Galen Howard to William Wurster to Charles Moore, took on new life as examples of the kind of simplicity and understatement sought by campus planners. One structure especially dramatized the meaning of "sensitive collaboration," and that was the university amphitheater, formerly a stone quarry. This simple yet ingenious transformation of stone into stage embodied the essence of the Santa Cruz idea: Design the structure to so closely fit its topography that it can exist nowhere else, or at least try to make it look as though it has always been there. Rehabilitation of older structures has almost become a cliché today, but in the early 1960s, this was a refreshing new approach to design.

The UCSC campus exists today as a sophisticated exercise in simplicity. The land still evokes the excitement it stirred in the minds of Dean McHenry and Thomas Church and Ansel Adams. It is still an extraordinary California landscape. And maybe that means that the planners were successful, after all. □



# U. C. Santa Cruz: The Architecture

*An overview by John Pastier*

Since the end of World War II the nation has seen a dramatic evolution in higher education, and California, as much out of necessity as out of progressivism, has been at the cutting edge of that change. Fed first by returning veterans, then by their children, as well as by a continuous influx of new residents, an explosive increase in students created the need for a physical expansion of staggering dimensions.

To meet the demands of sheer numbers, California added new campuses to its university system while expanding its old ones, and also attempted to raise the quality of its state college system even as it increased its capacity. Not even this was enough, so reinforcements were called up in the form of two-year colleges.

The consequences for the architectural profession were spectacularly mixed. Economically, this feverish growth proved a bonanza for firms dealing in school work, but the design success of the program was spotty. Existing campuses lost their charm and character through the addition of disappointing new buildings. And although several new outposts were master planned on virgin land, the best they could claim were scattered individual buildings of merit rather than any consistent sense of environmental quality.

The university's Santa Cruz campus stands as a radiant exception to this pattern. Its success is of such an order that it almost softens the dull pain of squandered opportunities elsewhere in the state. U.C. Santa Cruz has no "great" buildings, nor was it meant to. Its triumphs are those of modesty rather than brilliance, and its lesson is that a clear central idea can be sufficient to inform the whole, provided that the idea happens to be correct.

Admittedly, UCSC is a special case. Only rarely is such a self-sufficient and dramatic site made easily available to a university. The solution is not prototypical; it does not attempt the clearly ordered quadrangular space sequences of a traditional campus, nor can it duplicate the vitality that so often occurs where college meets town. Instead, it exploits a different sort of edge, one where meadow meets trees, and posits a different order than Descartes'—that of the forest.

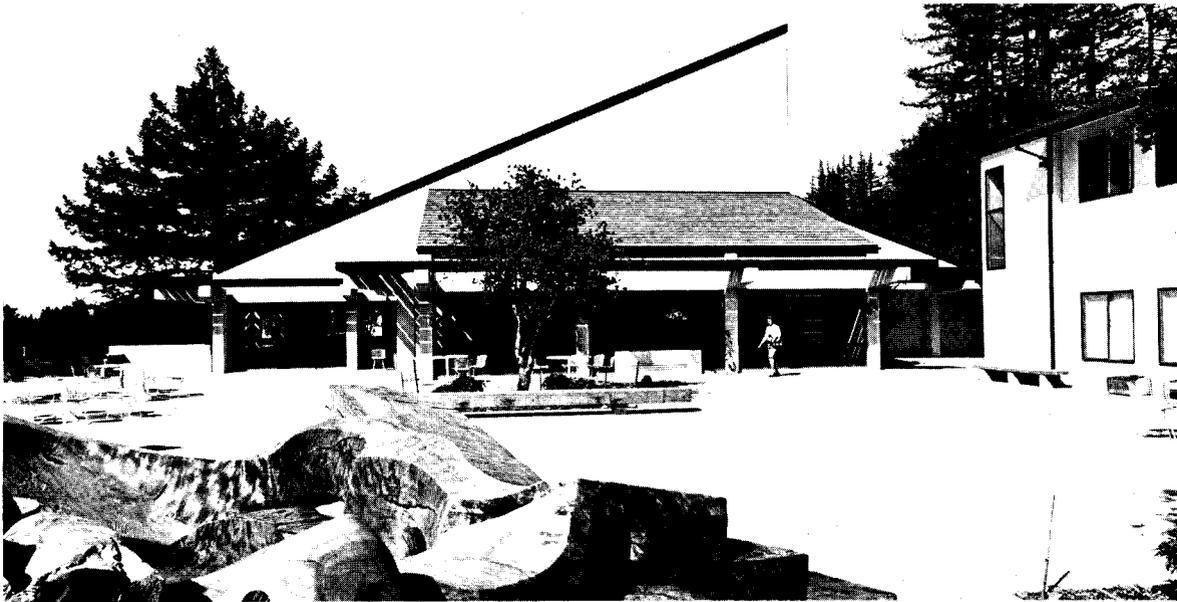
Santa Cruz's form prototype is not so much that of a university as it is that of a mountain resort or a sylvan hideaway. The opportunity to create a Shangri-La of the mind was sensed and exploited, yet with dignity and restraint. Its quintessential idea, landscape architect Thomas Church's dictum to build near the margin of forest and meadow while subordinating the architecture to the land and the trees, was embraced with understanding and good faith by the client and the various architects involved. (A similar concept had been the original guiding principle of a somewhat earlier project on the northern California coast, Sea Ranch, but was later abandoned in the interest of more lucrative land sales.) The result at Santa Cruz can be seen as an ecological metaphor not only in its respect for the site, but also in its embodiment of that most essential of natural principles—balance through diversity of species.

Chancellor Dean McHenry's insistence on diversity in designers was no less important than Church's guidelines. Not only was McHenry opposed to the idea of a "single hand" (his words) controlling the entire campus design, but he was also adept in the "always sensitive" politics of architect selection. In those days, the university regents were generally "inclined to glib

**Mr. Pastier** is a teacher and writer in Los Angeles.



Jeremiah Bragstad



Ron Partridge

*Cowell College (above), the first to be completed, was designed around two quadrangles. Stevenson (facing page and left) followed two years later in 1967 with white-walled structures.*

architects," and although such firms were given a polite hearing, they were given nothing more. One obvious reason that Santa Cruz does not look like other postwar University of California campuses is that the commissioning of architects was done with greater care and expertise than usual. As is almost invariably the case, excellence here resulted from the efforts of a strong client as much as from those of strong architects.

Still, not everyone has accepted the results of this catholic approach. Although the diversity of the campus has been criticized, the objections seem *a priori* rather than specifically valid. The matrix of redwoods buffers one college from another and also knits them together. Just as it would have been shortsighted for architects to attempt to compete with the forest, so is it myopic to underestimate its potency as the visual theme that integrates the various built elements.

Other universities have encouraged diversity with less harmonious results. Yale, for example, has become a veritable boutique of postwar modern architecture, and though it has gained some world-class buildings in the process, it has also witnessed some dismal flops. Furthermore, the juxtaposition of old

and new buildings, and even that of new and new, is usually far less compatible than that found at UCSC, and Yale has no universal softener comparable to the trees of Santa Cruz. (With the coming of modern architecture, the Ivy League has, alas, curtailed its use of that estimable vine.)

Santa Cruz has none of Yale's conspicuous architectural successes, but thanks to the distance, irregular terrain and majestic foliage between its colleges, its design diversity is more esthetically digestible. In some ways these collegiate clusters are like a string of little mining towns nestled in the foothills, each one different and with a sense of its own place, yet each serving a similar purpose.

Curiously, the various Santa Cruz colleges—with their complex programs and their need to relate several buildings over a wide area—are generally more successful than the campus' simpler, freestanding, single-purpose buildings. One may speculate on this anomaly. Good architects were retained for both classes of projects, so a discrepancy in design abilities is not the explanation. Most of the firms involved can be considered to fall within the Bay Region tradition, a design approach that is in

## Sensitive variations on regionalist themes.

some ways more applicable to residential work than to institutional building types. Similarly, the site is one that accepts the small-scale and residential vocabulary of the colleges more comfortably than it does the more monolithic nature of a field house or a laboratory block. It is neither surprising nor upsetting to come upon a village in the forest, but larger single buildings with more regularized exteriors and usually with more obtrusive parking areas seem inherently less appropriate in such a sensitive context.

But there may be an even stronger factor than physical determinism. Unlike the other new University of California campuses, Santa Cruz was not so much a desperately needed branch of the system (its regional population was relatively small) as it was a rare experiment in educational theory. Its founders' strong convictions about environmental planning were matched by no less potent intentions for a focused educational experience not often found in America. The architectural and pedagogical marriage of living and learning seems to have provided the colleges' designers with an unusual spur to excellence.

Beyond the idealism embodied in the twin notions of wholistic education and wholistic design, there was a further incentive in the form of professional pride. Santa Cruz's architects well knew that they were members of an elite group chosen not so much for the usual reasons of political and social skills as for their abilities to produce strong yet well-mannered buildings. Further, they were in most part exemplars of a loosely defined school, San Francisco Bay regionalism, which ensured both mutual respect and intelligibility of purpose. Reassured that their colleagues' work would not be at odds with their own, yet aware that they had all been set similar tasks and that their efforts would be subjected to minute and knowledgeable comparisons, the designers of UCSC's colleges competed in a gentlemanly yet demanding fashion. Judging from the evidence of the completed work, the objective seems to have been to employ

more sensitivity and understatement than one's neighbors, while still creating a recognizable character for each college. The result is not an architecture of overt drama or obvious photogenic qualities. Its full appreciation requires some familiarity with the Bay Region ethos and a taste for the subtle art of architectural self-effacement. There is one apparent exception to this pattern—Moore and Turnbull's Kresge College—but even that highly individualistic exercise follows most of the ground rules carefully.

The earliest colleges were sited in pairs. Wurster, Bernardi & Emmons' Cowell College (1965) and Joseph Esherick's Adlai E. Stevenson College (1967) both step down the hill from the edge of the trees and partially into the meadow at the eastern margin of the campus. Stevenson's buildings are modest, white-walled, irregular and economically built, and are sited to create offhandedly casual outdoor spaces. Cowell is somewhat less vernacular in character, with two large (at least for Santa Cruz) quadrangles ringed by dormitories whose stairwell fenestration is reminiscent of Japanese architecture. Cowell's library manages to combine a comfortable intimacy with that sense of formal order and suspended time so often found in traditional university libraries.

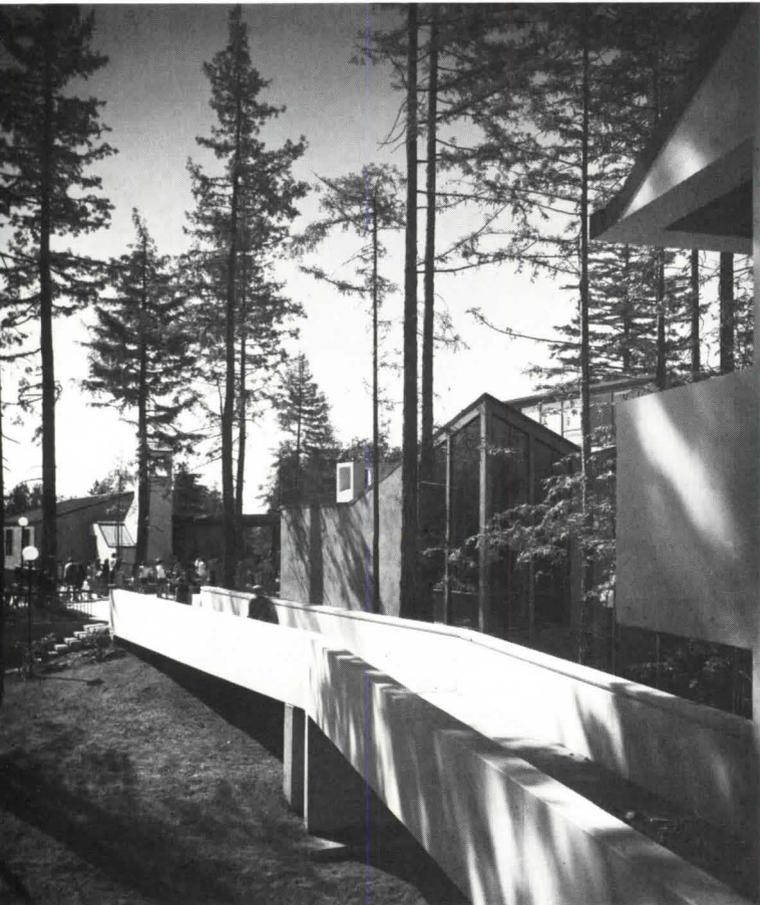
Still on the east, but farther up the hill and deeper in the forest, are the second pair, Crown College (Ernest Kump & Associates, 1967) and Merrill College (Campbell & Wong, 1968-69.) Like their downhill predecessors, they virtually flow into one another and frame a diversity of spaces. Visually, Crown seems almost subliminally familiar because its forms and flavor have been popularized in more than one high-quality residential development of medium density. Merrill is a bit more exotic, and at first glance it seems more evocative of Scandinavia than California. At five stories, it is the closest Santa Cruz comes to highrise construction. Deft siting on the slope makes these buildings seem lower than they are, and their slim verticality makes them seem almost threaded between the tall trees. Compared to the other solutions, these buildings seem at once more urbane and more a part of the forest.

*The campus of Merrill College (right and center) flows into Crown's (far right). They were completed within a year of each other. College Five (facing page, top) is the only campus so far designed by a non-Californian.*

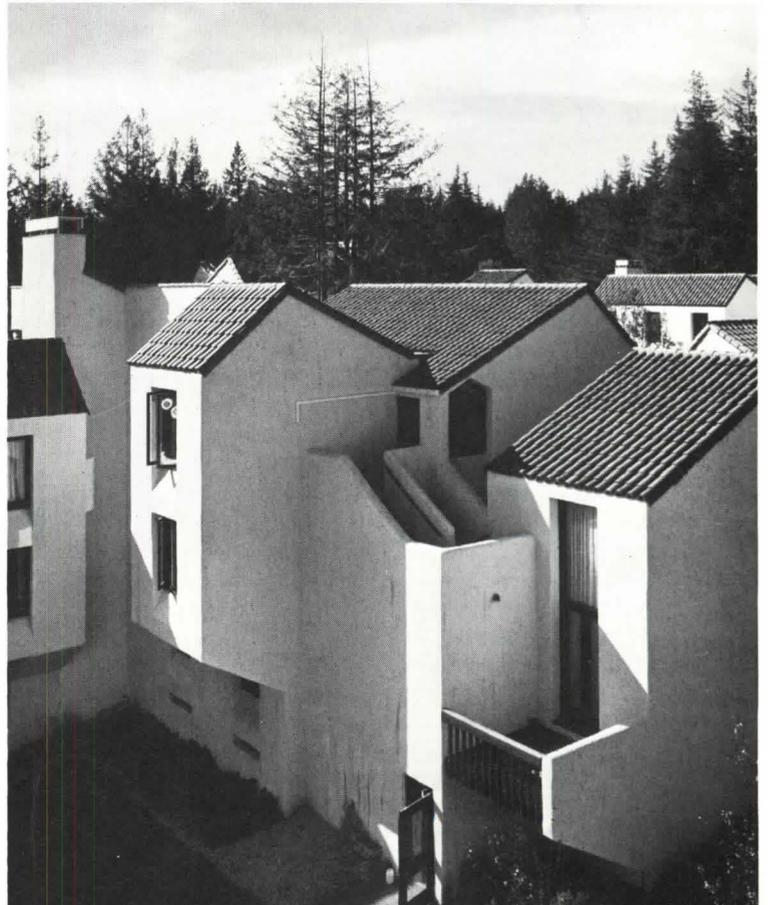




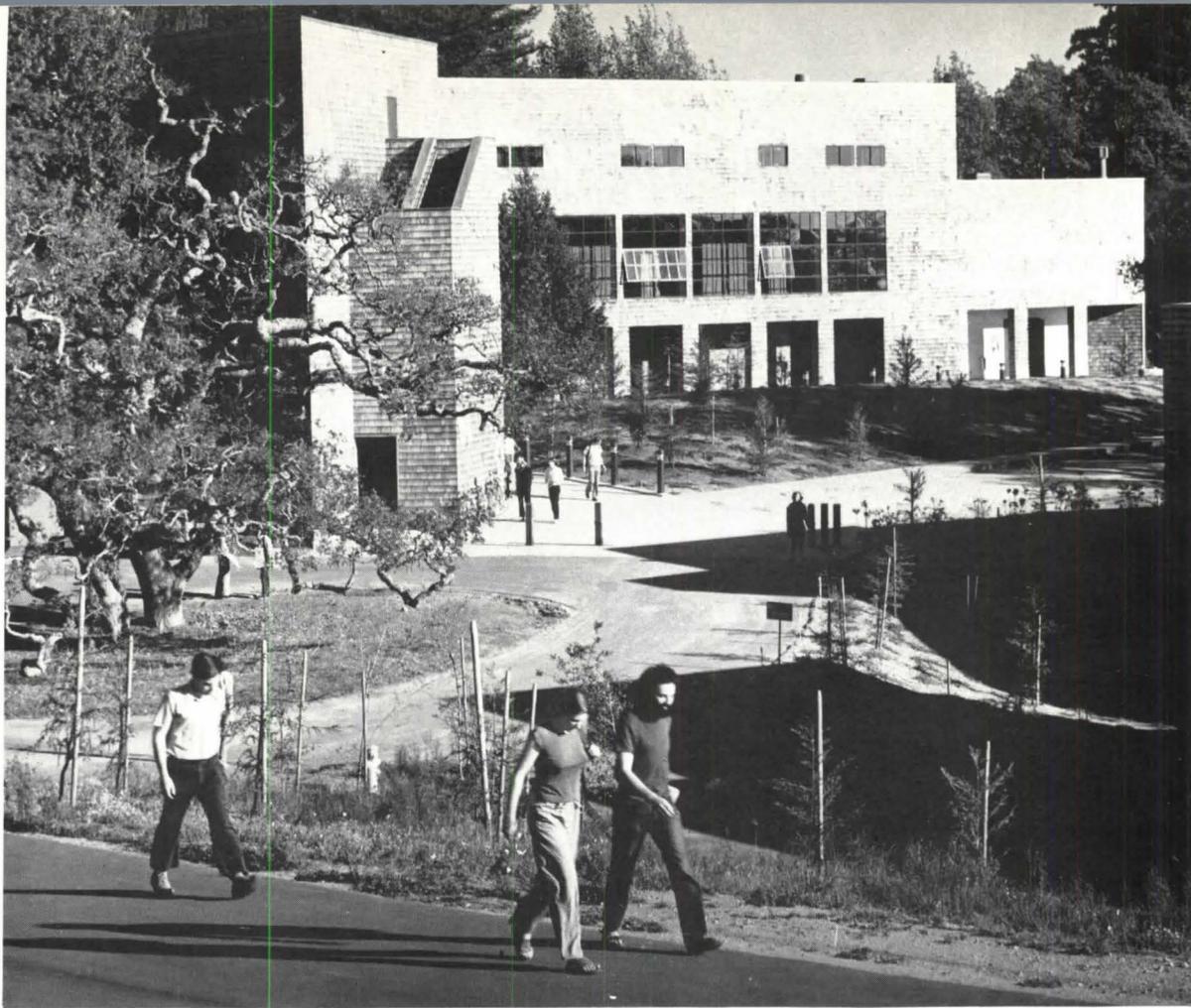
Karl H. Riek



Joshua Freiwald



*The shingle siding of Oakes College shown on these pages sets it apart. It is the newest of the seven colleges.*



Jeremiah Bragstad

## **A departure in the newest of the colleges.**

These initial four colleges can be said, in a way that is not easy to describe, to define in their diverse fashions the basic Santa Cruz style. Perhaps they are stylistic touchstones precisely because they so artfully seem to lack an identifiable style. (This characteristic is also one of the attributes of the elusive Bay Region style.) The quartet of firms involved clearly obeyed Church's first commandment, and thereby gave tangible demonstration of its validity.

The fifth college, appropriately designated as College Five, represents a departure from the loose unity embodied in the first four. Built in 1969-'70, it is the work of the only non-Californian among campus designers, Bostonian Hugh Stubbins, FAIA. Compared to its predecessors, it is rigid and monolithic, or at least it seemed so when first visited five years ago. But with the passage of time, it too seems to fall within the spirit of Santa Cruz, despite its quite large quadrangle and flanking four-story concrete-framed dormitories. Perhaps its red tile roofs have finally done the trick, but whatever the reason, College Five seems to be losing its Eastern accent.

The first quintet of colleges had a program that combined similar functional components—dormitories, classrooms, administrative and support space, and one main enclosure for dining, assembly and diversion. That last was the prime architectural opportunity to manipulate a grand lofty volume, and in each case the designers met the challenge with panache yet without eccentricity. In the remaining two colleges, however, a different set of eating arrangements precluded such a major focal point and spatial event. But even beyond that significant internal distinction, the remaining pair stand out in their exterior form as well.

Kresge College, completed in 1973, was the sixth to be built. Because it is the most attention-getting of the Santa Cruz projects, it will be discussed separately and at length. In this space it seems necessary to say only that Kresge demonstrates how

much design freedom was possible within the planning strategy set forth by Thomas Church.

The most recently built residential unit is MBT Associates' Oakes College (1977), and it is unique in two respects. Unlike the other colleges, it forgoes an architecturally defined outdoor congregation space, and instead treats the ground plane between buildings as a minimally altered extension of the meadow in which it sits. Oakes is also the most tidily designed and deftly detailed of all the colleges; its thoroughly studied massing and meticulously worked-out fenestration and shingling reveal a perfectionism that is both marvelous to behold and somehow a shade too proper for a campus where studied architectural casualness has become the design tradition. Even this slight breach of conformity may be justified by the setting, since Oakes is more visually exposed than any of its peers and, without a protective screen of redwoods, cannot allow the sort of small inconsistencies that would escape notice in its predecessors. Santa Cruz's married students' housing, competent but of a far lesser order of design quality, is also fully exposed to view. It shows that Church's strategy was actually a way of making the architects' task easier, for, had this latter project been sited in the trees, its shortcomings would probably not require comment.

The eighth college, still unbuilt and still unnamed, is also planned to be out in the open, but for good reason. As the home base for courses in environmental studies, this building will strongly emphasize solar energy and thus a wooded location would be self-defeating. And of course, when built, this structure will establish yet another degree of diversity.

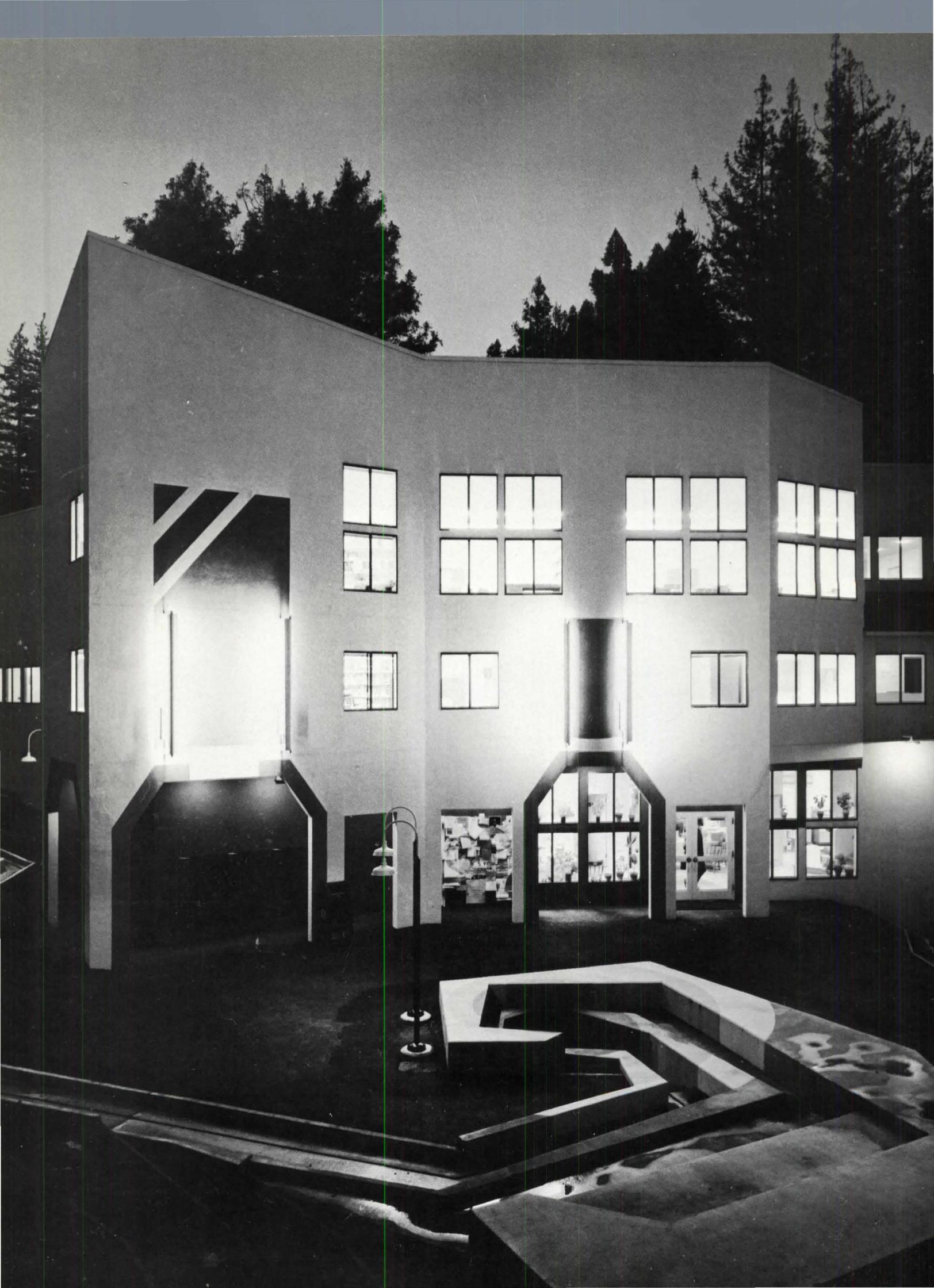
But to discuss the architectural parts of U.C. Santa Cruz, worthy of attention though they may be, is somewhat akin to admiring the campus redwoods one at a time, or dissecting the restored old ranch buildings that are found at the bottom of the hill near the main entrance gate. This is a place whose character and quality are of a different order from that of its individual components, just as the essence of its forest is far more impressive than a mere summation of its individual trees. □



Jeremiah Bragstad



Jeremiah Bragstad



# U. C. Santa Cruz: Kresge College

*An evaluation by John Pastier*

Kresge College is the moth and the butterfly of the Santa Cruz campus. It is drab and bright, crude and sophisticated, subtle and obvious, extroverted and introverted, organic and artificial. If variety is the spice of life, Kresge is the best of thymes and the worst of thymes.

Admittedly, this pun is forced and gratuitous, but if one is to appreciate Kresge College on its own terms, one must be prepared to bear up under a steady barrage of allusion, illusion and ambiguous wit. Although its architectural underpinnings are solid and serious, its forms and details mock the notion of grand gestures and monumentality even as they flirt with those very qualities.

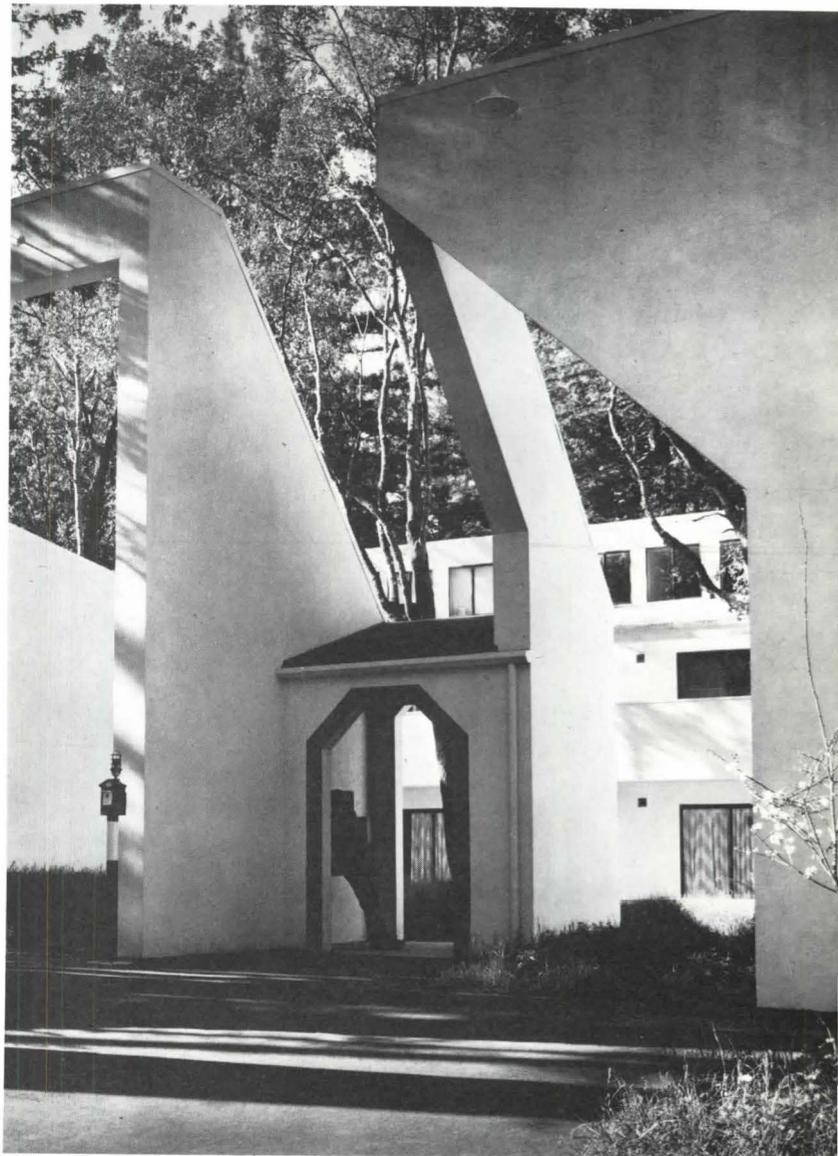
Santa Cruz beach is the site of California's finest surviving traditional amusement park, but Kresge takes many of its cues from Disneyland. Its site plan has been compared to a Mediterranean village street, but if one ignores its sharp bends and switchbacks, it could just as easily be seen as a descendant of Walt Disney's Main Street.

Charles Moore, Kresge's codesigner along with William Turnbull, is a publicly professed Disneyland connoisseur, and many of the Magic Kingdom's tricks of space, scale, facade and sequence are reinterpreted in that project. Naturally, the Moore and Turnbull design eschews the overt cuteness and approximate historicism of Disney. But although Kresge's forms are abstract, Disney's planning principles carry through. Both places have as their spine a less-than-true-scale auto-free pedestrian street. Disney's allows horsecars, buses and fire engines, while Kresge's permits bicycles and skateboards. Cars remain outside both precincts, and in both places the backs of the buildings are clad differently from the fronts.

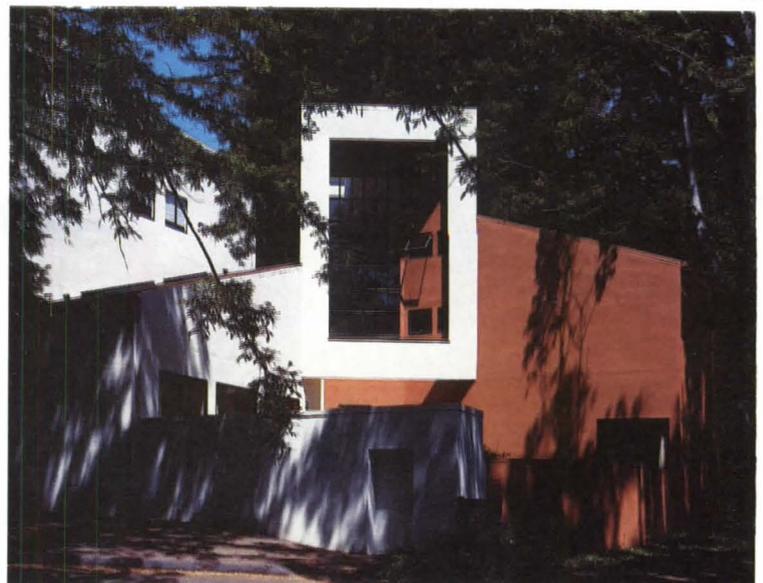
At Disneyland, this dichotomy is a simple case of stage-set fronts grafted on to blankly utilitarian building shells. At Santa Cruz, it arises from radically different environmental obligations on the interior and perimeter of the college. Since Kresge is a series of stucco buildings set into the forest, its exterior walls are painted a dull brown in order to be minimally obtrusive. The sides that face the public circulation spine are painted white (with some brightly colored graphic accents) to maximize the light and to set off the playful architectural forms.

Kresge College is sited along a ridge in an otherwise rough terrain, and its spine is consequently bent to mirror the natural contours. Along with its flanking buildings it approximates the shape of Cape Cod, or of an arm bent at the elbow and clenched at the fist. The necessity to deflect the main street helped bring about another parallel to Disneyesque design principles: a rich space-time sequence.

*Walls facing the forest are brown, as at right; the others white with bright accents. Left, the administration building.*



Morley Baer



John Pastier



## Ever-changing spatial and visual experiences.

Having come from a temporal design discipline, that of animated films, Disneyland's planners found it natural to conceive of their Main Street as a progressive journey through time rather than space. This approach led them to make each moment eventful, usually by means of an interesting succession of interim destinations.

Since the Kresge design team did not have all of Disney's tantalizing elements at its disposal, its task was a bit more difficult. (There was no opportunity to employ the Disney proto-postmodernist Victorian facades, nor did Kresge's program include the tempting array of shops and eating places that were at the disposal of Disney's "imagineers.") The easiest way to demonstrate Moore/Turnbull's success is to describe the journey from one end of the street to the other.

At the downhill end (the shoulder of the arm), one can enter Kresge either by passing through a purely symbolic portal or by ascending an Aaltoesque flight of steps. Either route leads to a faintly Sienese plaza that focuses on a blue drain-cum-fountain formed in an angular spiral. The plaza is bounded by a dance studio, the college's administrative and faculty offices, a classroom, student apartments and the college "post office"—an outdoor array of mailboxes. Leaving the *piazza*, one passes some

small orange trees and finds the space constricting, then widening, then narrowing once again under the influence of flanking buildings that are neither parallel nor directly opposite one another. (This pattern and the resulting pulsating space is the rule all along the street.) A bit farther uphill, the street widens into a central space whose nonresidential anchors are a classroom and a self-service laundry. The latter, of course, is a social center as well as a temple of purification, while the former is distinguished by an undersized entrance of mock monumentality: A flight of steps leads to doors which are flanked by symmetrical niches for pay phones (one of which has been removed), and which are surmounted by an approximately rainbow-colored pseudo-tympanum. Also defining this space is a rostrum originally designed for student demonstrations (and slyly banded in patriotic tricolors), but used now mainly for orientation week speeches.

A switchback ramp connects this space with a small villa-like dormitory, but the main exit is via a right-angle turn and up a short stepped ramp. Continuing past more classrooms and sleeping quarters, one suddenly comes upon a tall portal in the shape of a slightly cockeyed triumphal arch which doubtless celebrates the Victory of Learning over Ignorance, since it abuts the college's largest classroom on one side and the library on the other. Once through this gate of enlightenment, the next sight is that of a



John Pastier



John Pastier

## The street as two distinct environments.

long, narrowing space graced by a small island of plantings. This passage is purely residential and leads to the last of the three plazas. Terminating the vista is an oddly shaped false-fronted structure housing a food store, cafe and the Kresge "town hall"—the college's main assembly space. These three indoor spaces wrap around an outdoor area that serves as an entrance court and outdoor dining area. (This octagonal enclosure once contained a sunken fountain, but it was boarded over to provide more seating area.)

Since the ensemble of structures is highly irregular, the return journey is far from a simple mirror image of the uphill trek. Not only are the vistas longer when looking from above, but the perception of spaces can be radically different. (Indeed, when I first crossed the street, the central square looked so different on the return trip that it seemed certain that I had taken a new turn and discovered a previously overlooked pocket of space.) There can be no doubt that Kresge's street is a masterpiece of urban design stagecraft.

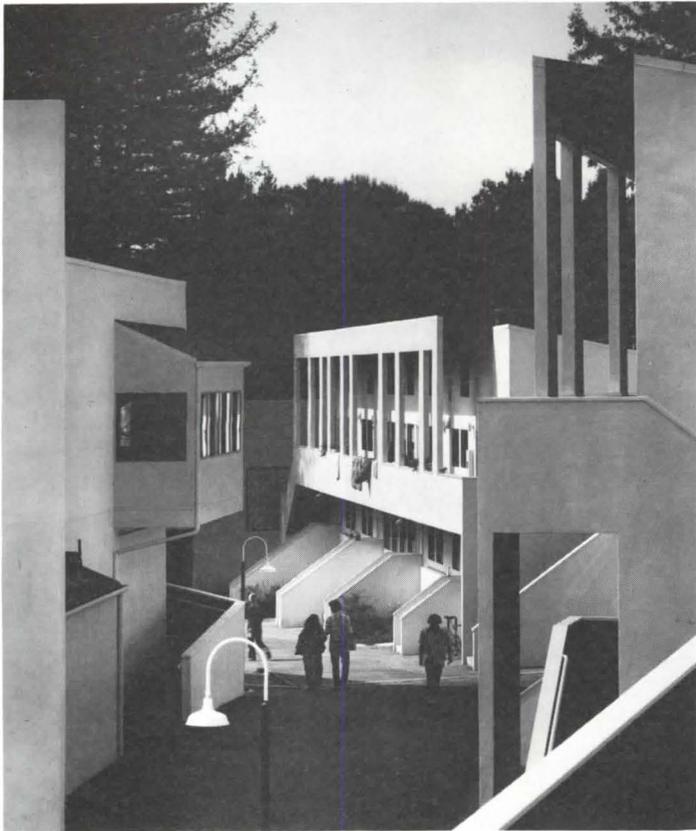
Its physical complexity is mirrored in its use. Kresge's provost, anthropologist May Diaz, observes that the street divides itself into two distinct environments ("pseudo-moieties" in the parlance of her trade). The lower street is quiet and attracts the more studious and academically advanced students as tenants. The upper street, beginning beyond the rostrum, is the scene of

loud music, partying and general hanging-out, all facilitated by fairly direct contact between the street and the lower floor of the dorms and the presence of a low parapet that acts as a 150-foot-long seat. Here is where new students tend to live, and where they make their friendships and indulge in their flirtations. The upper street is a social lubricant that would warm the heart of Jane Jacobs.

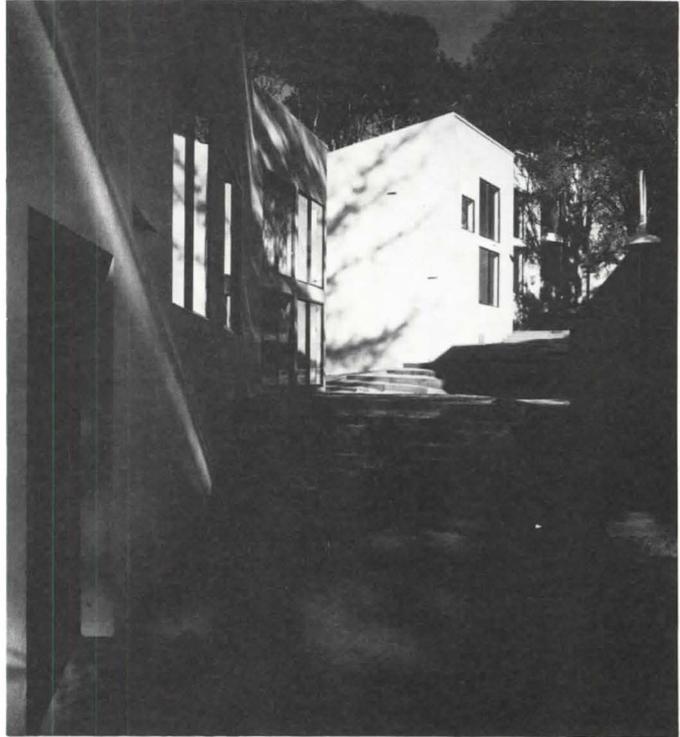
But there is also a price to be paid on the upper street. Residents there complain of noise and lack of privacy. One visiting lecturer even reports that students claim to enter and leave their rooms by the rear, forest-facing windows on occasion just so that their neighbors won't always know what they are doing. There is also a variety of other complaints, but most fall into the category of inevitable griping and Kresge students generally seem to feel that they would not be as happy living in one of the other six colleges.

It would be fair to give Kresge an A+ for its urban design, and a low A or high B for its social planning. Grading its architecture is difficult, however. The buildings, in all honesty, appear tacky. This is due in part to a rock-bottom construction budget. (After allowing for the effects of inflation, Kresge was built for the lowest cost per square foot of all the colleges.) But, at the same time, some of the tacky appearance is due not to inexpensive materials or crude workmanship, but to architectural intentions. The college's false fronts and screen walls are often deliberately awkward in their forms, proportions and juxtapositions.

*Across page, the lower street;  
below right, entry steps; bot-  
tom, the upper street. The  
trellis in the bottom photo was  
built by the students.*



Morley Baer



Morley Baer



John Pastier

*The upper court terminates in the cafe and assembly building shown here. A fountain in the center of the cafe has been covered to provide additional seating. Below right, the college library.*



Morley Baer



## **Tribute, indictment and accomplishment.**

One suspects, without being totally sure, that just as the filigree masonry screens of the '50s were sometimes a crutch for architects who had difficulty composing window openings, so too may Kresge's tongue-in-cheek cladding be a way of sidestepping the visual challenge of a more straightfaced design approach.

The college's style seems to be intended both as an affectionate tribute to vernacular building and as a playful indictment of architectural pretensions. Both are worthy goals, but their realization is hampered by an esthetic that relies too much on caricature and not enough on wit. One misses the visual equivalent of that verbal subtlety and grace which Charles Moore has amply displayed in his writings and lectures.

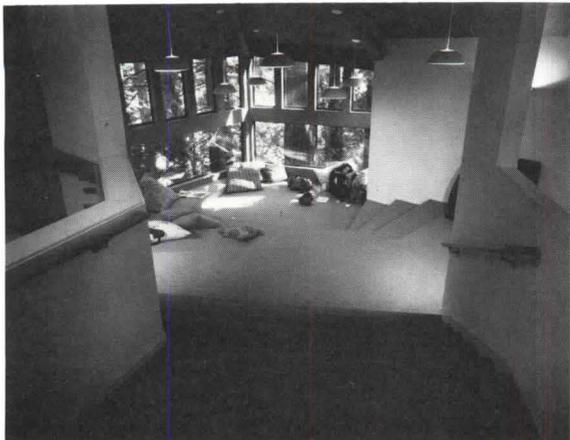
Nevertheless, *Kresge College* embodies, to an uncanny degree,

one long-standing aspect of American vernacular style. Upon visiting Lowell, Mass., over a century ago, Charles Dickens recounted that "there was a large hotel whose walls and colonnades were so crisp, and thin, and slight, that it had exactly the feeling of being built with cards. I was careful not to draw my breath as we passed . . ." In the years that have passed, we have come to see such structures not as flimsy construction, but as part of our pragmatic nation's cultural heritage.

Whether or not *Kresge College's* architecture ultimately earns such a tribute, its accomplishment as a more comprehensive work of environmental design is beyond doubt. Within the rigorous discipline of a minimal budget, difficult site and necessity to respect the land, Moore and Turnbull have orchestrated an experience in time and space that stands alone on a campus where good design is virtually taken for granted. □



John Pastier



Morley Baer

## Kresge Postscript

*The following is summarized and excerpted from the forthcoming book "A Psychology of Building: The Motive to Shape Space," to be published by Prentice-Hall next May. The author is Glenn Robert Lym, currently a designer in the San Francisco firm of Esherick Homsey Dodge & Davis and holder of a doctorate in social psychology.—Ed.*

On their first visit to the site of Kresge College, Charles Moore and William Turnbull walked in opposite directions in the wooded ravine. As they returned to each other, they exclaimed

*continued on page 70*



## Where Architects and Behavioralists Meet

*The tenth annual conference of the Environmental Research Design Assn. By Ellen Perry Berkeley*

They call it MER, or PER, or BES—which stands for Man-Environment Relations, or Person-Environment Relations, or Behavior-Environment Systems—all essentially the same thing, and the subject that brought 302 researchers to the State University of New York at Buffalo in early June for the 10th annual conference of EDRA. And EDRA, pronounced like Ezra, stands for the Environmental Design Research Association, variously described during the conference as “a loosely coupled system that’s fun to participate in,” and an organization that’s “not so much *interdisciplinary* as *adisciplinary*; we’re all half-breeds here,” and “a place where we can get ‘warm fuzzies’ (as opposed to ‘cold pricklies’), because we’re all on the periphery, advocating change, and there’s nowhere else we can get this kind of reinforcement.”

We were knee-deep in jargon for three-and-a-half days; things were “personalistic” and “paradigmatic” and “synomorphic” in spoken discourse, and in the written *Proceedings* we were treated to “reification” and “varimax criterion” and even “molar environments.” I will avoid all such constructions in this article. That’s a promise.

What is the importance of this research to architects who have designed most of their buildings without it, who may not know where to find it when they want it, and who may not know how to interpret it when they find it? As Michael Brill (one of the two conference advisers) pointed out in introducing a major session, architects aren’t liable for a “lousy building”—a building that doesn’t *fit*—“only for a building where the roof leaks.” To which Ezra Ehrenkrantz, FAIA, replied that researchers “shouldn’t broadcast their results with the design professions (who don’t read) but with the clients, asking the clients ‘how will you incorporate *these* results in *this* job?’ An architect will *have* to read it, to get the job.”

That struck me as one of the most important sub-messages of this conference. There were 20 to 30 other analyses, comments, revelations, findings and urgings that struck me that way. I can’t give much detail on a conference whose *Proceedings* ran to 448

pages and included 161 presenters and panelists in the authors index. The program for the conference ran only to 32 pages, but listed a grand total of 62 papers, 8 symposia, 45 workshops and 16 poster sessions. (In addition, I personally logged in seven sit-down meals, several drinks at the end of each day—for restorative purposes—and uncountable conversations in hallways, in restrooms, at the book display, over a poker game, etc.) It was a busy, enlightening, exasperating and stimulating time, and I will try to condense it for readers, especially for those who don’t read.

The good news from EDRA about “postoccupancy evaluations” is that these are common enough now to be referred to simply as “POEs.” A major investigation done for HUD by Robert Bechtel and Rajendra Srivastava unearthed 1,305 POEs on housing—three times the anticipated number. The not-so-good news is that more than half of these were done by universities and in architecture schools, where the findings were not utilized by anyone; more than half were done outside the U.S. (Sweden leads the world, in doing POEs and in incorporating them into architectural practice); almost one-quarter were done in the peak year of 1974, and of the 3,000-plus agencies under HUD, only 1 percent had done any POEs at all. There is no legal mandate for doing POEs, and the financial benefits from POEs in housing have yet to be documented (as they have been with schools and hospitals). “The single most important factor in the nonuse of POEs,” says Bechtel, however, “is the lack of involvement of professionals after housing is built. Bankers, architects, just walk away.”

But the really bad news is that this weighty study—with its survey results, and its recommendations and its lists of people doing POEs—is not being released by HUD. Only the bibliography is available, although a 28-page handbook on POEs, done as part of this project, will be available in six months. (Write to HUD’s office of policy development and research.) Why is it so difficult to get the bulk of the study released? “We think all we have to do is present the data and be reasonable, and people will do something,” says Bechtel; “but innovation never happens that way. It takes 25 years for innovation to happen. The people in the agencies don’t have this in their training, so they don’t know how to deal with it.”

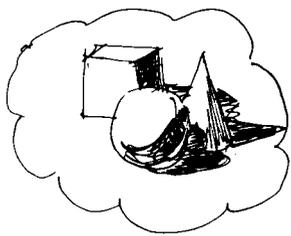
**Ms. Berkeley**, who has now attended three EDRA conferences, was a senior editor on *The Architectural Forum* and on *Architecture Plus*.

The good news about interdisciplinary collaboration is that “we got past the ‘gee whiz’ stage of collaboration five years ago, bragging that we’d just had lunch with a sociologist,” according to one long-time EDRA participant. Today an “enormous number” of the people in EDRA have academic credentials in two fields; “most of us in EDRA are working in what we call the ‘squishy middle’ between design and the behavioral sciences,” said John Archea, who currently chairs EDRA. The balance between designers and behavioral scientists was variously estimated to me as 40-60, 60-40 and 50-50. I was also given a 40-40-20 estimate: psychologists, architects and others (in that order!). No one knows for sure: “EDRA people don’t like to label themselves,” says Willo White, EDRA’s executive officer and only paid staff person.

The not-so-good news is that “some members have felt that EDRA has been taken over by psychologists and has lost its original design focus,” as mumbled occasionally at this year’s conference and as stated explicitly in a paper given at last year’s conference. The authors, Rhonda P. Ross and David E. Campbell, analyzed EDRA proceedings for all previous years, and noted that the papers presented at EDRA increasingly favor the abstract—basic research over applied research, 2 to 1—and that nondesigners, especially psychologists, are increasingly represented among those giving papers. The authors didn’t know whether this last was “due to behavioral scientists becoming increasingly interested in environmental design or to designers losing their initial enthusiasm over the usefulness of EDRA.”

And the really awkward news this year was the inadvertent scheduling of EDRA for June 6-10, overlapping the AIA convention in Kansas City, June 3-7. “There’d be no advantage to us if the New York Five showed up,” said John Archea, “but we’d like to have more of the average architects from the eight-man office.” A new committee of EDRA has been formed, to improve—or perhaps to begin—“interdisciplinary relations.”

I heard too many shades of opinion at EDRA—some people impatient with material that lacks a theoretical base, some people impatient with material that is “occasionally obscure and irrelevant”—to think that a group even as small as EDRA’s 450 members would be of one mind on this subject. But the poster announcing the conference is revealing: The two figures are an academician and an architect, and the two are looking in different directions, thinking in different languages. “We were limited to drawings in the public domain,” says Andrew Seidel, cochair of EDRA-10, explaining this illustration, but he acknowledges a “schism” that needs to be “eliminated.” There is a good bit of



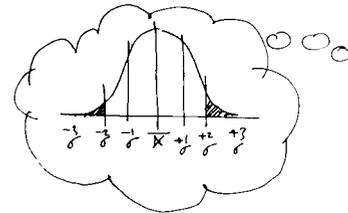
talk about “man-environment researchers” being a third group, distinguishable from (and somewhere between) designers and behavioral scientists, but I was amused to hear that one man who has been to almost every EDRA conference says he knows instantly whether he is listening to a designer or a behavioral scientist. For some, there is no third group.

And for many, there are two groups tugging very firmly in different directions. As one EDRA member expressed it, “The researcher keeps saying ‘I’m not ready with the information’ and the architect keeps saying ‘I need to have this building by Thursday.’” Several presentations addressed these problems, mostly from the position of the researchers. Lorraine G. Hiatt’s reflections on her various roles as environmental psychologist

mentioned that a nursing home on which she collaborated (with a “prominent Eastern firm” of architects) won an award in the research category from *Progressive Architecture*. But the award, she wrote, was “withdrawn prior to formal announcement. Apparently one of the review criticisms was that the ‘design was not worthy of the research.’”

The good news about the growth of this research, according to John Archea: “We were going to call this conference ‘Environmental Design Research: The Unfulfilled Promise,’ but it’s not unfulfilled. The National Bureau of Standards has a major program doing what we do. The most interesting work in some fields is increasingly environmental: work done by geographers, and cognitive psychologists. And we’re moving into policy-level activity, entering court cases, and having an impact on life-safety codes; this work was starting a few years ago, but was considered peripheral to the academic.”

The nagging news is that while a lot more people are doing it, and doing it with a lot more sophistication than ever before, there’s nowhere an architect can go to get all this information, to find out what’s being done, in the opinion of many partici-



pants. One major research project, just at the end of its feasibility stage, is aimed at making more accessible the vast amount of information on “the impact of the built environment on the health and lives of people.” Conducted by ASMER (the Association for the Study of Man-Environment Relations), and funded by the National Institute of Mental Health and HUD, this study has come up with a comprehensive definition of the problem, identifying three categories of information users—researchers, practitioners and systems planners—and developing 10 separate systems for improving the situation (everything from monitoring, to retrieving, to translating, to disseminating, and then some).

But as stated in the current issue of the *Journal of Architectural Research* (widely in evidence at the conference), “The distribution of research results . . . is distinct from the use of such materials in architectural practice.” A questionnaire in the *JAR* is concerned about this matter of “research utilization,” asking readers what sources they use in solving a design problem, and asking whether they find it easy or difficult to “consult” and “apply” original research on the social sciences or on technology.

A small piece of good news drifted my way in one of those hallway conversations: the existence of a handbook, cleverly illustrated, done as a graduate architecture thesis, seeking to explain social science research to environmental designers. And it does! The handbook is the work of Min Kantrowitz, who not only gives the rationale for the use of social science research in design, but also explains the concepts and methods of social science research. The glossary alone is a gem of plain talk. The handbook, says Kantrowitz, is intended to help the designer “distinguish useful research from useless research and . . . begin to apply social science research to design in a discriminating and appropriate manner.” It’s only in draft form, thus far, but someone will surely grab it up for publication before long. Out of the carloads of books published each year, this is one of the small percentage that seems worth losing trees over.

The good news from EDRA about education is that any architecture school wanting to become or remain accredited is

*continued on page 72*

# Adaptive Abuse

*Examining some perils of (and to) the preservation movement. By Arthur Cotton Moore, FAIA*

After too much urban renewal, after heroic modern architecture with brutalist concrete and mill finish aluminum curtain walls and, above all, after people learned they could protest and win, preservation has become a widespread, middle-class, grassroots architectural movement with amazing political muscle. So completely embraced is the movement that it now challenges motherhood and Palladio for irreproachableness.

The levers of the preservation movement are pervasive. Few public projects today in urban areas would see the light of day without some federal subsidy, and with that comes a host of obligatory strings, including handicapped access and historic preservation review. For any impact on historic preservation, federally involved projects now require scrutiny by more than one federal bureaucracy. When the federal lever is absent, there is abundant access to the media. Superbly effective groups, such as "Don't Tear It Down" in Washington, D.C., enjoy good press, know how to picket and, most important in our increasingly litigious society, know how to deal with the courts. Temporary restraining orders, preliminary injunctions and all kinds of legal maneuvering can be orchestrated to frustrate most demolishers. And old judges tend to like old buildings.

Preservation is now quite socially acceptable, and frequently the people who are in it are some of the most powerful in the community. This fact has not been lost upon the critics of gentrification, where young white professionals push out the poor, usually blacks, from older but quite livable inner-city neighborhoods. But this is more a public policy/political issue than a preservation problem. The government can save people from painful dislocation through rent subsidies, turnover moratoriums for tax abatement or relocation assistance.

A familiar indictment of preservationists says they are not economically practical enough, but one of the achievements that has led to the maturation of the preservation movement is a widespread understanding of the economics of development and reuse. When I wrote in 1969 that buildings were destroyed on ledger books way before the wrecker's ball, my economic thesis was considered strange; now preservationists are awash in square foot costs, rental projections, tax incentives and full-scale pro formas. That these skills have given an esthetically based movement major strength seems still to elude architects as a whole, to their great disadvantage. Paul Goldberger, the *New York Times* critic, warns about the Faustian deals developers are now offering preservationists: I'll preserve this landmark provided you let me build this 30-story tower nearby (which, of course, just may kill the whole neighborhood and make the landmark look as though it has indeed sold its soul to the devil). My experience, however, is that the original preservationist battles against developers have inoculated a certain skepticism which has provided a healthy immunization against all but the most diabolical builder's appropriation of preservation rhetoric. In most recent battles, the preservationists have not generally been co-opted, yet it is good warning that we should take to heart, for we will see a lot more of these developers in preservationist clothing.

Many critics have complained of the inevitable San Francisco

**Mr. Moore** is the principal of Arthur Cotton Moore/Associates, Washington, D.C. This is part of his book in progress to be titled *The Architecture of the Absurd*.



look of much preservation design, known in some circles as Californication. Certainly sandblasted brick, distressed beams, hanging plants with rope tails, Thonet chairs and Helvetica medium bold do not great architecture make—old or new—yet too much basic brick may be a small price to pay for the saving of a landmark, and it can also always be plastered over. Californication is essentially a soft problem which will in part be solved by the emergence of more sophisticated design examples for the reuse of old structures.

As an aside, sophisticated preservation design may be relative to the new postmodernism, since both share a historical lean and an antidogmatic humanism. Postmodernists, however, still have something to learn from their older cousins. Preservationists are almost by definition involved, specifically focused activists, in contrast to the arcane academic posturing of this early stage of postmodernism. In reality, most urban problems respond only



Photographs by the author unless otherwise credited

to a real show of power, and preservation designers know that popularity converts to that power. Postmodern design to many people appears both strange and ersatz—close but not the real thing. It therefore cannot yet muster sufficient constituency to influence urban situations. Such preservation clichés as bare brick, on the other hand, function as accepted symbols for a whole series of attitudes and expectations. Urban designers may well employ these symbols to generate support, but they should also realize that this is merely a means to open the door for creative work.

The strength of any movement in a democratic society lies in its popularity, and preservation's widespread appeal is the first time in a long time that architecture has been truly popular. But other frustrations are building up against the preservation movement. In the likely tougher economic times ahead, a challenge to its power, similar to what we've seen in the environmental

*Transmogrification in downtown Norfolk, Va.: peekaboo Victorianism behind a commercial strip on Granby Street during conversion in 1975 to Granby Mall.*

protection movement, is not only likely but probable. And so here I have attempted a set of warnings to the movement which I have grouped and labeled (knowing, as does any contributor to the current state of theoretical pollution, that to categorize is to live).

*Noncontextualism:* Probably anything done with blinders on produces pitfalls, and it is also natural that reverence and concentration produce a certain amount of tunnel vision. The strong historical bias of many preservation efforts tends to exacerbate this with a revealing museum-like orientation. In a museum display, it is customary to set the revered object on a pedestal surrounded by a frame, floated on a panel, stripped of any former



Patricia Moore



## The context can mock a preserved building.

context to be loved for itself alone. Many preserved historic architectural "treasures" have been so treated. But architecture, except for a few monuments and manor houses, when in an urban context, usually occurred either reacting to or linking with its surrounding developed real estate. A row house is naked without the rest of the row. So many "preserved" buildings in isolation have an almost startled look, as if they were a guilty survivor of some holocaust. This beached whale syndrome can produce a rather strange malaise, like unpleasant reminders of a Guernica-type bombing raid, and the resultant effort seems oddly perverted.

In books such as *Townscape*, Gordon Cullen as early as the 1950s pointed out that most historical buildings could only be seen from a few select views and always as part of an assembly of other structures with which they had a symbiotic relationship. Stripped of urban context and seen in the round, some preservation efforts tend to recall not old times but rather the fast-food franchise on the strip equally isolated by its field of parking. Buildings saved without regard to their settings invite unintended juxtapositions, overwhelmings that can make the preserved building look absurd.

*Left, noncontextualism in Roanoke, Va.: a forlorn firehouse. Below left, a renewal survivor in Baltimore: Canton-Carroll mansion in the proposed Joes-town historic district. Right, a possible prototype for Citicorp: hunkering church in Athens, Greece.*



Although esthetically debilitating and an old but surprisingly durable criticism, this is one fault not likely to provoke real confrontation with the business community.

*Historians vs. Design:* In recent years, few buildings have been more a symbol of preservation than the Old Post Office building in Washington. Saved at the 11th hour, it progressed from a preservationist rallying point to a projected tenancy that once included the office of archaeology and historic preservation, including the keeper of the National Register, the President's advisory council on historic preservation, the National Endowment for the Arts and the Landmarks Commission. It is therefore not surprising that the preservation officers of these agencies and inside GSA took more than customary interest in the project.

My firm, in a joint venture with McGaughy, Marshall & McMillan, Stewart Daniel Hoban/Associates and Associated Space Design, Inc., experienced the predictable antagonism between historians and designers which surfaced early over the proposed corridor lighting system. This may seem a small issue, but one of the dramatic changes from the original design (already under suspicion by the historians) was that we were going to allow people to actually experience the center of the building's grand cortile. Under the structure's original concept, the central atrium or cortile was only to provide light filtered through a low

## There can indeed be a fate worse than death.

glass roof to the industrial mail sorting operation below. Our design removed the low glass roof to allow people at the first and ground floor (former basement) to stand in the center of this grand, magnificent space, look up and see the open arcades of corridors around the cortile.

There was the rub. Where the GSA has over the years installed pendant fluorescent fixtures, the historians insisted we install new pendants even though we all knew that the budget would only allow extremely cheap fixtures. Faced with the prospect of the public pouring into this grand new/old cortile and seeing a hanging forest of cheap motel lights, we decided to opt for an indirect lighting source concealed behind the piers. The preservation unit at GSA Central dug in, maintaining that historically one has always seen the actual source of light and that this historical verity overrode the consideration that the vast number of fixtures might just look cheap, ugly and banal. The ensuing struggle consumed the better part of a year, up and down the GSA hierarchy—a lot of bad feelings, a lot of paper and a lot of Librium all around.

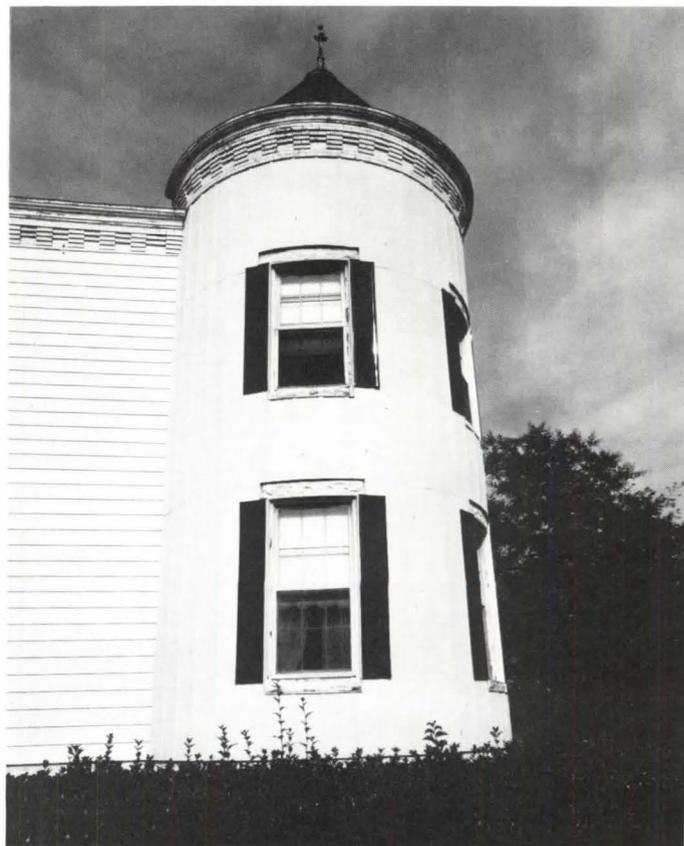
This small saga is illustrative of the conflict that arises between puristic preservationists and adaptive reuse architects. It is a difference largely fostered by orientation and background. The preservation officialdom around the country is comprised largely of historians who, naturally, value historical truths above all else. For example, there is only one registered architect among the 23 professionals reviewing architectural projects at the President's advisory council on historic preservation, and less than 5 percent are registered architects of the 230 professionals at the office of archaeology and historic preservation. The rest are mostly historians.

In contrast, architects are first designers and have, until recently, come from schools where even architectural history has been at best in the shadows and in some cases totally absent. I was fortunate to be educated in both traditions and believe an imbalance exists. For example, it is nonsense that no existing building can be improved by new design. Yet that thought is strongly held historian preservation bias, and the protection against the new designer is this absolutist position—that is, it must remain exactly as originally built. The fact that every age has had its hacks and imperfections, not to mention the usual construction calamities of dispute, contractor errors, economies and changing design directors of the work, means that only a rare building was a perfect conception perfectly built, and therefore could not be improved. W. J. Edbrooke's 1890s quixotic design for the Old Post Office was bastardized by a succeeding troop of architects who, however, did keep the most dubious Edbrooke premise—a heat-trapping skylit cortile that could be enjoyed by no one from the floor. In part because it was a functional disaster, every generation since its construction wanted to tear the building down. To preserve it meant changing its basic original design.

*Wretched Excess:* This surely springs from enthusiasm, but it is at bottom a symptom of the juggernaut of success. The restoration of the colonial homes of Old Town Alexandria, Va., where most of the federal preservationists seem to congregate, has not only been esthetically pleasing, but in the real lingua franca of our society has been financially titillating. One of my basic theses in this article is that the preservation movement has been exceptionally indiscriminating. No lines are really enforced between the fake or absurd and the real thing. Transparent fakes, or porticos on gas stations as in Charleston, S.C., together with the elephantine "colonial" applique over the



*Wretched excess on a gas station in Charleston, S.C. (above), and a colonial-ized Victorian turret treated with board and batten siding and stationary shutters on Capitol Hill in Washington, D.C. Facing page, creeping transmogrification in Vancouver, B.C.*





Patricia Moore

six-story Holiday Inn adjacent to Old Town are warmly embraced as long as they continue the good news styling of colonial, a style which at best was an ignorant and poverty-driven response to English Georgian architecture. I believe preservation started as a genuinely proarchitectural bias, but now clichés, formulae and gimmicks are embraced and any notion of design is rejected. The proverbial little old ladies in tennis shoes who started the movement have grown complacent, and the moneyed, muscled preservation movement is showing its dark side.

A further example of wretched excess is the restoration game. In this case, colonialization not only is applied to new buildings and service structures of unforgivable modernity, but is also forced onto buildings of existing significant historical architectural style and integrity. The old market in Charleston is anchored by an antique in its own right, an archaeologically correct reproduction of the classic Roman temple at Nimes, France. This 138-year-old version of a 2,000-year-old monument in architectural history has been restored by a developer with the cheapest builder's gimmicks of double hung multipane windows set in walls of textured 1-11 plywood colored with "colonial" wood stains, all rammed into beautiful old stone vaults.

That what passes for "restoration" equals without question the most superficial mutilizations seems to cause not even a quiver as long as the money rolls in. So many cases of "restoration" of forceful Victorian structures has taken place in Washington's restoration areas—Georgetown, Capitol Hill, etc.—that I can only offer a prototype figure to synopsise the activity. The curved glass windows in Victorian turrets are routinely straightened, multipaned and bordered by nail-on, never-move shutters while the building is deporched and embellished by carriage

lamps, fire symbols, etc., all of recent manufacture and sensibility. Why do preservationists and historians ignore this demolition?

A variant of wretched excess is the general approval given some conversions so long as they preserve the exterior shell. So we see churches technically preserved, while their great interiors and *raison d'être* are being infilled with floors for the storage of records or converted into discotheques, as in Atlantic City, N.J. The question of appropriateness in some conversions might be worth considering. Transmography represents, as in part wretched excess does (unlike the other categories), an indictment of a failure to act, and especially to act with specific discrimination. It is a failure not to realize that there is a form of demolition short of the wrecker's ball. As in the restoration game, partial demolition occurs when buildings are transmogrified—transformed into an absurdity, resulting in an area, condition or geography that I call transmography. Prevalent in old downtowns is the casual violence of the "remodeling," usually of the ground floor but progressively engulfing the entire facade. Shiny tile facials are applied to turn-of-the-century French copy-book facades and are rudely updated 50 years. The resultant visual war is overlooked as the area itself becomes overlooked.

Transmography speaks volumes on the general public's feelings about old values, about the plight of central cities and their rigidity against change and about the basic economic health of those old commercial row structures. Such partial demolition as this has been a reliable forecast of complete demolition. Transmography, in short, means that the building has one foot in the grave. It also represents the complacency and other elitism of the preservation movement too often interested in only the



## **'You don't kill your children,' no matter what.**

heroically historic or at least very large old buildings. That our turn-of-the-century commercial downtowns are already on the steady slide toward extinction arouses little interest in the movement's early champions. Too, the assumption that transmography is reversible is often an illusion, as we found in the 1952 tile refacing of McCrorys in Baltimore which removed forever its rugged cast-iron facade to accommodate the smoother tile appliques. This building is to receive yet another screen, now in aluminum over the whole facade, and its future is dubious.

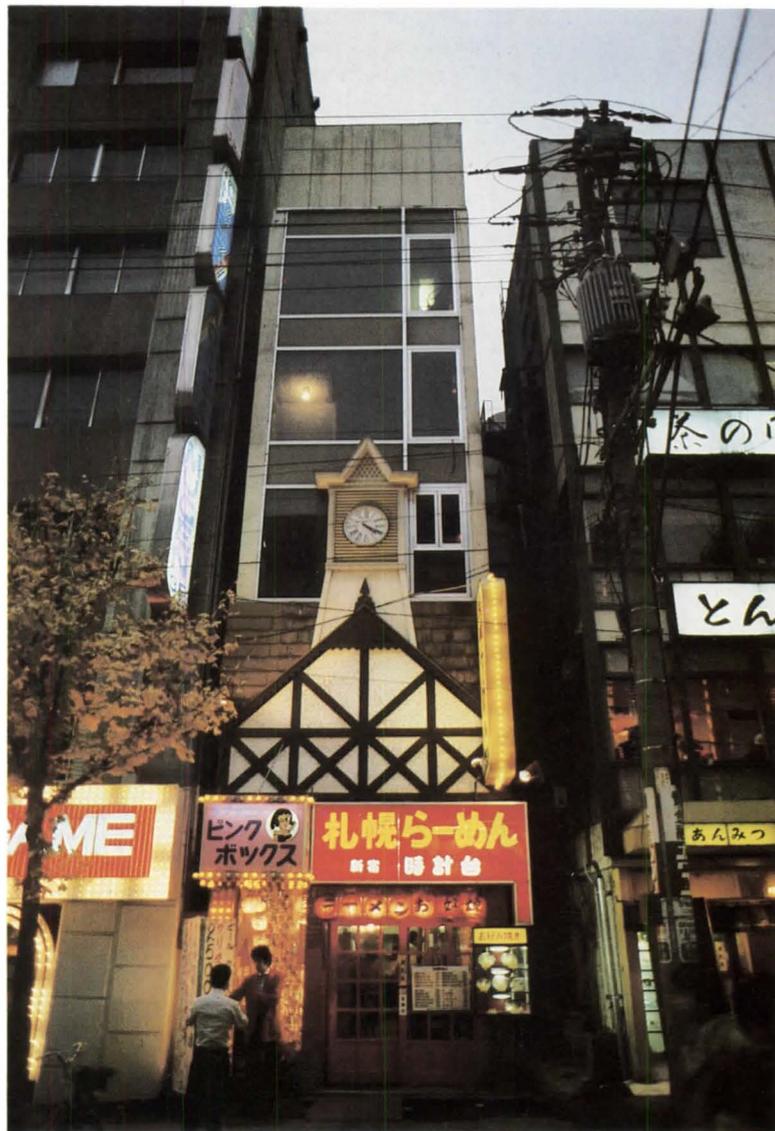
*Status Quoism:* Up to now I have been talking about serious abuses, but not ones which could precipitate a power showdown. Status quoism may fill that bill. In Baltimore, the construction of the subway and adjacent parcels required for structural rea-

sons the removal of a row of indifferent commercial structures of varying ages. The only architecturally interesting structure (the Murphy building)—a 90-foot-high, heavily embellished and guano encrusted arched facade, circa 1890—was at our insistence to be retained as a gateway to the subway. The rest of the demolition was not only vital to the \$500 million subway project, but also, because a pivotal federal grant was involved, was the key to the multimillion dollar revitalization of the whole central retail district. The state preservation office entered the picture because of that federal grant. One preservation officer proceeded to announce at several public meetings that "they (the buildings) are all my children and you do not kill your children, even the ugly ones."

This may speak volumes about this person's psychological state, but it did little to speed up the meetings. Indeed, the lady



*Left, transmogrification with a vengeance in Providence, R.I. Below, international transmogrification, Tokyo division.*



agitated particularly for the corner building, a dull gray block distinguished only by one piece of trim, which was hotly debated as either traces of Art Deco or the residue of a commercial sign. All players knew the game being played. The corner was the keystone to the row and, if retained, no change could take place. The status quo would be preserved. (I once heard an active preservationist give testimony which was entitled simply, "What's Wrong with the Status Quo?" What is wrong is that it is an illusion. That old retail district is being economically devastated at an accelerating rate. There is no status quo in urban affairs.)

More status quoism in Baltimore. The proposed reuse of the industrial B&O railroad yards recently went afoul of the preservation fever occurring in the adjacent Otterbien district (dollar houses) and the more conventional gentrification in the Federal

Hill area. Because the Federal Reserve Bank had been coaxed into relocating on one part of the nearby barren yards, private banks developed a sudden interest in this wasteland. First National Bank of Baltimore was hard at work on relocation plans when a nearby homeowner, horticulturist and new preservationist announced that a tree on First National's lot was the site of an abolitionist speech by Frederick Douglass in the early 1860s. Considering the fairly sketchy documentation on any site as to what trees were or were not there 120 years ago, it took a leap of faith that that particular tree was indeed the one which shaded that special utterance. Conceive, for example, the problems of documenting the surrounding foliage of the Camp David accords or the trees outside Richard Nixon's "I am not a crook" speech 120 years from now, even conceding the 1970s' considerable advances in photography and more extensive

## A need to apply design and discrimination.

photojournalism over the 1860s'. Nevertheless, this allegation was enough to send the bank skirring away, meaning another preservation victory and maintenance of the status quo.

What we are talking about here is fear—fear of the recurrent horrors of urban renewal into urban wasteland, fear of the desiccated landscape of modern concrete blocks within fields of asphalt parking, fear of the loss of any sense of urban form. These infrequently voiced suspicions, however, mask the basic fear of a people threatened, the fear of any change whatever. Some years ago the *New York Times* ran an article called the "Age of Acceleration" in which it was proposed that the truly unsettling aspect of our age of rapid change was that the rate of change was itself accelerating. The complexities and rootless quality of much American life tends to breed a counter-reaction by people desperately trying to bring order to their lives by metaphorically throwing out any anchor.

The only change one can get significant public response to now is backward change. Hence the interest in historical allusion, extending into the design of new buildings. Theme parks and postmodernism, to some extent, participate in this aspect. Arbitrary obstructionism in the name of preservation to frustrate major revitalization efforts now has an air of legitimacy, guaranteed by a popular following really seeking to stop the world. It is not surprising that easy political alliances can be struck between antidevelopment groups and preservationists, for they are

*Below, Riggs Bank branch of 1924 in Washington, D.C., destroyed five years ago for not being historical enough. Facing page, the mammoth Eaton Center in Toronto muscles in on its long-established neighbors.*

now frequently first cousins. It is a perversion of the preservation movement. The co-opting of preservation as a negative economic force is simply going to produce that unequal confrontation which may be devastating to our architectural heritage.

I have deliberately stressed the word "preservation" and not the term "historic preservation," first because I feel preservation can extend easily to a whole grouping of buildings of various ages, whole contexts and, indeed, whole neighborhoods. Second, the emphasis on pure historicism as a test has excluded some marvelous structures of more recent times that are worthy of getting exercised over. Washington's delicately decorated 1924 Riggs Bank branch once located across from the Executive Office Building and demolished over protest is a case in point. The term should be "historic architectural preservation," with emphasis going to either adjective.

The turgid attempts to deal with America's urban decline since World War II (urban renewal, pedestrian shopping malls, Section 8, Operation Breakthrough, HUD programs 235, 236 and 221D3, etc.) make the preservation movement shine all the more brightly. As a committed preservationist as well as an architect of new buildings, I am concerned about the future of this shining light.

The preservation movement has in part received some of its power as a reaction against modern design, so a message from a contemporary reuser may not be too popular. Yet the common denominator underwriting preservation's abuses is a rejection of the role of design. But after the movement's present complacency period will come a time to vigorously apply thoughts of design and discrimination. This will be needed to combat inevitable challenges and to allow historic architectural preservation to continue as a vigorous contributor to the maturation of a postindustrial America. □



Wm. Edmund Barrett



# GRINNELL SPRINKLER SYSTEMS GIVE YOUR DESIGNS MORE ELBOW ROOM.

Space limitations imposed by building codes can also impose limits on architectural creativities. But you can broaden those limits by installing a Grinnell Sprinkler System.

When sprinklers are installed throughout a building, many building codes permit up to a 300% increase in floor area—depending upon occupancy, height, and construction — resulting in a correspondingly better utilization of valuable land.

A sprinkler system is a capital investment that allows you other cost-saving design freedoms as well. Increased building height. Greater distance between exits. A wider range of interior finishing materials. Lighter roof framing. Decreased exit widths. Fewer draft stops and less firestopping.

So when you lay out your next building, design in a Grinnell sprinkler system. It'll help you make more economical use of every construction dollar.

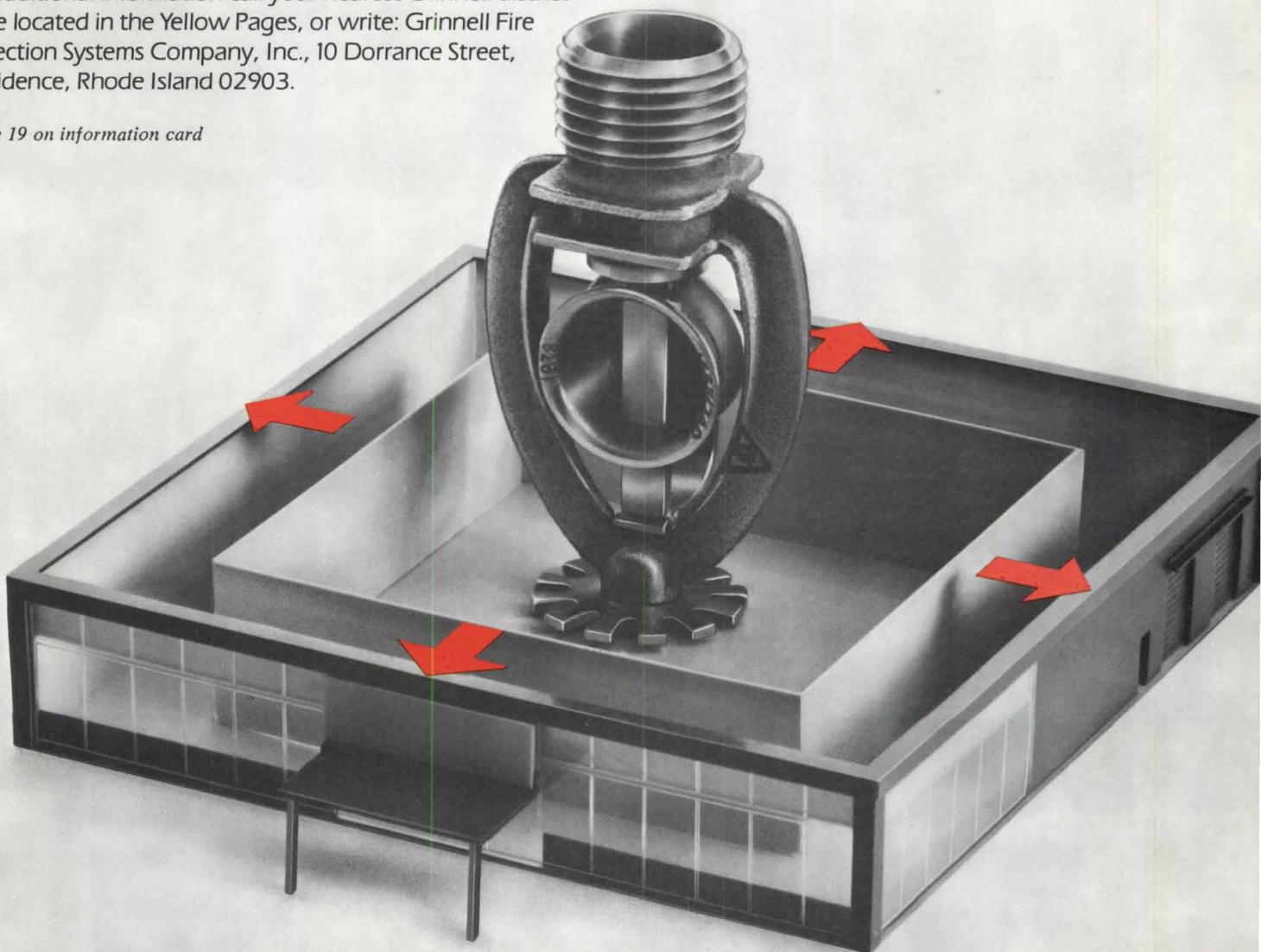
For additional information call your nearest Grinnell district office located in the Yellow Pages, or write: Grinnell Fire Protection Systems Company, Inc., 10 Dorrance Street, Providence, Rhode Island 02903.

*Circle 19 on information card*



**GRINNELL**  
GRINNELL FIRE PROTECTION SYSTEMS COMPANY, INC.

Protecting Life and Property Since 1850.



You are  
cordially invited  
to attend...

# "Preservation and Conservation in Partnership"

October 3-7, 1979 San Francisco, California

The 33rd Annual Meeting of the National Trust for Historic Preservation is of particular interest to preservationists, conservationists, architects, city planners and real estate professionals. The theme, "Preservation and Conservation in Partnership," dramatizes the special relationship between conservation and preservation. Notables from each field will head many of the sessions, lectures and seminars.

The Annual Meeting and Conference lasts for five days and covers a wide range of theme-related subjects. Among the topics are "Growth of the Conservation Ideal in the West" and "Policy, Politics and Protection for the Built and Natural Environments." Other absorbing discussions include preservation of waterfront areas, America's transportation heritage, adapting alternate energy sources for conservation, and many more. All sessions and events take place at the Fairmont Hotel.

This city of national allure will also serve as a "living laboratory." Tours, designed and conducted by professionals, will give participants a close-up look at preservation and conservation in action in San

Francisco's parks, waterfront areas, downtown and ethnic neighborhoods.

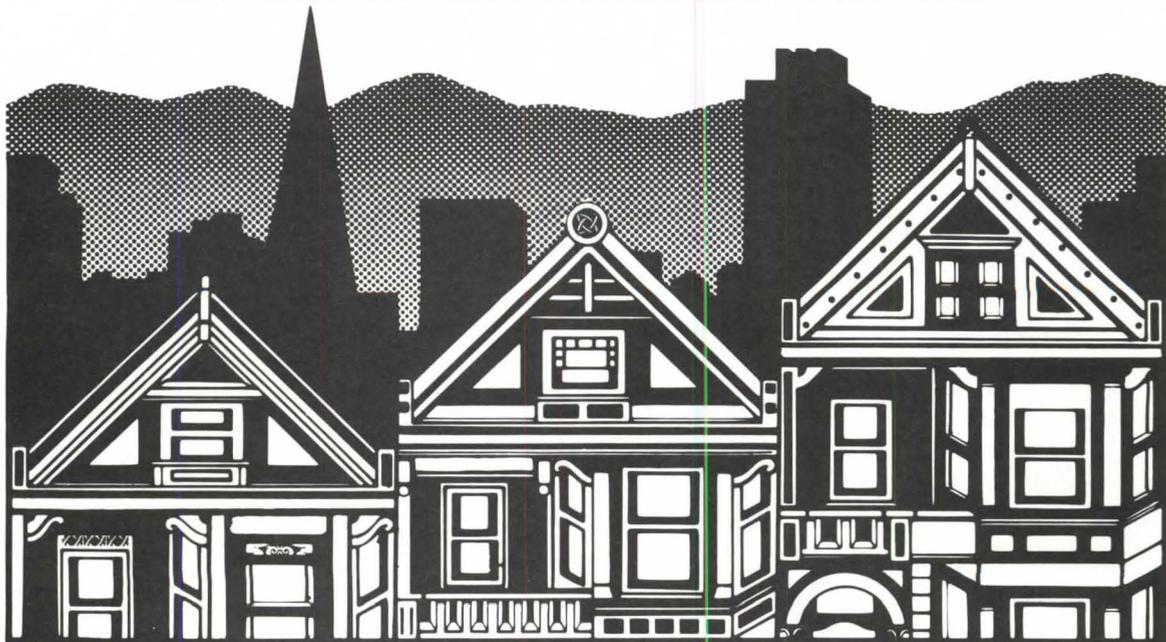
The National Trust Annual Meeting and Preservation Conference is not to be missed by anyone—professional or volunteer—who seeks to preserve our nation's heritage and conserve our nation's resources. Registration fees are as follows:

FEES FOR MEMBERS	\$125
FEES FOR STUDENTS	\$ 35
FEES FOR NONMEMBERS (includes one year membership)	\$145

Mailed registrations must be postmarked no later than September 19, 1979 or, you may register at the Fairmont Hotel.

For further information and a brochure containing details and a registration form, write: Annual Meeting Coordinator, National Trust for Historic Preservation, 748 Jackson Place, N.W., Washington, D.C. 20006. Or call (202) 254-5194.

THE NATIONAL TRUST FOR HISTORIC PRESERVATION



Circle 20 on information card

**Lym from page 55**

"This has to be a street!" Moore subsequently wrote, "The scheme . . . was based on a pedestrian street winding up the ridge in the forest tightly flanked by buildings, their fronts painted white to bring light into this passage in the dark forest. . . . The imagery of whitewalled galleries along a winding street is, of course, of a village."

After early design work was completed, the university hired biologist Robert Edgar to be Kresge's provost. Edgar saw the college and its growth as the central concern of an environmental studies program that would develop organically. And he envisioned buildings "which could be dismantled and moved," Lym writes. "He saw barn-raising throughout the life of Kresge celebrating its piecemeal growth. He wanted what he called a 'tinker toy college' that people could rebuild every so often and that in time would find its own spatial order."

Edgar was both pleased and dismayed with the early Moore and Turnbull design. "The dispersal of residential, academic and communal functions within a village in the forest pleased Edgar's sense of a growing, organic college. But the architects' organizing urban street left him cold. He did not want the college's overall order predetermined."

In 1976, Lym interviewed a dozen Kresge students, finding them "in love with yet irritated by the college." He characterizes their life styles as "California mellow."

The students liked the way residential, academic, social and administrative functions were distributed through the college. They felt that, as the architects intended, "it reinforced their sense of living in a sociable place." They also liked the street. Said one freshman: "My friends and I skateboard down it a lot.

Have you ever heard of frisbee golf? You throw a frisbee through the holes in those big walls."

The students liked the street as a place to have fun, not for the civic qualities that were the architects' objective. Moore and Turnbull intended that "the private room was to be a place for the individual while the street was to be a place for the public," in Lym's words. Yet to the students, "what occurred on the street was not all that different from what occurred in their living units. They rejected the street as a public order.

"For them, Kresge realized the spatial order of a forested retreat. They considered Kresge to be embedded in the whole Santa Cruz campus and its forest, which in turn was separated and protected from the problems and realities of the metropolis and nation outside. Kresge was a place for suspending concerns about the realities of the outside world and for suspending commitment to self and to community." Said one student, "I think Kresge has an element of protection which I personally rebel against. All of U. C. Santa Cruz is very up-on-a-hill, very elitist, a monastary atmosphere. Kresge in particular."

Continues Lym, "The students objected to the street's whiteness, because it worked against their spatial order of the forested retreat. They like the sociability of the street but wanted it merged into the forest. They wanted to erase all traces of the street's public, civic nature."

Some of their comments: "Kresge really doesn't blend into the forest too well because it is white." "The paint gives a feeling of this being a little city. I would have preferred anything but white. It gives you a feeling of civilization." "Kresge has been compared by people to the old Italian towns, which I think is a useful comparison." "We call it candyland." □



# FIRST EDITION!

## 1979 Combined Specs, Load Tables and Weight Tables for steel joists and joist girders.

**Standard  
Specifications  
Load Tables and  
Weight Tables**  
for steel joists and joist girders.

**STEEL JOIST INSTITUTE**  
Leadership since 1928.

A fifty-two  
page working handbook.  
Everything you need to  
specify open web, longspan  
and deep longspan joists  
and joist girders.  
Send for your free copy.

Steel Joist Institute  
Room 204-B, 1703 Parham Road  
Richmond, VA 23229



Please send me your new combined edition  
for steel joists and joist girders.

Name

Title

Firm

Address

City  State  Zip

Berkeley from page 57

now offering courses on the behavioral aspects of design. "But students think that if they take my course," said one such teacher, Sandra Howell, "they can get 'squishy' about architecture and not care about technical things." In one symposium, teachers of these subjects agreed on the advantages of an interdisciplinary approach, but acknowledged that their students are worried: What do they know and where do they go, and who will hire them? Someone from the floor answered "No one," to which a panelist replied, "I'm more worried that someone will hire them." A joke doesn't tell it all, but many difficult things are said partly in jest.

It's an uneasy situation in the architecture schools: According to one psychologist, "A lot of studio teachers are sensitive to user needs but are very unsophisticated." And a list of the biggest problems in teaching this material to architecture and design students—a list derived from a survey of those teaching it—leads off with "lack of support from design practitioners." This list of 11 biggest problems goes on to include "emphasis on product, not process and content," and "student demand for solutions and handbooks," and "attitude taught to students which assumes truth rather than exploration." Here, too, there is no unanimity: When one of these teachers said that design students come to PER courses wanting a cookbook, another teacher quickly replied, "Don't put down cookbooks."

The good news on funding for environmental design research is that three men from Washington showed up at EDRA in ties and jackets to tell where some of the money is—Michael Pittas from the design arts program of the National Endowment for the Arts, Francis Ventre from the center for building technology (CBT) of the National Bureau of Standards and Fred Krimgold from the directorate of engineering and applied research of the National Science Foundation.

The not-so-good news: "Your voice is very weak in Washing-

ton," said Pittas; "the art and museum people are much stronger, and they're only 30,000 strong." (There are 22,000 people holding design titles in government alone, he said.) Pittas described the various grants and matching grants available from NEA: Full information will be available by mail from NEA in September.

Ventre spelled out the aims and activities of the environmental design research division of the CBT of the NBS. If the equation says that benefits over costs equals value, then the way to improve the situation, says Ventre, is to increase the benefits, instead of the traditional answer of cutting the costs. The CBT has been doing building research for more than 75 years, but only in the 1970s has it been exploring questions of building *use*—and use is responsible for 92 percent of a building's life cycle costs, says Ventre. Operation is responsible for 6 percent and construction for 2 percent.

Krimgold from the National Science Foundation explained the "modest beginning" made by the NSF in environmental design research (some would say it is modest indeed). In NSF's division of applied research, with a budget of \$20 million, "\$600,000 is possible" for environmental design research. Krimgold repeated the comment by an unidentified congressman that he (the congressman) was as well qualified to speculate on social phenomena as anyone else, which was about the worst news from the outside that anyone had heard during the conference. Krimgold stated that no one was speaking with a consistent viewpoint on what needs to be done and how it should be done, in this field, and he challenged EDRA to become "the embodiment of extragovernmental coherence on these matters."

This was translated by EDRA as "an agenda," which was further defined as "a consensus concerning a benchmark against which the agencies can measure their programs. If we don't do it, others will—and have." The final one-hour session of the conference took up the subject. Concern was voiced that such an agenda might put some people in a preferential position to earn money. Concern was also voiced that the agenda *might* become a straitjacket, or might be considered too literally a *plan*, implying a schedule, instead of a *framework*, implying simply a definition of "what's inside this field and what's outside." But even a framework won't be easy. Said one researcher, "Let's not confuse where we think we *ought* to be going, with a prediction based on where we've been." Said another, "It's a question of whether we are going to let an opportunity pass or not." And another: "They want us to act like a professional society, and we *have* to, whether we like it or not." Someone noted that EDRA was approaching puberty. The meeting came to a quiet adjournment, with the board of directors having been empowered the day before, in any case, to prepare such an agenda.

I do not want to give the impression that this group of people is any more argumentative than any other group. The level of discussion throughout the conference, especially on that last tired morning, seemed quite respectably academic. A printed sign saying "No Smoking, No Eating, No Beverages" had been amended by someone in this group?—to include "No Hard Breathing" and that's pretty much the way I'd call it. There was naturally some criticism launched against some of the methods and results of previous research, and one fellow stood up to say that his colleagues back home could scarcely believe these papers are refereed (approved by peers). But it was not an explosive conference, or a divisive conference. One student had described the typical EDRA as being "a lot of your average academic bullshit, and a lot that advances the art, and occasionally something explosive." If there was anything explosive, it was well contained and I missed it.

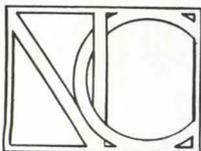
So much for the ambience, and for some of the issues in this field that is environmental design research and this organization that is EDRA. As for the research itself, I am tempted to refer the reader to the *Proceedings* (448 solid pages of the refereed papers, some appearing only as one-paragraph abstracts). Take

*continued on page 74*

## CRIMINAL JUSTICE ARCHITECTURE

*An opportunity for architectural firms that lack the specific credentials to break into the specialized and highly active field of Criminal Justice Architecture.*

NATHANIEL CURTIS, F.A.I.A., Architect, Designer, Project Architect or Principal in Charge of over 75 correctional institutions — State, County, City; Co-recipient of over 100 AIA Awards for Excellence in Design; available to a limited number of clients in the architectural profession as a consultant to participate with them in the marketing effort and/or conceptual design of projects in the Criminal Justice Field.



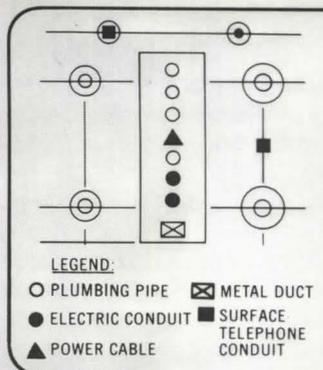
NATHANIEL CURTIS, FAIA  
3614 Magazine Street  
New Orleans, Louisiana 70115  
Telephone: (504) 899-5622  
Telex: WUI (682) 1235 IHWTCUW

# SEAL UP PENETRATIONS IN HIGH RISE FIRES!

## THERMAFIBER® Safing Insulation

effectively cuts off fire at utility cut-outs in multi-storied buildings — keeps flames from spreading floor to floor.

A recent 2½-hour fire test employing THERMAFIBER Safing Insulation dramatically proved the remarkable capabilities of this unique fire-stopping material. THERMAFIBER Safing Insulation



was used to seal openings of various sizes. These openings provided access for steel pipe, copper pipe, steel conduit, metal air ducts and power transmission cables run through a fire-rated floor.

■ For convincing test results, fire containment ratings and other specifics, call your U.S.G. Representative. Or write to us at 101 South Wacker Drive, Chicago, Illinois 60606, Dept. AJ89

**UNITED STATES GYPSUM**  
BUILDING AMERICA

Circle 22 on information card



### Berkeley from page 72

a look at the table of contents: Perception and Preference; Social-Environmental Issues; Urban Environments; Housing and Residential Environments; Theory; Research Methodology and Design Methods; Designer-Researcher Collaboration and Research Utilization; Children and the Environment; Design and the Handicapped; Elderly and the Environment; Student Residences; Correctional Environments; Technical Issues; Additional Issues. Copies are available at \$18 each from EDRA, L'Enfant Plaza Station, P.O. Box 23129, Washington, D.C. 20024.

It won't give the plot away to say that you'll find, in these *Proceedings*, some information on all of the following:

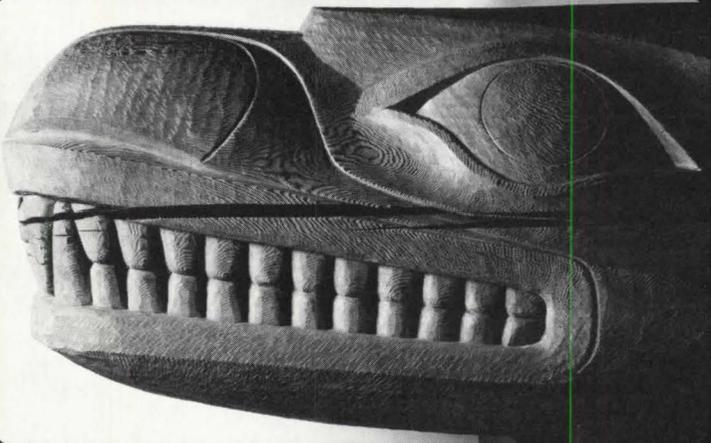
- how elderly residents use their *private* space extensively, in institutional housing, even for a large part of their social lives;
- how the emerging trend called "mainstreaming" (educating handicapped and nonhandicapped children together) suggests new design principles beyond "barrier-free compliance," since only 10 percent of the handicapped children are in wheelchairs or are physically and orthopedically handicapped;
- how a "conglomerate drawing" may be able to communicate "aspects of an environment previously considered unrenderable, such as the essence, feeling, quality or experience of a place," and thus may enable designers "to arrive at new kinds of design solutions";
- how plants can be regarded as a design tool, altering the "radiation and energy balance" with some predictability for particular plant characteristics;
- how men and women may see their homes differently: males as a place to relax in, and females as predominantly work-related.

But some of the most interesting material won't be found in the *Proceedings*. A workshop on the development of design

guidelines for large institutional clients turned out to be a discussion of work-in-progress for the U.S. Army Corps of Engineers: design guides on children's environments, and on youth centers, and an analysis of vandalism in bachelor housing. "The worst thing you could do with guidelines is parachute them down from the top," said one of these researchers, and the army is way ahead of him. Robert Shibley, an architect with the Corps of Engineers, says that the idea is "not to add to the administrative burden but to empower the *users*, to invite the users to ask questions. We don't want to say 'We've got a better idea,' we want to create a demand base for better engineering and architecture." (One of these has already won a *P/A* design award, and *has* been published.)

And one of the most interesting experiences of the conference was staying in a building—indeed, some people never went outdoors—that was described in our program as "the most innovative megastructure of the decade"; the Ellicott complex at the Amherst campus of SUNYAB, designed by Davis Brody Associates. It was an interesting experience and not a positive one. When someone asked, "Has anyone done a POE of *this* place?" he got a laugh, and not a happy one.

If you've read this far—you who don't read—you might want to save the dates of the next EDRA conference, March 2-6, 1980. The place: Charleston, S.C. (Some of the action: a special effort by women of EDRA to make their visit to a nonERA-ratified state helpful to women in general and to women in Charleston). The theme is "Optimizing Environments: Research, Practice and Policy." But the call for participation suggests that "papers which do not directly address the title but which intersect with the interests of the Environmental Design Research Association are welcome." In the kind of language that most of us understand, that could mean just about anything. □



## 1979 Architects' Cedar library. Free.

It's the new "Do it with shakes and shingles" kit. The most complete cedar library ever created for architects.

Covers 10 basic "How to" subjects: Insulation. Ventilation. Roof Junctures. Valleys and Flashings. Product selection. Economy grades. How to specify. Care and treatment. Finishing. Literature catalog. All free.

Send for the Cedar Library, Suite 275, 515-116th Avenue N.E., Bellevue, WA 98004.

Or use the reader service number 28

### Respond.

Red Cedar Shingle & Handsplit Shake Bureau

## Crouse-Hinds LSL/LRL luminaires.

The basic forms of light for area and walkway lighting.



Crouse-Hinds round and square LSL/LRL luminaires complement the shapes you're using in your buildings.

They perform as beautifully as they look. Their even light distribution means you need fewer units to meet minimum light-level requirements.

Energy-efficient LSL/LRL luminaires are available in two sizes. Smaller sizes take all H.I.D. lamps through 250-watt metal halide. Larger sizes take the 250-watt HPS and 400-watt mercury, metal halide, and HPS lamps.

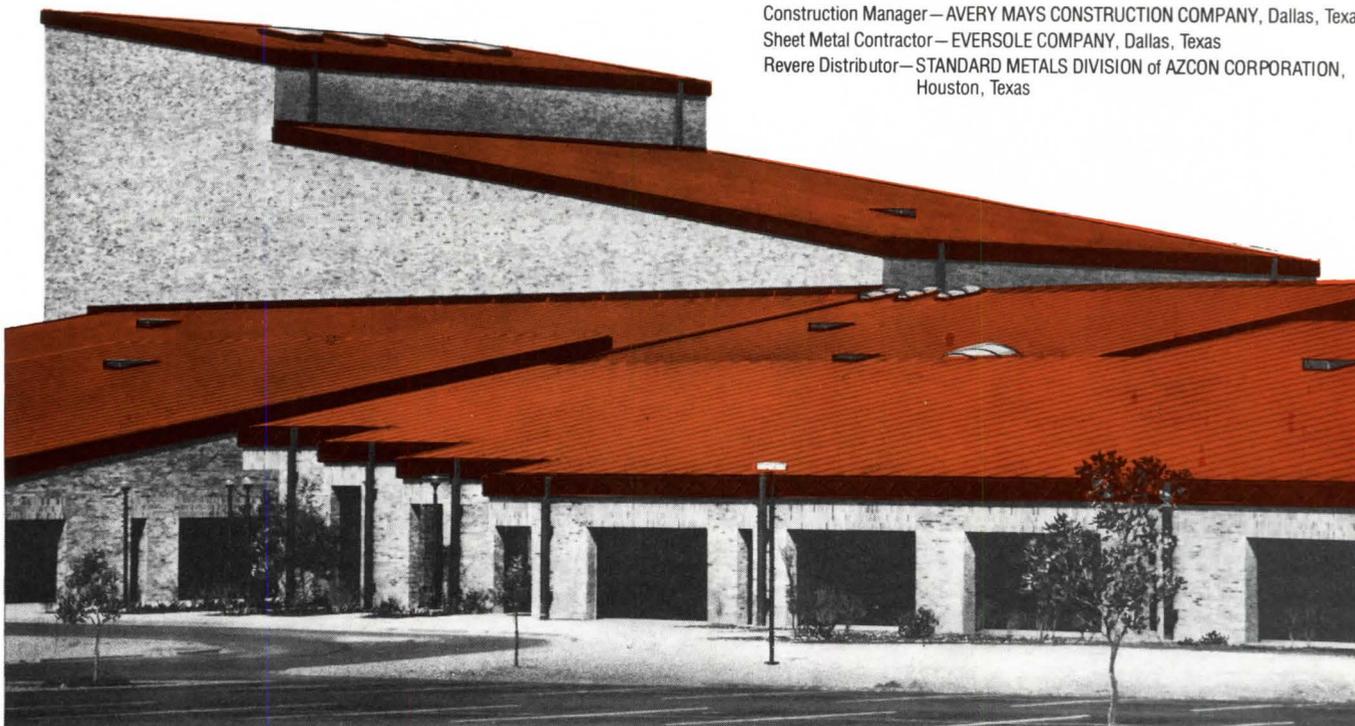
Take a closer look at the Crouse-Hinds LSL/LRL luminaires. Write for literature to: Crouse-Hinds Company, Lighting Products Division, P.O. Box 4999, Syracuse, N.Y. 13221. Or call (315) 477-8119



**CROUSE-HINDS**

# When the class of **2130** departs we expect this Revere copper roof will still be on campus.

BROOKHAVEN COLLEGE, FARMERS BRANCH—Dallas County, Texas  
Architect—PRATT, BOX, HENDERSON and PARTNERS, Dallas, Texas  
Construction Manager—AVERY MAYS CONSTRUCTION COMPANY, Dallas, Texas  
Sheet Metal Contractor—EVERSOLE COMPANY, Dallas, Texas  
Revere Distributor—STANDARD METALS DIVISION of AZCON CORPORATION,  
Houston, Texas



Copper roofs have been known to last for 150 or more years, so the college building shown above should still have its original copper roof in the 22nd century. This enduring quality is one of the reasons so many architects specify copper.

Another reason for "crowning with copper" is the natural warm tone of red metal which complements other building materials. Copper and brick, for example, are a natural, as they are in the building above.

Building owners appreciate the low cost per year of copper because it requires little, if any, maintenance. Another advantage of copper is its ease of installation. Copper can be formed

into any configuration you design and joints are easily soldered.

More than 400,000 pounds of 16 oz. and 20 oz. Revere sheet copper were used on eight buildings at the Brookhaven College. Construction is standing seam over gypsum deck. You can design with freedom and confidence with copper because it lends itself to so many types of construction: horizontal and vertical batten, flat seam and Bermuda style, to name a few.

Revere has a wealth of data on copper for roofing, flashing and other applications which we will gladly share with you. Just drop us a line. Revere Copper and Brass Incorporated, 605 Third Avenue, New York, NY 10016.



# REVERE

Circle 23 on information card

# BOOKS

## The 'Nuts and Bolts' Of A/E Procurement

**Architect/Engineer Contracting: A Manual.** Washington, D.C.: Committee on Federal Procurement of Architectural/Engineering Services, 1979. Variously paged. \$95. Order from: AIA Publications Marketing Department.

The design professional and the public official who want to know all the ins and outs of A/E procurement at the local, state and federal levels will want to possess this document. Prepared by the Committee on Federal Procurement of Architectural/Engineering Services (COFPAES, of which AIA is a member), and Catholic University's schools of engineering and architecture and law, the book costs \$95. While this price may seem steep at first thought, the volume will probably pay for itself many times over. It comprehensively fulfills its intent of providing an "up-to-date, working knowledge of the objectives and mechanics of the A/E procurement process."

The manual's predecessor was a companion textbook for the course on the government official and A/E contracting initiated by COFPAES two years ago as a "nuts and bolts" approach to procurement. The revised manual replaces the first edition and also makes it possible for the first time for the volume to be bought independently as a reference work.

The book begins with a general overview of government A/E contracting. The second section, on project planning, gives insights into long-range programs, funding, project authorization, organization and scheduling. The selection process is carefully detailed in chapter 3, providing agency rules of announcement, evaluation, criteria and ranking for federal projects as well as the selection process in state and local agencies.

Chapter 4 is on the negotiation process, explaining contracts, compensation, cost estimates and fee limitations, as well as a discussion of the "psychology of negotiation." Chapters follow on audits, A/E services, federal assistance requirements, project administration and such legal aspects as contract clauses, termination, deficiencies and redesign.

Each chapter begins with a summary of its contents. Inserted into the text, where

possible, are examples and illustrations to supplement the basic information. And at the end of each chapter are additional documents pertinent to the subject discussed. The manual is arranged to permit the addition of materials without disturbing the page sequence. There is a detailed table of contents, an index for the easy retrieval of information and a bibliography.

Inquiries regarding the manual or the dates and locations of future sessions of the course on the government official and A/E contracting may be directed to Arnold J. Prima, AIA, administrator of government affairs, at Institute headquarters.

**Mackintosh Architecture: The Complete Buildings and Selected Projects.** Edited by Jackie Cooper; introduction by Barbara Bernard. New York: St. Martin's Press, 1978. 111 pp. \$15.95, hardbound; \$5.95, paperbound.

The highly stylized images of Charles Rennie Mackintosh (1868-1928) have generally been interpreted as precursors of the modern movement. How modern and how relevant he was to what modern architecture became is a question seldom addressed. Mackintosh's celebrity is far in excess of his rather short career and small output.

Only 14 complete buildings can be credited to him, of which perhaps only three or four are truly memorable. The most famous is the Glasgow School of

Art, while others such as Hill House and the Scotland Street School are less well known. Mackintosh's importance is not with complete buildings but with his transformations of interiors and his designs of chairs, cabinets, fabrics, stained glass and other elements of decorative arts.

The large project was frequently beyond his ability. The Glasgow School of Art is at least three buildings: the well-known north facade (see below left) of 1896-99, the west wing and library of a few years later and then the rear and south elevation that has little relation to the other faces. His excellence lies at the small scale—at the intimate detail—such as the Tub chair for his own apartment, or the ballustrate screen for Miss Cranston's Willow Tea Rooms. These pieces, set within a carefully structured space with screens, white walls, details picked out in pink, gray, mauve and green, and accessories in silver and black, created a world of unforgettable presence.

Unfortunately, little remains of Mackintosh's complete interiors; Hill House and the Glasgow School of Art are the main ones, along with a few fragments. The surviving pieces of furniture have become art objects in themselves—as they certainly deserve—but removed from the intended context, they lose meaning. Given the remoteness of Glasgow, any publication of Mackintosh's work is of some importance.

This book is a slim one containing approximately 200 original views, new photographs and drawings. The photographs are for the most part well-produced and the book is handsomely laid out with a small amount of Mackintosh inspired typeface for titles. The book is not comprehensive, although it contains all of Mackintosh's complete buildings and selections of his major alterations and unbuilt projects. The text is minimal and consists of a rather profunctorious introduction and brief descriptions of the commissions. In no way does the book replace Thomas Howarth's *Charles Rennie Mackintosh and the Modern Movement* (1952, with later reprints) and Filippo Alison's *Charles Rennie Mackintosh as a Designer of Chairs* (1973).

The few observations of the authors of this book offer little in the way of insight. The Glasgow School of Art is described as the "first building in the modern style" and makes one wonder what the authors

*continued on page 78*



# 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 identify

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 air-conditioning; 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

## 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

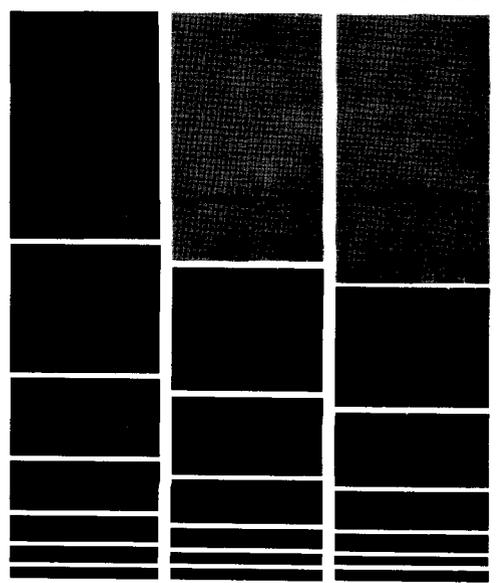
NAME \_\_\_\_\_

FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

IDENTIFY AIA MEMBER \_\_\_\_\_



## Books from page 76

think the modern style is, or was. The influence of the school on modern architecture of the functionalist-technologically oriented type is problematic. Mackintosh used large areas of glass for studios, but he hardly invented the studio window, and there is little evidence he assigned to glass any of the properties the Bauhaus or subsequent modernists did.

Mackintosh attracted a large following in the pre-World War I area, principally in Glasgow and on the continent and influenced some of the Art Nouveausts, Sezessionists and later Art Decoists. But the man who created interiors for expositions in Vienna, Turin and other places has only a tenuous connection with main-line modern architecture. The impact of his design can be judged by a contemporary description:

"Here we found the strangest mixture of puritanically severe functional form and lyrical sublimation of the practical. These rooms were like dreams: Everywhere there are small panels, gray silks, the slender vertical shafts of wood, small rectangular sideboards with upper edges that jut out, so smooth that their different parts merge into one, so straightforward that they look as innocent and serious as young girls about to receive Holy Communion—and altogether unreal."

For a good collection of Mackintosh's work, this book is a suitable purchase, but only in paperback. *Richard Guy Wilson, Chairman, Division of Architectural History, School of Architecture, University of Virginia*

**The Monticello Fault.** Archibald Rogers, FAIA. Durham, N.C.: Moore Publishing Co., 1979. 610 pp. \$12.95.

In order to understand this novel, one must first understand its author. Archibald Rogers is a Renaissance man and an architect. His interests and knowledge cover the fields of architecture, art, urban design, economics, history and politics. His chairmanship of the AIA commission on design and later his presidency of the Institute only served to increase his depth in intellectual affairs. Over a period of 10 years, he spearheaded AIA's efforts in national urban policy, confronting issues of poverty, race, pollution, politics, environment and urban design. His first novel, *The Monticello Fault*, is in many ways the sum of the parts of Rogers' diverse interests (see Feb., p. 40). He has already launched into his second book project on the cultural history of the Renaissance and beyond.

Now about *The Monticello Fault*. The story takes place in the late 1980s. It is the saga of two major conflicts: one of politics and power and the other of art and design. Both of these contests are pre-

cipitated by a series of earthquakes which strike the nation's capital, leveling the venerable old Capitol but leaving much of the capital city relatively undamaged. The first struggle is the age old one in democratic forms of government, between the Chief Executive and the legislative body for control and power. The rebuilding of the capitol on a new site in Kansas provides a unique opportunity for the President of the U.S. to separate the legislative branch from the major executive bureaus, thereby reducing the power of Congress and enhancing the power of the Presidency.

The second struggle is between two different philosophies of art and design: one in the mold of modern traditionalists, such as Le Corbusier, and the second in the mold of the emerging (dare I say?) postmodernists. The struggle goes into the depths of the culture and institutions which breed taste, art and design. The design process itself is examined as the two philosophies battle with each other in two major design competitions, one for a museum of art on the President's estate and the other for the nation's new legislative capitol building.

The architecture, both physical and political, is presented in the book as the result of a complex web of social interrelationships, personal motivations, institutional development, economic realities, historic trappings and design theory.

*The Monticello Fault* is both fable and fantasy. Try it. You'll like it! *Michael B. Barker, AICP, Administrator, AIA Practice and Design Department*

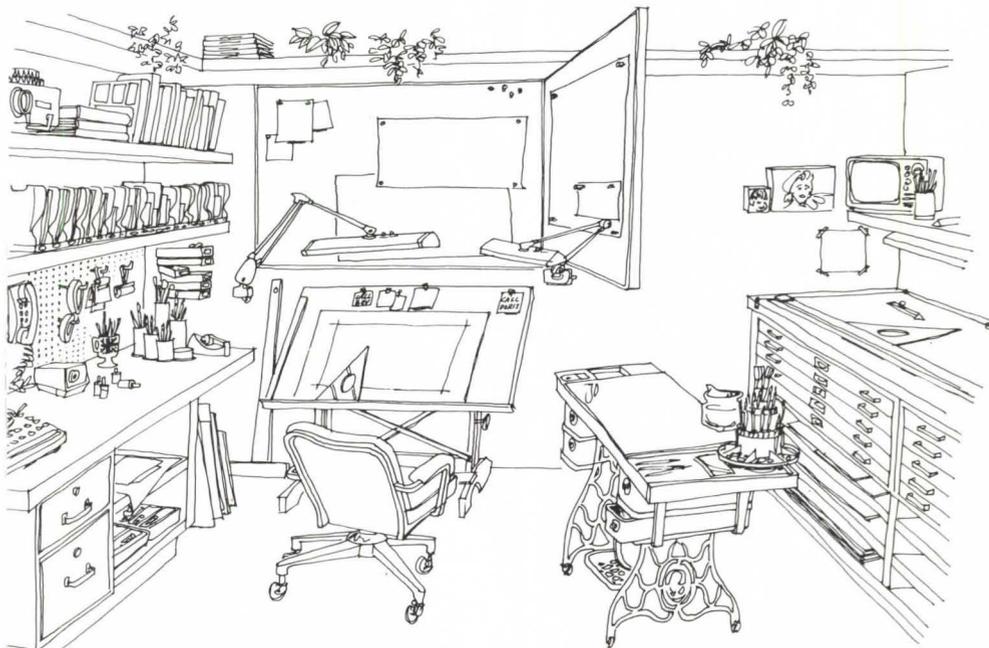
**Design Through Discovery.** 3rd edition. Marjorie Elliott Bevin. New York: Holt, Rinehart, Winston, 1977. 404 pp. \$19.95 hardbound, \$13.95 paperbound. (Available to AIA members for \$17.95 and \$12.55 from the department of publications marketing.)

The author, who is a painter of international recognition, approaches design from the standpoint of a practicing artist, presenting the text in a fluid, lucid style which is intelligible to both the novice and the educated layman. The study is not concerned with a specific period or chronology; rather, it attempts to focus on the timeless quality of design, incorporating examples and illustrations of all eras.

The basic premise is to explore two constant factors in design: (1) the significance of design as a consideration in each and every human endeavor and (2) nature as a continuous source of inspiration for the designer.

With the third edition of *Design Through Discovery*, the author underlines her intention to communicate with designer and consumer alike. For this reason, the most current edition has been totally rewritten to include technological

*continued on page 80*



**Drawing & Painting Buildings: Reggie Stanton's Guide to Architectural Rendering.** Westport, Conn.: North Light Publishers, 1978. 144 pp. \$17.95. Architectural rendering—the visual translation of an architect's concept for a project—is used, says Stanton, as a tool to sell the concept at numerous stages before the project is ever completed. The rendering is useful as well after completion in office brochures and publications. Stanton gives the basics of rendering, showing how to use pen and ink and brushes and paints to show building components, landscaping, people, moving clouds, the ubiquitous automobile. He discusses materials, tools, equipment and gives shortcuts to take in making a rendering. The book is filled with illustrations.

# Come, Get \$unstruck with us!



REVERE SOLAR AND ARCHITECTURAL PRODUCTS, INC. made a commitment to solar energy years ago. Now, as the pioneer and leader in the manufacture of solar energy systems, we want to help you get your share of bigger than ever sun dollars in America's fastest growing industry.

We offer you five systems to capture original and retrofit solar powered applications in a wide range of areas, including: **residential, institutional and multi-unit housing; swimming pools; and commercial and industrial buildings and processes.**



## CHECK THE AREA OF YOUR INTEREST

- SUN-PRIDE™** Complete domestic hot water system...from solar collectors to hot water tank. All components warranted by Revere.
- SUN-CENTER™** Prepipd, pre-wired power package for solar domestic hot water systems. No pipe cutting. No joint sweating.
- SUN-AID™** Modular solar collectors for existing buildings. Include exclusive Revere Tube-In-Strip solar absorber plate, for trouble-free performance.
- SUN-ROOF™** Structural roof and solar collectors, all in one. Collector panels mounted flush with roof line. Hardly noticeable from ground level.
- SUN-SWIM™** Specially sized solar collectors with factory brazed tubes and joints. Easy installation...uses pool circulator to move the water through the collector loop.

Chances are you're thinking of quoting on jobs involving one or more of the above areas right now. Don't miss this golden opportunity to think Revere Solar and see how your sales and profit picture could be affected. But you need all the facts first. **Call your nearest Revere Solar representative. Or fill out your name and address, tear out the whole page and mail to: Revere Solar and Architectural Products, Inc., Dept. AI89 Box 151, Rome, New York 13440. Phone: 315/338-2401.**

Name \_\_\_\_\_

Company \_\_\_\_\_

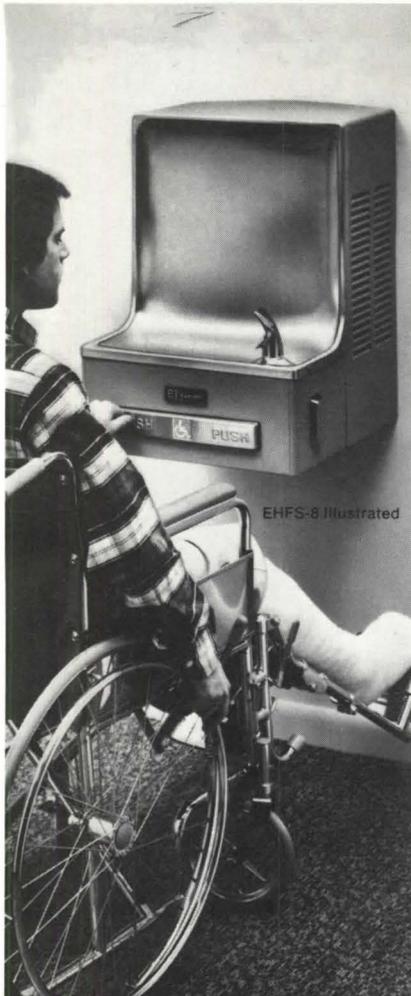
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_



# REVERE

**SOLAR AND ARCHITECTURAL PRODUCTS, INC.**  
A subsidiary of Revere Copper and Brass Incorporated  
*Circle 25 on information card*



## Specify Elkay's barrier-free line —and more!

Start with Elkay's non-pressurized storage tank—a system that prevents flooding, if failure ever occurs, because *only* stored water is released.

Other features on most Elkay models include anti-splash basin, fast recovery rate, and "open interior" design for easy installation. Complete selection of wall, floor, semi- and fully-recessed, and barrier-free applications. Write for free literature, or contact your Elkay representative.

Elkay Manufacturing Company  
2222 Camden Court  
Oak Brook, Illinois 60521



Circle 26 on information card

### Books from page 78

and educational advances prevalent in contemporary life. More than 600 illustrations are reproduced (many in color) to document changing life styles as well as monuments of days long ago. The volume is divided into four parts which analyze the disparate essentials of design: elements, materials, media and people. Throughout these four portions, Bevin voices her unique ideas synthesized with those of estheticians and practicing designers. These sources are enumerated in a lengthy and highly useful bibliography.

In the chapter on color, additive primaries and subtractive primaries are identified in their relation to light. Such a consideration is new to design handbooks, which usually discuss color mixings of pigments, discounting the effects of light. Certainly, a color theory incorporating light is potentially more useful to the designer. New approaches to staid topics are abundant throughout the volume.

In the last chapter on "Community and Environment," the role of the city planner is outlined as an overwhelming burden requiring the individual to assume the responsibilities of architect, engineer, psychologist, sociologist, social worker and, most importantly, visionary.

Perhaps Bevin's intention in writing this book is most precisely stated by Sir Hugh Casson in the Royal Institute of British Architects' annual discourse of 1976, excerpts of which are published in *RIBA Journal* (February 1977, p. 70). In discussing the education of an artist, Casson points out that "their lives have been enormously enriched and expanded by the precious possession of an educated, alert, sophisticated seeing eye." Books such as *Design Through Discovery* assist in the development of such a sophisticated eye. *Lamia Doumato, Head, Art and Architecture Library, University of Colorado*

### Art Nouveau and Art Deco Lighting.

Alastair Duncan. New York: Simon & Schuster, 1978. 208 pp. \$25.

Art Nouveau and Art Deco ideology emphasized a wide range of formalistic and technological experimentation in lighting. In a study of these designs one could reasonably expect a discussion of the artistic intentions of the designers, a review of technological innovations and a survey of both residential and commercial as well as interior and exterior lighting design. Unfortunately, Alastair Duncan's recent book *Art Nouveau and Art Deco Lighting* fails to address any of these considerations (with the exception of technological innovations) in any depth.

A major deficiency is the lack of a central focus. Duncan divides his material into five chapters. These include a cursory history of lighting techniques through the

mid-1920s, an essay on Art Nouveau, an annotated list of leading Art Nouveau lamp designers (listed by nationality), an essay on Art Deco and, finally, an annotated list of French Art Deco designers. The essays are brief and do not provide a clear understanding of the underlying ideologies of each style. Further, the short biographies of individual designers omit such essential information as birth and death dates, and only marginally suggest relationships of designers to each other.

Aside from the current popularity of Art Nouveau and Art Deco, Duncan never reveals what it is about these two styles that warrants their inclusion in the same book. Indeed, the section on Art Deco seems to have been added as an afterthought. Only three of the 33 color plates are of Art Deco lamps. The annotated list of Art Deco designers contains almost exclusively French designers. Duncan states, "Of those people who involved themselves with the genesis and subsequent growth of the Art Deco style of decorative lighting almost all were French and based in Paris" (p. 141). While France was the major center of Art Deco design, it is a grave injustice to mention only a few designers from England, Germany and Italy—and these only in passing. Virtually no mention is made of American designers. Particularly disappointing is Duncan's failure to investigate the work and influence of West Coast designers on Art Deco light design.

Associated with Christie's in New York City, Duncan has access to numerous examples of Art Nouveau and Art Deco residential lamps. Many of these are beautifully illustrated in the volume, but his primary concern with residential lights tends to steer him away from commercial and exterior designs. To discuss only Horta's famous metro lights in these essays is to ignore a vital aspect of the topic.

Finally, the text is poorly written and edited. The photographs are not keyed to the text. Structurally incomprehensible sentences abound. Of the Belgian designer Paul Dubois, Duncan writes: "Paul Dubois, compatriot and colleague of Constantin Meunier and Victor Rousseau as creator of monumental sculpture (see, for example, his bust of the Count of Mérode in the Place des Martyrs in Brussels), was also to design and execute *objets d'art*, such as vases, beltclaps, candelabra, plaquettes, jugs and paperweights, examples of which were frequently displayed at the expositions of *Les Vingt* and, subsequently, at the Salons of *La Libre Esthétique*" (p. 49).

On the positive side, the book is richly illustrated with color and black and white plates revealing the wide variety of forms and images created by Art Nouveau and Art Deco designers. These photographs are

of high quality and vividly express the change in design ideology from the late 19th to the first part of the 20th century. *Barry N. Zarakov, Virginia Historic Landmarks Commission, Richmond*

**Organizing and Managing Information in Architectural, Engineering and Consulting Firms: Analysis of a 1978 Survey.**

Kathleen L. Kalt. Sponsored by *Professional Management Journal*, P.O. Box 11316, Newington, Conn. 06111. (Type-script, unbound.) 87 pp. \$15 to *PSMJ* subscribers; \$25 to others.

Kathy Kalt, former assistant librarian at AIA and currently librarian for Skidmore, Owings & Merrill in Washington, D.C., has prepared a helpful manual for any firm which is contemplating setting up its own office library.

As she explains, when she was at AIA, the staff was frequently called upon to help firms throughout the country which wanted to know how to organize and run an office library. Consequently, the library staff sent out a questionnaire on the aspects of information management in firms. Then, when she went to SOM, she was faced with starting an office library from scratch. With the aid of a grant from *PSMJ*, she sent the questionnaire to 100 librarians. The responses form the manual's basis for information.

The manual begins with the common sense question: Is your firm ready for a library? Kalt tells how and why an office library can be of value. She describes the activities and functions of an office library, explaining the responsibilities of the librarian, the physical facilities, what it will cost and other pertinent data. Sections follow on ordering procedures, periodicals, cataloging and classification, manufacturers' literature, slides, archives, circulation, reference work, in-house communication and sources for further information.

**Return to the City: How to Restore Old Buildings and Ourselves in America's Historic Urban Neighborhoods.** Richard Ernie Reed. Garden City, N.Y.: Doubleday, 1979. 191 pp. \$8.95.

Don't look to this book for detailed advice on how to restore a historic building or neighborhood. Despite its subtitle, the book is not really a "how to" treatise directed specifically to the designer. Rather, it tells of how people are "coming home" to the city after decades of neglect by America's middle class. There are vivid descriptions of adaptive use in such diverse places as Chicago, Portland, Maine, New York City, San Francisco and Marshall, Mich.

Reed tells how to organize to save a neighborhood, how to create a new identity, how to attain design unity, how to make preservation economically feasible.

He also touches on the problem of displacement, telling of places like Savannah, Ga., where means have been taken to avoid it. There is a final chapter on how to restore a building, with a listing of things to avoid and to consider. This check list is too brief and introductory for the architect, but it will be helpful for others who want to become involved in the back-to-the-city movement.

**Design for Safe Neighborhoods: The Environmental Security Planning and Design Process.** Richard A. Gardiner. Washington, D.C.: National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Program, U.S. Department of Justice. 83 pp.

As the introduction to this report states, environmental security (E/S) is based upon the premise that urban environments can be designed or redesigned to reduce both opportunities for crime and the fear of crime, "without resorting to the building of fortresses and the resulting deterioration in the quality of urban life." The manual gives a planning process for the analysis of neighborhood crime problems and the generation of environmental solutions to the problems. It is presented as a "decision-making tool," directed primarily to those in the urban planning and design professions.

The E/S approach is on prevention of crime, its main thesis being that the design *continued on page 84*

# Granite.

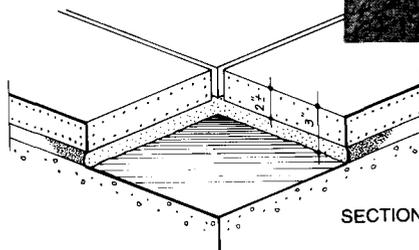
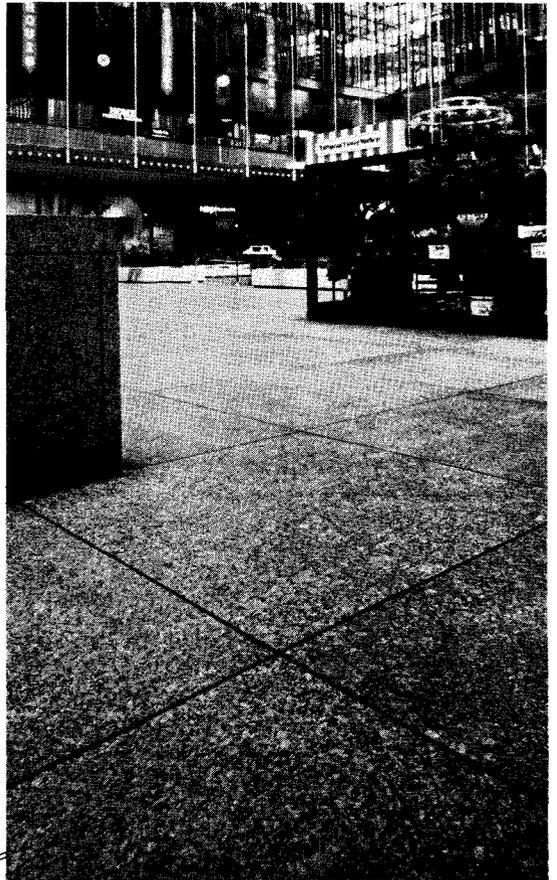
## A step up to beauty.

## A step up to wearability.

Forever-lasting beauty that requires no maintenance, adds a stepping stone to prestige, elegance. Choose from twenty colors, endless shapes and patterns, and all the expert help we can give you. Consider the character of mixing more than one color or pattern in an application.

For more information, and a packet of full color literature illustrating Cold Spring Granite products in use, call toll free **800-328-7038**. In Minnesota call (612) 685-3621, or write to the address below.

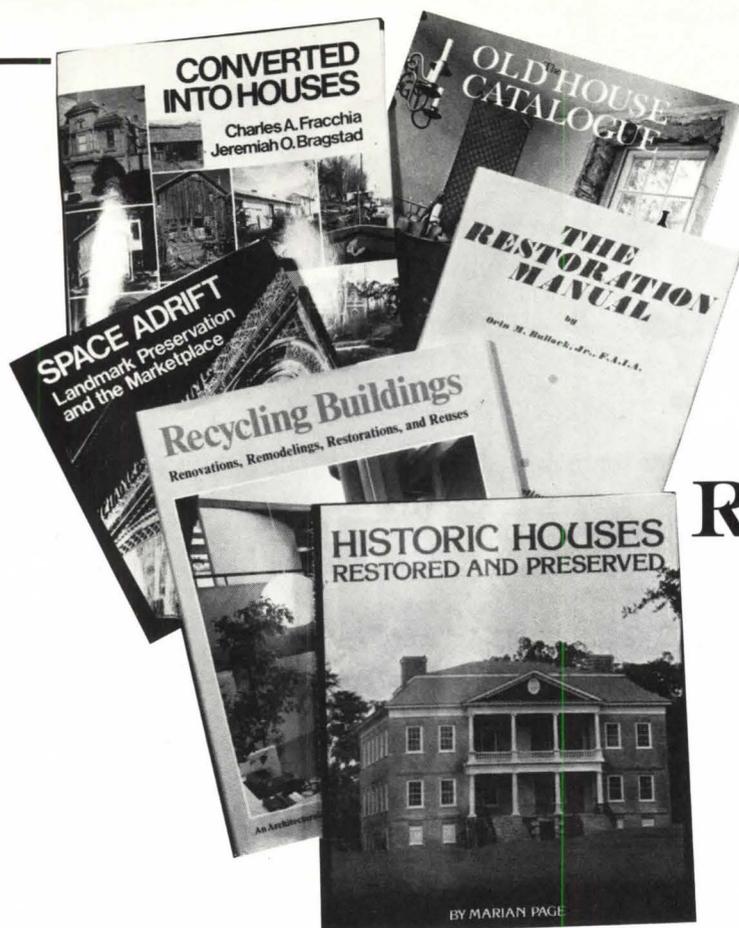
I.D.S. Center, Minneapolis, MN  
Architect: Philip Johnson & John Burgee, New York, N.Y.



SECTION



**Cold Spring Granite Company**, Dept. AIA-8A 202 South 3rd Avenue, Cold Spring, MN 56320



## Restored and Preserved

### \*Converted Into Houses

(3-M228)

By Charles Fracchia and Jeremiah Bragstad. Serves as a guide book for creative recycling of non-residential buildings into houses. Over 30 dwellings—from other buildings, both in the U.S. and abroad, are discussed in lively text. Each dwelling shown as it was and as it is, accompanied by history of use and the process of conversion. Hardcover, 96 pages, 216 color photographs (1976). \$15.00 Non-member, \$13.50 AIA member. Paperback (3-M228A) \$6.95 Non-member, \$6.15 AIA member

### \*The Old House Catalogue

(3-M299)

Compiled by Lawrence Grow. Listed under one cover are 2,500 products, services, and suppliers for restoring, decorating, and furnishing period houses—from Early American to 1930s Modern. This much needed book ends the difficult chore of finding old materials and objects, or places that fashion reproductions. Softcover, 240 pages, 400 illustrations (1976). \$7.95 Non-member, \$7.15 AIA member

### \*The Restoration Manual

(3-M115)

By Orin M. Bullock Jr. Invaluable reference on how to “read” older structures in order to preserve and reconstruct them in a manner compatible with their original design and construction. Hardcover, 181 pages (1966). \$13.95 Non-member, \$12.55 AIA member

### \*Historic Houses Restored and Preserved (3-M268)

By Marian Page. Behind-the-scenes view of the restoration of 19 Historic houses—representing four styles of architecture—their philosophies of preservation and priorities. Hardcover, 208 pages, 200 photographs (1976). \$25.00 Non-member, \$22.50 AIA member

\*Denotes books published by organizations other than AIA; may not be in accord with AIA policy.

### \*Recycling Buildings: Renovations, Remodelings, Restorations, and Reuses (3-M265)

Edited by Elisabeth K. Thompson. This lavishly illustrated collection of the most successful examples of recycling buildings will appeal to ecologists, preservationists, and most of all to architects, who will find a wealth of imaginative and innovative design ideas in the rapidly expanding area of the profession. Hardcover, 224 pages, 282 photographs, 32 in full color (1976). \$24.95 Non-member, \$22.45 AIA member

### \*Space Adrift: Landmark Preservation and the Marketplace (3-M172)

By John Costonis. Presents “the Chicago Plan,” an ingenious approach for protecting landmark buildings. Involves government purchase of a landmark’s unused development potential, followed by sale of “development rights” to a developer who can then make new buildings larger and more profitable than zoning regulations normally permit. Hardcover, 207 pages, illustrated (1974). \$10.00 Non-member, \$9.00 AIA member

#### TO ORDER

Send letter with item number and quantity you wish to order, including payment to: Manager, AIA Publications Marketing, 1735 New York Avenue, N.W., Washington, D.C. 20006.

Furnish firm name, correct mailing address, and name of person to receive order.

Checks may be made payable to The American Institute of Architects. District of Columbia residents add 5 percent sales tax.

Foreign orders must be accompanied with check or money order made payable in U.S. dollars, and include 20 percent of total amount of order for postage and handling.

# “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

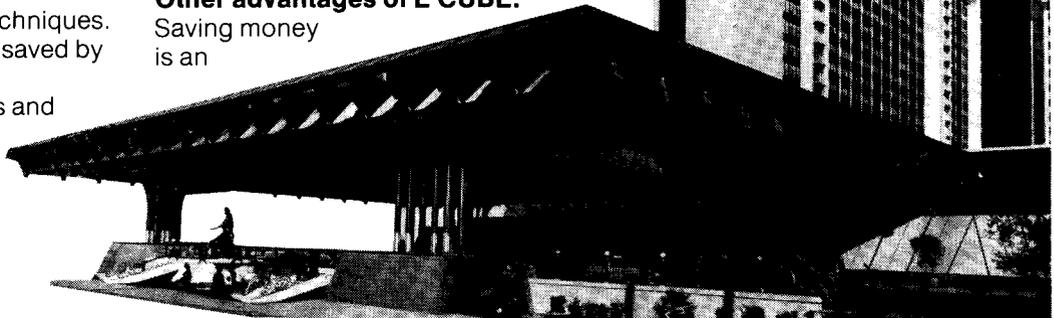
guest rooms were inadequate for optimum guest comfort.

- 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.

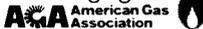
E CUBE allows the design engineer to control the results by his input of performance efficiencies.

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 Dave Sgrignoli at (703) 841-8564. 

David L. Sgrignoli, Manager Energy Systems Analysis American Gas Association 1515 Wilson Boulevard Arlington, Va. 22209	
<input type="checkbox"/> Send more information on E CUBE.	
<input type="checkbox"/> Send information on Seminars.	
NAME _____	
ADDRESS _____	
CITY _____	
STATE _____ ZIP _____	
<b>ENERGY CONSERVATION UTILIZING BETTER ENGINEERING</b>	

Circle 30 on information card

### Books from page 81

of the physical environment plays a key role in providing opportunities for the occurrence of crime, and that to reduce neighborhood crime, the citizen must be encouraged and given the means to take on responsibility for his neighborhood "beyond his front door." First, however, those who make decisions about neighborhoods have to assume the responsibility themselves of understanding how their decisions affect the potential for crime. They must create the framework that will support and reinforce the citizenry. Involved are planning decisions about such matters as transportation, residential and commercial development, recreational areas and zoning. While the manual makes no suggestion that neighborhood redesign is in itself the solution to crime, it is called an "important and overlooked tool."

The manual stresses that "territoriality" is the major ingredient in achieving a safe neighborhood. Although urban designers cannot create territoriality, they can "provide the stage for positive human behavior to manifest itself." The manual tells how. It presents a theory and then backs it up with a technical planning process and application strategy, giving four case studies where the E/S theories have been applied—with success.

The report is recommended to archi-

tecs and planners and all others who would want to know why some neighborhoods thrive and others decay into ghettos. It is for sale by the U.S. Government Printing Office, Washington, D.C. 20402 (stock no.: 027-000-00751-1).

**The Eads Bridge.** Photographic essay by Quinta Scott; historical appraisal by Howard S. Miller. Columbia: University of Missouri Press, 1979. 142 pp. \$19.

Every admirer of majestic bridges in general and Eads Bridge over the Mississippi at St. Louis in particular will enjoy this book. It opens with a portfolio of photographs by Quinta Scott, and, as the publisher says, they have caught the "subtleties of form and texture that gave this structure its remarkable esthetic impact."

The photographs are complemented by Miller's text, which tells of all Eads' trials and tribulations during the bridge's planning, design and construction. Eads had never built a bridge before, but he brought to the task inventiveness, confident that nature "was not only knowable but known and that technical knowledge and human will could master the universe. Truth was absolute, engineering an exact science."

Miller's account is not fluff. He tells the reader that histories of engineering have cited Eads Bridge as the world's first chrome-steel structure, crediting Eads

with the first major application of any kind of structural alloy steel. "He appears as a bold innovator whose foresight helped usher in the modern age of steel frame construction." But such accounts, he says, are misleading, explaining too little by claiming too much. As he points out, Eads "was a metallurgical pioneer by default."

"Chrome steel was his second choice, an unknown material that looked promising only after carbon steel had made such a poor showing." Nor did Eads himself believe that the use of chrome steel was the most innovative aspect of the project.

This is not to say that Miller takes anything away from what is rightfully Eads' place in engineering history. Miller writes: "The bridge became a milestone in the history of engineering, its builder an inspiration to generations who sought to follow his example of self-made manhood. As building art, the bridge symbolized the triumphant convergence of steam and steel in 19th century America. It was the proud product of a Victorian age that could worship both God and science. . . . A century later it still stood, a monument to what Louis Sullivan had called 'the will of the Creative Dreamer,' the almost mystical vision and power that enabled some men to transform even unorthodox ideas into realities." □

## micro computer software

- job cost estimating
- job cost accounting
- critical path method



designed by architects  
for the construction industry



MICRO  
MODE,  
INC. 1901, N.W. MILITARY DRIVE • SUITE 201  
SAN ANTONIO, TEXAS 78213 (512) 341-2205

Circle 30 on information card

## Now, a quick, economical and accurate system that helps you make certain your project meets model building code fire protection requirements

COMPUCODE is a new service of Rolf Jensen & Associates, one of the world's leading firms of fire protection engineers and building code consultants. COMPUCODE provides a concise, computerized analysis of the building code requirements relating to fire protection for your specific building project.

You provide basic building description information—occupancy data, areas, stories above grade, distance to adjacent structures, etc.—and COMPUCODE quickly prints out the applicable fire protection code requirements in outline format.

COMPUCODE can save architects, engineers, developers and code officials hours of costly professional time. It helps avoid code interpretation conflicts and speeds up the entire building design process.

For descriptive literature, costs and complete information write or call.



A service of  
**Rolf Jensen & Associates, Inc.**  
100 Wilmot Road, Deerfield, IL 60015  
Telephone (312) 948-0700

Circle 31 on information card

# October 17th is Architects Day

At last, a major building show with a special focus for architects.

Designed so you can quickly pick your specific interests, and timed so you can organize your day in advance.

Free Architects Conference Program. Leading industry experts concentrating on the latest building techniques to reduce costs without restricting design flexibility.

Exhibits. Grouped into specially focused divisions:  
1. Residential 2. Commercial 3. Energy 4. Machinery and Equipment.

**The calibre of our some 250 exhibitors makes Build Expo an important event.**

These will include nearly all the innovative giants of the building and construction industry—from ALCOA to Owens Corning, from AT&T to Kohler.

These and scores of other companies will use live demonstrations with technical experts to unveil their most significant new products and services—the ones that could affect your future for years to come.

But Build Expo '79 offers you much more than its exhibits.

**Free building and design conferences.**

Other building shows often charge you up to \$100 for their conference programs. But at Build Expo '79, a single \$5 advance registration fee entitles you to attend all the exhibits and all conferences for all three days.

Learn all you can about the latest in building technology and new products—the information you must have to compete successfully in the years ahead—all for only \$5.

## BUILD EXPO '79. OCT. 16/17/18 McCORMICK PLACE, CHICAGO, ILL.

Sponsored by The Producers' Council

Circle 32 on information card

<p>TUES., OCT. 16</p> <p><b>Contractors Day</b> (In cooperation with A.G.C.)</p> <p>10:00 A.M. Ribbon Cutting</p> <p>10:15-11:45 A.M. "Who Guarantees What To Whom"</p> <p>12:00-1:45 P.M. LUNCHEON F. Stuart Fitzpatrick Award "Your New Office Of Construction" Chairman: Mr. Thomas E. Dailey</p> <p>2:00-3:15 P.M. "Effective Methods of Contracting"</p> <p>3:30-4:45 P.M. "The Changing Building Materials Market... Who's Buying What From Whom"</p> <p>Exhibition Hrs. 10 A.M.-5 P.M.</p>	<p>WED., OCT. 17</p> <p><b>Architects Day</b> (In cooperation with A.I.A.)</p> <p>9:00-10:15 A.M. "Barrier-Free Design"</p> <p>10:30-11:45 A.M. "Solar Energy Systems"</p> <p>12:00-2:00 P.M. LUNCHEON Speaker: Elmer E. Botsai, FAIA</p> <p>2:15-3:15 P.M. "Engineered Brick Masonry Development and New Innovations"</p> <p>3:30-4:45 P.M. "Glass and Glazing Design"</p> <p>IMPORTANT: The A.I.A./P.C. Continuing Education Program will provide Continuing Education Units for participating A.I.A. visitors.</p> <p>Exhibition Hrs. 9 A.M.-5 P.M.</p>	<p>THURS., OCT. 18</p> <p><b>Builders Day</b></p> <p>9:00-10:15 A.M. "What Builders Need to Know in Today's Market"</p> <p>10:30-11:45 A.M. "How to Get Front-end Funds for Residential Development"</p> <p>LUNCHEON</p> <p>2:15-3:30 P.M. "Marketing Ideas for Better Market Penetration"</p> <p>1:00-4:00 P.M. "Truss Plate Institute and Component Manufacturers Council Market Meeting"</p> <p>Exhibition Hrs. 9 A.M.-4 P.M.</p>
---	--	--

**Exclusive at Build Expo. Product Technology Theatre.**  
Exhibitor's products that most interest you presented live every day.

**Mail this coupon today and save \$5.**

If you wait until the opening of Build Expo to register, the fee is \$10. But mail this now and it will only cost you \$5 for the entire show with all exhibits, conferences and related activities.

Build Expo '79  
331V Madison Ave., New York, New York 10017

Yes, I will be at McCormick Place for Build Expo '79. Please register me now and send my Official Badge, which admits me free to all conferences and exhibitions, and my Build Expo Information Kit.

Enclosed is my advance registration fee of \$5.

Important: Please Type Or Print

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**Note:** If you are coming with additional members of your firm, please attach a separate sheet with all above information. We will be happy to include Official Badges in their names if you will enclose their \$5 advance registration fees with your own. Please make your check out to "Build Expo." We'll be happy to answer any questions you may have about Build Expo '79. Just call (212) 682-4802.

<p><b>BUSINESS</b></p> <p><input type="checkbox"/> Architect</p> <p><input type="checkbox"/> Engineer</p> <p><input type="checkbox"/> Builder/Developer</p> <p><input type="checkbox"/> Bldg. Owner/Oper.</p> <p><input type="checkbox"/> Contractor</p> <p><input type="checkbox"/> Apt. Owner/Oper.</p> <p><input type="checkbox"/> Manufacturer</p> <p><input type="checkbox"/> Dealer/Distributor</p> <p><input type="checkbox"/> Interior Design</p> <p><input type="checkbox"/> Please indicate (Govt., Mktg. Assn.)</p>	<p><b>JOB FUNCTION</b></p> <p><input type="checkbox"/> President/Owner/Principal/Partner</p> <p><input type="checkbox"/> Vice President/General Manager</p> <p><input type="checkbox"/> Superintendent</p> <p><input type="checkbox"/> Project Manager/Job Captain</p> <p><input type="checkbox"/> Specifier</p> <p><input type="checkbox"/> Sales/Marketing/Advertising</p> <p><input type="checkbox"/> Purchasing/Plant Engineer</p> <p><input type="checkbox"/> Foreman</p> <p><input type="checkbox"/> Public Official</p> <p><input type="checkbox"/> Other _____</p>
--	--

## DEATHS

**Jack K. Burns**, Lansing, Mich.  
**D. E. Compton**, Indianapolis  
**William H. Hilton**, Forest City, Ark.  
**Laurence W. Hitt**, Titusville, Fla.  
**William D. Potts**, Gleneig, Md.  
**Lester H. Weckesser**, Cherry Hill, N.J.

**Henry L. Livas, AIA:** A senior partner in the firm of Livas & Associates, headquartered in Norfolk, Va., Mr. Livas served from 1948 to 1977 as associate professor of architecture at Hampton Institute. He was director of architectural research at Hampton at the time of his death on June 10 at the age of 67. He was the first black architect to be registered in Virginia and was licensed as well in Maryland, Missouri, New Jersey, North Carolina, Pennsylvania and Washington, D.C.

Mr. Livas earned a bachelor's degree in building construction from Hampton Institute and a master's degree in architectural engineering from Pennsylvania State University. Those who knew him say that he showed a deep concern for young black architects, as he spent countless hours beyond classroom requirements in the architectural laboratory or in his home training students in design.

He was a member of the National Technical Association, serving as the organization's president and editor of its journal. Also, he was a member of the American Society of Engineering Education; the Association of Collegiate Schools of Architecture; Sigma Lambda Chi, an honorary building construction fraternity; Omega Psi Phi, and other organizations.

## BRIEFS

**AIA and the American Hospital Association** in a joint fellowship program have named Gregory T. Oltvedt of Minneapolis and Leslie McCall Saunders of Clemson, S.C., as fellows in the health facilities design program. The fellowships provide resources for those interested in studying health facility planning, design and construction and are made by a committee of AIA and AHA on an annual basis to persons who have earned a degree from an accredited school of architecture or are in the final year of undergraduate study leading to such a degree.

**Nathaniel Owings, FAIA**, a founding partner of Skidmore, Owings & Merrill, and his wife, Margaret, have made possible the first chair endowed by alumni at Cornell University's college of archi-

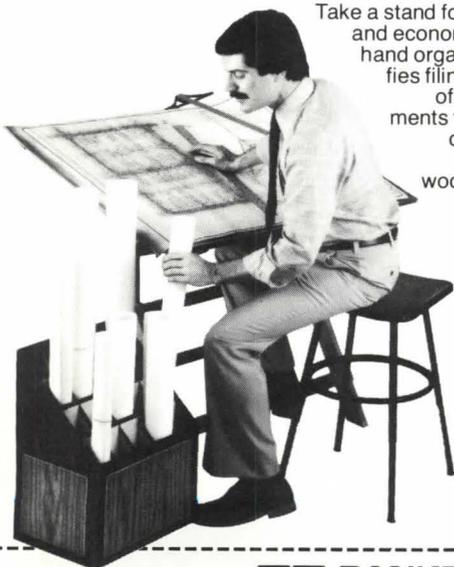
ture, art and planning. The primary funding source is the gift of a five-house compound and about seven acres of land in New Mexico, valued at more than \$500,000, which has been willed to Cornell.

**The Office of Charles & Ray Eames** is the recipient of the 1979 Royal Institute of British Architects' gold medal. Charles Eames, who died on Aug. 21, 1978, won the AIA 25-year award for his prefabricated steel house in Pacific Palisades, Calif. (see April '78, p. 11). Other Institute honors included the craftsmanship medal for furniture design in 1957 and the industrial arts medal in 1962.

**"Energy Research and Energy Information Services"** is a guide to a variety of current information on energy research, production, consumption and projections available in a choice of formats. Write for a free copy: National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22161.

**Zimmer Gunsul Frasca Partnership**, Portland, Ore., has received the national honor award in the 1979 Bell System's architectural awards program for an office complex for Pacific Northwest Bell in Portland. The program was started in

### ROLL/STOR™ Stand puts rolled documents at your fingertips.



Take a stand for convenience and economy with this at-hand organizer. It simplifies filing and retrieval of up to 20 documents from individual compartments. Roll/Stor is woodgrain-styled, made of steel-reinforced corrugated fibre-board, and comes assembled and ready to work. See your local supplier for complete details or use coupon for your FREE catalog.

Send me a FREE catalog and more information on Roll/Stor Stand.

**BANKERS BOX** records storage systems  
 Division of Fellowes Manufacturing Company  
 1789 Norwood Avenue, Itasca, Illinois 60143

Name \_\_\_\_\_ Title \_\_\_\_\_  
 Firm \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

AIA-8

### HAWS drinking fountain has wheelchair access



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

**Haws**

DRINKING FOUNTAINS

1960 to encourage "good architectural design, coincident with good planning and reasonableness of cost."

**Educational Facilities Laboratories** has been merged with the Academy of Educational Development. Alan C. Green, Hon. AIA, EFL president, has become AED senior vice president and director of the EFL division. EFL's headquarters are now at 680 Fifth Ave., New York, N.Y. 10019.

"Update," a quarterly produced by the Portland Cement Association previously distributed only to personnel in the cement industry, is now available to the concrete construction industry at large. For a free subscription, write: PCA, Update Editor, 5420 Old Orchard Road, Skokie, Ill. 60077.

**The Association of Women in Architecture** has inaugurated a program of awards to companies, governmental agencies and educational institutions that "encourage and promote women in the field of architecture and design." The association's newly elected president is Doris Power.

**Charles Burchard, FAIA**, dean of the college of architecture and urban studies at Virginia Polytechnic Institute and State University, has been awarded the Alpha

Rho Chi silver medal for "outstanding contributions to the national social-professional fraternity of architects and his leadership in education for the design professions." Only 12 persons have received the award since it was established in 1941.

**Louis Sauer, FAIA**, of Philadelphia has been named head of Carnegie-Mellon University's department of architecture.

**The nation's first 20th century district** to be entered in the National Register of Historic Places is Old Miami Beach. Efforts are being launched by the Miami Design Preservation League to make the Art Deco area "an exciting place to live in and visit."

**Gerald R. McSheffrey**, a fellow of the Royal Institute of British Architects and professor at the University of Kansas' school of architecture and urban design, has been selected as dean of the college of architecture, planning and design of Illinois Institute of Technology.

**The Bard Awards**, given annually for "excellence in architecture and urban design" by the City Club of New York, honors a piece of legislation this year. The law is the Canine Waste Law of 1978, which made it illegal for a pet's waste to remain on city streets.

**The Department of Energy**, in cooperation with four other federal agencies, has purchased solar photovoltaic power systems (at a cost of \$500,000) to be installed at 53 federal facilities. Under the photovoltaic utilization program, DOE plans to spend \$27.5 million to encourage the use of photovoltaic systems at federal facilities and to stimulate the industry. Several thousand such systems are to be purchased and installed by 18 federal agencies participating in the program.

**Richard S. Peters, AIA**, professor of architecture at the University of California, Berkeley, and a member of the San Francisco firm of Peters, Clayberg & Caulfield, has been elected president of the Association of Collegiate Schools of Architecture. As president elect, he will serve as vice president of ACSA in 1979/80 and president in 1980/81.

**Fellowships are offered by the Hospital Research and Educational Trust** of the American Hospital Association to persons "who will conduct problem-solving projects directed toward identifying and achieving improvements in the organization and delivery of health care." Information about application procedure for 1980 fellowships may be obtained from HRET, 840 N. Lake Shore Drive, Chicago, Ill. 60611. □

**NOW . . . All the benefits of Carpeting . . . with better STATIC PROTECTION than tile.**

**COMPU-CARPET™**  
Pat. Pend.

High Performance Anti-Static Carpeting

COMPU-CARPET permanently anti-static carpets and COMPU-MATS™ • Eliminate static problems in computer and terminal areas • Protect sensitive electronic equipment • Meet IBM recommendations • Provide comfort and acoustical advantages of high quality carpeting • Carry a 5-Year wear and static warranty.

See Sweet's General Builders Catalog 9.28/UN

**UTP UNITED TECHNICAL PRODUCTS, INC.**  
THE STATIC CONTROL PEOPLE

23 Southwest Industrial Park  
Westwood, MA 02090  
(617) 326-7611

**Displays Happen with Grip-A-Strip**  
Patent No. 3675782

Display posters, charts, signs, pictures, anything... anywhere

Style GBR illustrated  
Accommodates map hooks

Available in Gold, Satin, Bronze Finishes  
Style GBR - Mechanical Installation  
Style St - Pressure Sensitive Mounting

Rep Inquiries Invited

Grip-A-Strip uses a system of patented innerlocking rollers which effectively grips and holds any inserted material.

Practically designed for your client's use, Grip-A-Strip gives maximum display area per product dollar to walls in hallways, conference rooms, and offices without disrupting architectural styling. Its trim profile is unobtrusive when not in use; yet Grip-A-Strip readily displays everything from a business letter to the largest poster.

**Grip-A-Strip**  
10601 Theresa Dr. • Jacksonville, FL 32216 • Ph. 904 / 641-94341

# ADVERTISERS

## Michael J. Hanley

Publisher

## Michael M. Wood

National Sales Director

## George L. Dant

Manager, Production and Business

1735 New York Ave. N.W.

Washington, D.C. 20006

(202) 785-7300

## ADVERTISING SALES OFFICES

**Washington, DC.** (202) 785-7271

Michael M. Wood

1735 New York Ave. N.W.

Washington, D.C. 20006

**New York** (201) 729-4937

Thomas R. Crow

46 Main Street

Sparta, N.J. 07871

**New England/New York State**

(617) 632-8185

Robert L. Tagen

87 State Road West

Westminster, Massachusetts 01473

**Chicago** (312) 887-1171

Robert M. Brown

201 E. Ogden Avenue

Hinsdale, Illinois 60521

**St. Louis** (314) 569-3210

Richard D. Grater

1466 Summerhaven

St. Louis, Missouri 63141

**San Francisco** (415) 348-8222

Jules E. Thompson

1290 Howard Avenue #303

Burlingame, California 94010

**Los Angeles** (213) 378-8361

Bert Charlton

2560 Via Tejon

Palos Verdes Estates, California 90274

Acme Brick Co. . . . .	28	Nucor (Vulcraft) . . . . .	14-15
<i>Phillip Poole Associates</i>		<i>Faller, Klenk &amp; Quinlan</i>	
American Gas Association . . . . .	83	Olympic Stain . . . . .	Cov. 4
<i>J. Walter Thompson</i>		<i>Kraft Smith</i>	
American Seating . . . . .	24	Owens-Corning Fiberglas . . . . .	2-3, 18-19
<i>Hanish Associates</i>		<i>Oglivy &amp; Mather</i>	
Bankers Box . . . . .	86	PPG Industries (Glass) . . . . .	10-11
<i>The Wittleder Co.</i>		<i>Ketchum, MacLeod &amp; Grove</i>	
Ceco Corporation . . . . .	20	Red Cedar Shingle & Handsplit	
<i>Fensholt, Inc.</i>		Shake Bureau . . . . .	74
Cold Spring Granite Co. . . . .	81	<i>Cedarcrest Advertising</i>	
<i>Kerker &amp; Associates</i>		Revere Copper and Brass . . . . .	75
Columbia Lighting . . . . .	17	<i>The C. T. Clyne Co.</i>	
<i>Devine, Miller, Carlson &amp; Donaldson</i>		Revere Solar & Architectural	
Concrete Reinforced Steel Institute	30-31	Products . . . . .	79
<i>Y&amp;R/Buchen, Reincke</i>		<i>Conklin, Labs &amp; Bebee</i>	
Crouse-Hinds Co. . . . .	74	Shand, Morahan Co. . . . .	1
<i>Rumrill-Hoyt, Inc.</i>		<i>Hakanson &amp; Associates</i>	
Curtis, Nathaniel . . . . .	72	Steel Joist Institute . . . . .	71
DAP, Inc. . . . .	12	<i>Batz, Hodgson, Neuwoehner</i>	
<i>Kircher, Helton &amp; Collett, Inc.</i>		United States Gypsum Co.	
Elkay Manufacturing Co. . . . .	80	<i>Marstrat, Inc.</i>	
<i>Post, Keyes, Gardner</i>		New Testone Panels . . . . .	32
Grinnell Sprinkler Systems . . . . .	68	Sound Control . . . . .	9
<i>Hutchins/Y&amp;R</i>		Thermafiber . . . . .	73
Grip-A-Strip . . . . .	87	United Technical Products . . . . .	87
<i>Dick McGee Advertising</i>		<i>Group 4 Advertising</i>	
Haws Drinking Faucet Co. . . . .	86	Vecta Contract . . . . .	23
<i>Pacific Advertising Staff</i>			
Howmet Aluminum Corp. Cov. 2 &			
<i>Kerss, Chapman, Bua &amp; Norsworthy</i>			
Jensen, Rolf & Associates . . . . .	84		
<i>Sebstad &amp; Lutrey</i>			
Johns-Manville (Bldg. Systems Div.)	6-7		
<i>Broyles, Allebaugh &amp; Davis</i>			
Kawneer Architectural Products . .	Cov. 3		
<i>Garrison, Jasper, Rose &amp; Co.</i>			
Micro-Mode, Inc . . . . .	84		
National Trust for Historic			
Preservation . . . . .	69		
<i>J. Walter Thompson</i>			

**Subscriptions:** for those who are, by title, architects, architectural employees and to those in architectural education (faculty, schools and students), and to libraries, building construction trade associations and building products manufacturers: basic rate \$12 a year; \$8 to ASC/AIA affiliate members and student chapters (bulk orders) in the U.S., its possessions and Canada. For all others: \$18 a year in the U.S., its possessions and Canada; other countries to those who are by title, architects: \$18 a year. All others outside the U.S., its possessions and Canada: \$30 a year. Single copies: \$2.50 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*.

**Insulating  
glass  
is a  
good idea.**

**Insulating  
glass with  
Kawneer's  
Insulcast 450  
is a great idea.**



Insulating glass can be a wise investment since it pays off in terms of heat savings, fuel savings and comfort. Now, carry your good idea a little further and consider the framing system.

**Kawneer's new Insulcast 450<sup>®</sup> Thermal Framing can make a big difference.**

By adding Kawneer's new Insulcast 450 Thermal Framing your total investment in the combined system will pay back even quicker. In fact, when compared to a non-thermally broken system with insulating glass, Insulcast 450 can reduce the payback period by as much as 15%.

The faster payback is made possible since the small additional investment in Insulcast 450 can provide an additional 20% reduction in total heat loss.

**Not all thermal framing systems are alike.**

Kawneer's Insulcast 450 features the

exclusive IsoLock<sup>®</sup> thermal barrier. IsoLock positively interlocks the interior and exterior metal removing the potential danger of framing failure and glass breakage. It also reduces condensation and its damage since heat conduction is minimized to the point where the framing system stays warmer than the glass.

**Insulcast 450.**

**The designer's element.**

The clean, slim framing members of Insulcast 450 present a flush grid appearance which enhances reflective and tinted glass. Combined with seamless face members it's the perfect solution for designs that require the practicality of insulating glass and esthetics to satisfy the designer's eye.

For more information about Kawneer's new Insulcast 450 Framing System write Kawneer Architectural Products, 1105 N. Front Street, Niles, MI 49120 (616) 683-0200.

\* A Trademark of The Kawneer Company.

**Kawneer**  
**The designer's element**

*Circle 37 on information card*

# Beauty that's more than skin deep.



Architect: Wendell Lovett, FAIA, Seattle, Washington

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

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

**Penetrates to  
protect wood  
beautifully.**



Circle 38 on information card