Progressive Architecture



"The flooring I specify must fit my design—and my client's budget. That's why I ask for Azrock."





"Economy is the watchword in school construction. And with Azrock Custom Cortina, I can create versatile floor designs that fit today's tight school budgets."

Custom Cortina in Azrock vinyl composition tile makes it easy to express your creativity and offer your clients the most floor for the money. The color-chip pattern is distributed through the full thickness of each tile for extra years of durable service. Custom Cortina easily outperforms carpet and other types of resilient flooring in heavy traffic areas. And it's easy and economical to maintain.

For low-cost floors of lasting beauty, ask for Azrock Custom Cortina.

The name to ask for in resilient floors.



Custom Cortina in Azrock vinyl composition tile. 18 colors, 1/8" and 3/32" gauges, 12" x 12" size. For free samples, ask your Azrock flooring contractor or write Azrock Floor Products, Dept. 410A, P. O. Box 531, San Antonio, Texas 78292.

FORMS+SURFACES



CS201 Arthur Young & Co., Tulsa, Oklahoma Arthur Johnson A.S.I.D.

Ceilings in Wood and Metal

Forms & Surfaces directs its attention to ceiling systems. Emphasizing natural materials and superb detailing, we have created an infinite range of design possibilities with grilles, eggcrate grids, and interesting wood and metal surfaces. All are provided in easily installed modular units for use in standard T-Bar suspension systems or direct attachment to the ceiling structure.

Forms & Surfaces Box 5215 Santa Barbara, California 93108 (805) 969-4767

A promise is one thing.
Delivery is another.

R.U.S.H. Delivers

Rapid Unigroup Shipment by Haworth (R.U.S.H.) is a comprehensive inventory system that enables us to ship UniGroup panels and components in our most popular Videne and fabric colors within five working days from date of order acceptance.

Now when you're ready to move or expand or remodel offices, we're ready to fill your

order. Fast.

R.U.S.H. is designed to respond quickly to your smaller, more immediate product requirements. Without shortages or delays and at no cost pre-

mium over regularly scheduled orders. You get immediate order confirmation, and we ship within five working days. Because when we promise, we deliver.

Call the R.U.S.H. Action Line number any time. Or send for the complete R.U.S.H. product listing. Haworth, Inc., Holland, MI 49423.

R.U.S.H. Action (616) 396-7874



H/WORTH

Editor

John Morris Dixon, FAIA

Executive Editor

James A. Murphy, AIA

Managing Editor/Production Daniel H. Desimone

Senior Editors

David A. Morton, Features, Books Suzanne Stephens, Features

Associate Editors

Martin Filler, Interior Design Richard Rush, AIA, ARA, Technics Eleni Constantine, News Report

Administrative Editor

Copy Editor

Editorial Assistant

Graphics

George Coderre, Art Director Susan Newberry, Art and Production David W. Scott, AIA, Architectural drawing

Contributing Editors

Norman Coplan, It's the law Josephine H. Drummond, Specifications clinic William T. Lohmann, AIA, FCSI, Specifications clinic Alvin D. Skolnik, FCSI, Specifications clinic

Correspondents

Esther McCoy, Los Angeles Sally Woodbridge, San Francisco George McCue, St. Louis Peter Papademetriou, AIA, Houston Ralph Warburton, AIA, AIP, PE, Miami Stuart E. Cohen, AIA, Chicago Carleton Knight III, Washington Jon Hayes Carlsten, AIA, Atlanta

Publisher

James J. Hoverman

Louise Brischler, Administrative Assistant Peggy Walsh, Sales Service Wilma M. Virgil, Marketing Service Nancy Lee Gallagher, Promotion Manager Elizabeth A. Mercede, Promotion Coordinator Denise A. Vaccaro, Production Assistant Thomas Moran, Circulation Director Gloria Adams, Associate Director of Circulation Terry Makowski, Circulation Manager E.M. Dwyer, Customer Service Manager

Penton/IPC

Progressive Architecture (USPS 485-890) is published monthly by Reinhold Publishing, A Division of Penton/IPC. Philip H. Hub-bard, Jr., President; Harry I. Martin, Vice-President. Penton/IPC. Thomas L. Dempsey, Chairman; Sal F. Marino, President: N.N. Goodman, Jr., Benjamin L. Hummel, Joseph Lipka, Paul Rolnick, **Executive Vice-Presidents**

Executive and editorial offices, 600 Summer St., Stamford, Conn. 06904 (203-348-7531).

Subscription information:

Subscription information: Send all subscription orders, payments, and changes of address to Progressive Architecture, P.O. Box 95759. Cleveland, Oh 44101 (216-696-0300). Subscriptions pay-able in advance. Publisher reserves right to refuse unqualified subscriptions. Professional rate of \$12 per year is available to architectural and architectural-engineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields. Professionals outside U.S., U.S. Possessions, and Canada: \$25 per year. Non-U.S., U.S. Possessions, and Canada: \$25 per year. Non-professional domestic rate: \$25 per year. Nonprofession-als outside U.S., U.S. Possessions, and Canada: \$45 per year. Single copy \$5, payable in advance. When filling a change of address, give former as well as new address, zip codes, and include recent address label if possible. Allow two months for change. Send all claims to Progressive Architecture, P.O. Box 6192, Cleveland, Oh 44101.

Indexed in Art Index, Architectural Index, Engineering Index. Controlled circulation postage rates paid at Hartford, Ct 06101. Volume LX, No. 9. Printed in U.S.A. Copyright © 1979 Penton/







September 1979

Progressive Architecture

Editorial: Ethics III—Wasting not

Interior design

- 85 Designer's Saturday
- Introduction: Interior design: On the threshold 129
- The interior decade: A summary of the 1970s. 130
- 139 The 'isms' of pluralism

"Isms" are defined as they relate to interiors shown in this issue.

A corner on the world 140

FDM Productions and Evans Partnership offices by Gwathmey Siegel.

Cool, calm and collective

Bray-Schaible Design and D'Urso Design share renovated studio space.

Two Sunar showrooms in Chicago and Los Angeles by Michael Graves.

154 Ace of clubs

Lounge area of First Ave. Squash Club by Robert A.M. Stern.

Modified Modernism

Offices by Tod Williams & Associates for New York financial firm BEA.

160 The CRA amendment

The California Redwood Association offices in San Francisco.

162 Sleek revival

Johnson and Hollander's offices for Yves Saint Laurent in New York.

164 Each to his own taste

The Esprit de Corp showroom and an apartment by Peter Wilson Associates

Faux bois sans faux pas 168

A New York apartment designed by Richard Gillette.

Astir in the shopping mall

The Cook's Spoon, Aurora, II, by Sisco/Lubotsky and Stuart Cohen.

172 Hot dog heaven

Franks for the Memory restaurant in San Francisco by Richard Fernau.

- Insiders' outlook: Design professionals look at the 1980s.
- Conclusion: Reflections on a past, projections toward a future. 181

Technics

- Specifications clinic: The furnishings game 197

Providing suitable office acoustics requires sophisticated techniques.

263

Departments

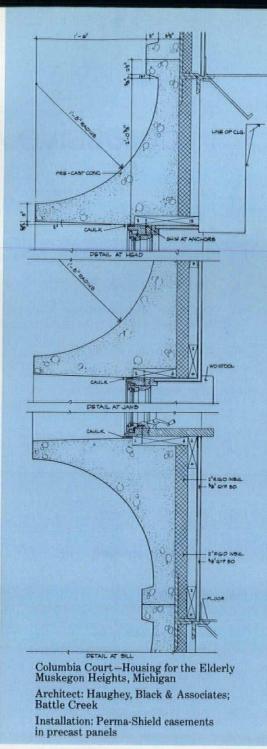
- 250 **Building materials** 10 Views
- 254 Job mart 29 News report 258 Directory of advertisers It's the law 213
- 218 Books Products and literature 232

Cover: The ancient Roman god Janus surveys both past and present in this design by Michael Graves commissioned especially for P/A. Graves's past work (p. 131) and recently completed projects (p. 148) are in this issue.

Reader service card







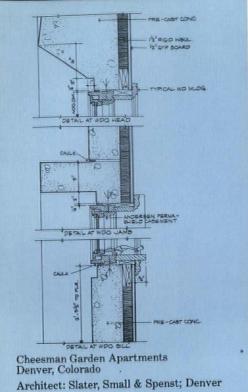




Concrete evidence

Structural harmony was only one of the beautiful reasons why these project architects chose Andersen® Perma-Shield® windows.

They also knew Perma-Shield windows have many of the same long-lasting qualities as their concrete surroundings. Andersen's tough, protective sheath of rigid vinyl won't rust, pit or corrode. Won't need painting every few years. The architects also liked how easily Perma-Shield windows install into concrete and masonry. And how they keep occupants comfortable while keeping fuel and maintenance costs down. Andersen Perma-Shield windows are made of wood, sheathed in vinyl and built two times more weathertight than industry air-infiltration standard I.S. 2-73 to help seal out dust and drafts. Help seal in comfort.

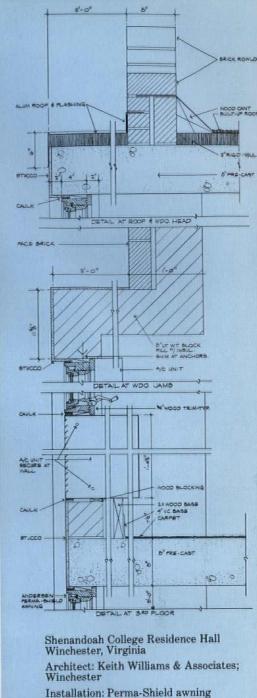




Installation: Perma-Shield casement operating and fixed units in precast frames







windows in masonry frame, with stucco facing

of Andersen beauty.

And with double-pane insulating glass, Perma-Shield windows can reduce conducted heat loss through the window area by at least 47% (compared to single-glazed units without storms).

Why not cast your next design around any of the six Perma-Shield window and gliding door styles? They're all strong evidence of Andersen beauty, comfort, low-maintenance and fuel-savings.

Need more evidence? See Sweet's, File 8.16/An. or call your Andersen dealer or distributor. He's in the Yellow Pages under "Windows." Andersen Corporation, Bayport, MN 55003.

The beautiful way to save fuel*

Andersen Windowalls





Integrated Ceilings gets technical.

Introducing Linea, the brand new ceiling with the high-tech attitude.

Brightly painted baffles are hung below the structural ceiling. Piping, air vents and utility systems are painted out black. Lighting comes from down lights, track or both.

The look is quite bold.
However, your client may
not be. In that case, Linea becomes a more conventional
luminous ceiling simply by laying inexpensive light diffusers



Integrated Ceilings, Inc.

on the grid above the baffles, with fluorescent strips providing the light from above.

Either way, Linea is a handsome, one-directional look that's flexible, easy to maintain, easy to specify, damage resistant and surprisingly affordable.

Linea. High-tech up high. From Integrated Ceilings. Send for information.

We don't just have your ceiling. We've got your color. And if we don't, we'll do a little mixing. And then we will.

2231 Colby Avenue, Los Angeles, California 90064 (213) 478-0043

Ethics III Wasting not

September 1979

Design professionals are in a position to disclaim any major responsibility for allocation of our resources. Buildings, after all, consume only a fraction of our materials and energy, and our society is still jamming its superabundant highways with fuel-guzzling vehicles, while planes circle above our congested airports; millions of Americans still relax by roaring powerboats across our waters or skimobiles across our winter landscapes.

The only area in which architects in practice can be sure to help society conserve its resources is by reducing the energy demand of structures and their furnishings. They can design building envelopes that are not energy sieves; they can make possible the use of natural lighting and ventilation, or the artificial lighting of one desk without lighting up a whole floor. But even here, it is largely up to the occupants to adjust blinds and thermostats or flick light switches as they leave; with computer controls, someone must keep them working effectively.

When it comes to the resources consumed in construction, the situation becomes too complex for the architect to grasp. A few years ago, many were concerned that the demand for wood was leading to ecological destruction of forests and streams. Now they must concede that wood is one of our few "renewable" resources. Now that scarcity of fuel is a preoccupation, we've become aware that our plastics are synthesized out of petroleum components, that metals, glass, cement, and brick demand great amounts of energy in their production. Then varying amounts of energy are needed to transport materials to the site and put them in place.

Ideally, the architect could best serve the interests of society by calculating—through some unthinkably intricate computer programs—just how each building could be built with the least drain on the resources ranked as most critical to our future. Such a calculation would take into

account the possibility of substituting labor—which seems, at least statistically, to be overabundant—for mechanical power.

In reality, of course, all of these myriad calculations are made by that ubiquitous, inscrutable mechanism known as the market. The market constantly weighs the relative availability of petroleum-derived synthetics, of stone, of sand, and of innumerable other building constituents, of transportation, of labor, etc., and comes up with evaluations in dollars that should reflect the relative importance of these resources to our survival. But the market is warped by innumerable instances of regulation, subsidy, price-rigging, tax inequities, labor-protecting clauses and export-import policies. Besides, the market has a notorious lack of foresight, hardly sensing shortages until they occur. But, having no better gauge, the architect might as well assume that whatever costs the least to build and operate represents the least drain on our crucial resources.

One step the practicing architect can take in the interest of resource conservation is to ask, "Is this construction really necessary?" Does the client really need new facilities, or would a software solution—a reorganization of activities serve the purpose? If the architect is even asked whether a new facility is necessary. he faces an unaccustomed ethical dilemma. It takes exceptional integrity to say, "Consolidation in one new facility will not significantly improve the function of your organization." Can the architect trust his judgment in such situations over the client's presumed expertise? And won't some other architect get the job, anyway?

What the architect definitely can do to save resources—with the confidence of his own expertise—is to say, "The space you need could be best obtained in an existing building." This kind of advice American architects are now giving quite regularly, and the results are a genuine

conservation of old structures and of resources that would otherwise have gone into unnecessary new ones. But this is not an entirely altruistic position: design for remodeling and rehabilitation is quite remunerative for the professional.

The broader questions of resource allocation can be addressed by architectural professionals as a *group*, working through their organizations. The American Institute of Architects has made its influence felt in Federal policies regarding reuse of old buildings, for instance, and striven for building energy policies that would stress real energy saving through design, rather than simplistic rules—on percentage of glass area, for instance—that might actually obstruct conservation.

On the question of energy sources, the AIA seems to recognize an obligation to oppose environmentally threatening processes, but a resolution condemning nuclear power plants, introduced at this year's AIA convention, was rephrased into a general one about energy policy; judging the risks of reactors was considered beyond the membership's expertise. AIA should not, however, let its responsibilities for environmental quality rest there; it should support an unbiased study (perhaps cosponsored with other organizations) to analyze this critical questionand the risks of alternative sources, such as coal and oil shale—with the authority AIA cannot find within its own ranks.

In the development and allocation of our resources, decisive power must be conceded to economic and political processes. But the market has no conscience at all and governments—alas—all too little. Architects and other environmental professionals must press for the rational management of the resources on which our future depends.

John Maris Dife

Height restriction calls for unusual design approach
...steel helps provide most economical solution



How do you build a 136,558-sq-ft building on a 7.5-acre lot that's restricted by a three-story height limitation? The builders of this project, Bannockburn Executive Plaza, Bannockburn, Ill., solved the problem with a steel-framed, "Y"-shaped structure featuring 30-ft-sq bays.

bays.

"We considered most of the alphabet before settling on a basic 'Y' configuration," reports Harry Dolan, vice president for the developer, Terracom Development Group. "Ideally, a building with this much area requires about nine stories to insure optimum floor layout and depths. The challenge was to compress this height to only three stories, yet leave the site open with good sight lines."

Preliminary framing analysis (PFA) requested

Early in the final design stage, the project's structural engineer asked Bethlehem to prepare a PFA based on a 30 ft x 30 ft bay size. Earlier, the designers conducted a similiar study on a concrete frame.

After the results of both studies were compared, the steel frame came away the winner. The structural engineer

reports, "Structural steel proved to be the best solution because of its economy, light weight, ease in spanning the 30-ft bays, and speed of erection." The frame was erected in about 10½ weeks at a cost of \$5.35 per sq ft. The unit weight of the steel frame was 7.5 lb per sq ft.

Construction economies were attributed to the ease by which the utilities and mechanical systems could be installed within the steel frame. Also, structural steel simplified the framing for the cantilevered balconies and the roof skylight in the center atrium.

Composite construction

ASTM A36 beams and girders are designed as simple beams. Lateral wind forces are resisted by beam-column moment connections utilizing Type 2 Construction per A.I.S.C. design specification. Single-piece, ASTM A572 Grade 50 high-strength columns were used throughout. The elimination of column splices contributed to fabrication and erection economies.

The floor system consists of 3-in. composite steel floor deck topped with 3¼-in. lightweight concrete. The floor system acts compositely with floor beams spaced 10 ft on centers. The

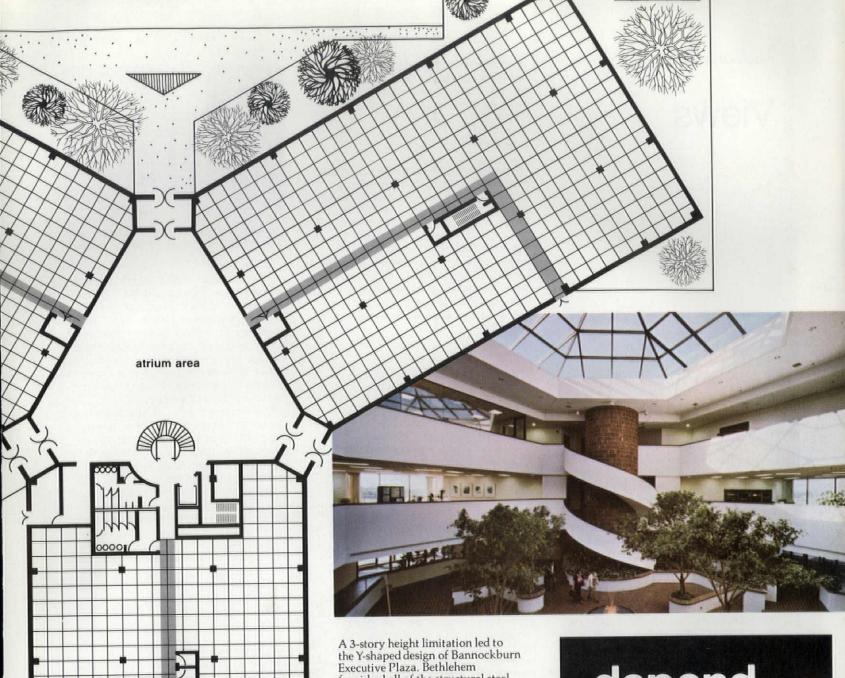
beams, in turn, are supported by composite floor girders.

Sales Engineering Services available

Bethlehem's frame analysis service team can be very helpful in determining the most economical steel frame for your building. Our PFA program is part of the broad range of technical and advisory services we offer.

Our District Office Sales Engineer and Home Office Buildings Group can work in cooperation with your consulting engineer to develop a detailed budget cost study on the total steel framing system package. The program utilizes the systems approach and includes all components of the building floor system, as well as wind and seismic/drift control. At the conclusion of the study, you are presented with a comprehensive material quantity summary and cost estimate in a convenient, easy-to-read form. No fee or obligation is involved.

For more information, get in touch with a Bethlehem Sales Engineer through the nearest Bethlehem sales office. Bethlehem Steel Corporation, Bethlehem, PA 18016.



furnished all of the structural steel for the project.

Each wing encompasses about 14,000 sq ft per floor. Entrance is gained through the 36-ft-high skylighted atrium. Structural steel simplified the framing of the cantilevered balconies and the

skylight. Floor plan of a typical level demonstrates interior space flexibility made possible by the spacious 30-ft-sq bays.



Developer: Terracom Development Group, DesPlaines, Ill. Architect: Enviro-Technics Ltd., Skokie, Ill. Structural Engineer: Joseph L. Heil, P.E., Milwaukee, Wisc. Fabricator: Rodgers Iron Works, Chicago, Ill. General Contractor: Pepper Construction Co., Barrington, Ill.



Give us a call: Atlanta (404) 522-4918 Baltimore (301) 685-5700 Boston (617) 267-2111 Buffalo (716) 856-2400 Chicago (312) 861-1700 Cincinnati (513) 984-4615 Cleveland (216) 696-1881 Cleveland (216) 696-1881 Detroit (313) 336-5500 Houston (713) 659-8060 Los Angeles (213) 726-0611 Milwaukee (414) 272-0835 New York (212) 558-9400 W. Orange, N.J. (201) 736-9770 Philadelphia (215) 561-1100 Pittsburgh (412) 281-5900 St. Louis (314) 726-4500 San Francisco (415) 465-6290 Seattle (206) 938-6800 Ask for Sales Engineer

Progressive Architecture

Views

Johnson's date with history

That an architect and client may propose a neo-neo-Gothic tower based on remote and unbuilt precedents is within their collective prerogative. The imposition of the tower and its support structures on the urban fabric goes beyond that prerogative and suggests neo-60's bulldozer planning.

The construction of mechanically repetitious façades on a pedestrian square is only a minor improvement over the surface parking which currently exists. The six-story glass arcade added to the center of the south side of Market Square, however, effectively reduces this vital urban space to the subservient role of forecourt to another empty plaza intended to "echo at a smaller scale" the square itself. (The plaza may be smaller in size but its scale is clearly monumental and forbidding in the drawings.) Even the placement of the tower has ignored the precedent established by placing some glass contraption along Stanwix St. while its neighbors are building a wall of towers.

These few formal issues, however, are incidental to the social and economic destruction imposed on the small businesses and other occupants destined to be improved by the wrecking ball.

If the architect and client insist on arrogantly imposing their whimsey on blocks of urban space, let them select one of the large tracts of land on the North or South Sides which have yet to recover from the original bulldozer planning. Richard W. Pohlman, Assistant Professor College of Fine Arts, Dept. of Architecture Carnegie-Mellon University Pittsburgh, Pa

I viewed the "PJ & PPG" article in your July issue as an overpassionate desire of the East Coast publishing establishment to justify or pacify senility with historicism and indulgent semantics. I find it extremely difficult to contain my emotions when confronted with the absurdity of the AT&T Building and this latest insult of Johnson to the profession of architecture.

When many years ago Johnson was accused of plagiarizing Mies van der Rohe, he quipped, "I copy from the best!" With the passing of the great masters, it seems that Johnson, left to his own talent, had to revert to a groping emascula-

tion of trite historical details. With the wealth of new talent in the world, to persist in publishing such travesties will only impede rather than advance the profession of architecture.

Ronald Zocher

Ronald Zocher Architect Stony Creek, Ct

The reason Philip Johnson's PPG and AT&T got so much publicity is because he is Philip Johnson; if an unknown architect did something like that it would probably never get published. Mr. Johnson is not a saint; it does not mean every building he designed is worthwhile to discuss, especially a *trash* design like PPG and AT&T.

What an insult to those architects who are honestly working on these problems which are desperately facing our nation today like energy, high inflation of construction cost and so on. Why waste your very valuable pages? Why? Why? Why? Ning Chang Architect Rockville, Md

[P/A is not necessarily endorsing the design or urban impact of either of the recent Johnson/Burgee office tower proposals (see Editorial on AT&T, June 1978, p. 7). Obviously, buildings of such size and individuality would be of editorial importance, quite aside from Philip Johnson's reputation. History will determine whether our reservations about these designs are justified.

—Editor]

Addenda on grading of wood

Commendations to you on the excellent Technics feature, "Innovations in Wood" (P/A, July 1979, pp. 90–99). A difficult subject to cover, but well done.

One omission (actually two) needs to be noted: (1) in the summary of association sources of information, the grading rules indication was left off of the Western Wood Products Association, a rules-writing agency which supervises quality standards for more production than the combined volumes of all of the other softwood lumber grading agencies shown; and (2) the American Plywood Association, which I believe holds a similar position on those products.

Malcolm Epley, Jr., Director Industry Communications Western Wood Products Association Portland, Or

[APA confirms that it does establish grading rules for plywood products.—Editor]

Atlantic City squeeze play

Although not an architect, but an engineer, I am a long-time subscriber to your publication. I could not let the enclosed go by without sending it along with my recommendation that for your next P/A Awards program a suitable category be established to recognize works such as this.

It is said that there is some merit in every project, although for some (such as this), it may be necessary to stretch the imagination to describe it in a positive manner. Perhaps it qualifies under "energy conservation for an existing structure." Certainly the elimination of sunlight from most windows and a reduction in the roof load could save money if the house were air conditioned in the summer. During the winter



In Atlantic City, the Bongiovanni house is enfolded in the wings of new Penthouse casino.

months elimination of wind and infiltration will make the house more comfortable.

Maybe the architect could be commended for making the most out of a "difficult site." The photo does not indicate the exterior wall treatment for the casino, but perhaps the architect has used similar windows and maybe even a tile roof. Under those conditions, he could be given an award for blending his building in with the character of the neighborhood.

When it comes time for the awards banquet, it may be appropriate for Mrs. Bongiovanni to present the award to the architect and in so doing describe in her own words the beneficial aspects of the casino which may be lost to the casual observer of the photo.

Actually, the situation distresses me as it will others, because it proves that an individual's rights to privacy, sunlight, and a decent environment are only rights as long as someone bigger or with more money allows it. Those associated with the project, whether casino owner, architect, or local regulatory authority, should be ashamed of themselves.

George W. Johnson, PE Johnson & Stover, Inc. Middleborough, Ma

The city monumental

That brief quotation of mine on the importance of ornament in architecture in your article (*Progressive Architecture*, May, 1979, Introduction, p. 87) recalled a long-forgotten occasion which, for some of us, seemed a quasi-miraculous one.

In the spring of 1953 Christopher Tunnard, Chairman of the Department of City Planning, Yale School of Architecture, and Lamont Moore, Associate Director of the Yale University Art Gallery, organized an exhibition called Ars in Urbe. A lengthy subtitle began "An Exhibition of Civic Art from Renaissance to Present Times in Europe and the United States..." The gravamen of Ars in Urbe was the role of classical Rome through the centuries. In fact, it was the first clear statement for the classical tradition since the lapse of the American Renaissance in the early 1930s.

A key feature of the exhibition was a trompe l'oeil triumphal arch framing the entrance done by John Barrington Bayley, designer of the new wing of the Frick Collection. His inspiration? An arch from Raphael's "School of Athens."

As is the custom a conference accompanied the exhibition, Mr. Tunnard being in command. Privileged to be one of the speakers I took occasion to prophesy the end of Modern Art, especially Modern Architecture, and I added that it was time that we began to look at the [continued on page 14]



Urethane unitary contract carpeting that stands up in heavy traffic.

They said it couldn't be done.

They said a tough, easy-to-install urethane unitary was simply impossible. And it was. Before VORACEL* C Brand

Urethane Backing

A carpet backed with VORACEL C is more durable than conventional latex or jute backed carpet. It's the first of its kind that can be installed using tack strips or by direct glue down.

Circle No. 442, on Reader Service Card

And speaking of installation, you don't need any special tools-VORACEL C urethane backing conforms to conventional contract installation regimens. It cuts cleanly and joins with virtually invisible seams. VORACEL C urethane backing is flexible and won't become brittle at low temperatures

And VORACEL C urethane backing is tough. It resists pilling and fuzzing. Mold and mildew. VORACEL C urethane backing keeps carpeting looking better-longer. Just like carpeting with VORACEL attached

padding designed for residential use.

VORACEL C urethane backing is currently available on contract carpeting by Trend and Galaxy. Come and see it at the

VORACEL C Urethane Backing. At last, they've done it.



At last! A giant step forward.

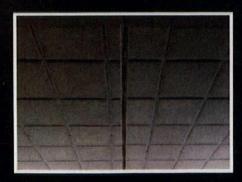


Economic indicator.









With the costs of energy continuing to spiral, here are four ways to slow down your energy consumption. All are designed to cut down heat transfer through the roof of a building while providing a sound, solid substrate for the built-up roof above.

One is J-M Fesco-Foam* roof insulation, offering outstanding thermal efficiency and important savings in both fuel and air treatment equipment costs.

Another is J-M Fesco* Board, the versatile, field-proven, expanded perlite roof insulation board that combines economy with thermal performance for both new and "tear off" reroofing applications.

Then there's J-M Fesco factorytapered Dri-Deck," that provides not only insulation but a positive, 3/16" per foot drainage system as well, using only one factory-tapered unit.

Uniquely-designed J-M Re-roof Board with waffle-patterned channels on the underside for vapor pressure relief to minimize roof blisters provides insulation right over any dry old roof.

Choose any of these J-M roof insulation products and you'll find that your investment will pay off in savings and comfort in the years ahead.

For details, consult Sweet's or contact George Constantin, Johns-Manville, Ken-Caryl Ranch, Denver, Colorado 80217, (303) 979-1000.

For single-source built-up roofing systems

JMI
Johns-Manville

Circle No. 365, on Reader Service Card

Views continued from page 10

classical tradition so marvelously revealed by Ars in Urbe. My address was subsequently published in Perspecta, a students' magazine.

I should report that the exhibition was sourly received by *The New York Times*. Aline B. Saarinen [then Aline Bernstein] was the newspaper's chief art critic at the time and, then as now, the art critics of that formidable institution enjoyed tremendous power. Mrs. Saarinen's condemnation set the cue for the attitude of the University administration to *Ars in Urbe*. It hardly helped Messrs. Tunnard and Moore.

A number of years later Mrs. Saarinen and Mr. Tunnard met. She remarked apologetically that she had been mistaken in her assessment of Ars in Urbe, and she had the impertinence to say "I was younger then." The damage had been done.

No doubt today's Paladins on Yale's staff and the "Big Blues" among the alumni would be surprised to learn that the University had a modest part in the rebirth of the classical tradition which, it would seem, is upon us at long last.

Henry Hope Reed, President Classical America New York, NY

Atlanta at the crossroads

I wish to correct an erroneous and unfair characterization of the Georgia-Pacific Tower and Margaret Mitchell Square as portrayed in your July 1979 article, "Problematic return of the Prodigal Son."

First, Margaret Mitchell Square is a misnomer and a nonentity. It is presently a confluence of six streets identified solely by a single sign. As a public space it is nonexistent. As a locale, it is nondescript.

Secondly, the design responsibility for a real Margaret Mitchell Square rests with our agency as prime contractor to the City of Atlanta. Georgia-Pacific has graciously donated to the City of Atlanta the funds necessary to acquire a significant portion of the Square.

Margaret Mitchell Square will become a public space within the context of a commercial revitalization effort known as the Fairlie-Poplar project. The Square is to become the major entry to this larger project area.

Finally, to assume a corporate mind set adverse to the interests of Atlanta, and then to expound upon that false assumption in a burst of editorial fancy is cute, but very unfair and unprofessional.

E. Larry Fonts, Vice President Planning & Urban Design Central Atlanta Progress, Inc. Atlanta. Ga

[The article expressed opinions on the design only, indicating no preconceptions at all regarding the client's "mind set."—Editor]

Photo credits

It has come to our attention that some of the photos of the Ward Bennett apartment (P/A, July 1979; p. 76, top two photos and p. 77, upper right photo) are by Tim Street-Porter.

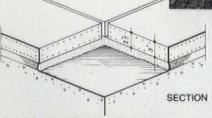
Granite.A step up to beauty. A step up to wearability.

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.

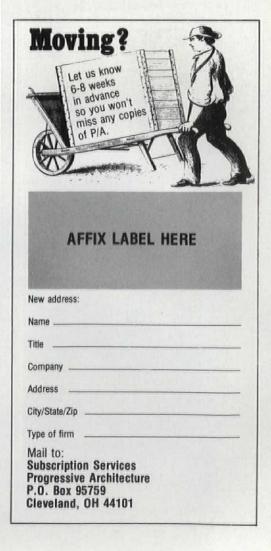




Cold Spring Granite Company, Dept. PA-9



202 South 3rd Avenue, Cold Spring, MN 56320



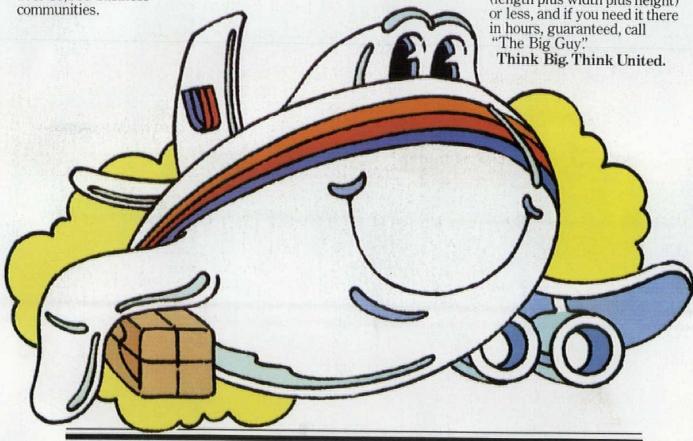
Circle No. 325, on Reader Service Card



Your small package has to get there today? Call the airline that goes there most often. United's Small Package Dispatch.

Over 1,600 direct, same-day flights. Direct service to 109 U.S. cities—more planes to more places than anybody! And we have arrangements with other airlines to extend our service to over 629 cities, over 10,000 business

Airport to airport or door to door. Choose your service. We guarantee pickup and delivery 24 hours a day, every day of the year. Airport to airport always available. Call "The Big Guy" toll free. (800) 638-7340.
Maryland call: 269-6470.
Honolulu, Hawaii, call: 836-5250.
Hilo, Hawaii, call: 935-9144.
If it weighs 50 pounds or less, if it measures 90 inches (length plus width plus height) or less, and if you need it there in hours, guaranteed, call



Call The Big Guy." More planes to more places more often.

WUNITED AIRLINES

In Warroad, Minn., we have a firm-but-polite There are a lot of design concepts that call for fine wood windows, but where standard units don't meet all of the requirements. When that happens, call Marvin. We make the world's largest line of fine wood windows, but where standard units don't meet all of the requirements. When that happens, call Marvin. Special request. We also offer beautiful trapezoids and triangles is so that the policy of the property of the policy of th

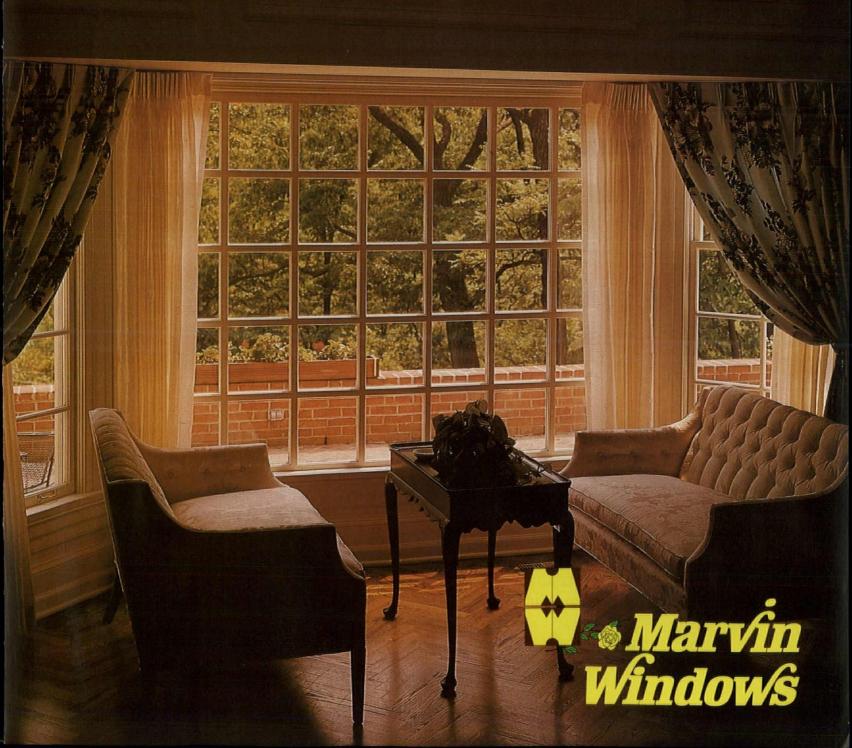
line of fine wood windows,

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

triangles in any shape or size you specify. These beautiful units have heavy 5/4 frames and 1" insulating glass.

Write or call for catalogs and tracing details. Marvin Windows, Warroad, MN 56763. Phone: 218-386-1430.

Circle No. 408, on Reader Service Card



THERE'S A BIG BETWEEN GAFSTAR OURS HAS A B

It's ironic. When you're about to specify a floor, all you get to see are beautiful new samples. Which gives you absolutely no idea of what the floor will look like when it really counts. In the future.

Unfortunately, that's when your clients' happiness is at stake. Along

with your reputation.

That's why with Gafstar® Contracfloor™ sheet vinyl we give you a look at its future, by showing you how well it stood up in the past.

ANY FLOOR CAN SHINE WHEN IT'S NEW. GAFSTAR CONTRACFLOOR SHINES WHEN IT'S OLD.



In this busy corridor of Brackenridge Hospital in Austin, Texas for example, this Contracfloor took a lot of abuse.

Twenty-four hours a day, for three years, patients' beds rolled over it.

Doctors, nurses and hospital staff hurried back and forth. And visitors paced up and down.

But you can hardly see a trace of wear. It's still a shining example of a

beautiful floor.

TESTS PROVE OUR FLOOR STAYS BEAUTIFUL LONGER.

The key to our beautiful-looking

floor is its tough no-wax surface.

But the leading inlaid doesn't even have one. So there's nothing to protect its pattern from the abuse it has to take everyday.

And even though the leading inlaid's wearlayer is thicker, the only gauge

that means anything is how it wears.

The Frick-Taber Abraser Test

proved it.

In 6,000 cycles abrasives significantly wore into the pattern of the leading inlaid. While they didn't make a dent in ours.

If that doesn't make an impression on you, imagine those results on

the floor.

After years of wear, your clients will still have the same beautiful-looking Contracfloor they started with.

DIFFERENCE CONTRACFLOOR AND NG INLAID. THER FUTURE.

A BRIGHT FUTURE WITH VERY LITTLE WORK.

Contracfloor gets off to a beautiful start. With many different designs and colors in widths up to 12-feet. Which means Contracfloor has fewer seams. And it's more flexible than the leading inlaid, so it's not contract the seams of the seams.

than the leading inlaid, so it's not only easier to install, it's faster too. Which makes it beautifully economical as well.

But a beautiful floor isn't worth much, unless it's easy to keep that way. And that's where Contracfloor really shines.

The durable surface is a stainresistant no-wax. Simple washing and buffing keep it clean and glossy.

Since it's solid and non-porous too, dirt and germs have nowhere to hide. Which means Contracfloor is healthier to be

around.

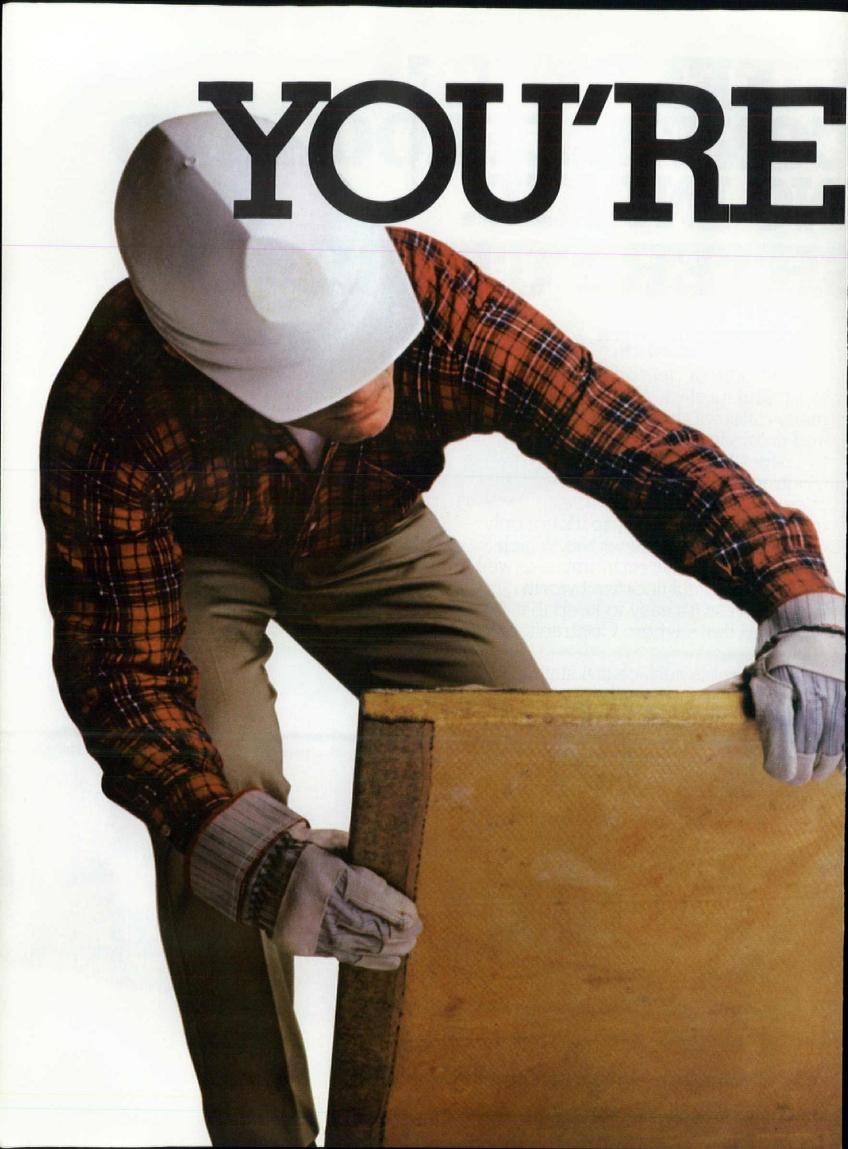
And it's more comfortable to walk on. With a Quiet-Cor® vinyl foam interlayer that makes it easy on the feet.
Which all leaves no doubt,
for a floor with a brighter
tomorrow, you'll want to
specify Contracfloor today.

GAFSTAR CONTRACFLOOR SHEET VINYL

For more information on Contracfloor, refer to Sweet's Catalogue, Industrial Construction/Renovation or General Building, Sec. 9.23 under Resilient Flooring Or call toll free anytime 800-223-0344*
*In New York State call 800-442-8169.

Circle No. 343, on Reader Service Card





WRONG.

You're wrong if you specify Owens-Corning Fiberglas Roof Insulation just to save energy.

You're right to specify Owens-Corning Fiberglas* Roof Insulation because it is the best base for your built-up roof. Of course efficient use of insulation is very important. But our roof insulation gives you that and so much more. For example, because it's Fiberglas,* it resists rotting, warping and shrinking. That provides a dimensionally stable base for your BUR System. That's just one important reason why Owens-Corning Fiberglas Insulation is the best base for your built-up roof.

The comparison chart below lists the critical features you should look for in any built-up roofing base. A cursory glance shows you Owens-

Corning Fiberglas Insulation wins going away.

One more thought. Quality Fiberglas roof insulation has been our business for over 35 years. And we're continually making it a better product through research and development. It is something that you can't put on a chart. But it's something that you can depend upon from Owens-Corning. Learn more about Owens-Corning Fiberglas Roof Insulation. Contact your nearest Owens-Corning office today, or write to

H. A. Meeks, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

FIBERGLAS

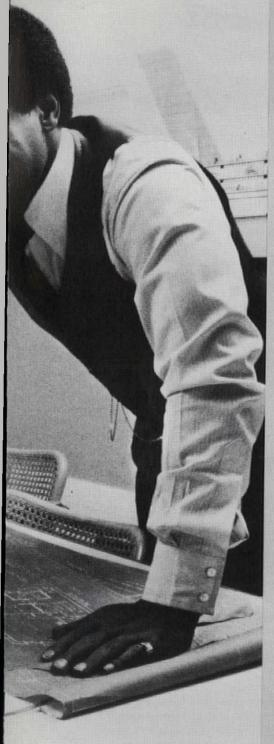
WHY OWENS-CORNING FIBERGLAS ROOF INSULATION IS THE BEST BASE FOR BUILT-UP ROOFING

| 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- Coming Fiberglas Roof Insulation | √ | ✓ | √ | √ | / | √ | √ | √ | / |
| Owens- Corning Fiberglas Furi® | / | / | / | | / | / | | | / |
| Perlite | | | | | | | | / | / |
| Urethane | | | | √ | / | / | | | |
| Composites | | | | | | | | | |
| Wood Fiber | | | | | | | | / | |

Hold a meeting



in Chicago. From L. A.



Problem There's never been a construction job that didn't require some mid-course adjustments in design, schedules, or materials. And since several

parties are involved, to discuss and agree to the changes, a meeting is often needed.

Which means travel costs, time lost, other projects delayed, profits eroded by reduced productivity.

Recognize that meetings are a form of communications, and you'll see ways the Bell System can help.



Time is money
—going and coming.

"As you'll notice

Solution Many architectural and engineering firms use teleconferencing to handle those inevitable follow-up problems. With significant savings in professional time, cost and trouble.

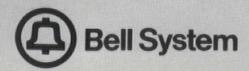
The simplest form is the conference call. One involving several parties at several locations can be arranged by an operator—or often by just pushing buttons.

With speakerphones or portable conferencing equipment, many "attend," with full give-and-take. Add facsimile machines, and you add the rapid exchange of documents, drawings, diagrams, and photos.

In any case, you've served your clients well, with ease and convenience. And travel costs go down while professional productivity and billable time go up.

If you haven't talked teleconferencing with your problem-solving Bell Account Executive lately, your company is missing something.

The system is the solution.



"I need a really reliable door.



That's why <u>now</u> lalways specify Clark."

A door that needs constant maintenance is an expensive nuisance.

A door that doesn't open or close properly can tie up a whole plant — and waste expensive cooled or heated air.

It's something most people don't realize until it's too late — a door can be the most critical part of a plant's material handling system.

Clark doors provide the constant access you need to keep your plant moving. Our components are tested at least one million times before they're specified. We insist that they must require virtually no service at all. The result — doors that can operate in excess of 1,000 times a day. On the lowest maintenance schedule in the industry.

Because our doors are urethane-filled, their insulation efficiency stops virtually all energy loss through heat conduction. In most cases, they'll save enough on energy alone to pay back the purchase price within a year.

Call or write us today for a catalog showing the complete line of reliable Clark doors.

Clark Door Company, Inc. 69 Myrtle St., Cranford, NJ 07016 U.S.A. Tel: 201/272-5100 Telex 13-8268

Clark Door Ltd. Willow Holme, Carlisle CA2 5RR, England 0228-22321/2; Telex: 851-64131



Clark Door of Canada, Ltd. 46 Torbay Road, Markham, Ontario L3R 1G6 416-495-1292 & 1892; Telex: 06-986840

Nippon Clark Door, Ltd. Toko Building, 4-6, Honcho Nihonbashi, Chuo-Ku, Tokyo 103 (03) 661-1328-9 In 1978, customers and staff started giving this department store carpet a 7 day-a-week workout.



But after 2,000 days, the specifier knows this carpet will still be bright and beautiful. That's Beauty & The Bottom Line.



For further information on Bigelow Contract Products, see our insert in your Sweet's Catalogue. Or write or call for our "Proven Performers" Booklet:
Bigelow Contract Department, Bigelow-Sanford, Inc., P.O. Box 3089, Greenville, SC 29602, 803-299-2000.

Name

Title

Address

City State Zip

Beauty up front, performance down the line.

A SPERRY AND HUTCHINSON COMPANY PA-9/79

A three-color stripe and coordinated solid loop pile carpet, in a Dow-Badische blend of acrylic/nylon fibers, specially woven by Bigelow to meet the design criteria of Hess's Department Store, Harrisburg, Pennsylvania.

TO WAL

Reed is the largest wallcoverings dis-tributor in the United States. Our broad product line includes everything from the most exotic hand prints to good old tried-and-true. Papers, light and heavy-weight vinyls, metallics, mylars, strippa-bles, pre-pasteds, fabrics, whatever.

You won't believe so many choices could come from one source. (When you maintain a multi-million-roll in-

ventory, it's easy.)

Moreover, our prices are competitive, and our delivery is simply beyond compare. (With 11 strategically located

distribution centers across the country,

it's a snap.)
We're ready when you need us — for service, for advice, for selection, for help of any kind.
So next time you're working out a wallcoverings plan — or specifying a wall-

WALLCOVERING



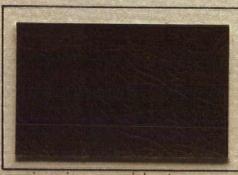
reception area



president



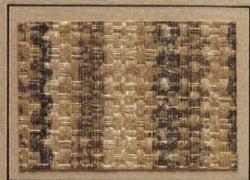
office manager



senior vice president



corridor



restroom

coverings supplier — remember Reed. We have great wall to wall ideas for just about any wall you could suggest.
Call our nearest regional office and let's talk contract together. In Atlanta, Georgia, it's 404/876-6367. In Dallas, Texas 214/747-9011. Chicago, Illinois

312/569-2290. Los Angeles, California 213/266-0330. And Philadelphia, Pennsylvania 215/638-4950.

Circle No. 387, on Reader Service Card

Sunworthy, W.H.S. Lloyd, Bolta, Dwoskin, Ultra Tex, Reed.





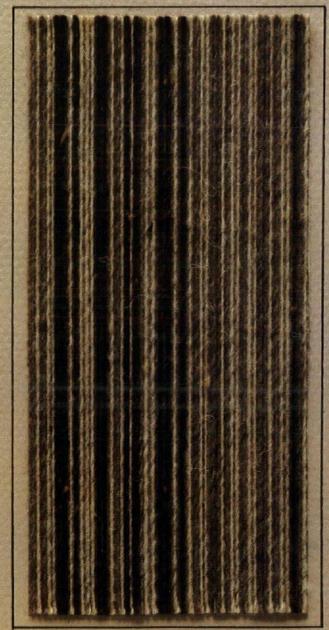
production manager



account executive



bookkeeping



board room



News report

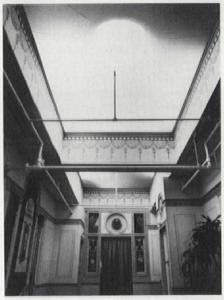
Tents for interiors, ellipses, and music

How to top off a fabulous illusionistic loft, a coordinated piece of architectural and painterly trompe l'oeil, whose elegant interior by architect-owner Peter Nelson integrates murals by Richard Haas? (See p. 129 and P/A, Sept. 1977, p. 94.) The industrial skylights of the Canal St. loft building seemed a bit heavy and metallic for the subtle Adamesque interior. The solution, completed in January 1979, was to install a translucent tent, or rather "vela" (the word comes from the Latin for membrane), an interior canopy in eggshell white which harmonizes with the gentle Palladiana and painted vistas on the interior, while providing a soft, evenly diffused illumination.

The architects of Nelson's "vela" were Future Tents Ltd., a four-man New York firm that seems to think tents are an architectural answer to the nomadic lifestyle of modern times. Perhaps they have a point. Some of their other recent projects demonstrate that tents offer flexible responses to public as well as private, exterior as well as interior, situations. Other firms make bigger and more expensive fabric structures, but few come up with such practical and imaginative solutions.

All this summer, in Washington, DC, the 10,000 daily visitors to the White House waited, in inclement weather, on the Ellipse in the shelter of five Future Tents evocative of Camelot. (The theme seems outdated, but probably it's hard to make a tent that looks like a peanut.) The double-spired sky-blue forms, each topped by ten colored windsocks, are, in fact, designed for maximum curvature, to make what the designers call "a more voluptuous surface as well as a more effective one."

The tents, which cost a total of \$50,000, replace five ill-fated earlier tents designed by the National Park Service and erected



Vela softly lights Nelson interior, Haas murals.

for the Bicentennial. Fabricated without a tailored cutting pattern, these poorly engineered structures ripped and blew away in high winds. The new tents, put up in early May, are to be dismantled in mid-September and stored for use next year.

The most prominent Future Tent erected to date is that constructed on the west lawn of the U.S. Capitol for the National Symphony Orchestra's Summer Series. Designed and fabricated for \$25,000, this tent is made of the same vinyl-coated polyester as the Ellipse tents were. Unlike the smaller tents, this structure is not fitted into a frame, but is supported by 40-ft steel truss masts, resulting in a freer form. The tent, 50' x 80' x 40' tall at its highest point, was put up for each of the summer concerts and subsequently dismantled.

Engineering consultants to Future Tents for the NSO tent and the Ellipse tents were Buro Happold of New York, and acoustical consultants for the NSO tent were Jaffe Acoustics of Norwalk, Ct.



Tournament style tents encircle Ellipse, free-form NSO tent stalks the Capitol lawn.



Rights to reproduce Wrights

"Frank Lloyd Wright designed this porcelain for Japan's Imperial Hotel. Now it can be yours." runs the ad. For the first and only time, a reproduction of the dinnerware Wright designed for the cabaret of the Imperial Hotel in Tokyo is being issued in a limited edition. Surprisingly, the initiative did not come from Taliesin West, the architectural studio founded by Wright, but from an enterprising Chicago architect and Wright fan, Thomas Heinz, editor of the Frank Lloyd Wright Newsletter. Backed by

Chicago businessman Sidney Bowen of Consolidated Foods, Inc., Heinz persuaded Noritake, the Japanese manufacturer who made the original dishware, and the Imperial, which controls the use of the decal, to allow this reproduction, but no later one. Strangely enough, when Taliesin had approached Noritake with the same request in 1967, the manufacturer claimed to have destroyed the decals.

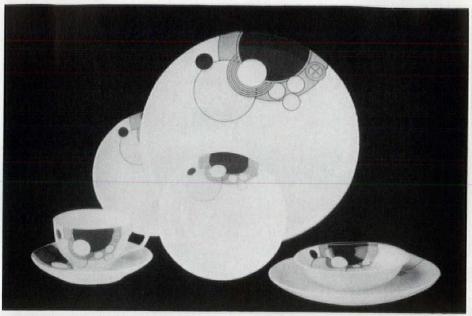
Taliesin is furious with Heinz for successfully appropriating what they consider to be their inheritance, but Heinz appears to be within his legal rights. Wright copyrighted little of his work; the design for the dishes was apparently never copyrighted in the U.S. Even if it had been, such a copyright would have expired by this date. Moreover, the reproductions are clearly differentiated from the originals and no registered trademark is used.

However, by stamping the dishes with "the characteristic red square which has come to be known as Mr. Wright's signature"—as the ad puts it—the reproductions strive for a note of Wrightian approval. In fact, the red square with a black border with which the new dishes are marked is not the solid red square that Wright used as a stamp. It resembles the version of the red square that he used on his architectural drawings: a black square colored in red, so that it appeared to be a red square bordered in black.

Battle lines are forming over the use of the red square in any form. Bruce Pfieffer, the architectural historian in charge of the Frank Lloyd Wright Memorial Foundation, fumes, "If they use the red square we'll get them," but Heinz says insouciantly, "How can you copyright a red square?"

The place settings that the "Oak Park Collection" (Heinz and Bowen) are selling for \$175 apiece include seven of the ten pieces originally designed; the luncheon plate, demitasse cup, and saucer are missing. The reproductions are based on the version of the china that Noritake manufactured after 1953, in a somewhat heavier porcelain than the eggshell china made earlier. Noritake apparently recommended manufacturing the pieces at that date, following a request by Wright to the Imperial for some of the cabaret china. The hotel responded that they had discontinued it, but a year later, the dishes were again in production and available from the Hotel for \$50 to \$75 a set. The last set was made in 1968

Although Heinz claims that he could not find any pieces dated earlier than 1953, some of the earlier dishware (dated 1935), along with samples of the three pieces missing from the reproduced sets, is kept in Taliesin's vaults in Arizona.



China designed by Frank Lloyd Wright for the cabaret of the Imperial Hotel (reproduction).

In the pre-1953 ware, the design of intersecting and tangential circles, executed in blue, yellow, green, red, and 18k gold, folds over the lip of the cup or dish so that the circles complete themselves. An apocryphal-sounding anecdote says that Wright put the large red circle on the cup just where a lady's lipstick would leave a smear—saving her embarrassment and the hotel stains on the china.

One can only guess what FLW's reaction to the reproduction would have been, but perhaps he would have disapproved. Not so much because the dishes are being reissued independently of his studio as because, while they have no claim to being the collector's items that the originals are, they are being marketed as an exclusive luxury item.



Steelcase's Scala Regia.

NEOCON XI: Two shows in one

Like the summer solstice, NEOCON, the annual summer rite of the American contract furniture industry, came to Chicago again during June. The eleventh installment of the mammoth trade exposition seemed to many observers, however, to be not one but two shows, operating simultaneously, independently, and concentri-

cally within one another. The traditional split between the high-style faction and the business-is-business faction that has always been part of the comprehensive show seemed more pronounced than ever this year, giving rise to the two-shows theory. For want of better terms, the two shows might be characterized as the Italian NEOCON and the Polyester NEOCON.

The existence of the Italian NEOCON was made manifest at its first unofficial event: the opening of Michael Graves's new showroom for Sunar (p. 148) on the tenth floor of the Merchandise Mart, site of the three-day event. The soft murmur of Italian (and French and German) was heard among the peonies and Moët, as it would be throughout the week in the other high-style furniture showrooms. The Italian NEOCON had little to do with Italians as such (though there were a great many in attendance in Chicago this year). The epithet represents, instead, the emphasis on high design exemplified by the Italians over the past 20 years, and seems to be a good symbolic tag for other "Italian" firms, some of them more American than apple pie. Conversely, the Polyester NEOCON takes its name from the favored (leisure-) suiting of its major participants.

Rarely did the twain meet, although in some settings they were seen to glide by each other with the ease of oil and water. Tastes, of course, diverged: the Italian NEOCON occupied itself with the quest for the best new chair (result: David Rowland's striking design for Thonet, by common consent winner of the best-of-show category. His other new introduction was a fabric-covered prototype for Knoll). The Polyester NEOCON, on the other hand, seemed particularly obsessed with desk drawers this year, debating new designs including this or that component. [News report continued on page 33]

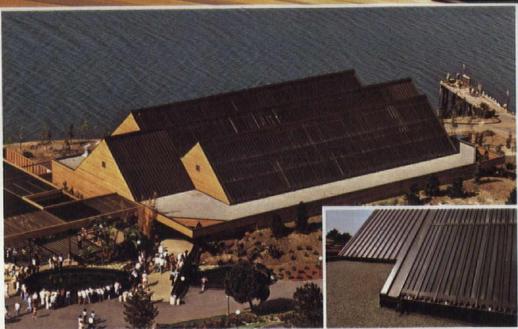
Why the architects for Sea World and the VA chose metal roofing by AEP



Project / VA Hospital
Location / Palo Alto, Calif.
Architect / Kaiser Engineers
General Contractor /
F. P. Lathrop Construction Co.
Area / 43,700 sq. ft. metal roofing

Project / Sea World Shark Exhibit
Location / San Diego, Calif.
Architect / Homer Delawie Associates

General Contractor/ Nielsen Construction Co. Area / 16,600 sq. ft. metal roofing



VETERANS ADMINISTRATION HOSPITAL architects wanted the rich look of copper roofing to complement this prestigious project. Their answer—AEP's precoated WEATHERING COPPER—pure ground copper particles liquefied in an acrylic carrier. This amazing coating, developed by AEP, ages from its bright, new-penny finish to a distinctive patina—at approximately half the "in-place" cost of copper sheet. And, it has a 20-year warranty! AEP's WEATHERING COPPER Batten System provided this project with a modern approach to traditional roofing.

SEA WORLD SHARK EXHIBIT architects wanted warm "earth-tone" roofing to blend with the natural atmosphere of the aquatic park. They also needed to integrate the roofing system with 6,000 sq. feet of solar panels without interrupting the architectural theme of the project. (This solar system heats the world's largest shark tank.) Their answer—AEP's Batten Roofing System coated with Duranar® 200 by PPG—the industry standard in 20-year warranty coatings.

All of AEP's many standard colors are applied to 24-gauge hot dipped galvanized steel G-90 ASTM A-446. AEP, the leader in quality and variety of metal roofing, also manufactures STANDING SEAM, PERMA SHAKE aluminum shingles, aluminum



CALIFORNIA MISSION and "S" Tile, along with BERMUDA metal roofing.

AEP offers design-to-completion service anywhere in the U.S.

AEP offers design-to-completion service anywhere in the U.S. For facts and detailed specifications refer to Sweets 7.2/AR. For our new '79 catalog, write or call collect.



ARCHITECTURAL ENGINEERING PRODUCTS COMPANY

Home Office: 3650 California St., San Diego, Calif. 92101 Phone (714) 295-3131 Midwest Office: 22307 Ridgeway, Richton Park, III. 60471 Phone: (312) 747-8110

"Whenever insulating concrete is right for our clients, Permalite" perlite aggregate is in our specs."



Why so many architects specify Permalite perlite concrete for roof decks:

Permalite perlite concrete, bonded to high-strength steel centering, provides ideal roof deck construction where insulation, rigidity, permanence and resistance to fire, wind and seismic pressures are vital factors. Permalite perlite insulating concrete roof decks have been exposed to the forces of hurricanes, tornadoes, high winds and earthquakes since 1949 with no records of damage. It can be poured slope-to-

drain for fast removal of storm water. And insulation can be increased substantially when polystyrene or other insulation boards are incorporated in the perlite concrete roof deck system.

Write for roof deck specification data, or see our catalog in Sweet's (3.1/Gr). Then specify Permalite perlite concrete to save weight, energy and construction time.

Permalite PERLITE AGGREGATE

GREFCO, Inc./Building Products Division 3450 Wilshire Blvd., Los Angeles, CA 90010 (213) 381-5081



News report continued from page 30

There were worthwhile events that had nothing to do with style—a lively briefing on Haworth's advanced open-office wiring, for instance, and a deftly delivered 45-minute minicourse in lighting, without commercial, presented by members of the architectural firm Smith, Hinchman & Grylls for AmSeCo. In another part of the Mart, Armstrong showed a technically elegant multimedia essay about interior space.

Showroom designs reflected-and provoked—a great deal of the polarization. Easily the most controversial new showroom was that of Michael Graves for Sunar, which caused deeply divided opinions to break forth even as the attendees began to wilt on Friday morning. Other new showrooms included the expanded Steelcase duplex, with an elaborate stairway by Harry Weese Associates linking the firm's no-nonsense new lower level, dominated by chunky columns, to Warren Platner's glassy 1970 landmark interior above. The new Angelo Donghia showroom is a curiosity that might be described as Decorator Post-Modern. All in all, NEOCON continues to be much like any other family reunion, alternately fascinating and boring. One wouldn't want to miss it, if only to be in on the continuing saga. [MF]

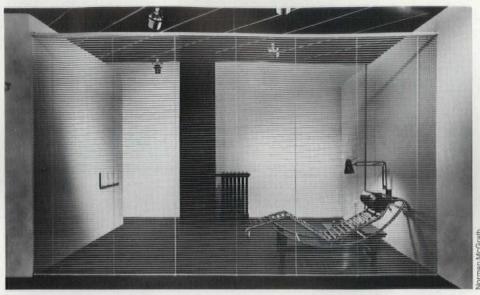
Exhibits: Introand Retro-spectives

Interiors for Photographs Light Gallery, New York May 5-June 2

Current interest in photography led Light to ask five interior design firms to create temporary model interiors for the display of photographs. The rooms included contributions by D'Urso Design, Inc., Falkener-Stuetley Interiors, Ltd., Mac II, Parish-Hadley, Inc., and Patino/Wolf Associates, Inc.

For the most part, the results had about as much to do with the effective display of photographs as do the designer-tablesetting invitationals held each year at Tiffany's. For example, the legendary firm of Parish-Hadley, Inc. (still reigned over by the dovenne of upper-class New York decorators, the redoubtable Sister Parish) offered a conference room dominated by a hideous calla-lily print chintz of the sort one felt sure had died with Dorothy Draper. Mac II's room featured a chrome-andglass trestle table (set on a striped dhurrie rug) that bore a breathless, silver-framed congratulatory note from the firm's principals, signed, "Love, Mica and Chessy."

The only room that seemed to take the alleged program at all seriously was that



Joe D'Urso's interior at Light.

by Joseph D'Urso. A minimalist cubicle, D'Urso's room was screened from the rest of the gallery by a wall of venetian blinds, which caused some nicely mysterious cross-hatching and proved that coloristic effects can indeed be achieved without the use of color. The only furnishings were a Corbusier chaise longue, a draftsman's lamp, a pair of Bang & Olufsen stereo headphones, and a small black end table on which sat the sole touch of color: a bottle of Calvin Klein nail polish (D'Urso had worked on the design of the packaging). Hung low on one wall was a 32-in.-long, Japanese-simple print of a black-andwhite Harry Callahan photograph of reeds, ravishingly effective in the spare space. This tiny room seemed surprisingly small on entering, as do many of the great monuments of Modernism, and showed with great persuasiveness that neither scale-nor quality-is a function of size.

With the exception of the D'Urso room, the only other part of the exhibition that addressed the issue intelligently was a back gallery in which was shown a small group of photographs of interiors in which photographs are displayed. Some of them, like Cervin Robinson's shots of JoAnna Steichen's Steichen-filled apartment in New York, and Norman McGrath's portrait of Charles Gwathmey in front of his superscale photomural of some years back, had merit as photographs as well, a nice compensation of multiple meanings in an exhibition that for the most part lacked even single ones. [MF]

Alvar Aalto Cooper-Hewitt Museum, New York June 16-Sept. 16, 1979

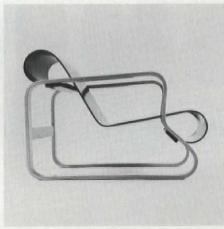
The exhibit will travel to Chicago, Houston and San Francisco in late 1979 and 1980.

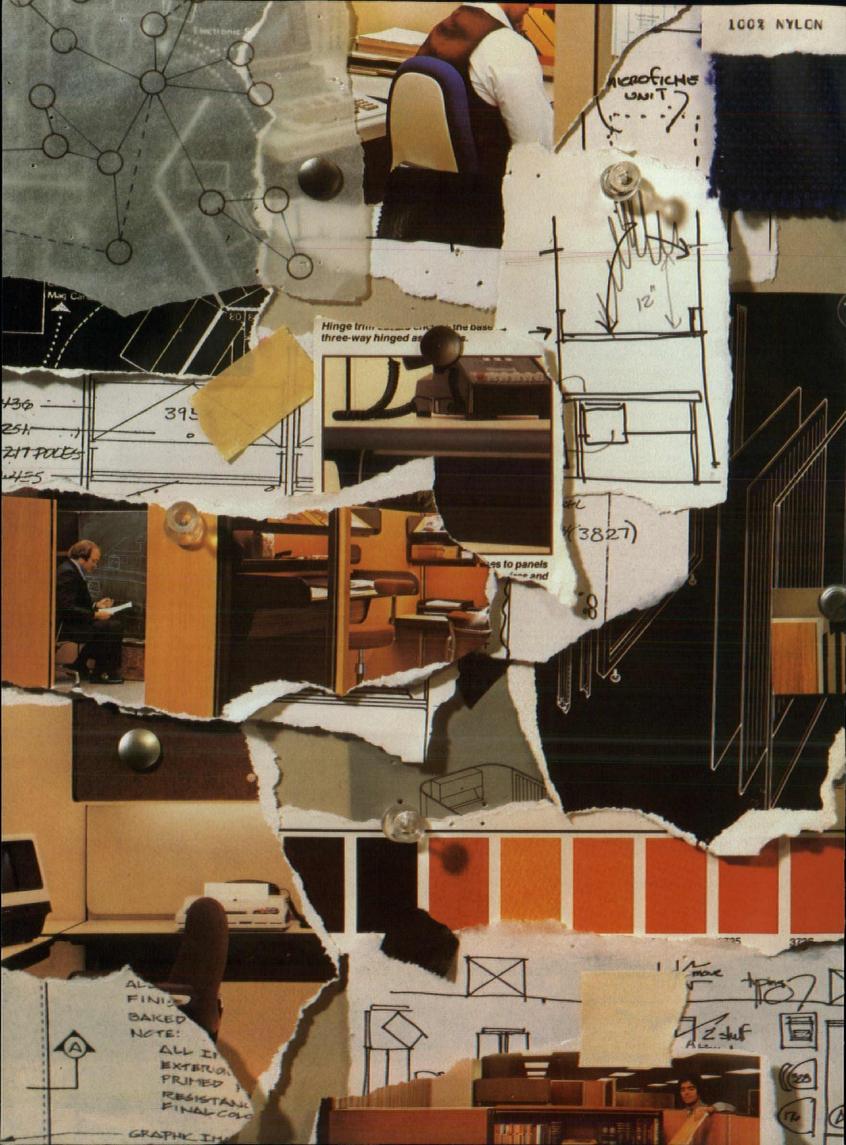
Alvar Aalto, the great Finnish architect who died three years ago, was a genius. His

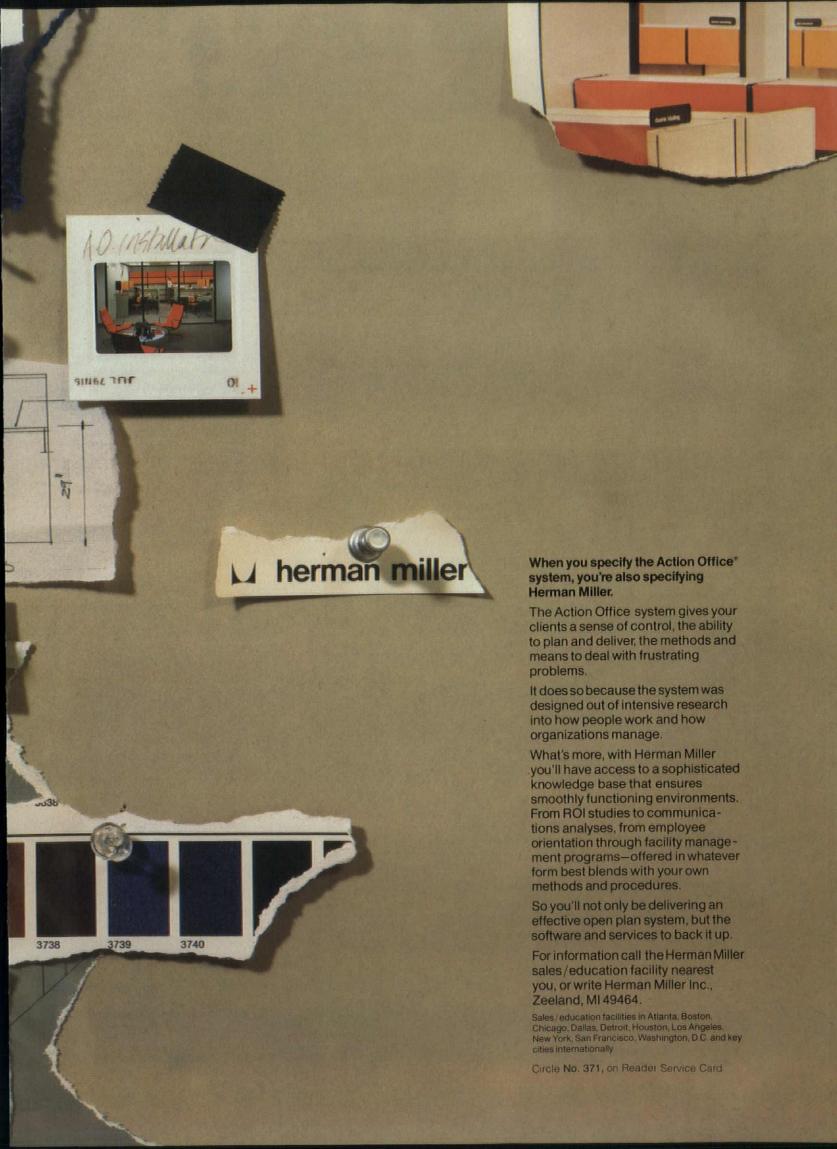
perfectly resolved buildings stand as evidence of his architectural gift, of course, but Aalto's oeuvres evince something more: that intense expressed consciousness of the human condition which is the touchstone of genius. Aalto's concern was always with "tiny man." A relatively large number of his projects were public buildings: town halls, apartment housing, concert halls, museums, libraries, schools, churches. He was extensively involved with urban design, from a plan for the center of Finland's capital, Helsinki, to one for the tiny town of Avesta, Sweden. And the formal expression of every project was a vehicle to express the philosophic concerns about which Aalto constantly wrote: how to find a human order, a standardization which would allow diversity and freedom, a rationality which remained organic.

Aalto worked for an accessible beauty. He designed chairs for the sanatorium in Paimio (1930–3) with as much care as the luxurious Villa Mairea (1938–9) for his friends. So it's appropriate and timely that a retrospective of his work be seen in this country, where his four extant works are at [News report continued on page 36]

Aalto's Scroll Chair, 1929.







News report continued from page 33



Experimental House, Muuratsalo, Finland, 1952

relatively elite institutes of higher education. In bringing this exhibition, organized by the Museum of Finnish Architecture of Helsinki, to the U.S., the Finnish Cultural Service should have done us a great favor.

But perhaps not. The poorly organized, visually mediocre, and inadequately explained exhibit does not show Aalto to best advantage. It consists almost entirely of panels, each treating a single building (a few major works get two panels). The blown-up photos, ground plans, and occasional drawings do not describe the buildings well. The photos are largely of details; the ground plans do not include or even indicate the building's context; and

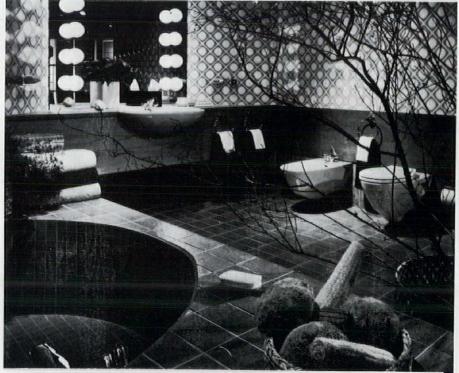
the drawings are rarely labeled at all. Aalto's paintings and sculptural essays in bent wood are scattered over the panels without identification, or any relation drawn to the furniture or buildings.

While these shortcomings are not of the Cooper-Hewitt's making, one would expect the museum to do what it could to mitigate them. But unfortunately, the installation is confusing in the extreme. There is no clear rationale for the grouping of the panels-it is neither chronological, thematic, formal, nor philosophical. Not even basic data are supplied, so that not only is the appearance of a building unclear, but it is even doubtful how much of it has been built. The most successful parts of the show are the furniture and fabric, most of which was added by the Cooper-Hewitt (courtesy of I.C.F., New York). These objects can speak for themselves better than the absent buildings can.

In short, the exhibit serves neither the general public nor the architectural community, being insufficiently explained for the one and lacking insights or new material for the latter. (For example, there are no exterior photos of two buildings completed in 1978: the Church of Riola and the parish church of Lahti.)

Nonetheless, the beauty of Aalto's design will out, and the viewer who can and is willing to provide the background and structure that the exhibit lacks might find the formal and philosophical themes that the exhibit fails to develop. The evolution of Aalto's fan shapes, for example, and the unique form they take in each project. The fanned-out plan of Wolfburg's Cultural Centre (1951-62) has a totally different context and meaning from that of the Bremen tower block built in 1963-yet both acquire form and function from their "fan" design, which links the separate spaces to a common center like the petals of a flower. Another theme might be Aalto's concern for the juncture of vertical and horizontal planes. Lessons learned from bent wood are applied to the church vaults of Wolfsburg and Vuoksenniska. Or, the overarching theme of Aalto's geometry, which, like Caravaggio's light, seems to come from within the structure, to be an expression of the forces contained within the building: those of sound, of focused attention, of reading, of prayer.

Aalto's forms express not only their social function but also their relation to the surrounding landscape. The architecture that reflects natural forms is best known—Villa Mairea, in the flat woods of Noormarkku, or the Church of Riola, among the rocky outcroppings of the Apennines. But the urban insertions are equally resonant with formal echoes of their context—the pristine blocks of Finlandia Hall in Helsinki's new center, or the [News report continued on page 41]



the finest in DECORATIVE and ARCHITECTURAL ceramic tile

AMSTERDAM CORPORATION

NEW YORK: 950 Third Avenue (corner 57th St.), New York, N.Y. 10022/(212)644-1350.
PHILADELPHIA: 2275 Washington Avenue, Philadelphia, Pa. 19146/(215)732-1492
SAN FRANCISCO: Galleria—Design Center, 101 Kansas Street, San Francisco, Cal. 94103/(415)861-3354
OAKLAND: 101 Tenth Avenue, Oakland, Cal. 94606/(415)444-6050
For full color catalog, send \$2.50 to Amsterdam Corporation, 950 Third Avenue, New York, N.Y. 10022

Circle No. 403, on Reader Service Card

omega/polaris



Stendig

OMEGA desk and cabinets with POLARIS chairs. New York: 410 East 62 Street. Chicago: 950 Merchandise Mart. Los Angeles: 201 Pacific Design Center. Other showrooms in Atlanta, Denver, Detroit, St. Louis, San Francisco, Seattle. Representatives in major cities, write or call Stendig* Inc., 410 East 62 Street, New York 10021 (212) 838-6050. Stendig Inc. a subsidiary; B&B America, a division of Stendig International, Inc.

Celotex makes the stuff the best roofs are made of.

The Pink Stuff: Thermax® Roof Insulation

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

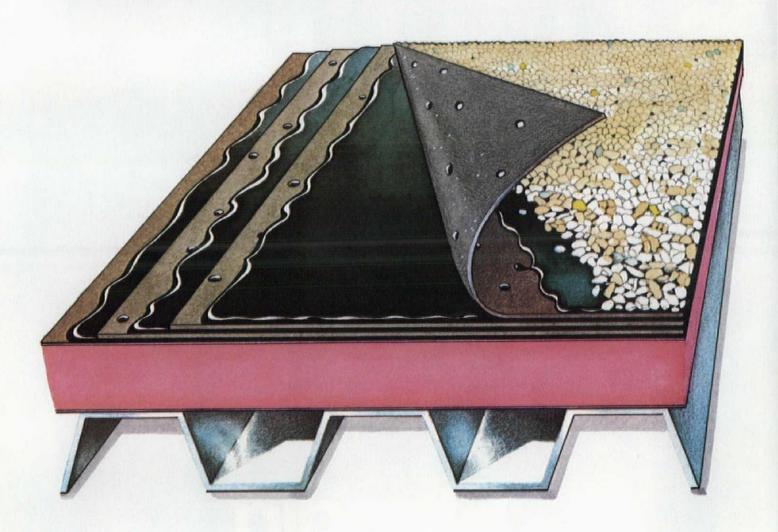
Thermax's isocyanurate foam core is reinforced with glass fibers for greater dimensional stability. It is sandwiched between two asphalt-

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

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

The Green Stuff: Tempchek® Roof Insulation

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



lightweight, easy cutting, easy handling, easy application characteristics as Thermax, and the same compatibility with hot asphalt.

Its glass-reinforced urethane core gives
Tempchek excellent dimensional stability.
And Tempchek costs less installed than the greater
thicknesses of conventional, lower-efficiency
materials required to achieve the same insulating
results. That makes Tempchek the first choice for any
non-fire-rated job.

The Stuff With Holes In It: Celotex Vented Ply Sheet

When laying a roof, inadequate brooming is one of the major sources of roofing problems. Sometimes even the most careful brooming can trap gases, vapor and moisture that can cause blistering later on. Celotex Vented Ply Sheet has 1/4" holes that allow gases, vapor and moisture to escape during application, so the whole brooming process

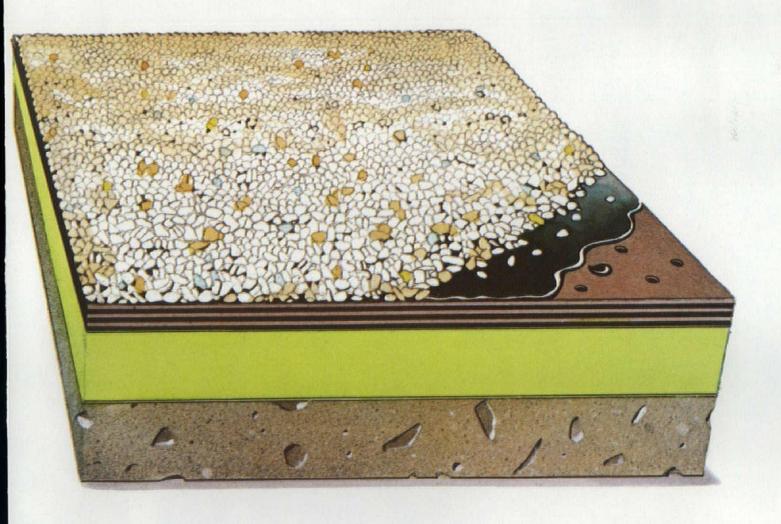
is eliminated. The holes are computer-patterned so they fall in different places in each successive layer of felt. The results are a roof that is easier to install because no brooming is necessary and, more importantly, a roof that is almost blister-proof.

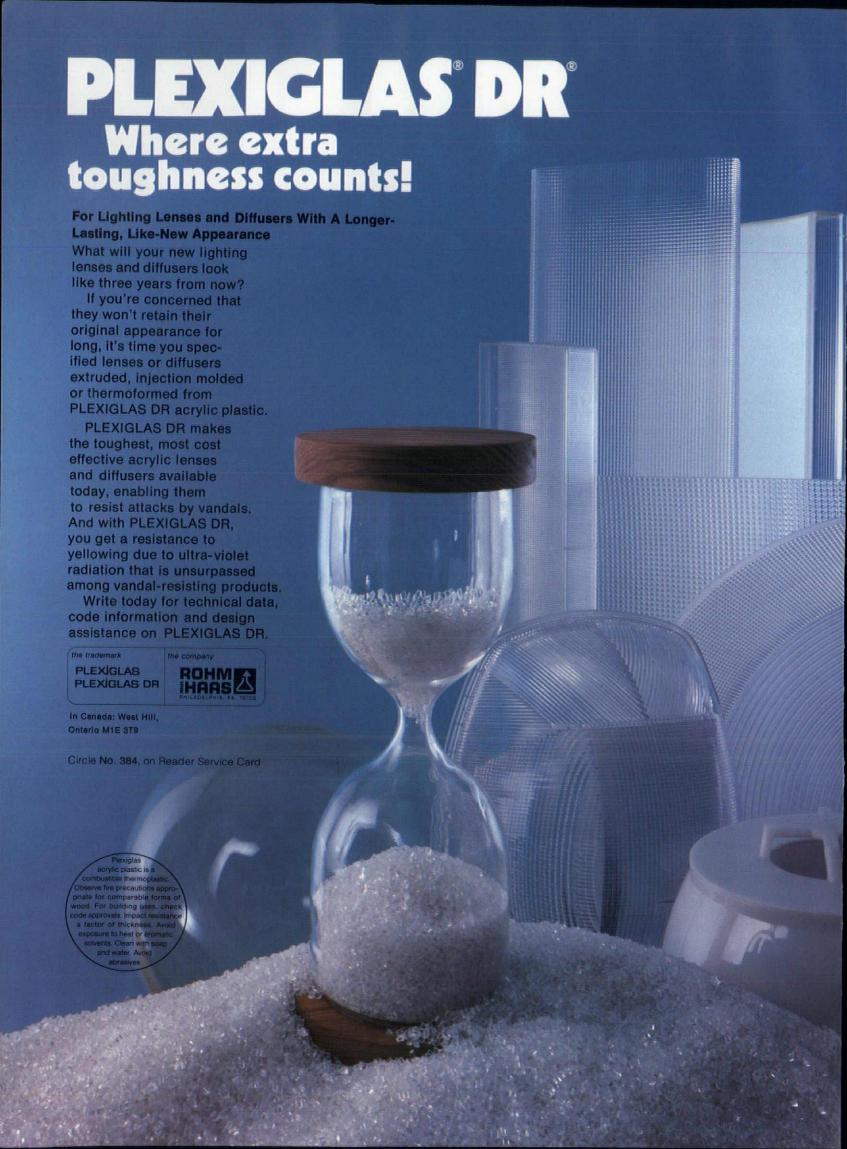
Celotex Vented Ply Sheet further reduces installation cost by requiring only three plies instead of the conventional four. (Over insulation and non-nailable substrates, only three plies are required. And over nailable substrates, lay down three plies and a Celotex base sheet.)

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

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







startling sinoid undulation of Baker House at MIT. Most amazing of all are Aalto's projects in an industrial landscape: the Sulphate Pulpmill in Sunila (1930–9) or the housing in the mining town of Kiruna, Sweden. Here the forms are abstracted from a "devastated" nature. But Aalto shows it to be as rich a source of "art" as the nature we consider unspoilt.

This endeavor to abstract a rational, man-made form from an organic natural one lies at the heart of Aalto's work. "Architecture," Aalto wrote in 1941, "should always offer a means whereby the organic connection between a building and nature (including man and human life as an element of greater importance than others) is provided for." Aalto's buildings are suffused with the same spirit that his words are. Some—but not enough—of his genius can be seen in this show.

Van Day Truex 1904–1979

Van Day Truex, a leading U.S. interior designer, died on April 24 at the age of 75. The president of the Parsons School of Design from 1942 to 1953 (and head of Parsons' Paris branch from 1930 to 1939),



Dionysus decanter, designed by Truex.

Truex was design director of Tiffany & Co., from 1955 to 1967. He was responsible for the design of many classic modern pieces, but was perhaps best known for his modern glassware designs for Baccarat. His famous Baccarat wine carafe is in the permanent design collection of the Museum of Modern Art, and his work for Baccarat earned for him France's Legion of Honor in 1951. Truex designed architectural hardware for Yale & Towne, carpets for Edward Fields, and widely published interiors, distinguished for their comfort and simplicity, which were highly influential in the 1950s and 1960s. [MF]

D/R folds after 27 years

Design/Research International, the coastto-coast chain which brought welldesigned housewares to a receptive public for over a quarter of a century, went out of business in June, a victim of "severe mismanagement," according to the company's chairman, Peter Sprague. The nine-store chain, with headquarters in Cambridge, Ma, was begun in 1952 by architect Benjamin Thompson, who resigned as president six years later. Thompson's successful surmise that the American people—or at least a reasonably affluent and well-educated portion of them-were ready for home furnishings which expressed the principles of good design, turned D/R into one of the most influential transmitters of modern taste in this country during the 1950s and 1960s.

Based in large measure on simple, imported "discoveries," the D/R line for the most part eschewed the serious, Museum Design Collection approach of some of its earlier competitors (such as the alsodefunct Bonniers), and focused instead on functional, affordable objects. D/R alsogained fame as the exclusive U.S. distributor for Marimekko fabrics, the Finnish textiles which enjoyed a particular popular-[News report continued on page 45]

The Affordable Digital Thermostat That Thinks For Itself.

Our new low-cost, all-electric digital thermostat is smart. In fact, it's so smart it can automatically switch from heat to cool and back again—all by itself—unlike other digitals that you have to "manually" switch from heat to cool.

Its "automatic" feature provides

Its "automatic" feature provides a minimum 5° comfort zone. Once the desired temperatures are set, the SMART digital does the rest.

The Jade digital is flexible too. While most competitors offer only a maximum 15° set up and set back range, our digital provides a range up to 53°. And, other digitals offer only two temperature settings which limit operator flexibility.



Jade's provides up to eight temperature settings.

What's more, its recall button allows the first program entered to return for weekend and entertaining lifestyle.

The SMART Digital Thermostat accurately and electrically senses temperature and displays it continuously, along with the time of day, thru a LED readout.

Best of all is the price. The Smart Digital is available at half the price of most competitors and comes in four models. All are easily installed and are available in a decorative off-white color.

Write for complete product information. Make the Smart Choice. Jade Controls' Digital Thermostat.



Qualifies for 15% Energy Tax Credit.



The challenge was to design a hospital to meet rigid requirements without sacrificing budget or appearance.

Only a Pella package had the flexibility to offer the best of both worlds.

Both cost containment and aesthetics were important considerations for the architect who specified Pella Clad Windows for the Atlantic City Medical Center. Outside, the attractive aluminum cladding requires next to no maintenance to keep up good appearances year after year. Inside, the natural wood adds eye and touch appeal.

Solarcool® Bronze Glass was chosen to filter sunlight and to help maintain a comfortable temperature level in

the building. Louvered Pella Clad Panels that match the window cladding were chosen to ventilate the air conditioning system. Ease of maintenance was also a consideration. Pella Windows make it easy to clean both sides of the window from inside.

Overall, this cost-effective Pella package offered a multitude of features to help make the new Atlantic City Medical Center both functional and beautiful.



Pella's Clad Casement has a unique hinging system which moves the sash toward the center of the frame as the window is cranked outward. This open position provides plenty of room to clean outside glass from inside.



Pella's Double Glass Insulation System has a full 13/16" air space between panes. It actually outperforms welded insulating glass, yet costs less. Wood and vinyl separate the two panes of glass and function as a thermal barrier.



Pella's tough aluminum exterior cladding is cleaned and etched, then coated with a baked-on acrylic polymer. It won't chip, crack or peel. Available in three standard colors.



Pella's Clad System includes clad frames which will accept single glass, insulating glass, louvers, or matching clad panels like the one shown at top of photo above. They offer outstanding flexibility and freedom for your design concepts.

For more detailed information, use this coupon to send for your free copy of our 28-page, full color catalog on Pella Clad Windows & Sliding Glass Doors. Call Sweet's BUYLINE number or see us in Sweet's General Building File. Or look in the Yellow Pages under "windows", for the phone number of your Pella Distributor.

Atlantic City Medical Center Mainland Division Pomona, New Jersey

Architect: The Ritchie Organization Boston, Massachusetts

Project Director: Wendell Morgan

Project Architect: Martha Manevich

Construction Manager: William Blanchard Company Name
Firm
Address
City State ZIP

Telephone

Mail to: Pella Windows & Doors, Dept. 735/9, 100 Main St., Pella, Iowa 50219. Also available throughout Canada. This coupon answered within 24 hours.



© 1979 Rolscreen Co.

Only Pella offers it all.



News report continued from page 41

ity in the late 1960s. But in recent years the firm, which had outlets in New York, Philadelphia, Westport, Ct, Chestnut Hill, Ma, and four California cities in addition to its celebrated main store in Cambridge, fell on hard times. The superior marketing techniques of such good-design competitors as Conran's, Cost Plus, the Workbench, and the Pottery Barn (which all derived from the D/R philosophy) hastened the end of the far-flung D/R operation, an ironic victim of improvements on the idea it pioneered. [MF]

Conferences

ACSA Teachers Seminar Cranbrook Academy, II June 17–22

The official title was Design Process: Insight, Scholarship, Criticism. But the subject which the conference addressed was that of history and its meaning to the design studio and to practice. Speakers were: architects Charles Moore, Stanley Tigerman, Alan Greenberg, and Grant Hilderbrand.

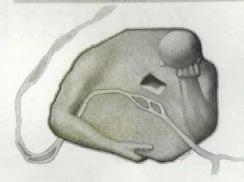
Faculty participants in the conference were asked to present either their general

methodology for teaching design or a description of a specific teaching problem illustrated by student work.

From the presentations, shared beliefs emerged. Many of the architectural community present neither believed in, nor taught design as straight problem-solving; rather, architecture was seen to be based on historical precedents, models, or typologies. When there was disagreement among the delegates, it was not over the legitimacy of looking at history, but rather the intention. Should historical precedents be the source of specific forms or of general principles? Even though many of the speakers apparently advocated the former, the most controversial presentations were those by Alan Greenberg and Thomas Gordon Smith, whose eclectic work incorporates elements and citations from specific historical styles. Equally controversial were the beautifully rendered "rationalist" projects by George Ranalli.

The one disturbing note of the conference was the emerging impression that, in spite of disclaimers, many faculty members felt that while all history was equal, some history was more equal than others. This prompted one irate delegate to accuse the umpteenth invoker of Soane and Lutyens of name dropping. Still, most delegates left agreeing that useful insights on teaching design had been exchanged. [Stuart Cohen]

CONSULTATION INTERNATIONALE POUR L'AMENAGEMENT DU QUARTIER DES HALLES PARIS



Paris contemplates vacant site at its center.

Revised timetable for Paris competition

Sponsors of the international competition for the design of the Les Halles site in Paris (P/A, June 1979, p. 36) have announced an extension of the registration deadline to October 20, 1979. Date for submission of entries has now been set for Dec. 18. Judging and publication of results are to take place in January, 1980. Program can be obtained by sending registration fee (\$60 U.S., \$30 for students) to L'Architecture d'Aujourd'hui, 67 Avenue Wagram, 75017 Paris.

[News report continued on page 48]



If that vast space overhead is an eyesore or just an eyebore, we've got the geometric solution: MEROFORM.™ It's spaceframe that makes a ceiling something to look up to.

And when it comes to filling space, MEROFORM leaves plenty of space for creativity. It comes in

enough finishes and fittings to fit most any design idea. If you're interested in a new design latitude (and longitude), contact your local Unistrut Service Center or write the Unistrut Corp., Wayne, Michigan 48184

UNISTRUT



How do you design the You start with Owens-Corning

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

| 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 | / | V | √ | V | / | / | / | V | / |
| Owens- Corning Fiberglas Furi® | √ | √ | 1 | | √ | √ | | | / |
| Perlite | | TO THE | | | | | | / | / |
| Urethane | | | | 1 | / | / | | | |
| Composites | | | | | | | | | |
| Wood Fiber | | | | | | | | 1 | |

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

best roofing system? and end with Owens-Corning.

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



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

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

D. Meeks, Owens-Corning Fiberglas Corp. Fiberglas Tower, Toledo, Ohio 43659.

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

Fiberglas

News report continued from page 45

The Belmont Retreat: Design research

Design Research Report RR-20.2

Event: The Belmont Research Retreat July 13–15, 1979.

Place: The Belmont Conference Center,

Elkridge, Md.

Participants: Robert B. Bechtel, Lynn Beedle, Richard Bender, John Bennett, Michael Brill, Neils Diffrient, Leonard Duhl, Charles Eastman, John Eberhard, John B. Jackson, Ralph Knowles, Gary Moore, Constance Perin, Raymond Studer Sponsors: National Endowment for the Arts/National Science Foundation. Directors: Michael Pittas, NEA; Fred Krimgold, NSF; Michael Brill, Retreat Chairman. Purpose: Answer or discuss the following questions: 1 What are the main problems of the designed environment? 2 What research would contribute to the solution of these problems? 3 How should it be funded? 4 How should proposals be evaluated? 5 How can we develop methods for fullest utilization of design research? 6 How can we more clearly define the field?

Background: The above mentioned participants are among the most talented and experienced researchers in the field of design research. The types of design research needed could be categorized as follows:



1 Private sector applied research: There is a need within the context of the design process for a research professional skilled in the acquisition of either material or social information which can aid and improve the more complete matching of environment, or product, and its use. Like all other types of design consultants, this type of researcher must be able to justify his or her existence by proving to be profitable to the designer or client. The education and skill development necessary for these professionals needs formalization to establish a base of professional purpose as well as responsibility. Designers must be exposed to the existing skills and expertise in this field.

2 Public sector applied research: Society needs researchers to provide or improve the information base for solutions to social as well as environmental problems. The application of such information would be in design of public buildings, spaces, or planning. This kind of research is publicly funded in the context of the solution of public problems.

3 Nondirected basic research: The third type of research is the acquisition of knowledge which may as yet be undirected but which shows great potential for pertinent application either for the public good, but in the private sector, or for the good of society in general. This is the arena in which the skills and knowledge might be formulated for later directed use. This is the area which is most difficult to evaluate since the implications and directions of research may not be apparent until the project is finished or even later. It is also the function of this category to evaluate the process and ethics of design itself. Investigators might probe the success or failure of designed environmental elements, within their own context or in the



Above: NSF's Fred Krimgold (I) and retreat chairman Mike Brill (r) in consultation.

Left: A porch portrait. (Back row I to r) Krimgold, Perin, Brill, Studer, Eberhard, Zucker, Pittas. (Left on stairs, back to front) Diffrient, Beedle, Duhl, Bender. (Right on stairs, b to f) Eastman, Bechtel, Moore. (Front I to r) Jackson, Bennett, Knowles.

culture as a whole. To the extent that it relates to the public good, it may be publicly funded. Subjects of this nature are also frequent topics of private research through educational institutions.

Present funding method: At present the merit of many government grant proposals is determined by a committee of eminent experts in the field. An accepted grant proposal usually couples a pertinent subject with convincing credentials, assuring by past achievement the potential of future results. Such a committee occasionally is influenced by the great potential of a topic studied by an inexperienced researcher or the presentation of a questionably pertinent topic by an experienced researcher. Peer review comes from the sciences and is relatively new to the arts.

The Conference: The conference found itself segmented into roughly three parts.

Part I—Friday evening: NEA/NSF invited John Cable, DOE; Harold Cannon NEH; David Dibner, GSA; Andrew Euston, HUD; Richard Wakefield, NIMH; Robert Dillon, NIBS; Robert Shibley, U.S. Army Corps of Engineers; and Francis T. Ventre, NBS, to discuss their experiences with design research and delineate their needs.

Sample statements:

John Cable: "We must learn how to package things [like research] that are not products in order to sell them in a product-oriented atmosphere."

Harold Cannon: "We are all walking archives of our own experience."

David Dibner: "I need your help. We need practical solutions to problems."

Andrew Euston: "The design problem is not politically feasible to talk about."

Richard Wakefield: In the field of behavioral responses and the impact of settings we have "seen the largest number of applications and the fewest number of grants."

Robert Dillon: "We are not really codifying the knowledge we have."

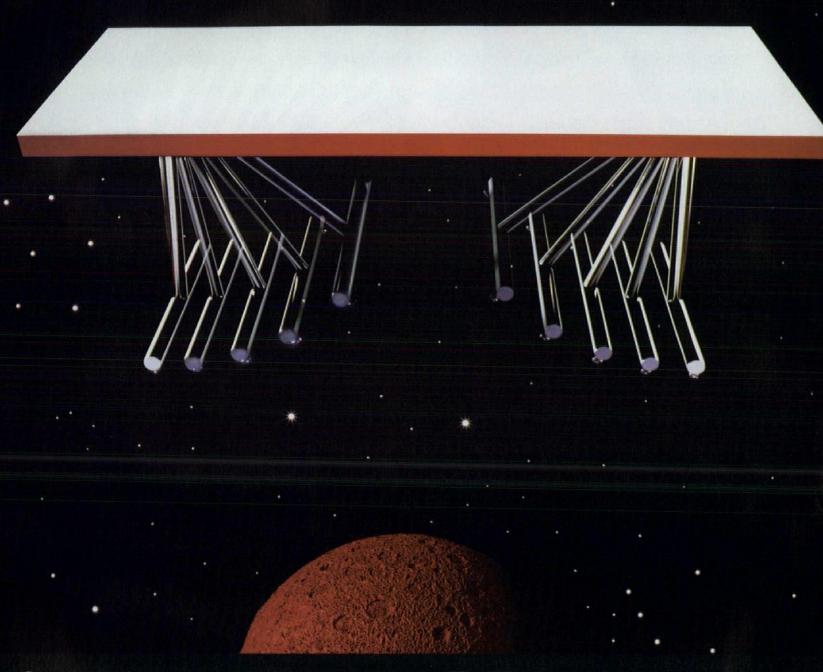
Robert Shibley: "If it is important enough to have the push—[often] you don't have time for the research."

Francis Ventre: "The built environment is not a problem on the consciousness of the country. There must be a public manifestation of need."

Evaluation by researcher: Government agencies do not make extensive use of design research in the design decision-making process. The research which does take place is primarily applied research with a definite problem and expected use, or is done after the fact. Research spans the spectrum from material to sociotechnical research. The emphasis seems to be on the long-term effects of design decisions. Obtaining the funds to sponsor research is complicated by politics and a [News report continued on page 52]

Circle No. 440, on Reader Service Card Design Aylo Heiticerins E Designifor ZEPEL

The secret of a great table is not why, but Howe.



Tempest tables give space a new dimension: extraordinary flexibility. For they can create a room. And they can empty a room. Such is their genius, their beauty. Tempest folding tables neither act nor look like ordinary folding tables. They fold fluidly, smoothly. Yet, once locked in place, they stand firm, solid-as-a-rock. And offer the warmth and beauty of permanence. Tempest by Howe—the secret of a great table.

The Tempest Collection by Howe

For details on the complete line, write:
Howe Furniture Corporation
Executive Offices/Showroom: 155 East 56th St., New York, NY 10022
Or call collect: (212) 826-0280
Showroom: 1158 Merchandise Mart, Chicago, IL 60654
(312) 321-1502
Canada: Constellation Contract Furniture, Markham, Ontario

BIFMA Member



SOURCES

Employee Dining Room

Tables:
Howe Furniture Corporation
Chairs: Fritz Hansen
Wall Mural: Jack Larsen
Boras "Katten" design
Carpeting:
Milliken's Corporate Square
carpet tiles
Ceiling: Armstrong
12"x12" Travacoustic
"Sanserra" pattern

Designer lays Secret on the Table

New York firm uses single source to solve two different design problems for Volvo.

Theodore V. Hinz, of Goldstone & Hinz, New York architectural consultants, planned this handsome Conference and Employee Dining Room for the corporate headquarters of Volvo of America, Inc., Englewood Cliffs, N.J. While the treatments appear totally different they share a common objective:

Hinz wanted to create an environment expressing orderliness, quality, good taste and openness for both locations.

He achieved his aims by selecting two types of special-purpose tables by Howe.

In the dining room, where employees enjoy an uninterrupted view of the wooded landscape, Howe's pedestal base Tempest table offers classic design with stability and obstruction-free seating comfort.

In the conference room—one of three, all with the same facilities—flexibility is the keynote. Here, Howe's conference room Tempest table met the requirements for inherent strength and a spacious working surface.

Once again, creative designers solve problems by showing Howe.



SOURCES

Meeting/ Conference Room

Tables:
Howe Furniture Corporation
Chairs: Olli Mannermaa
Div. of Finnart
Carpeting:
Milliken's Corporate Square
carpet tiles
Wall Covering: Vicrtex—
L. E. Carpenter & Co.
Ceilings: Armstrong's
12"x12" Travacoustic
"Sanserra" pattern
Visual Aid Panels:
Eberhard Faber—Board
Tackboards: Korok
Wood Folding Walls:
Fairhurst Industries, Inc.
Lighting Fixtures:
Skylume Legion Lighting

Advertisement

climate that prefers specific product orientation and finite goals. The definition of design research is apparently unclear. The evening, in some cases, amounts to an impassioned appeal for assistance and increased participation from the researchers present.

Part II—Saturday morning and afternoon:
The morning begins with rumblings of discontent about the task being too product oriented and narrowly defined. The chairman readily acknowledges that putting that much brainpower in a room does not demand an overly restrictive structure or specific product. There is no attempted bridge with the previous evening. Instead, the personal input of each participant is requested to explain his or her own research and attitude toward the role of design research.

Sample statements:

Leonard Duhl: "We must investigate the forces on the problem, rather than poll the solutions."

Lynn Beedle: "If there is anything new in the last ten years, it is the concentration on the need."

J.B. Jackson: "The design [of history] is already there; if you can comprehend it, it is yours."

Ralph Knowles: "Design research may not be a discipline—it may in some sense be about identifying the problem, rather than dealing with it."

Gary Moore: If we only respond to building needs, we don't advance science. If we only respond to science, we don't build anything. We are caught in that tension. Part of design is to live with that tension." Constance Perin: "All culture is arbitrary; why is it coming out this way? Environments are not made often enough to facilitate human purposes.

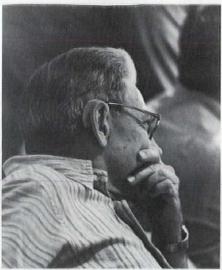
Richard Bender: "The funds are a trap."
Charles Eastman: "Errors keep repeating themselves. We don't use existing knowledge. Things could be much better even without any new knowledge."

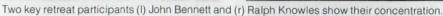
Ray Studer: "Design is predicated on the notion that there is a need for change."

Neils Diffrient: "The relative impact on society from products is not well understood. The only research many people do is find the right person for the job."

Robert Bechtel: "Belief systems are much more important than research in design." John Bennett: "Why do the best and the brightest continue to do what is wrong?" Mike Brill: "Research is gaining enough knowledge or enough feeling to have other people agree with you."

John Eberhard: "Design issues for buildings of the future will be influenced by outside forces such as: public attitudes,





technology, economics, resource availability, and changes in fashion.

Researcher's afterthoughts: The great majority of those present are involved with socio-technical research. Their interests are diverse. Although they appear to be affable, it is clear that there are some emotionally charged disagreements under the surface. All have benefited from the exposure to the various attitudes and viewpoints. Some participants express concern that a more cohesive product is not being developed. No sparks fly.

Part III—Saturday evening and Sunday: At the opening of the Saturday night session, Chairman Brill presents the idea of breaking into three separate committees to discuss and document the following questions and answers:

1 What issues should be addressed by design research and why?

2 What values/ethics and whose values/ethics should underlie design research?3 What are the best strategies for the fullest social utilization of design research?

The intention is that the group divide, discuss the questions independently, and draw up their responses. Sunday morning, the answers are to be presented for discussion. The intent is to begin to sketch what a meeting proposal or product might entail. With little dissent, the committees are formed.

The three groups presented their own work on Sunday morning. Although the product serves to sketch the concerns involved, more work is necessary. A "Belmont Manifesto" is outlined and discussed. It is generally agreed upon to prepare a document based on the responses from Saturday night and that the document will be reviewed by all present and signed if agreement seems appropriate. After lunch, a brief discussion returns to the events of Friday evening and suggestions are made as to how to more

effectively help meet the needs of government agencies.

Researcher's evaluation: In the time period allotted, the task of originating a workable set of issues and funding suggestions, along with evaluation criteria, was an ambitious one. The participants had little choice but to opt for more time. Although the "jury is out" on the results, one can expect great things. The only task that the conference conceivably could have performed in the given time was to examine the existing system of grant awards and attempt to slightly modify or correct it. In coming to the conference, however, and discussing the broader question in such depth it is possible that the attendees will produce a document, to be known as the Belmont Manifesto, that will be of greater significance to the entire field of design research. It most certainly will still be of use to NEA and NSF in evaluating their own methods. The conference was also no doubt of great interest and importance to those who attended, including this researcher. If nothing else, communication occurred and vocabulary was exchanged. It was perhaps the birth of a new relevance and utility for design research.

There was ample recognition that people need research, people do research, and any mechanism to evaluate proposals involves live people as an intrinsic part. The gamble is on the people. Opinion prejudice: This researcher was disappointed that there was not more controversy expressed by the conference attendees. There certainly were opposing views present and they should have been allowed to surface. Creativity and judgment will ever be opposed. It is this opposition which both implies the need for research and can nullify its effects. A healthy climate for creativity needs research for balance. Opposition assures that both forces are at work, [RR] [News report continued on page 57]



Construction products that swing, slide or fold.

We've got a full line for every building class, every building style. And the service to back it up. That's why we have such a solid reputation. And it's building every day. If your reputation is building, contact your nearest Stanley sales representative today.

Stanley Hardware,

Division of The Stanley Works
New Britain, CT 06050 (203) 225-5111

Our

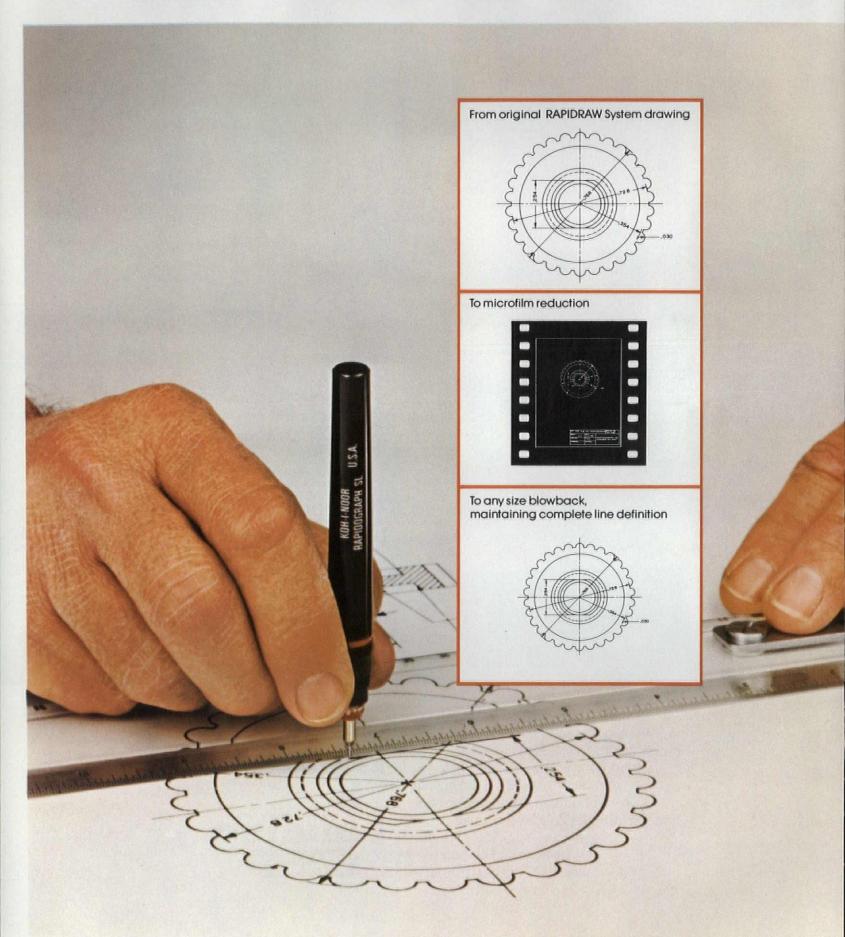
Peputation

Stanley

STANLEY

helps you do things right.

What makes The "RAPIDRAW"



System faster and easier?

"RAPIDRAW" INK-ON-FILM TECHNOLOGY provides 8 major advantages:

- Ink drawings on film can be transferred directly to microfilm without costly retouching or redrawing.
- . The quality of ink lines on film is superior.
- Ink-on-film drafting can be accomplished faster and easier than a comparable square foot of pencil drawing on paper.
- Ink lines can easily be erased from drafting film without leaving a "ghost" or other photodetectable traces of erasure.
- The Rapidograph Technical Pen is easy to handle, producing ink lines of predetermined, consistent width and uniform density.

- Ink-on-film drawings retain highest quality through successive generations of photographic reproductions.
- Ink-on-film drawings provide maximum dimensional stability and are virtually indestructible.

To know what The RAPIDRAW System of direct ink drafting on film can do for you, send the coupon below for a free copy of our new RAPIDRAW System manual. (Or call toll free 800-631-7646; in New Jersey, collect 201-479-4124; in Canada, toll free 1-800-268-4961 or collect 416-671-0696.)

RAPIDOGRAPH 3065 RAPIDOGRAPH SL 3076...OR RAPIDOMETRIC 3095 **ACCESSORIES** RAPIDRAW ERASING PELIKAN AND DRAFTING FILM SYSTEMS KOH-I-NOOR **INKS** RAPIDRAW Engle State
1 of population has Bear 1 to State
1 to population has Bear 1 to State
1 to September 1 to Septemb

YOU GET MORE FROM KOH-I-NOOR

The "Breakthrough" Company

Koh-I-Noor Rapidograph, Inc., 100 North St., Bloomsbury, N.J. 08804

In Canada: Koh-I-Noor Rapidograph, Inc. 1815 Meyerside Dr., Mississauga, Ont. L5T 1B4 For immediate reply to a request for our RAPIDRAW System manual . . . fill out, clip out and mail this coupon to Koh-I-Noor Rapidograph, Inc., 100 North St., Bloomsbury, N.J. 08804. PA-9-79



News report continued from page 52

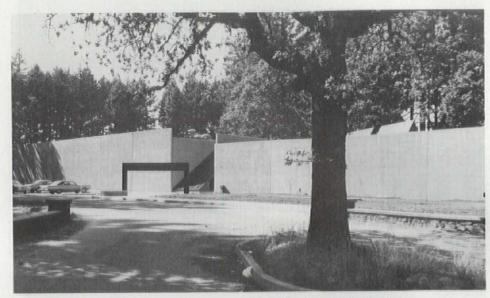
In perspective

Hillsboro Public Library, Hillsboro, Or.

Completed in 1975, the Hillsboro Public Library, by Martin Soderstrom Matteson of Portland, Or, won a 1976 Honor Award from the Portland Chapter of the AIA. A community use building, the simple low structure houses a meeting room, greenhouse, and children's area as well as the library proper.

The building relates closely to its surroundings. The triangular configuration was determined by the site specified: the northeast corner of wooded Shute Park.

Like a closed book, the building presents a blank cover to the street. The concrete wall of the facade is broken only by a glass greenhouse sloping back into the structure and flanked by the main entrance. A steel bent, set at an angle to the front wall, frames and indicates the entry. The rear of the building (the triangle's hypotenuse) looks north onto the wooded park. Composed of ten setbacks forming alcoves for secluded reading, offices, and conference rooms, this side is entirely glass. To allow for further expansion, the west side of the building is an easily demolishable wood frame construction sheathed with industrial metal siding. [News report continued on page 58]

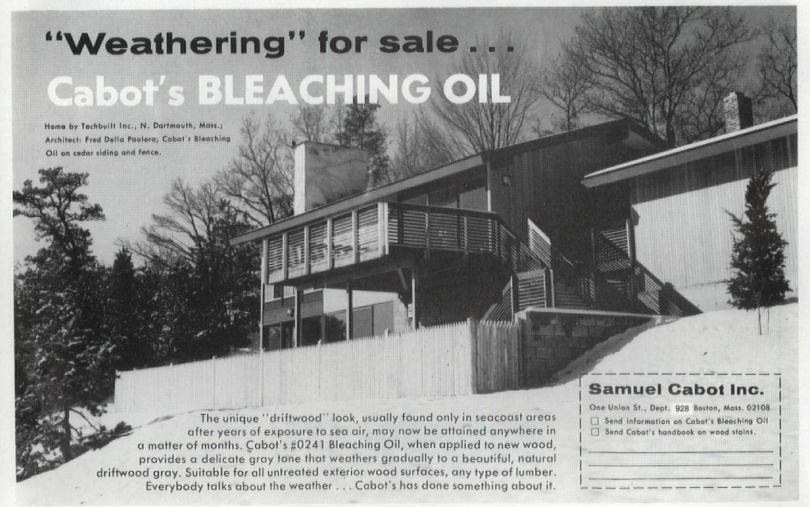


Architectural parallel to a book, the library's austere exterior shelters intimate places.





ss: Ed and Carol Hershbe





Back glass side of library cuts reading nooks out of encircling woods.



News report continued from page 57

At the apex of the triangle is the children's section of the library. Lower scaled than the adult section, this includes a quarter-circle sunken storytelling area. The circle is completed in the exterior land-scaping, and the overscaled exterior drainpipe, which runs along the north side, dumps its water into a concrete well within the circle, making a dramatic cascade.

Similar transformations of functional elements into formal drama occur throughout the design. Atop the concrete tilt panels of the façade and concrete columns that support the rear sits a roof of steel trusses, joists, and exposed decking, a light and active architectural solution which is also less costly than a standard suspended roof. Clerestory windows over the bookstacks provide additional natural light. The exposed ducts of the mechanical system outline the circulation routes, visually linking the various spaces. The greenhouse adds an exotic touch.

Done for only \$630,000, the building is as a library should be. A receptive public space, it offers privacy and choice on the interior. The design captures the excitement, the escapism, and the imaginative freedom of reading, while providing a pleasant, hushed place to read.

[News: Eleni Constantine except as noted.]

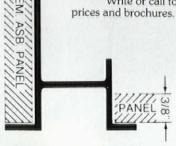
[News report continued on page 62]

NEW FROM FRY FOR'79!

PANEL DRIP MOLDING (PDM-375-875) . . . for Cement Asbestos Panels

Provides for clean, sharp edges, a closure for vertical or horizontal panels. Also — helps stop panel stains because, naturally, it's a drip mold! Made of extruded .050 aluminum with clear, baked-on acrylic finish.

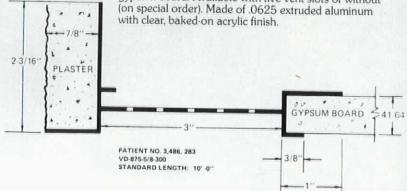
Write or call today for samples,



PATENT NO. 3,486,283 STANDARD LENGTH: 10'-0" PUNCHED 8" O.C. FOR FASTENING.

VENTED DRIP SCREED (VD-875-5/8-300) ... For Gypsum Board Soffits

Now we have a special new 3-in-1 molding for gypsum board! Advantages: helps end soffit stains; more than meets code requirements; serves as plaster screed for facia, and serves as terminal for exterior gypsum board. Available with five vent slots or without (on special order). Made of .0625 extruded aluminum with clear, baked-on acrylic finish.

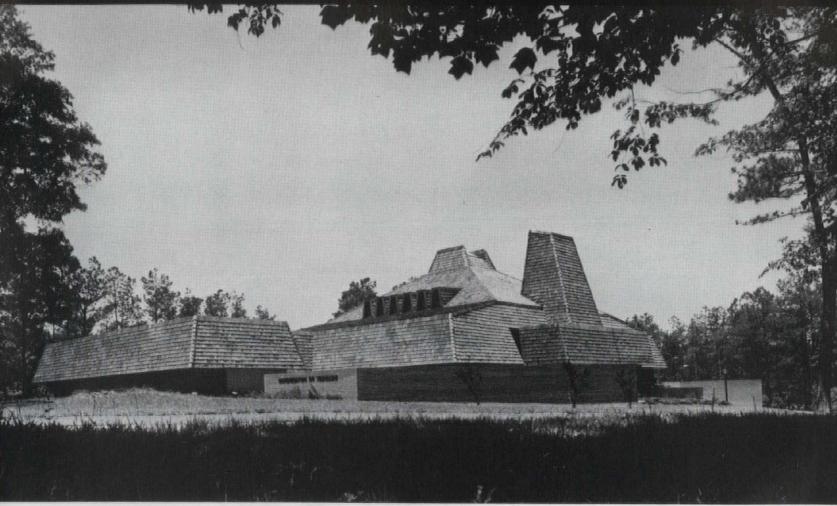


FRY REGLET CORPORATION

625 S. PALM AVENUE, ALHAMBRA, CALIFORNIA 91803 (213) 289-4744 MAILING ADDRESS: P.O. BOX 2251, ALHAMBRA, CA 91803



Cladding follows form: Red Cedar for a Georgia Synagogue.



"The shape of the roof is directly related to the special functions of the interior and is intended to emphasize the interrelationship of these spaces.

"We were looking for a material to clad the roof shapes that would not detract from the forms, would be handsome, and would give a warm and inviting atmosphere to the structure.

"We chose cedar shakes and could not be more pleased with the result."

-Benjamin Hirsch, A.I.A.

For our new Architects' cedar library, write Suite 275, 515-116th Avenue N.E., Bellevue, WA 98004.

(In Canada: Suite 1500, 1055 West Hastings Street, Vancouver, B.C. V6E 2H1.)





These labels under the bandstick of red cedar shingle and shake bundles are your quarantee of Bureau-graded quality. Insist on them.

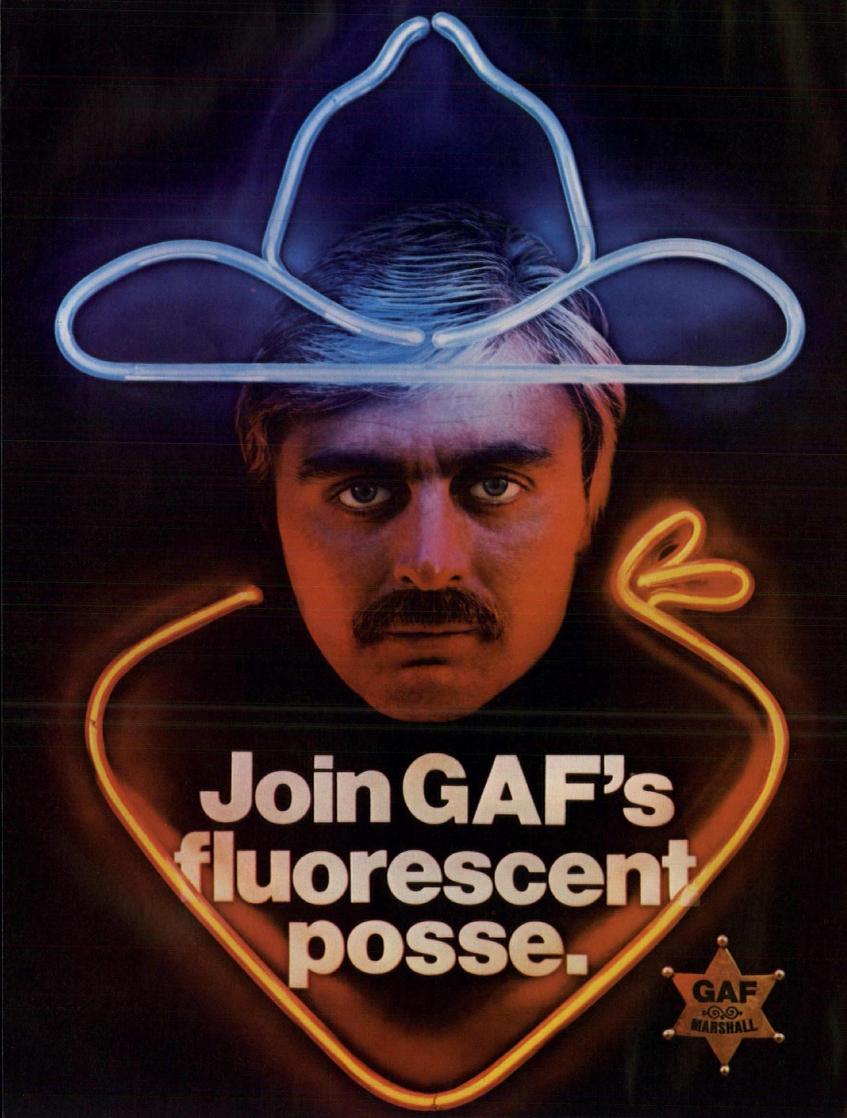
Congregation Or VeShalom, Dekalb County, Georgia. Architects: Epstein & Hirsch.



Hand made adze with cedar handle used by the Suquamish Indians to carve canoes. Ground mill file is the blade. Cedar. To touch the earth.

Circle No. 382, on Reader Service Card

Red Cedar Shingle & Handsplit Shake Bureau



WANTED

Join up with GAF and smoke out every dangerous-to-profits, burr-under-the-saddle fluorescent diazoprinter in this hyar land.

Any Make, Any Model, Any Year.

You'll find them hiding out at Architect and Engineering offices, residing around Designer's enclosures, Draftmen's quarters and even Contractor's trailers. Look for these identifying characteristics:

Profit eatin...air pollutin, smells you out of town...requires foolin with messy chemicals that ruin your duds...space stealin

....saddled up to a meter...noisier 'n a coyote...not too bright 'bout Repro draftin'...requires gloves to handle chemicals...not to mention you non-machine owners who have to wait till the cows come home for the prints done on the outside, and have to worry about lost originals and print costs.

No self-respectin' professional would still be saddled with

them disreputables.

Snuff 'em out! Trade 'em in! Improve your profits! And collect your grand reward! Now!

REWARD

Tie up with GAF, improve your efficiency and reduce your reproduction costs. Also get a real cool deal on a first-rate, adding-to-profits GAF fluorescent diazoprinter to boot.

Your grand reward is a credit up to \$250 (dependin' on the model traded in and traded for) on the best durn fluorescent diazoprinters in the entire U.S. of A.

THE GAF CORRAL

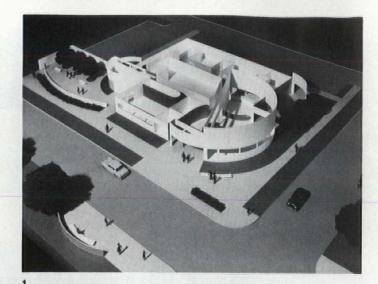
All five GAF fluorescent printers are designed to accommodate tracings and make diazo prints up to 47½ inches wide, by any reasonable length. They incorporate patented Negative Pressure Development (172FL, 176FL and 185FL) or

Print Vac® Development (PV 90 and PV 190) for the optimum in a diazo development with extremely low ammonia odor. While compact in design, they all are heavy duty and rugged in construction.





In progress



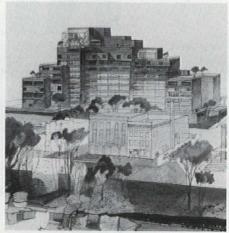
- 1 Family Health Center, Gary, In. The receptive design of the Family Health Center for the Methodist Hospital in Gary, In, by the architectural firm of Schmidt, Garden & Erikson of Chicago, reduces negative institutional connotations by its original and lively use of form and color. The five major functional areas-staff, support, examination, waiting, and receptionare each defined by color coding and unique volumes. The dominant corner cylindrical form, repeated at the other end of the building on a smaller scale, is echoed outdoors by curved walls defining pedestrian areas along the street. Construction on the \$500,000 publicly funded project is expected to begin this fall, and occupancy is scheduled for 1980.
- 2 Equitable Life Insurance Society, New England Service Center, Milford, Ct. Designed by the architectural firm of Hellmuth, Obata & Kassabaum, the new 65,000-sq-ft regional headquarters for this insurance company fits neatly into the surrounding wooded landscape. A series of square and curved steps and setbacks, the two-story structure, faced in tinted glass and brick, might be seen as an abstract topological form, a suggestion completed by rooftop gardens. At the entrance, a freestanding curved wall, punctured by four portals, stands in front of the building's curved glass front wall, suggesting that the "real" front wall has been detached. The \$4.3 million structure should be completed by April 1980.
- 3 Winslow House, Minneapolis, Mn. Ground was broken in June for a \$10-million condominium designed by Benjamin Thompson & Associates of Cambridge, Ma. The 58 luxury units are located on the banks of the Mississippi River in the historic St. Anthony Main area of Downtown Minneapolis. The condominium will complement another redevelopment by Thompson in the St. Anthony riverfront area: "St. Anthony Main," a renovation of 19th-Century manufacturing buildings for retail use. (P/A Nov. 1977, p. 42). The condominium, whose completion is planned for 1980, is named after a luxury hotel built in 1856 which catered to wealthy Southern families who came up the Mississippi to vacation in the city of St. Anthony in the summer.
- 4 Syrian National Theatre and Opera House, Damascus. Designed by the London architectural partnership of Renton Howard Wood



2

Levin, this multiuse theater complex planned by the Syrian Ministry of Culture and National Guidance for the capital is intended to be sympathetic to the Arabian vernacular of the city. The project, tentatively estimated at \$25 million, is to include three theaters, a restaurant, and a drama school. Selected in an international competition, the winning scheme is based on a theme common to the geometry of Arabic architecture: orthogonal squares within diagonal squares. All the public foyers open onto a central garden court, another "Arabic" feature. The construction, however, is in reinforced concrete, decorated in "Arabic" style, using bands of colored marble with inset diagonal squares. Main contractor for the government-financed project is the Military Housing Establishment.

5 "Raffles City," Singapore. I.M. Pei has been selected to design another convention center complex-this one in Singapore. The \$300-million project includes a 66-story hotel, twin 31-story hotel towers, and a 42-story office tower, all of which are to rise out of a 7-story base housing the convention center, an auditorium, retail space, and parking. "Raffles City" will occupy the former site of the Raffles Institution, a boys' school whose cornerstone was laid by the founder of Singapore, Sir Stamford Raffles, in 1821. The historic school was destroyed to make way for the complex, which will be a very different sort of landmark for Downtown Singapore; the taller hotel will be the city's tallest tower. Financed by a consortium headed by the Development Bank of Singapore, the complex is expected to be ready for international business by 1984.



2



4



5



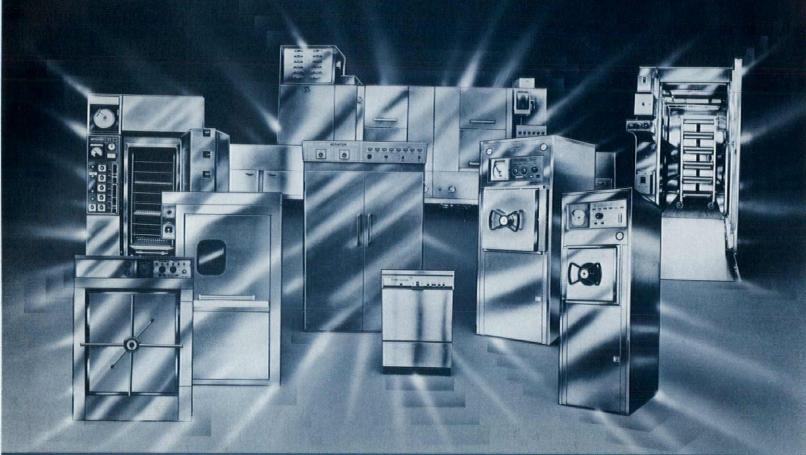
FOCUS ON KIMBALL Focus on the Kimball 7000 Series. A timeless, contemporary design, which focuses on the radius edge, and the richness of oak in a choice of three finishes. So focus on Kimball for stimulating new opportunities in developing creative office interiors.





KIMBALL OFFICE FURNITURE CO. A Division of Kimball International, Inc. 1549 Royal Street • Jasper, Indiana 47546 Telephone (812) 482-1600

With Vernitron,



all systems go!

Vernitron's Systems Approach gives you a broad range of interrelated sterilizers, washers and dryers. The precise system to meet your precise needs. Or, the individual unit to replace part of your present installation. To solve your specific problems.

Design is simple, so it's easier to train personnel.

Automation's built in, so operation is easier.

Machinery is readily accessible, so our systems are easier to maintain. Modular elements snap in, snap out. Many re-

placement parts are standard—available through your local industrial supplier. Goodbye downtime.

And we give you the Vernitron representative. He's more than a salesman—he's a washer, dryer, sterilizer pro! He can make on-the-spot repairs. Replace parts. Make suggestions. Untangle problems

Plus, Vernitron gives you T.E.S.S. Our exclusive Terminal Effluent Sterilizing System. Extra protection when involved with today's high hazard bacteriological materials.

Make the Vernitron system your system. Our engineers will match their experience and innovation to your creativity. To engineer and install equipment designed to meet your specific needs.

If construction or expansion of a bio hazard department is in your future—mail the coupon below today.

Vernitron MEDICAL PRODUCTS

5 Empire Boulevard, Carlstadt, New Jersey 07072 TELEX: 13-3345 CABLE: VERNIMED NEWYORK

I'd like to get Vernitron in my system. Tell me more about your sterilizers, washers, dryers and T.E.S.S. systems.

Name ______ Title ______ Institution _____ Address _____ City _____ State _____ Zip ____ VERNITRON MEDICAL PRODUCTS 5 Empire Boulevard Carlstadt, New Jersey 07072

Circle No. 398, on Reader Service Card



Remodeling clay.

It'd be easy to get the idea we designed Mini-Brick[®] just for remodeling.

You can use them over virtually any substrate. No depth problems around existing doors and windows, and you can design in all kinds of shapes and sizes to bring new character to an existing structure.

In short, Mini-Brick solves all of those problems in remodeling — that they also eliminate in new construction. They're genuine high specification, kiln-fired clay bricks — but they're just 7/16" (11 mm) thick, 1/7th the size and weight of standard bricks.

1/3 the time and labor. Installation can be as much as three times faster than with full size bricks, and the light weight saves not only in reduced structural loads, but in job-site storage and handling on scaffolds as well.

4 sizes — over 30 colors. Unglazed Mini-Brick has that distinct traditional individuality of clay color and texture.

Glazed finishes retain a handcrafted look enhanced by a wide range of color within each glaze. Some are especially formulated for use as pavers; all are excellent for veneering. Use them when you want a visual interest and excitement totally different from uniform ceramic tile.

The literature. Case histories, specifications, and application techniques are all included in our latest literature. Write or call for your free set.



PACIFIC CLAY MINI-BRICK®

Huntington/Pacific @ Ceramics, Inc.

9500 South Norwalk Blvd., Santa Fe Springs, CA 90670 (213) 692-0635

Remodel in San Diego's "Gaslamp District" captures original late 1800s brick look. Weight was critical and Mini-Brick saved an estimated 75% vs. standard brick. Over 9,000 corners used in 6,500 sq.ft. job. Mini-Brick: 2316 and 2316L, Sunset Red.

Cosgrove Building, San Diego, California Designer: Symonds and Feola, Architects and Planners.



We're not trying to sell you a vase, just the idea behind it.

Beautiful, isn't it?

Even though it's centuries old, the colors are exciting.

That's durability. And that's because it's porcelain enamel.

At AllianceWall, we adapted the idea to help you make buildings beautiful and to keep them looking that way. Permanently. Inside and out.

Our architectural wall panels are inherently beautiful.

They're also inherently durable. The porcelain is fused to steel at such high temperatures that it actually becomes part of the metal. So they resist most everything—fire, fading, stains, even scratches. And you can imagine the maintenance. Or rather, the lack of it.

If you can picture the perfect wall surface, this is it. It can be made to your specifications, laminated to virtually anything. Even used as a wall curtain for exterior and interior with insulation between. And if insulated to a thickness of just 1," the R-value is the same as a 12" brick wall (imagine the delight of an energy conscious client!).

There's a wide range of matte and semi-gloss colors available in smooth finish. And with our Wolverine line, you can get into

shapes, patterns, textures and graphics that are limited only by your imagination.

AllianceWall porcelain enamel panels. See what happens when you use a vase

as a base and go from there?

For more information, drop a line to AllianceWall Corporation, Dept. 1B, P.O. Box 247, Alliance, OH 44601.



New Mexico-Bank, Albuquerque, New Mexico Architect: W. E. Kruger & Associates

AllianceWall Corporation

The world's largest producer of architectural porcelain on metal.



Installation: IBM Corporation, Santa Teresa, California Architect: McCue Boone & Tomsick (MBT Associates) Contractor: Swinerton & Walberg Co. Fabricator/Coater: Cupples Product Div. H.H. Robertson Corporation PPG Product: DURANAR* fluoropolymer coating on extruded aluminum.

HOW TO PAINT A BUILDING BEFORE YOU BUILD IT:

The secret is factory-coated metal - and PPG coatings.

Paint first and build later — that's the secret of some of the most striking buildings going up these days. Because they use the drama and durability of colorful PPG coatings on factory-finished metal.

Big components or small, parts of buildings or entire buildings, factory finishing will give you benefits every building should have. A better finish applied under controlled conditions. A thermoset finish that is cured at the

factory instead of on-site for better bonding to the substrate. Plus more variety in color choices. And better color uniformity.

What kind of finish can you get? The most durable finish available to meet your specific requirements. Because PPG has more experience with more types of coatings than anyone else in the business.

For more detailed performance specs, write to: PPG Industries, Inc.,

Color Coatings, Dept. 16W, One Gateway Center, Pittsburgh, PA 15222.

PPG: a Concern for the Future

Color Coatings



Circle No. 380

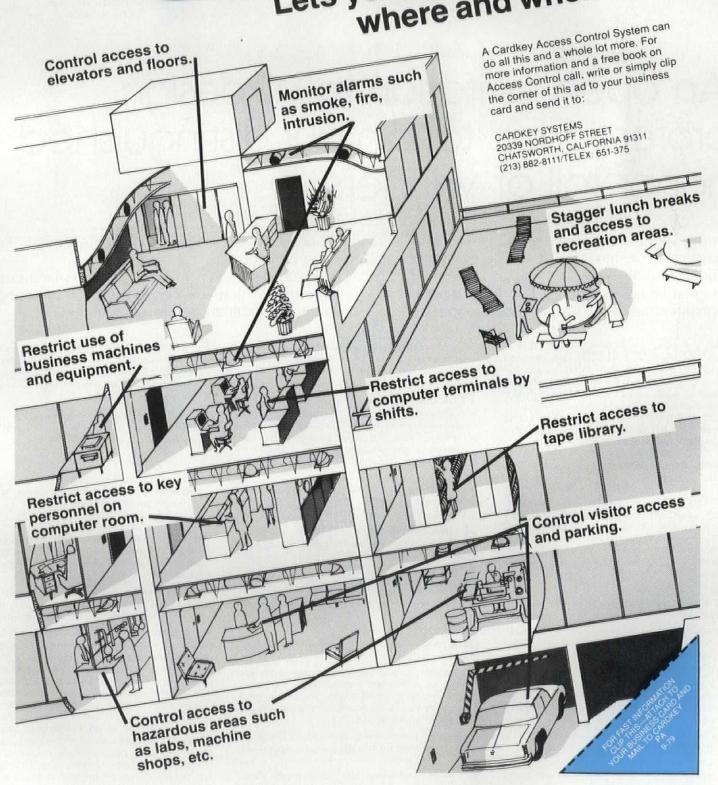
Installation: Sequoyah Vocational Technical Center, Soddy-Daisy, Tennessee Owner: Hamilton County Tennessee Architect: James Franklin, Architects/Planners, P.A., Chattanooga, Tennessee General Contractor: T.U. Parks Construction Company, Chattanooga, Tennessee Fabricator/Erector: The Binkley Company, Warrenton, Missouri PPG Product: DURANAR* 200 coating on coil coated panels



The name that started an industry

Cardkey

Lets you control who goes where and when.



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.

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

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 abut 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 $8'' \times 10''$ 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 completed 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.

DESCRIPTIVE DATA—To preserve anonymity during judging, submit the following data typewritten 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.)
- 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 Sahm, 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

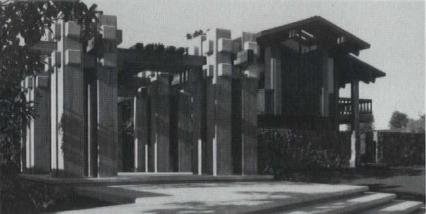
Owner: University of Minnesota, Minneapolis Campus. Architects Myers and Bennett Architects/BRW, Edina, Minnesota. Structural Engineer: Meyer, Borgman and Johnson, Inc., Minneapolis, Minnesota. General Contractor: Lovering Associates, Inc., St. Paul, Minnesota.

HUNTER MUSEUM OF ART—Chattanooga, Tennessee

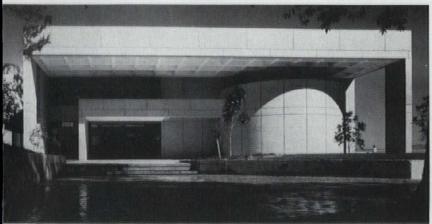
Owner: Board of Trustees, Hunter Museum of Art, Chattanooga, Tennessee. Architect: Derthick & Henley, Architects, Chattanooga, Tennessee. Structural Engineer: Bennett & Pless, Inc., Atlanta, Georgia. General Contractor: Raines Brothers, Inc., Chattanooga, Tennessee.

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.



A COUNTRY ESTATE—Rancho Santa Fe, California



HUNTER MUSEUM OF ART-Chattanooga, Tennessee

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 win-

Supporting documentation illustrating compliance

with ASHRAE 90-75 (or similar) specifications

dows, etc., are of prime interest.

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.

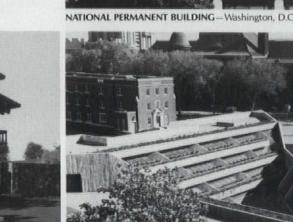
Ownership and Publication of Entries—All entries shall become sole property of CRSI. No materials will be returned. CRSI reserves the right to use or publish all entries and accompanying materials in CRSI advertising, CRSI publications or for any and all editorial purposes and by entering, entrant grants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

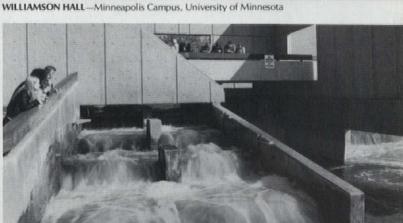
materials. Such right includes publication of photographs and names of Award winners without compensation to winners.

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.





GRAND RAPIDS FISH LADDER—Grand Rapids, Michigan

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

mail entries to



CRSI CONCRETE REINFORCING STEEL INSTITUTE

180 North LaSalle Street, Room 2112D Chicago, Illinois 60601 Attention: Victor A. Walther, Jr. Director of Marketing



Only Rixson-Firemark provides adequate control for any door hung on hinges or pivots...exterior or interior...large or small...regardless of traffic conditions, weight or likely abuse. Only Rixson-Firemark.

FOR EXTERIOR DOORS: The Incomparable No. 27 Closers

- Uncompromised door control, better, more reliable than *any* other closer
- True fast or slow latch adjustment
- Unequaled shock resistance and mechanical efficiency
- Iron closer body, double sealed, with all weather hydraulic fluid
- Fully conceals in floor; out of sight and harm's way
- Removable without door removal ("Q" models).
- 10-year Rixson warranty

FOR INTERIOR DOORS: The Exciting Century 2000

- Eliminates sizing and spring adjustment.
 Simplifies specification
- Heavy duty or regular model
- Unique hydraulic backcheck pre-set at 75°, field adjustable between 50-180°
- Facilitates uniform opening and closing forces throughout building
- Multiple spring backup system and unique fluid filtering
- 5-year warranty

Only Rixson-Firemark offers a full line of door closers...surface mounted, overhead concealed or floor concealed...for *any* application.

Ask the door control specialists:

RIXSON-FIREMARK

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



No. 27 Series
Floor type closers
for every application
where durability
and reliance
are paramount

CONRAC

Circle No. 383, on Reader Service Card



Claude Robillard Center in Montreal

ANNOUNCING!

International Super Sport Surface

Now Available in U.S.

It's not a new untested product. Mondo Rubber has been around for a long time. It is used by some of the top sport centers and schools throughout the world, like Montreal's Claude Robillard track and field house, Berlin University and the Milan tennis center in Italy. You'll find it on major running tracks throughout the world.

Really Multi-Purpose

It's good for basketball, tennis and volleyball. You can use it on diving platforms, around skating rinks and in weight-lifting areas. You can run on it with spikes or cleats or walk on it with street shoes.

Really Tough

That's because it's made of rubber.

It won't crack, peel, warp, scratch or dent, giving you years of long wear.

Indoors And Outdoors

Mondo Rubber resists temperature extremes and ultra-violet rays without cracking, fading or changing its composition.

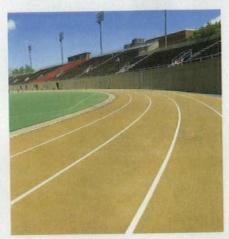
Cushioned, Yet Resilient

When your foot pushes down, it pushes back again. This makes it a fast competition surface, yet it's easy on your legs, and the resiliency gives good ball bounce.

It's easy to see why so many sports people are enthusiastic about this surface. It has lots of advantages over polyurethanes and PVCs. You're going to like it. A lot.

For more information, just return

the card in the back of this book, or write Robbins Information Center, P.O. Box 225, Dayton, Ohio 45401.



400 meter track at McGill University, Montreal.

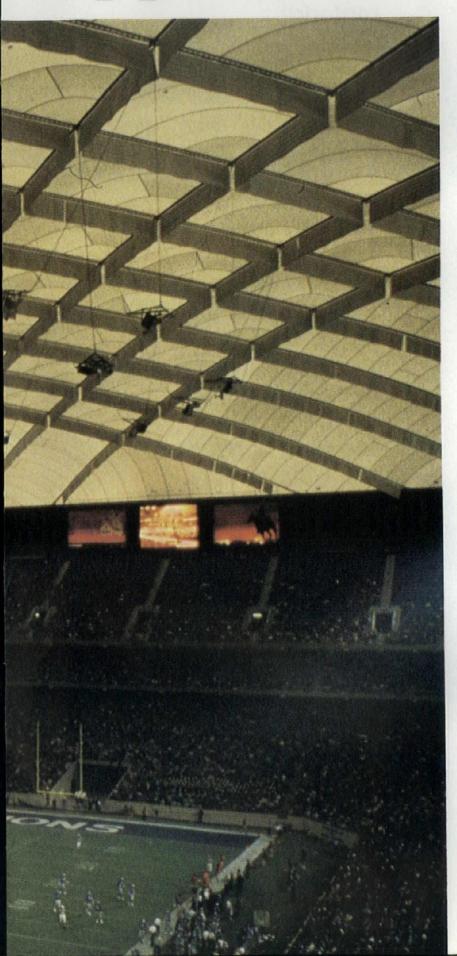




A 10-acre roof of TEFLON...and air



fabric coated with supports the load.



An air-supported dome of lightweight Fiberglas® coated with DuPont TEFLON® fluorocarbon resin completely roofs Pontiac Silverdome, home of the Detroit Lions, Detroit Pistons and Detroit Express. The 10-acre area is the largest permanent structure roofed with architectural fabric to date—and the stadium cost far less to build than comparable stadiums using other dome approaches.

Although the roof weighs 200 tons, the spectators inside never notice the slight increase in air pressure that supports it.

Tension structures with steel cables carrying the load, such as this LaVerne College drama lab and campus center, offer an attractive alternative to airsupported structures.



In addition to low construction costs, fabric structures coated with TEFLON offer easy and economical maintenance. The coated fabric resists sunlight, dirt and aging, and rain helps keep it clean because of the non-stick surface of TEFLON.

Fabrics coated with TEFLON have high reflectivity, which helps minimize energy expenditures for cooling in summer. They also provide relatively high solar transmission for natural illumination and can be insulated to minimize heat loss in winter.

Architectural fabric structures are strong. When properly specified, they easily withstand the stresses of wind and snow. And Fiberglas® coated with TEFLON does not support combustion—exhibiting exceptionally low values for flame spread and smoke generation.

Send for free booklet

Find out more about the advantages of architectural fabrics coated with TEFLON for permanent buildings. For a free 16-page full-color brochure, write: DuPont Company, Room 37050A, Wilmington, DE 19898.

Circle No. 443, on Reader Service Card





A copolymer glass fibre reinforced structural panel material...

THIS IS WINDAL-PROOF DECORIVE KRINKLGLAS®

Actual size



The metal inlay provides super protection to a beautiful product.
The heavy duty, transparent glass fibre allows natural lighting. This patented, exclusive new paneling is available in any color or multi-color decorator combination.

Suggested Usages: Roofing, Doors, Windows, Railing, Skylites, Partitions, Truck body panels, Railroad car sides, Industrial Applications, etc. In solar systems Krinklglas® (multifaceted surface) has proven, by tests, to be a 20 per cent greater energy factor when used as the face cover.



CONSUMER AND BUILDING CONSTRUCTION

AWARDS

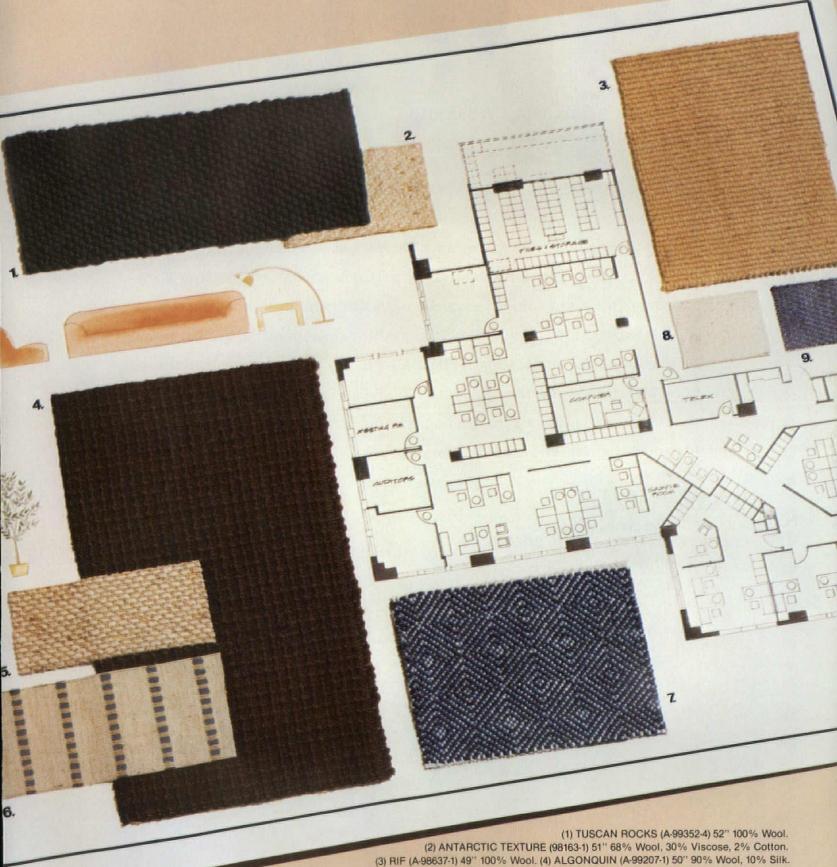
1065 E. 26th Street Hialeah, Florida 33013 (Dept. VP/PA)

Tel.: 305-691-5961

Telex: 51-9459 (Barnette Hilh.)

Write for color brochure, samples and pricing information.

Homespun by Scalamandré



(2) ANTARCTIC TEXTURE (98163-1) 51" 68% Wool, 30% Viscose, 2% Cotton.

(3) RIF (A-98637-1) 49" 100% Wool. (4) ALGONQUIN (A-99207-1) 50" 90% Wool, 10% Silk.

(5) WINTER (98132-1) 54" 65% Wool, 20% Nylon, 15% Rayon. (6) REED (A-98194-5) 50" 45% Cotton, 55% Linen.

(7) DIAGONAL SQUARES (A-99397-6) 50" 100% Wool. (8) ARCHITECTURAL TEXTURE (A-99008-4) 51" 80% Rayon, 20% Silk.

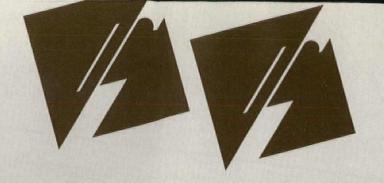
(9) SPINA VENEZIA TEXTURE (98099-6) 50" 40% Silk, 60% Spun Rayon.

Halamandré

950 Third Avenue, 10th Floor, New York 10022 to the trade only

Philadelphia • Atlanta • Miami • Dallas • Houston • Los Angeles • San Francisco • Chicago • Boston

Circle No. 416, on Reader Service Card



On Designer's Saturday Weekend Oct. 5 and 6 don't forget Kwik File...

We are located right in the heart of Designer's Saturday action at the O'Grady & Siegel Assoc. showroom, 306 East 61st Street, New York City (2nd floor of the Interior Design Building). We will be open from 8 a.m. to 6 p.m. both days.

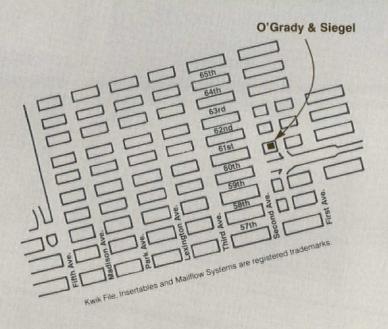
More and more architects and interior designers are discovering that Kwik File has some important things to say about total utilization of inner space.

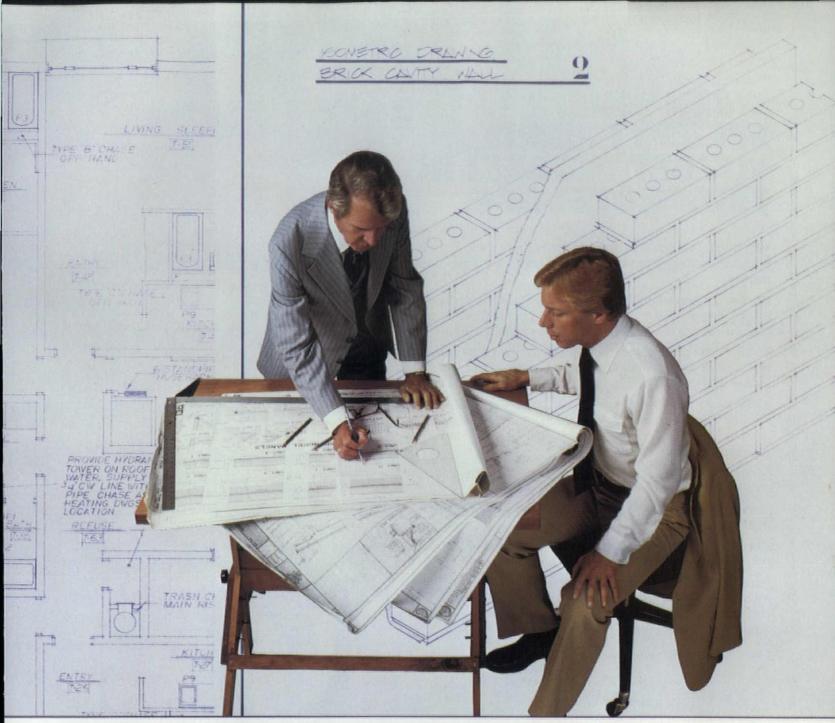
For one thing there is Kwik File's **Insertables** a complete internal organization system for office cabinets. Kwik File is also widely respected for its mailroom furniture, **Mailflow Systems**.

We've developed a special mailroom planning service kit specifically for architects and designers. Be sure to ask for one.

KWIK-FILE

2840 Grand Avenue South Minneapolis, Minnesota 55408 612/827-5681





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

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

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

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

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

If you'd like to know more about the values and characteristics of brick, write us. We're the Brick Institute of America.



WHEN YOU SPECIFY GRINNELL YOU GET THE BEST FIRE PROTECTION.

Why do the owners and designers of so many buildings choose Grinnell? Because we offer the broadest, most advanced line of fire protection equipment available.

Grinnell custom-designs a cost-efficient sprinkler system that factors in all types of requirements for a particular building—from code regulations to construction budgets. We use computer programs in its hydraulic design.

Our complete product line is manufactured in three plants with strict quality controls and the system components fabricated in one of our 6 strategicallylocated plants.

And once we install a system, we back it up with a complete maintenance and inspection program, including 24-hour, 7-day emergency service provided by our trained technicians. This emergency service is as close as the Yellow Pages of your telephone directory.

Today, Grinnell fire protection equipment helps to safeguard lives and property throughout the world.

Grinnell sprinkler systems can be found in virtually every type of structure, from industrial plants to hotels to museums.

Grinnell Fire Protection Systems. We know our business. We should. We're the oldest, most experienced company of its kind in the world.

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.

SPECIFICATIONS

System Classification

Pipe & Material

Alarm Valva

Water Motor Alarm

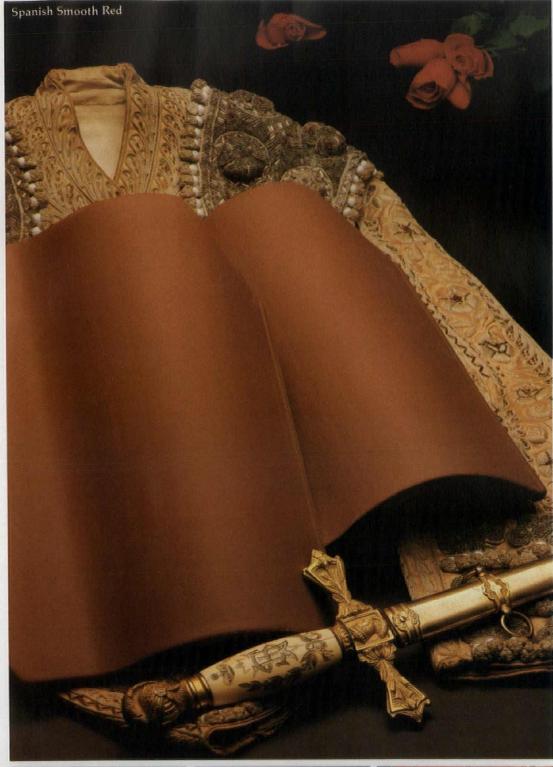
Drain Piping

Hanger

Circle No. 417, on Reader Service Card FIRE PROTECTION

Sprinklers







Americana Earth Gray



Mission Granada Flash



Williamsburg Forest Green

Ludowici-Celadon offers clay roof tile in more shapes, sizes, textures and colors than any other company in the world.

The unique variety of our clay tiles is highly adaptable to many different building applications.

We are experiencing a renaissance for clay roofs. There is a revival of this durable roofing material among architects and builders across the country. They recognize the value of the Ludowici roof system in which vitrified clay tile is a lasting armor against sun, snow, wind and rain...defying not only temperature but decay and erosion.

Owners can enjoy both versatile service and significant energy savings for their constructions with our products.

We are proud to produce for discriminating architects, builders, and owners a timeless product, a masterful variety of tiles





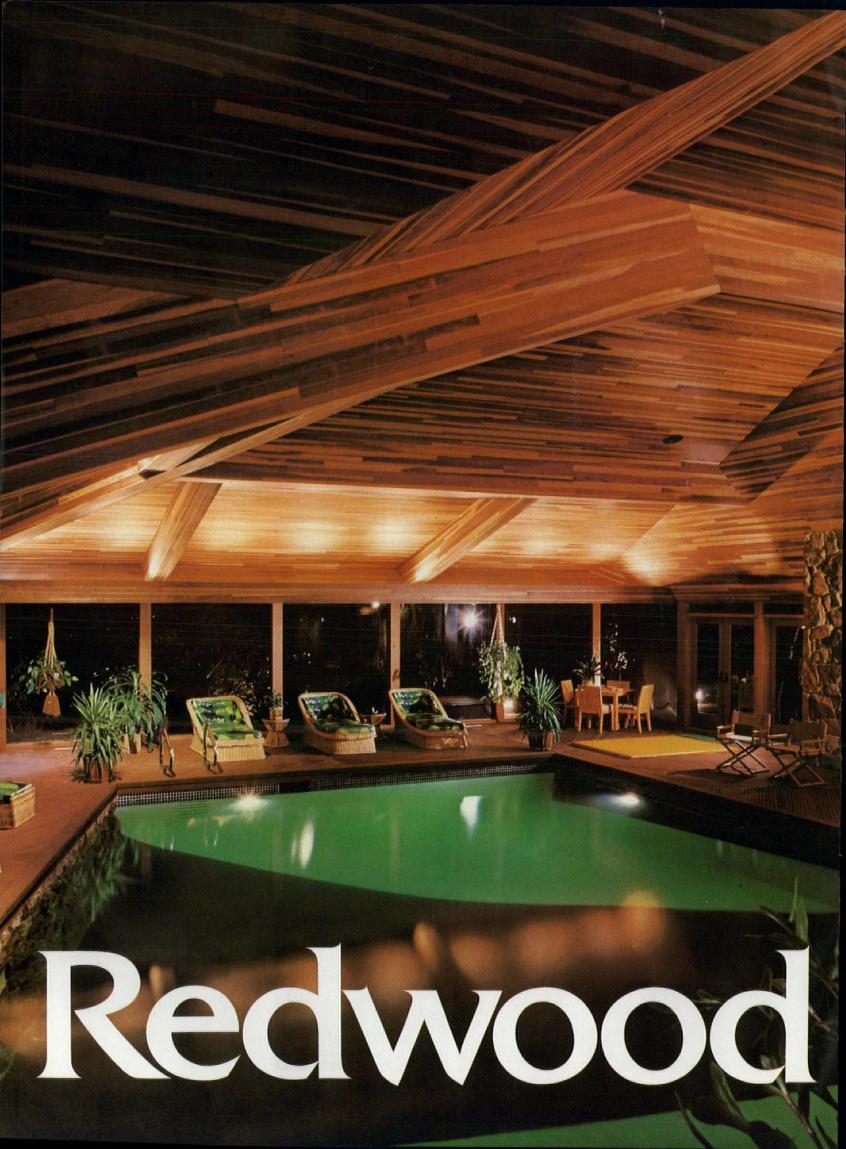
for traditional, modern and innovative architecture.

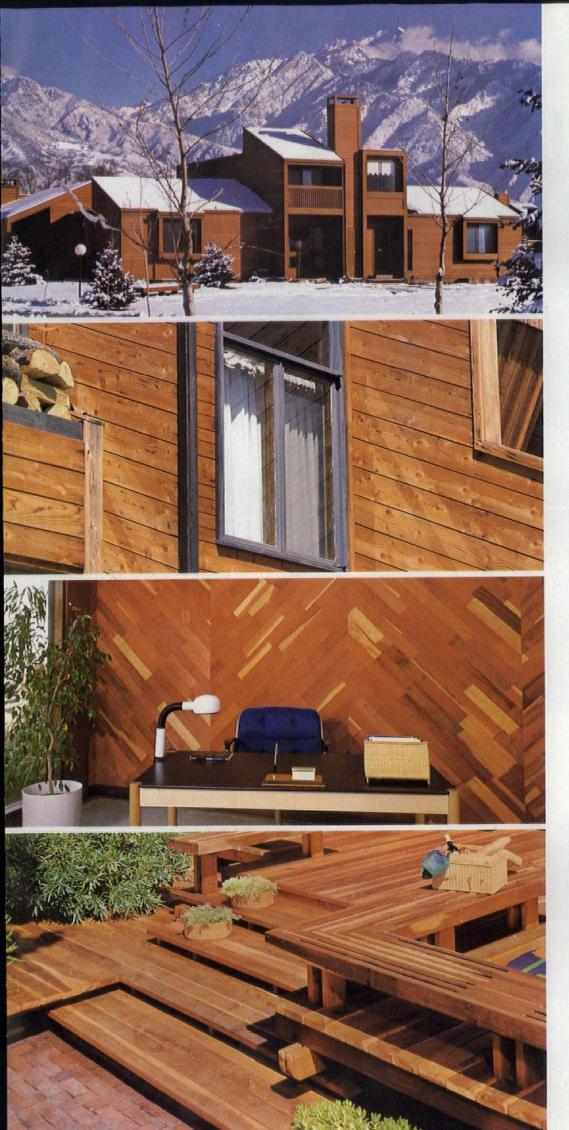
Create a masterpiece. An architectural expression that is succinctly individual and one that will defy the passage of time.

For further information, write or call:

LUDOWICI-CELADON

Division of CSC, Incorporated 201 North Talman Chicago, IL 60612 • (312) 722-7700





Redwood comes in a much wider variety of grades, shades, textures and types than most people think.

Redwood, as the work shown here clearly demonstrates, is not only beautiful, it's versatile. Redwood can be warm and rich. It can be bright and colorful. Redwood can be smooth and handsome. It can be rough and striking. Redwood has almost infinite possibilities.

And redwood adds enduring value to whatever you design or build. No other wood weathers like redwood. No other wood is as resistant to warping, checking, and age. No other wood takes and holds a finish better, or needs a finish less. Redwood insulates against heat, cold and noise. Redwood resists flame spread. Redwood. There is, literally, no

other wood like it.

Credits:

Clear grade residential ceiling Architect: Norman Jaffe, AIA Interior: Maurice Weir, FASID

Clear All Heart siding, multi-unit Architects: Fisher-Friedman Associates, AIA

Knot and sap textured siding, multi-unit Architect: Kermit Dorius, FAIA Architects and Associates

Finger joint interior accent wall Architect: Richard E. Huston Architect, Incorporated

Garden grades deck Designer: Elsebet Jegstrup



One Lombard Street San Francisco, California 94111

Redwood - A renewable resource





John Stuart International

979 Third Avenue New York 10022 212 HA1 1200

Circle No. 637, on Beader Service Card

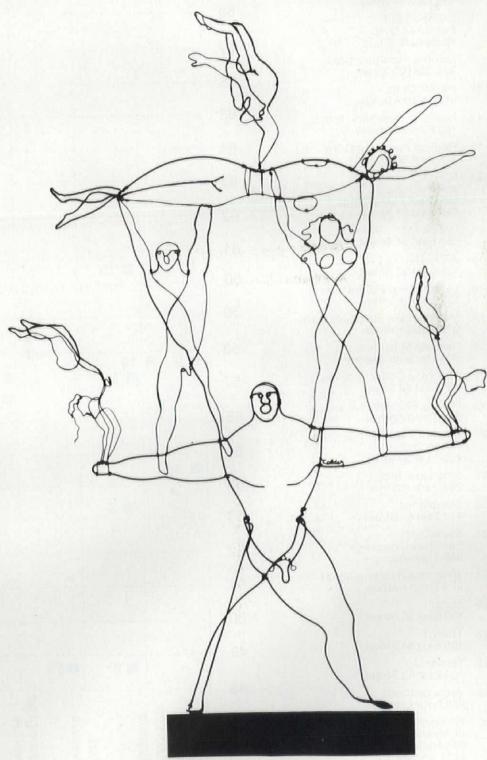
Alexander Calder, The Brass Family, 1929. Brass wire, 64" x 41" x 81/". Gift of the Artist. @ 1979, Whitney Museum of American Art. Design: Mitelman & Associates @ 1979 Designer's Saturday, Inc.

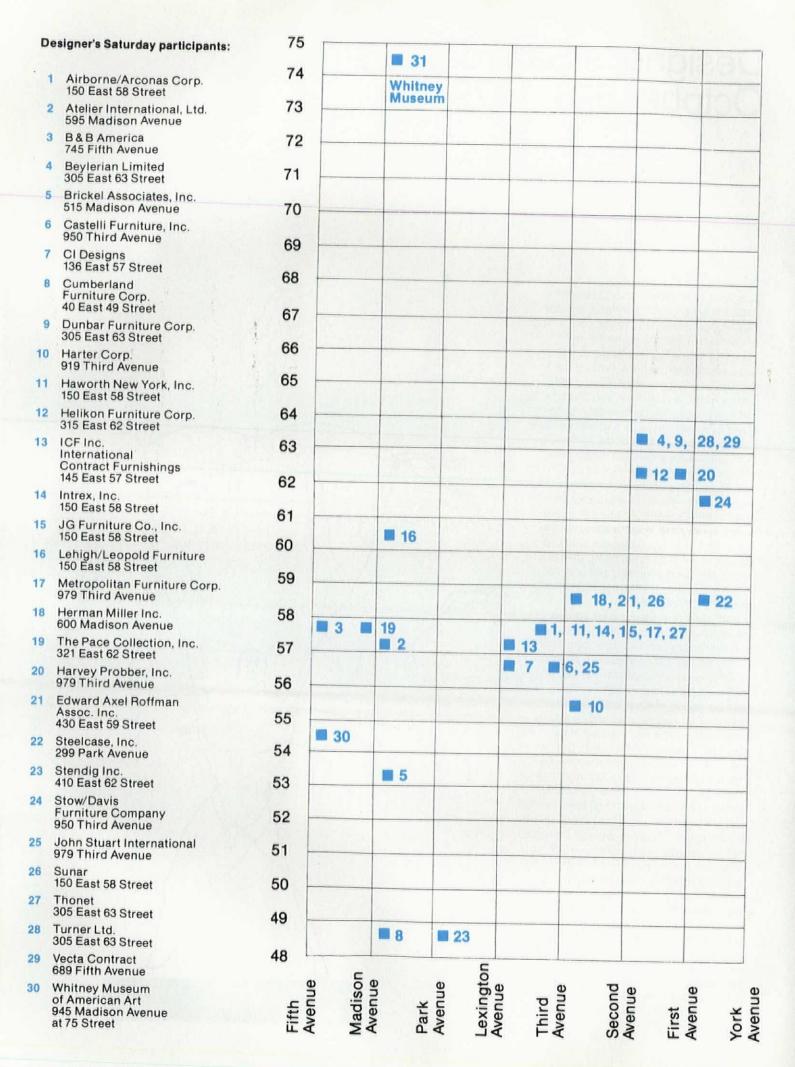
Designer's Saturday October 5–6, 1979

The twelfth annual edition of Designer's Saturday begins with perhaps a greater sense of excitement than ever before. That excitement is epitomized by the joyful sculpture by the late Alexander Calder that has been chosen as the symbol of the two-day event. Part of that excitement comes from the realization that Designer's Saturday has at last been widely recognized as more than just a regional furniture mart for design professionals. It is now a highly influential showcase for the best of high-style contract interior design, with impact on a national—and even international-scale. That broader influence that Designer's Saturday has attained is reflected in the fact that, for the first time, the special Designer's Saturday section of P/A is this year being distributed to our national readership, and not only those subscribers in close geographical proximity to New York.

Each new year seems to be adding to the importance of Designer's Saturday, and with just cause, for its concentration of quality and its dissemination of design innovation is unsurpassed for a show of its size. For Designer's Saturdaymembership in which is consciously limited—has always emphasized quality over quantity. This has resulted in the high degree of interest that New York design and communications professionals have shown in Designer's Saturday, and their authoritative voices (for both industries remain centered in New York) have carried the message far beyond the normal range of such events. And if quantity of exhibitors can be limited, apparently quantity of visitors cannot, for attendance has grown by leaps and bounds in recent years.

What visitors to the 29 Designer's Saturday showrooms in New York on the first Friday and Saturday in October will see is this: the finest contract furnishings produced in this country and abroad, seen, in turn, by the most inventive and influential designers. It is, as the name says, their Saturday, but if you are serious about finding the best in interior design, you should make it yours, too.





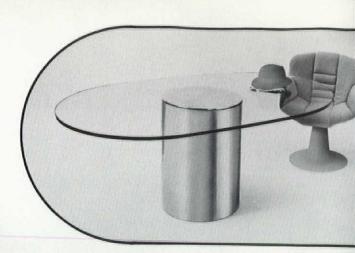
Vecta Contract
Ginkgo Biloba Tables.
Uniquely designed
cast aluminum base,
beautifully polished
or coated in 16
Thermoset colors,
6 table-top shapes,
37 standard sizes.
Veneers and laminates.
With solid wood, vinyl
or self edge, 2"or 11/4"
thick. Carefully scaled
and designed by
Gunter Eberle for
today's architecture.

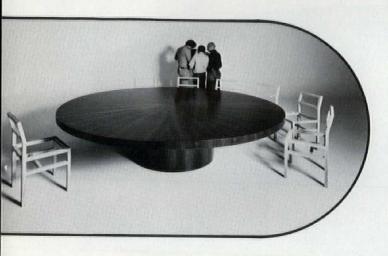


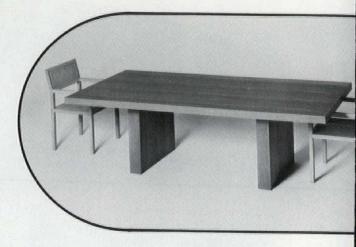
Circle No. 419,

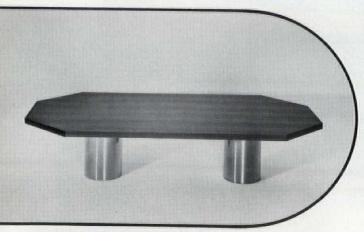


而 N C









In Chicago: Milo Bloch & Assoc, 415 N. LaSalle St. In Atlanta: MWG Inc.

In Miami: MWG Inc.

In St. Louis: Belson/St. Louis Inc.

In Minneapolis: In Depth Marketing Inc.

In Seattle: Ferguson-Hildreth Inc.

In Los Angeles: Howco Marketing Inc. In Dallas: Van Sant Inc.

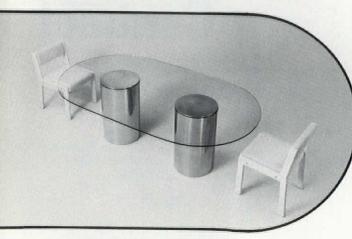
In Detroit: Pilbeam-Zimmerman Inc.

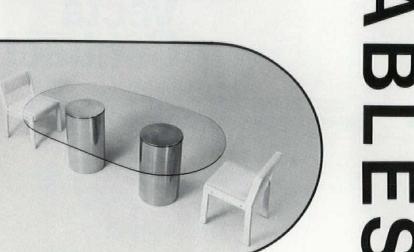
In Denver: Lounsbury-Bozik

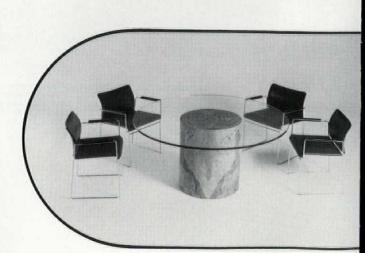
In Boston: Furniture Marketing Inc.

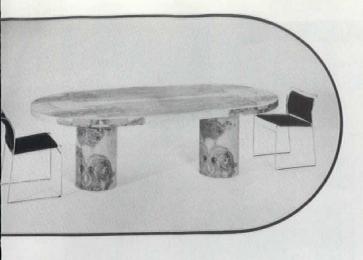
In San Francisco: Ferguson-Hildreth Inc.

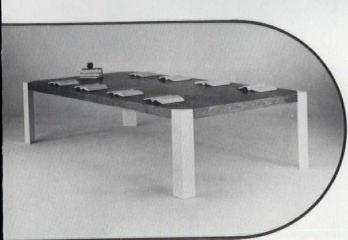
In Washington, D.C.: The Ed Weber Team In Philadelphia: Kennedy-Walker & Assoc.

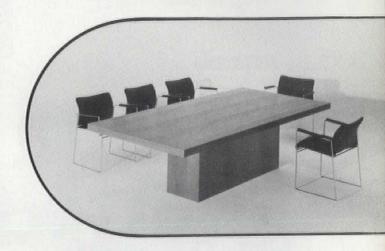


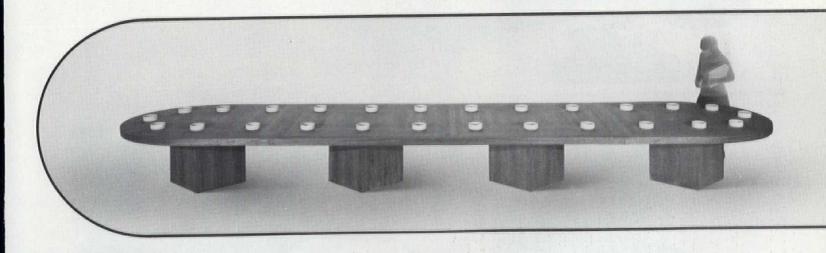




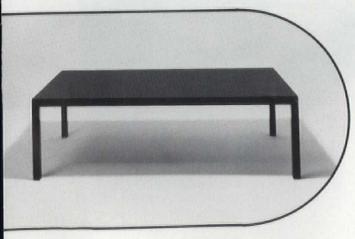




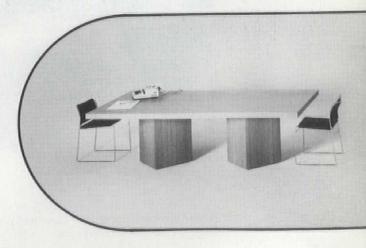




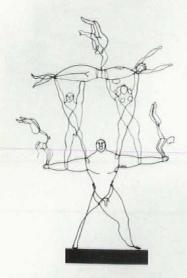
ARCHITECTURAL SUPPLEMENTS

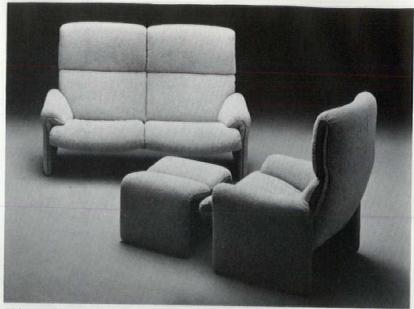


3E. 62ND.ST



Showroom: 150 East 58th Street, N.Y., N.Y. 10022 Tel. (212) 758-0922

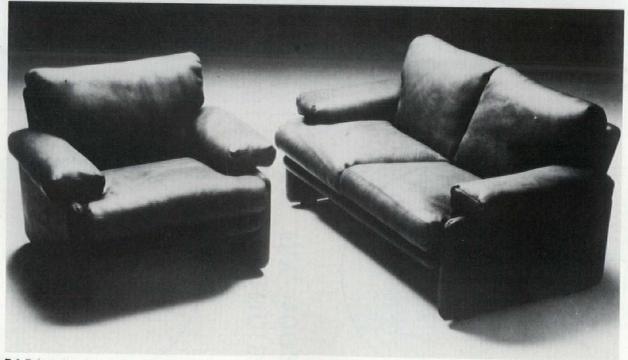




Airborne/Arconas: Primavera series seating by Andre Vandenbueck. Circle 100 on reader service card



Atelier International: Executive chairs and table by Giovanni Carini. Circle 101 on reader service card



B & B America: Coronado lounge series by Afra and Tobia Scarpa. Circle 102 on reader service card



5202 BIG SADDLE LEATHER CONFERENCE TABLE SERIES / DESIGN G. FALESCHINI NEW YORK: 321EAST 62 STREET / LOS ANGELES: 8936 BEVERLY BOULEVARD CHICAGO: 1248 MERCHANDISE MART / MIAMI: 47 NORTHEAST 36 STREET BOSTON · DALLAS · HOUSTON · SAN FRANCISCO · SEATTLE



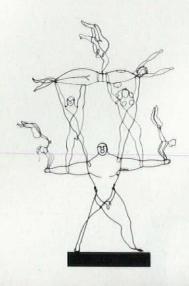
International Contract Furnishings Inc. 145 E. 57th St., New York, N.Y. 10022 Telephone: (212) PLaza 2-5870 Cable: Confurn NY/Telex 236073 Circle No. 420, on Reader Service Card

The Davis Chairs Design: Vico Magistretti, 1978

Would you dare to cover a contract chair in white?
We would.
The Davis office chairs and waiting room seating have covers that are removable for cleaning by the turn of one screw.









Beylerian: Folding armchair by Masayuki Matsukase and Centrokappa. Circle 103 on reader service card

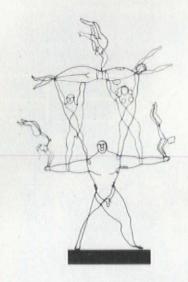


Brickel Associates: Shellback chair by Ward Bennett. Circle 104 on reader service card

Castelli Furniture: Plano folding table and plia stacking chair. Circle 105 on reader service card









CIDesigns: Ash and aluminum folding chair by Michael Kirkpatrick. Circle 106 on reader service card



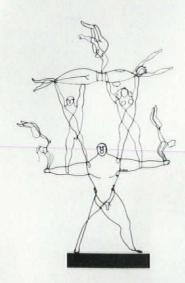


Dunbar: Storage column, chair, and desk, dePolo/Dunbar collection. *Circle 108 on reader service card*

Cumberland Furniture: "POD" chair line by William Sklaroff. Circle 107 on reader service card

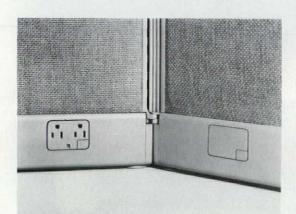


601 SOUTH FULTON STREET, BERNE, INDIANA 46711 SHOWROOMS: NEW YORK/CHICAGO/ATLANTA/DALLAS/DENVER

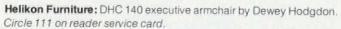




Harter: 2300 Series high-back and low-back office chairs. Circle 109 on reader service card



Haworth: TriCircuit ERA-1 open-plan office integrated power. Circle 110 on reader service card





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



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

Nova. A three-year guarantee.

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

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

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

Nova. Unlimited options.

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

You can order upholstered pads that can be replaced right on the premises, chair-stacking dollies, ganging frames, tandem units with or without tables, tandem riser mounts (for theater riser steps), fixed pedestal bases (that bolt into the floor), book racks, glide feet, tablet arms, removeable-top tables, table-

But if you're ingenious enough to think of something more, we can probably make it on special order.

top dollies, even a variety of ashtrays.

Nova. It's parked everywhere.

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

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

is waiting.

Prudential Life, Bell Telephone, Holiday Inn, and Zip'z ice cream parlors use it.

And, of course, Cuyahoga Vocation-

al High School.

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

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

For your convenience, we have additional

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

Circle No. 350, on Reader Service Card



plastisol covering sinuous springs which provides a soft and flexible support for long-term seating comfort. The Soflex® colors are white, red, brown, orange, yellow and blue.

coated finish suitable for outdoor use. Tubular steel frames are available in polished chrome plated or white, red or brown powder

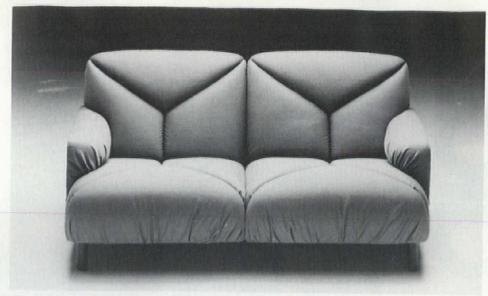
for mass area usage. and is also available with ganging connectors The 2001 chair stacks 30 high on a moveable dolly

to slide over the Soflex® seat or back allows for quick, on-location installation or replacement. A simple and unique upholstery option of zippered sleeves

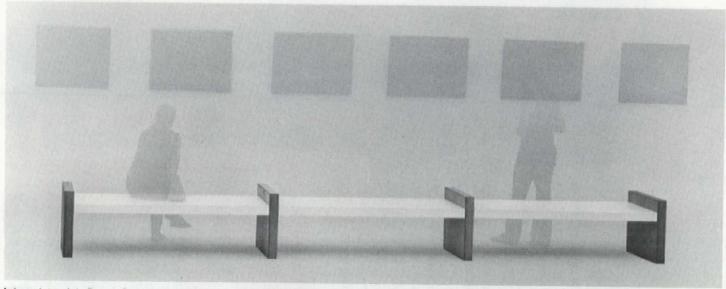
Designed for Thonet by David Rowland Patents pending **Thonet**

491 East Princess Street PO Box 1587 York, Pennsylvania 17405



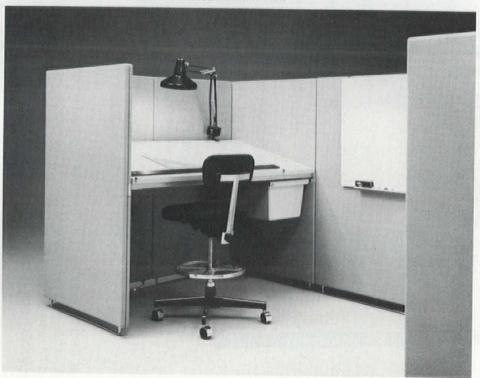


ICF: "Lobby Davis" lounge seating by Vico Magistretti. Circle 112 on reader service card



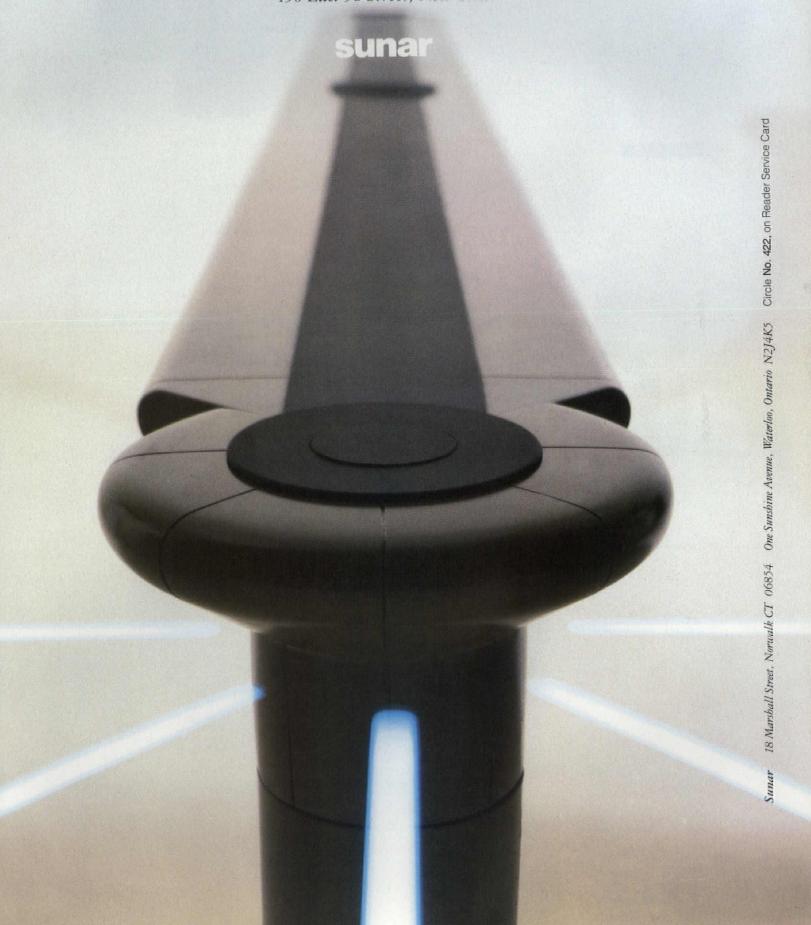
Intrex: Inter-Join Bench System of wood components by Paul Mayén. Circle 113 on reader service card

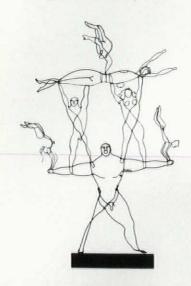
JG Furniture: Drafting/engineering work surfaces. Circle 114 on reader service card



For the office of the 80's-the award winning Race System, with its unique horizontal energy and communications distribution system. The basic concept, developed with innovative skill by designer Douglas Ball, gives a new meaning to flexibility in open office planning and offers an exciting alternative to conventional systems.

Race System will be presented at Designer's Saturday, October 1979, in the Sunar showroom, 150 East 58 Street, New York.





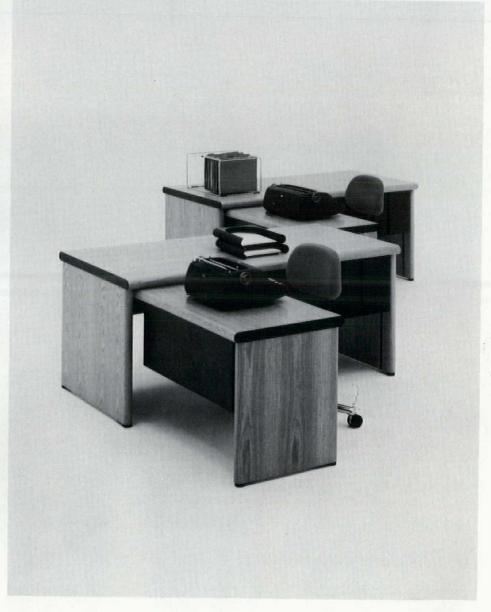




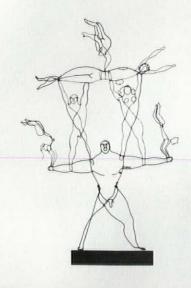
Metropolitan Furniture: The Resin Group tables by Jules M. Heumann. Circle 116 on reader service card

Lehigh-Leopold Furniture: The Personal Chair by Robert Whalen. Circle 115 on reader service card

Herman Miller: Secretarial arrangement of C-Forms in white oak. *Circle 117 on reader service card*

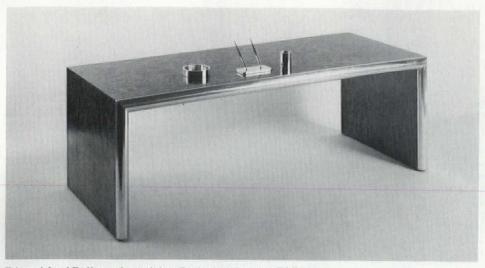












Edward Axel Roffman Associates: Table desk from the 50 Series. Circle 120 on reader service card

Harvey Probber: #4111 Aspen chair with swivel-tilt base on casters. Circle 119 on reader service card

The Pace Collection: "Big" executive desk and chair by G. Faleschini. Circle 118 on reader service card



Steelcase: #454 chairs, one of four series in monochromatic colors. Circle 121 on reader service card

IN ADDITION... THE STUDIO PROGRAM.

Designed by Rodolfo Bonetto for the Elco collection.

An effective group of luxurious furniture permitting combinations of elements suitable to office needs. The uniform finish on all faces is the result of extensive hand work allowing the components to be free-standing, functional spacial arrangements.

Available in White, Black or Champagne lacquer or Tanganyika Walnut.

For further information and the representative nearest you, write to: Dept. SP

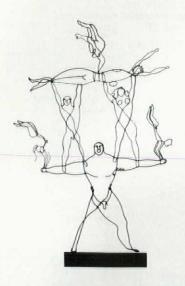
BEYLERIAN LIMITED 305 E. 63rd Street New York, N.Y. 10021 212/755-6300

NEW CHICAGO SHOWROOM 1198 Merchandise Mart Chicago, Illinois 60654 312/670-2220

Circle No. 432, on Reader Service Card



Designer's Saturday 1979









Stendig: #210 Omega executive double-pedestal desk. Circle 122 on reader service card

John Stuart International: #3800 Executive chair, Ero Dynamic series. Circle 124 on reader service card

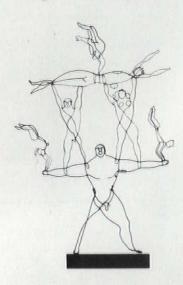
Stow/Davis Furniture: Highland Heather, British Woollens collection. Circle 123 on reader service card



Sunar: The Acorn Chair with hardwood frame by Vignelli Designs. *Circle 125 on reader service card*



Designer's Saturday 1979



Designer's Saturday scholarship award

For the third year, according to Leonard Eisen of Intrex, president of Designer's Saturday, the 29 members are sponsoring a \$3000 Student Scholarship to be awarded to the interior design/ architectural department of a college or university to be divided among deserving students as the recipient chooses. This year's award is going to the Parsons School of Design, and it will be shared by two outstanding students from the Department of Environmental Design: Rosemary Rees of Montreal, Canada, and John Scarnecchia of Mohegan Lake, NY. Both are entering their senior year at Parsons this fall. Awards jurors were Robert Bray, Joseph D'Urso, James Maguire, Norma Skurka, and John Vreeland. Presentations will be made at the concluding event of the week—the reception being held on October 6 at the Whitney Museum of American Art at 7 p.m.



Vecta Contract: "Ginkgo Biloba" conference tables by Gunter Eberle. Circle 128 on reader service card



Turner: High- or low-back Consenso chair by Otto Zapf. Circle 127 on reader service card



Thonet: #2001 Sof-Tech stack chair of tubular steel by David Rowland. Circle 126 on reader service card

JG/62-63 Auditorium Seating/National Gallery of Art



The JG/62-63 with its minimum side profile facilitated this continental layout. Concealed double articulating tablet arms blend with standard arms. Removable front rows add versatility

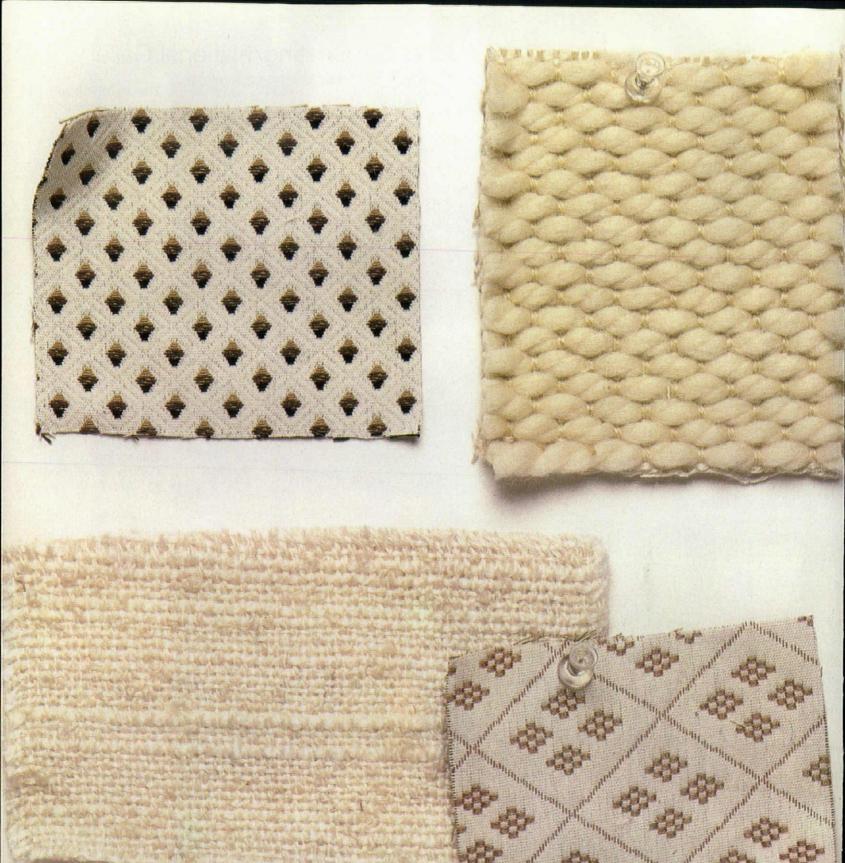
Complimentary layout service available on request.

Installation: National Gallery of Art, Washington, DC Architect: I.M. Pei & Partners Product Design: Peter Dickinson

JG Furniture A Division of **Burlington Industries** Quakertown Pennsylvania 18951 215 536 7343

Circle No. 363, on Reader Service Card





MANUEL CANOVAS

NEW YORK: D & D BUILDING, 979 THIRD AVE., NEW YORK 10022, TEL. (212) 688-5611

"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 energysaving 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 quest 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

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

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. AMA American Gas

| David L. Sgrignoli, M Energy Systems And American Gas Associ 1515 Wilson Bouleva Arlington, Va. 22209 | alysis ciation and |
|---|--------------------|
| ☐ Send more inform ☐ Send information | |
| NAME | |
| ADDRESS | |
| CITY | |
| STATE | ZIP |

PANEL LOCATION

Specify Duraflake FR.



HEATING VENTILATING & AIR CONDITION THE STATES

Anything less and you could be playing with fire.

Play it safe with Duraflake FR.

Specify Duraflake FR, the fire-rated particle-board that exceeds Uniform Building Codes and was approved and awarded a Class I rating by Underwriters' Laboratories in 1975. For the past several years, architects, engineers, builders and contractors throughout the world have been specifying Duraflake FR with confidence for offices, hospitals, auditoriums, airports, courtrooms...all types of buildings where public safety is vital.

Play it versatile with Duraflake FR. You can do almost anything with Duraflake FR. It can be drilled, routed, bullnosed, beveled and precision-machined. Smooth, grain-free Duraflake FR is also an excellent substrate for easy application of fine wood veneers, high and low pressure laminates and vinyls for wall systems, as well as contract furniture and fixtures.

Play it smart and always specify Duraflake FR.

For safety, versatility and economy, specify Duraflake FR. We can meet both code and creative challenges.

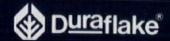
Play it for all we've got... a full Duraflake product line.

Besides fire-rated Duraflake FR, we offer a complete range of Duraflake products to meet every challenge! Ask for Duraflake that is edge-banded...filled...color coated... primed...or treated with hot melt polymer. If you need industrial particleboard, door core, stair treads, edge filled shelving or decking, Duraflake makes those, too. You can even specify Duraflake that is custom cut to your specs!

Play around with our free Duraflake FR kit. Seeing is believing. Send us a note or call us regarding your needs, and we'll send you our colorful Duraflake FR kit to help you get even more fired up over Duraflake FR.

Our kit contains product samples, application information, physical properties data, as well as information on the full Duraflake product line. Mail your requests to: Duraflake FR Kit, P.O. Box 428, Albany, OR 97321.

Or, call our sales office at 503-928-3341.



Willamette Industries, Inc. Building Materials Group P.O. Box 428 Albany, Oregon 97321

Member of National Particleboard Association

Associate Member of:

National Kitchen Cabinet Assn. National Furniture Manufacturers Assn. National Assn. of Plastic Fabricators Architectural Woodwork Institute

Duraflake FR is a product of the forests—the *completely* renewable industrial raw material resource.

Circle No. 335, on Reader Service Card







Specify VPI and get a seamless installation-plus the benefits of solid vinyl tile.

VPI's heat-welding process fuses 36" x 36" sections of solid vinyl flooring into one continuous surface that eliminates seams. Completely. Permanently. Forget about shrinkage and tile outline. And with no open seams, dirt can't hide, water can't seep through from the surface. The result is an attractive, long-lasting floor that stands up to almost anything

All VPI solid vinyl flooring resists attack from common chemicals. Because there's no laminated wear layer, pattern and color can't wear off...even under the heaviest traffic. Solid vinyl's natural resiliency reduces foot and leg

fatigue and resists permanent indentation from heavy objects. And you can choose from established patterns and colors in 36" x 36" sections for seam welding as well as in 12" x 12" Micro-squared™ tiles for conventional installation.

In schools, hospitals, nursing homes, shopping centers, offices—wherever you want a floor that stands up, specify VPI solid vinyl. Tile or seam welded. For more information, just write VPI, 3123 South 9th Street, P. O. Box 451, Sheboygan, Wisconsin 53081. Or give us a call at 414-458-4664.



TOWER CONTRACT VINYL WALL COVERING A Collection of textures in deep dimension



366 COLORS IN 36 PATTERNS

Textures in deep dimension for fabrics, cork, wood, grass, masonry, leather, etc., in a distinctive collection of 36 patterns in color-ways of 54 inch width in 30 yard bolts. Custom service for special colors and effects is also provided.

Distinctively created and produced to meet to-day's design and maintenance requirements of commercial and institutional projects.

DISTRIBUTED BY

FRAZEE'S CREATIVE WALLCOVERINGS

16301 Carmenita Road Cerritos, California 90701 3249 N.W. 29th Avenue

Portland, Oregon 97210

ISGO CORPORATION

2121 W. 21st Street Chicago, Illinois 60608

1237 Conveyor Lane Dallas, Texas 75247

5809 Chimney Rock Houston, Texas 77081

1334 Atlantic Street North Kansas City, Missouri 64116

WALLCO

6700 N.W. 77th Court Miami, Florida 33166

WALLCO WEST

4704 N. 7th Avenue Phoenix, Arizona 85013



A message from or another about

I write advertising. You design places for people to live, work and play.

And we both have the same problem.

Both of us are in the business of creating ideas. Of finding the excitement in things. Of using our talents to transform the ordinary into the extraordinary.

But that's only one part of our job.

The dilemma facing the architect, the interior designer, and the writer of ads.

Because our clients also expect us to be practical. For our subjective ideas, they're spending cold, hard, objective cash.

And, when you're trying to justify your creative expression to the guy who



Eastland Mall, Charlotte, N.C. Little and Associates, Architects.

pays the bills, you know how far "Because I like it that way" will get you.

After all, he isn't paying you to express yourself. He's paying you to do a job.



Cali Associates Building, Maplewood, N.J. Jerome Morley Larson, Architect.

And now I want to talk to you about using ceramic tile. Because that's what my clients are paying me to do.

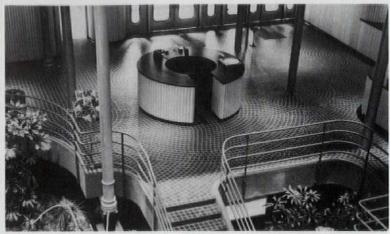
Ceramic tile. The way it works is just as beautiful as the way it looks.

I hardly need to tell you about the creative advantages of ceramic tile. The rich colors and textures. The deep-down glow. The versatility that lets you create patterns and designs, almost endlessly.

There's probably no other building and decorating material anywhere that lets you express your ideas so freely.

But how do you justify the initial cost of ceramic tile in logical, dollars-and-cents

ecreative person to Ceramic Tile:



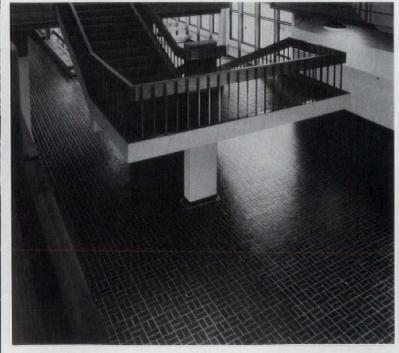
Museum of Natural History & Science, Louisville, Ky. Louis & Henry, Inc., Architects.

terms? When you could use any one of a dozen or so other materials that, in the short run, would probably cost less?

That's where I can offer you some help. As one creative person to another.

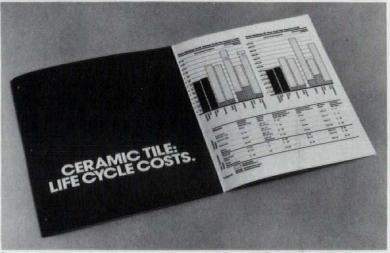
My clients have published the results of a totally independent life-cycle cost

Technical Institute of Alamance, Alamance, N.C. Six Associates, Architects.



study comparing ceramic tile with the most commonly used alternatives.

And, over the selected life-cycle of 40 years, ceramic tile actually came out



less expensive to install and maintain than any other floor or wall finish studied.

That may surprise you. But it didn't surprise me. I've been seeing proof of the durability of ceramic tile for years.

Some ammunition to help you convince your clients.

Just write my clients, the Tile Council of America, for your free copy of "Ceramic Tile: Life Cycle Costs."

It states the economic case for ceramic tile in figures even your most skeptical clients will understand.

And I hope it convinces you to use real ceramic tile in your next job.

Because my job may depend on it.

Tile Council of America, Inc.
Tile Council of America, Inc., P.O. Box 326, Princeton, New Jersey 08540

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

Introductory offer to new members of the

architects' book club

TIME-SAVER STANDARDS FOR BUILDING TYPES

by J. DeChiara & J. H. Callender

Pub. price, \$45.00 Club price, \$31.50

WORKING DRAWING HANDBOOK

by R. C. McHugh Pub. price, \$13.95 Club price, \$10.50

026/386 SPECIFICATIONS: Architecture, Engineering and Construction

by C. Ayers Pub. price, \$19.50 Club price, \$13.65

267/561 DICTIONARY OF ARCHITECTURE & CONSTRUCTION

by C. M. Harris Pub. price, \$38.50 Club price, \$26.95



THE PHOTOGRAPHY OF ARCHITECTURE AND DESIGN

by J. Schulman Pub. price, \$25.00 Club price, \$18.75



Dictionary

CHEM Hart

rchitecture Construction

023/395 HOUSES OF THE WEST

by Architectural Record

Pub. price, \$18.95 Club price, \$14.95

ANY ONE OF THESE GREAT PROFESSIONAL BOOKS

FOR ONLY VALUES UP TO \$58.50



785/678 CONSTRUCTION MATERIALS: Types, Uses, & Applications

by C. Hornbostel



256/241 THE USE OF COLOR IN INTERIORS by A. O. Halse

Pub. price, \$24.95 Club price, \$19.95

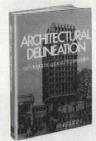


ENERGY TECHNOLOGY HANDBOOK

by D. M. Considine



by F. D. Dubin Pub. price, \$22.50 Club price, \$17.95



ARCHITECTURAL
DELINEATION: A
Photographic Approach
to Presentation

by E. E. Burden Pub. price, \$29.95 Club price, \$22.75



023/301 A TREASURY OF CONTEMPORARY HOUSES by Architectural Record



Time-Saver Standards

STANDARD STRUCTURAL DETAILS FOR BUILDING CONSTRUCTION

by M. Newman



by J. R. Taylor Pub. price, \$24.95 Club price, \$17.50

767/629 ARCHITECTURAL PRESENTATION TECHNIQUES

by W. Atkin Pub. price, \$15.95 Club price, \$12.75

STANDARD HANDBOOK OF ENGINEERING CALCULATIONS

by T. G. Hicks Pub. price, \$29.50 Club price, \$21.00

096/473 TIME-SAVER STANDARDS FOR ARCHITECTURAL DESIGN DATA, 5/e

by J. H. Callender



017/514 SOLAR ENERGY: Fundamentals in Building Design

by B. Anderson Pub. price, \$23.95 Club price, \$17.95

save time and money by joining the architects' book club

Here is a professional club designed to meet your day-to-day architectural needs by providing practical books in your field on a regular basis at below publisher prices. If you're missing out on important technical literature—if today's high cost of reading curbs the growth of your library-here's the solution to your problem. You're guaranteed a 15% discount; often it's much more.

The Architects' Book Club was organized for you, to provide an economical reading program that cannot fail to be of value. Administered by the McGraw-Hill Book Company, all books are chosen by qualified editors and consultants. Their understanding of the standards and values of the literature in your field guarantees the appropriateness of the selections. Books are selected from a wide range of publishers.

How the Club operates: Fourteen times a year you receive free of charge The Architects' Book Club Bulletin. This announces and describes the Club's featured book of the month as well as alternate selections available at special members' prices. If you want to examine the Club's feature of the month, you do nothing. If you prefer one of the alternate selections—or if you want no book at all—you notify the Club by returning the card enclosed with each *Bulletin*.

As a Club Member, you agree only to the purchase of four books (including your first selection) over a two-year period. Considering the many books published annually, there will surely be at least four you would want to own anyway. By joining the club, you save both money and the trouble of searching for the best books.

MAIL THIS COUPON TODAY

Architects' Book Club P.O. Box 582, Hightstown, New Jersey 08520



Please enroll me as a member and send me the two books indicated. I am to receive the Fremium Book at the introductory price of \$1.89 plus my first selection at the discounted price to members, plus tax, postage and handling. If not satisfied, I may return the books within 10 days and request that my membership be canceled. If I keep the books, I agree to take a minimum of three additional books during the next two years. I will receive the Club Bulletin I 4 times a year. If I want to examine a featured selection, need take no action. It will be shipped automatically, If I want an alternate selection—or no book at all—I notify the Club by returning the card enclosed. A postage and handling charge is added to each shipment. I will have a minimum 10 days in which to return the card, and you will credit my account fully, including postage, if this is not the case. Membership in the club is continuous but cancellable by me at any time after the four book purchase requirement has been fulfilled. This order subject to acceptance by McGraw-Hill.

A 36227

Orders from outside the U.S. must be prepaid with international money orders in U.S. dollars. _____

| 7 | 11: | 4 | 1 |
|----|-----|---|----|
| | | V | T, |
| T. | Ħ | П | 1 |

| Write Code No. of Premium Book Here | Write Code Notes of First Selection |
|--|-------------------------------------|
| Charge my USA MA | STER CHARGE* Exp. Date_ |
| Credit Card # | *MC Bank #. |
| Signature | |
| lame | |
| Address | |
| City | State Zip_ |

DESIGN FOR LIVING

EDWARDS HEATING/COOLING VALANCE UNITS PROVIDE SILENT



DRAFT-FREE COMFORT WITH **ECONOMY**

Put Edwards Valance Units in your plans for new or existing homes, apartments, offices or institutions. No fans, blowers, moving parts or special ducts. Low installation and

maintenance costs. Fine-quality units designed by the best engineers in the industry—Edwards. Optional exclusive Heat-SAVER coil available on chiller conserves energy, supplies free hot water. Send for full information.



EDWARDS ENGINEERING CORP.

101 Alexander Avenue Pompton Plains, N.J. 07444

Circle No. 336, on Reader Service Card



CHAL-ART CRAFTS 11-13 Maryland Ave., Paterson, N.J. 07503 INTERNATIONAL IMPORTS 7470 Beverly Blvd., Los Angeles, CAL. Write on your letterhead for free brochure or enclose \$5.00 for 108 page color catalog.

Circle No. 438, on Reader Service Card

NEW Target Tile & Stair Treads

Specially compounded to offer all the features of resilient, long-wearing rubber. Distinctivelystyled to provide exceptional decorative opportunities. Outstanding flame retardant features. A must for egress areas.

> Write or call for more details. The R.C.A. Rubber Co., an Ohio Corporation of Akron, Ohio, 1833 East Market Street, Akron, Ohio 44305. Phone (216) 784-1291.

ASTM-E84 FLAME SPREAD RATING OF 25 OR LESS.



TARGET

TILE & TREADS



Property — The R C A Rubber Co An Ohio Corporation of Akron. Oh

Press-on letters are now obsolete.



The KroyType 80 Automatic Lettering Machine.

It's the technological breakthrough that's actually making press-on letters obsolete.

It's easy to use. Just spin the typedisc and photoready letters are automatically and precisely printed. Alignment and spacing are always perfect. And KroyType™ lettering is produced on a

transparent tape that is adhesive backed for easy positioning. And, repositioning. The KroyType 80 Lettering Machine.

The KroyType 80 Lettering Machine. Five times faster than press-on letters. Saves time. Saves money. Makes press-on letters obsolete. For more information...or, for the machine itself, (only \$645) call Toll Free:

(800)328-1306

KROY

Kroy Industries Inc.
Graphics Division
1728 Gervais Ave./St. Paul, Minnesota 55109
(In Minnesota, call 612 770-7000)

KroyType 80" and KroyType are trademarks of Kroy Industries Inc. for the incredible new lettering system that makes press-on letters obsolete

Circle No. 630, on Reader Service Card

TEST TEST THEIRS. OURS.

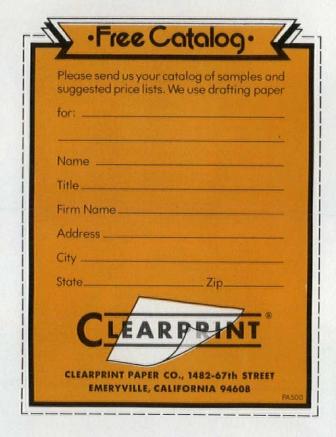
And "theirs" can be any drafting paper you choose.

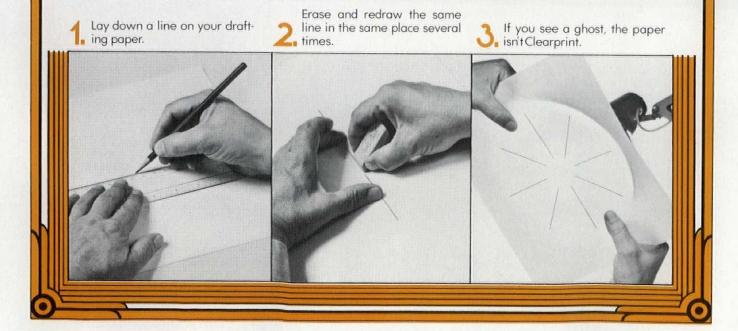
Draw a line, erase and redraw it. Then, look for ghosts. On any paper, other than Clearprint, they're almost sure to be there.

That would be the perfect moment to fill out our coupon and send for your free catalog. Then, try the same test on our paper. You won't get any ghosting. Forty years and more from now you won't see any cracking or yellowing either.

Send for your catalog today. Of course, there's no obligation — except to yourself and your company.

We perfected paper in 1933





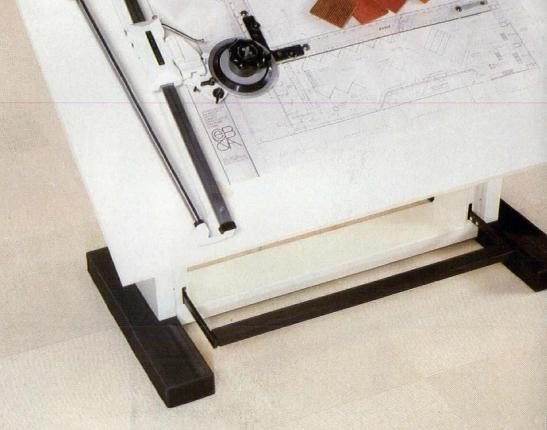
SOLUS



DAVIS FURNITURE INDUSTRIES INCORPORATED / Showrooms: High Point / Boston / Denver / Los Ang
P.O. Box 2065 High Point, N.C. 27261 Designed by Robert Bernard Associates / BIFMA Member







Design

Tretford tiles make it possible.

Architects have discovered the creative flexibility of Tretford tiles. Tretford's structured texture and wide color selection will challenge your imagination and enable you to design an infinite variety of outstanding patterns.

Design with Tretford. You will find the ultimate is now possible.

Circle No. 301, on Reader Service Card



THE MARKETPLACE

2400 Market Street, Philadelphia, PA 19103 • (215) 568-4300

Sales Offices and Showrooms:

Washington, D.C. Atlanta Pittsburgh Ft. Lauderdale Chicago Minneapolis Dallas Denver Los Angeles San Francisco Seattle Honolulu

Interior design: On the threshold

On the eve of a new decade, P/A looks back at interior design in the 1970s, and ahead to interiors in the 1980s.

Ten years ago, there was an almost palpable feeling of relief as the 1960s ended, for that wonderful and terrible decade had been (as the Chinese say) the most "interesting" of times. Now, as the 1970s draw to a close, there is rather a feeling of astonishment. The 1970s over? Compared to the tumultuous decade that preceded this one, the 1970s almost seemed not to exist; for some of the shell-shocked survivors of the 1960s, this has been the decade that never was.

Even before they end, the 1970s already have a byname: The Me Decade. As far as labels go, it is a fairly accurate expression of one of the most dominant social characteristics of the past ten years: a turning inward, an increased interest in self rather than others, on both an individual and a mass level. Author Christopher Lasch, whose book *The Culture of Narcissism* (New York, 1978) is a stinging indictment of this tendency, finds our increasing selfabsorption to be a deeply alarming sign.

Others, with a more cyclical view of history, see The Me Decade as a natural reaction, a corrective to the often-misguided, sometimes destructive sense of altruism that was one of the hallmarks of The Love Decade. Regardless of which of these interpretations is closer to the truth (most likely the truth contains elements of both points of view), the fact remains that we are left with architecture and design which is (as always) the physical embodiment of the social characteristics of our times.

Thus, in the design profession in the United States, the 1970s could well be termed The Interior Decade, so significant a role did interior design play within our built environment. Among the major determinants of the course of history, one of



Sept. 1977: Nelson loft, New York, by Richard Haas.

the strongest has always been money. In the case of the 1970s, it was lack of money that caused so many architects to return to interior design work. But the recession abetted that internalizing phenomenon no less in the design world than in the nation as a whole. In some ways, the 1970s were not unlike the aftermaths of other wars in American history: the financial readjustment as the cost of war was felt by the economy at large, the desire of the people to turn to areas of life (however narrow) over which they could exercise some control, and a centering of attention on home and career rather than on larger, more abstract issues.

In this issue, we begin with a review of the past ten years in interior design, and then go on to examine over a dozen recently completed projects that represent significant currents in interior design today. Sam Johnson said, "The future is purchased by the present," so it is not unreasonable to expect many of these projects to signify a down payment, as it were, on developments in the future. Finally, we have asked a diverse group of interior design specialists for their opinions about the profession in the decade ahead.

We are reminded now of what James Joyce said in *Ulysses*: "The now, the here, through which all future plunges to the past." That indivisible triunity of past, present, and future is at the heart of this backward and forward glance.
[Martin Filler]

The interior decade

The 1970s were years of great change, diversity, creativity, and importance in the interior design profession. Here is a photographic and descriptive summary of the decade and its meaning.

The 1970s began like a throbbing hangover after the party of the 1960s. As the old decade gave way to the new, our president for the past year had been Nixon: the bitter medicine self-inflicted by the country after its cathartic seizure in that year of woe, 1968. But styles do not die as quickly as hopes, so as the 1970s opened, interiors were still dressed in their bright party clothes. The wild, breakaway design schemes of the late 1960s continued to be executed well into the current decade, with the real turning point between the two eras coming not with the flip of the calendar, but with the onset of the severe economic recession that had such a deep effect on so many things in American life, not least of all architecture and interior design.

Symbolic of where we had come from were the pop designs of painter William Tapley for the Lieb house in Narberth, Pa, and the Perkel house in New York (P/A, May 1972, p. 120): zappy, supergraphic treatments that made those interiors look much like psychedelic record album covers. An urban office building funhouse of equally exuberant spirit was created by Corcia-deHarak for the ground floor lobby of 127 John St. in New York (P/A, Apr. 1972, p. 78). The counterculture still lived in such interiors as the Madonna house-boat in Sausalito by Chris Robins (P/A, May 1973, p. 94) or the "House of the Cen-

1 Finlandia Hall, Helsinki, Finland, by Alvar Aalto (P/A, Aug. 1972, p. 50). 2 House III, Lakeville, Ct, by Peter Eisenman (P/A, May 1974, p. 92). 3 Gunwyn Ventures, Princeton, NJ, by Michael Graves (P/A, Feb. 1973, p. 82).



1 Aug. 1972 (above). 2 May 1974 (below). 3 Feb. 1973 (opposite page).





tury" by Ant Farm (P/A, June 1973, p. 126), or nostalgic evocations of a pre-Modern past, such as a vacation house by Lester Walker in Woodstock, NY (P/A, Apr. 1975, p. 84). But the changes that were to come could be summarized in the interiors of two houses by the same architect, Charles Moore, executed at either end of the decade. Moore's and William Turnbull's Murray house in Cambridge, Ma (P/A, May 1973, p. 106), with its rainbow stripe and lightning-bolt supergraphics, is a world apart from the subdued interiors in Moore's and Richard Oliver's house near New York done several years later (P/A, Apr. 1978, p. 82).

Then it happened: the economic aftershock of the Vietnam War, the paralyzing effect of Watergate on the function of the government, and a too-hot-not-to-cooldown reaction to the supercharged atmosphere of the late 1960s all contributed to the worst economic recession in the U.S. since the Great Depression. Architects need no reminding of this, for the effect on their profession was devastating: work dried up, firms folded, young architects lived from hand to mouth, and even well-established figures turned to writing books or hit the lecture circuit. (Paradoxically, the recession had little effect on education: enrollments in architecture schools continued to increase throughout the decade, despite the discouraging prospects for employment upon graduation.)

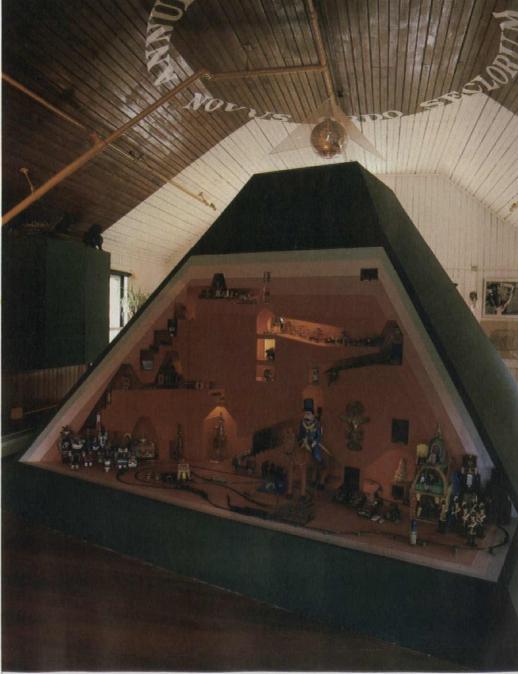
Naturally, architects looked for work wherever they could get it, and in the 1970s that meant interior design. The work of such architects as Alvar Aalto (ill. 1, and P/A, Apr. 1977, p. 53, and P/A, Mar. 1979, p. 57)—who continued to design the insides as well as the outsides of his buildings until his death in 1976—was a reminder of the traditional role of the architect as interior designer. Aalto's conception of interior and exterior as one inseparable design entity epitomizes one of the most noteworthy developments of the decade: the return of the architect to interior design. In fact, no history of architec-

4 Camino Real Baja, Cabo San Lucas, Baja California, Mexico, by Ricardo Legorreta (P/A, Sept. 1976, p. 68). 5 Pyramid, Moore house, Centerbrook, Ct, by Charles Moore (P/A, Apr. 1975, p. 92). 6 Trustees' room, Cooper Union Foundation Building, New York, original architect: Fred A. Petersen, 1859; renovation by John Hejduk (P/A, July 1975, p. 50). 7 Paramount Theater of the Arts, Oakland, Ca, original architects: Miller & Pfleuger, 1931; renovation by Milton Pfleuger, & Associates and Skidmore, Owings & Merrill (P/A, July 1974, p. 50).



4 Sept. 1976 (above). 5 Apr. 1975 (below).

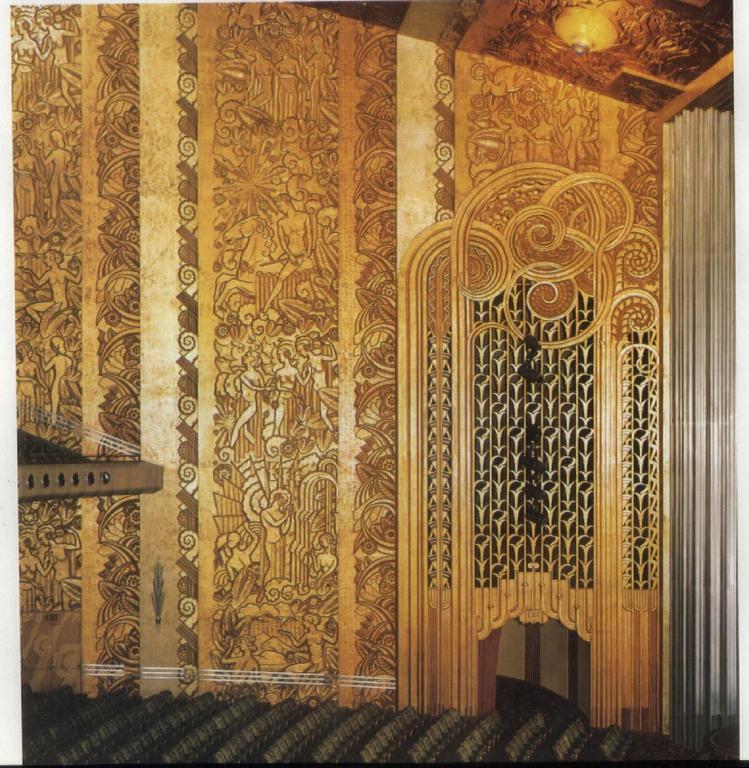
Stan Ries (opposite, top)



Robert Perron

Rob Super (opposite, bottom)





ture in the 1970s could be accurately written without a strong emphasis on the major role interior design played.

The reputations of a number of innovative young architects who emerged as important creative influences in the 1970s were based in large measure on interior design commissions. For example, the members of the so-called New York Five (announced to the world during this decade in Five Architects, New York, 1972) all have been involved in the design of the interiors of their buildings. Peter Eisenman (ill. 2), Michael Graves (ill. 3), Charles Gwathmey (ill. 12), John Hejduk (ill. 6), and Richard Meier (ill. 16) all had a significant impact on architecture through their interior designs. This was no less true at the other end of the polemical spectrum, which posed the "Whites" (a/k/a the Five) against the "Grays." Thus such architects as Frank Gehry (ill. 18), Romaldo Giurgola (ill. 14), Hugh Hardy (ill. 15), Charles Moore (ill. 5), Robert Stern (P/A, Dec. 1973, p. 50, Apr. 1975, p. 78, June 1976, p. 70, and Feb. 1977, p. 58), and Robert Venturi (ill. 8) were as involved with interior design as were their alleged philosophical opposites.

Yet even by identifying two such influential groups—to say nothing of the Silvers (P/A, Oct. 1976, p. 70) and other regional factions—we have also identified another of the major characteristics of the 1970s: the emergence and acceptance of pluralist design values. Any number of approaches to architecture and interior design became permissible during the past decade, reflecting the growing distrust of one authoritative architectural "line" in these times of diverse solutions for a diverse world. Thus the Albany State Museum interior by Richard Meier (P/A. May 1978, p. 76) could draw forth results quite different from those achieved by Louis Kahn in his British Art Center at Yale (P/A, May 1978, p. 76). This was true in every building type: in residential interiors—such as Michael Graves's Modernist-influenced Snyderman house (P/A, March 1978, p. 80) and Charles Moore's vernacular-influenced Burns

8 Brant-Johnson house, Vail, Co, by Venturi & Rauch (P/A, Oct. 1977, p. 60). 9 Pennsylvania Academy of the Fine Arts, Philadelphia, original architect: Frank Furness, 1876; renovation by Day & Zimmerman Associates (P/A, Nov. 1976, p. 50). 10 Charles Rennie Mackintosh chair exhibition, Museum of Modern Art, New York, by Emilio Ambasz (P/A, Mar. 1975, p. 62)

11 Torczyner & Wiseman law offices, New York, by Susana Torre (P/A, May 1977, p. 76).

12 Shezan restaurant, New York, by Gwathmey Siegel Architects (P/A, Feb. 1977, p. 78).



8 Oct. 1977 (above). 9 Nov. 1976 (below).









house (P/A, Apr. 1975, p. 74), as well as in office interiors-contrast Frank Gehry's Rouse Co. headquarters (P/A, Feb. 1976, p. 58) with his own later interiors for a Toyota warehouse in Maryland (ill. 18).

The growing acceptance of many differing styles and solutions was a contributing factor to yet another major influence in the 1970s: the growth of remodeling and restoration. What previous generations often despised for being different, architects, designers (and the public) in the 1970s prized for being different. Different, that is, from the often sterile and unimaginative architecture—debased descendants of the International Style, in large part—that continued to impose a bland sameness on our built environment. It is safe to say that such period masterpieces as Frank Furness's Pennsylvania Academy of the Fine Arts (ill. 9) or Timothy Pfleuger's Oakland Paramount Theater (ill. 7) appeal to a mass public much more readily than many contemporary structures do. For architects, an increased awareness of the importance of history makes the preservation of such structures all the more timely.

There were, of course, more practical considerations for the reuse of old buildings. Remodeling makes sound economic sense, especially during a decade when the costs of materials and labor rose at a staggering rate. Thus the renovation of the landmark Foundation Building of Cooper Union in New York by John Hejduk (ill. 6) combines all of those benefits: the restoration of a historic structure, the creation of new interiors of high design quality, and the intelligent expenditure of the client's construction budget.

Every decade in interior design can be characterized in terms of certain objects and materials which immediately summon up a concise image of the times (P/A, June 1970, p. 150). The 1930s was the decade of blue mirrors and rose-beige walls, the 1940s the decade of natural burlap and the split-leaf philodendron, the 1950s the decade of white plaster, beige velvet, and travertine. The 1970s will come to have

13 deBretteville house, Los Angeles, by Peter deBretteville (P/A, Oct. 1977, p. 72) 14 Rockwell Kent Gallery, State University of New York College Library, Plattsburgh, NY, by Mitchell/Giurgola Architects (P/A, Oct. 1978, p. 80). 15 Brooklyn Children's Museum, Brooklyn, NY, by Hardy Holzman Pfeiffer Associates (P/A, May 1978, p. 62). 16 Aye Simon Reading Room, Solomon R. Guggenheim Museum, New York, by Richard Meier & Associates (P/A, Oct. 1978, p. 68). 17 Southern Alleghenies Museum of Art, Loretto, Pa, by Roger Ferri (P/A, May 1978, p. 90).

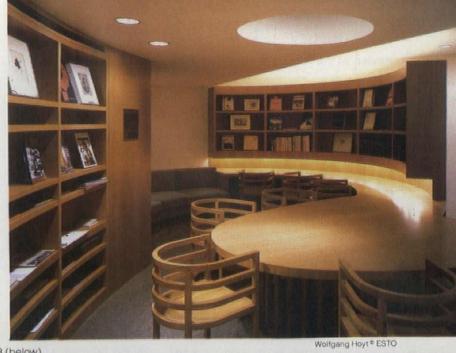


13 Oct. 1977 (above). 14 Oct. 1978 (below).

Norman McGrath







15 May 1978 (above left). 16 Oct. 1978 (above right). 17 May 1978 (below).



Cervin Robinson

such an image in our memories, too, and no doubt it will in some way relate to natural materials, another of the significant characteristics of interior design in the past decade. The cliché might be seen as asparagus ferns in macramé hanging baskets, or anything made of butcher block, but the pervasive return to natural materials of all sorts will be the truth behind the easy label. An outgrowth of the counterculture movement of the 1960s, this preference for organic and man-made materials grew tremendously during the 1970s. Although natural materials have always been part of the interior design traditions of some regions, as reflected in Ricardo Legorreta's Camino Real Baja hotel (ill. 4), the degree to which this tendency has been accepted everywhere is evidence of its widespread importance.

And far from having this review reflect only the influence of the architect in interior design, it must also be noted that the interior designer has grown to full professional stature during the 1970s. Significant changes in education, licensing, and professional accreditation have put interior designers on a professional footing that they had already earned on a de facto basis. The work of such leading interior designers as Ward Bennet (ill. 19, and P/A, Sept. 1978, p. 82) is as influential as that of any high-style architect. The inescapable relationship between these two branches of the profession (P/A, Sept. 1978, p. 70) bodes well for the 1980s.

The 1970s end on a note of greater optimism than they began. The emergence of an extremely talented younger generation of architects and designers holds high promise for the future. Among them are Emilio Ambasz (ill. 10 and Sept. 1978, p. 98), Peter deBretteville (ill. 13, and P/A, Oct. 1977, p. 72), Joseph D'Urso (P/A, Sept. 1977, p. 60), Frank Gehry (ill. 18, and P/A, Sept. 1978, p. 74), Susana Torre (ill. 11, and P/A, May 1977, p. 68), and Lella and Massimo Vignelli (P/A, Sept. 1978, p. 102), to name just a few. The names of many others who will rise to prominence in the 1980s are unknown to us now, but the inevitability of their rise is one of the great lessons of the 1970s. Let us hope that the achievements of this decade past, which was born amidst repression and despair, and which dies amidst expressiveness and hope, will be exceeded in the ten years to come. [Martin Filler]

18 Mid-Atlantic Toyota Distributors Offices, Glen Burnie, Md, by Frank O. Gehry & Associates (P/A, July 1979, p. 62). **19** Bennett apartment, The Dakota, New York, by Ward Bennett (P/A, July 1979, p. 74).



18 July 1979 (above). 19 July 1979 (below).

Tim Street-Porter



The 'isms' of pluralism

The multiple currents of design that periodically merge or diverge are here examined in recent interiors projects.

During the 1970s one of the most frequently invoked words in architectural design was "pluralism." In some ways that word represented a healthy recognition of equally valid approaches to our built environment. Yet to some extent it also masked a certain confusion about the real direction design has been taking since the first major cracks in the Modernist monolith began to appear circa 1960. This contradiction seems especially acute to anyone who seeks to plot our exact position at any given moment in the ebb and flow of events, for especially in the world of design, the proverbial crystal ball has often been more cloudy than clear.

Recent years have taught us, however, that uncertainty and ambiguity can become more or less permanent characteristics of life. And as comforting as logical, unified developments in any area of endeavor might be, we can scarcely expect them to prevail in design when they exist so infrequently in other realms of human existence. This condition appears with particular complexity in architectural interiors today: while many designers seek to go beyond orthodox Modernism, they do so without uniformly adhering to one school of thought. Their responses, while all pouring forth from the same source of Modernism, tend to spray out in many different directions. The works illustrated on the following 34 pages are discussed in terms of some of those divergent directions. In some cases, those directions are difficult to classify and describe: thus our recourse to "isms." And in some cases we find another "ism"—neologism—a necessary response to identification and explication.

Thus, among current directions in contemporary interior design we find:



Aug. 1976: "Signs of Life: Symbols in the American City" exhibition, by Venturi & Rauch.

Methodicism: Two offices by Gwathmey Siegel Architects (p. 140) continue in the formulaic development of that firm's characteristically dependable design. Minimalism: Joseph D'Urso's and Bray-Schaible's own offices (p. 144) epitomize the reductivist approach to design. Neo-Modernism: Two showrooms by Michael Graves (p. 148) continue his development of an architecture that does not exclude Modernism from its collage of historic styles.

Post-Modernism: Robert A.M. Stern, a leading exponent of that style, puts polemics into practice in a squash club (p. 154).

Modernism: An office by Tod Williams Associates (p. 156) shows that reports of that style's demise have been exaggerated. Regionalism: Offices for the California Redwood Association (p. 160) recall the hallmarks of the Bay Area style. Revivalism: Judith Hollander & Jed Johnson's office design with Michael Hol-

lander (p. 162) is part of a strong return to antecedent styles.

Pragmatism: Two projects by Peter Wilson Associates (p. 164) exemplify an approach that alters style as program requires. Exoticism: An apartment by Richard Gillette (p. 168) gives full expression to an undercurrent in much design today. Eclecticism: An amalgam of styles in a housewares store by Sisco/Lubotsky and Stuart Cohen (p. 170) reflects another strong development.

Metaphoricism: The fusion of real with surreal elements in a restaurant by Richard Fernau (p. 172) speaks of revived interest in communicative architecture.

Other "isms" abound, but which will flourish and which will run dry is a story for some future day. For now, we can reflect on the richness that this often confusing confluence represents, watching with interest as the stream of design continues on its willful, wayward course. [Martin Filler and Suzanne Stephens]

A corner on the world

These two offices by Gwathmey Siegel represent the richest, most elaborated expressions of volume using color and texture by the partnership to date.

This is where the action is. Every corner is an event. No wall can be taken for granted. But far from being visual chaos, Gwathmey Siegel's FDM and Evans office interiors are models of design choreography. The interventions have a precise logic, adding up to Gwathmey Siegel's definition of space.

As opposed to designers who read space as a series of overlapping planes, Gwathmey and Siegel perceive volumes. But, as distinct from those who conceive a sequence of closed volumes (rooms), they create a single complex, which, unlike a room, can't be taken in all at once. Thus, motion (space in time) is built into the design and the perception of it.

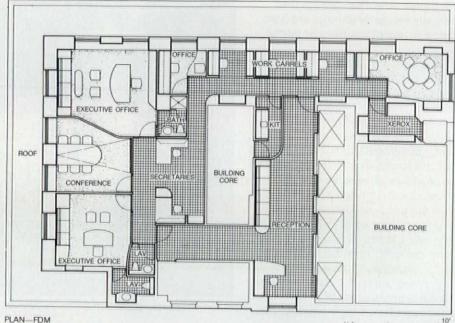
The use of color to effect this space was a fortunate outcome of the hard times of the early 1970s, when interiors became Gwathmey Siegel's bread and butter (P/A, Feb. 1977, pp. 72-83). By now the architects have attained a refined subtlety.

Working the corners

The new rich materials are used to "work the corners," as Robert Siegel puts it. Each wall is activated by investing it with a unique content of tone and texture. Every intersection is explored as an interaction of two (or more) design components.

The entrance lobby of the FDM offices, for example, is a composition of "broken" corners. A sea-green curve suppresses one potential corner to create another where it meets a mirror wall. Like a waterfall, the design moves in steps and flows from right to left, ending with a splash confronting the receptionist's desk.

Each element in corners "worked" in this way has an implied continuation beyond any intersection. In the receptionist's area



of the FDM entry, a second mirror wall visually realizes the implicit continuity of the perimeter wall, making it appear as though the latter, with its puncturing window, is extended through the mirror. In fact, the mirror's illusion reveals the truth: the perimeter wall does continue along that plane. periodically broken by fenestration.

The route of progression through the office is defined by a continuous pink wall. Not a flat plane, but a flexible object, this wall is wrapped around the central service core of the building and extended into the offices. The pink wall transforms several problematic conditions into design elements. The large obtrusive core, which leaves only a narrow band of space for the offices, is transformed into the heart of the floor, a pink center with members extending out to the perimeter.

At the center, at the edge

The circulation space, as the central intersection, is the reference point. The

wraparound hall in the FDM office is defined and measured by a gray tile floor and a reachable 7'-6" ceiling. The fourth side of this envelope differentiates various points en route. In the secretary area, the pink backdrop is contrasted with a large purple column (a structural leftover) anchoring the center of the space. The glass-block walls marking the conference room and small executive office allow the outside bounds of the floor to be sensed from the center. Narrow mirrors flank the doors of a bathroom and the president's office, in the corners, visually extending the glass-block walls perpendicular to them and thus implying the invisible space between the floor's core and skin.

As the circulation space is the central intersection, so the perimeter offices constitute the intersection with the outside. Here, design elements refer to and contrast with

Opposite: FDM entry, secretaries' area.





FDM and Evans offices

those defining the hall. A spatial contrast between the perimeter and the circulation area is set up by raising the ceiling a foot and a half in all the perimeter offices. The sensation of emerging from the center is accentuated by lighting set in the fascia over the office doors, illuminating the ceiling. Underfoot, gray tile gives way to gray carpet. Such consistent perimeter elements—the carpet and ceiling or the dark gray used on the perimeter wall—link the separate spaces and increase the scale of the whole. Furniture is also employed as a design constant—and to adjust the scale of the volumes.

The conference room and the larger executive office are particularly happy solutions. A curved wall in the conference/projection room organizes the space around the tongue-shaped table while allowing the room to have two windows.

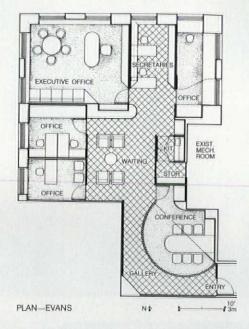
François de Menil's office, the seat of command, is directed to the desk, which, backed by a wall of machinery, becomes an instrument panel.

But the most elegant accommodation are the three work carrels fitted into the 10-ft-wide north passage. Open to the corridor and, like it, paved in light gray tile, the carrels are demarcated by panels of dark gray. The result is to move the perimeter wall in, so that anything beyond it appears to be extra space. The bay window effect is completed by a painterly use of shades of gray to overscale the window. The magnificent illusion of spaciousness works because all pieces of the design support it, providing references for the colors' meaning, or for the volumes' rationale.

Entrée spectaculaire

Such sensibility to the psychology of spatial perception is fundamental to Gwathmey Siegel's work. In the Evans Partnership offices, on the same NW corner of the same building, floors below FDM, a different spatial relationship is set up. Where the FDM office is two concentric rings—core and perimeter—the Evans offices are a dumbbell with a weight on each end—entry and executive office.

In the entry, a spectacular freestanding curve of glass block, illuminated from within like a huge vertical chandelier, is reflected in a black glass wall opposite, a mirror in the corner, another black glass wall facing the entry, and the dark green marble floor. The potentially grand effect resolves the deadend ell of the entry, allowing the receptionist, who sits at the other end of the office, to control the entry via the mirror in the corner. A less felicitous function of the entry, which destroys all its glass grandeur, is to act as a gallery. Against the black glass wall, a row of



back-lit technicolor photos of Evansdeveloped buildings is mounted. Along with a derivative placed smack in front of the mirror, these reduce the elegance of the reflective effects. First-class architecture shouldn't be used to set off such banalities.

The glass-block curve, a G S specialty (see P/A, Feb. 1977, p. 82) encloses the conference room. A theatrical space, it is illuminated by lights mounted on a fascia that cuts diagonally across the hemisphere, emphasizing the ceiling and the glass block. The conference table projects into this space; its curve is repeated in the third wall of the room. The design moves through and around the glass materials that reflect and allow penetration.

The circulation space, like the entryway, is betrayed by what seem concessions to a client's taste. Colorful decorative paintings are hung against the white wall as focal points. This sort of thing smacks of "interior decorating" and the paintings are mediocre to boot. It's too bad, because the design has strong basics and clever details. But the GS spirit is not present the way it is in the office above, and even familiar GS gestures are not always turned to best advantage. One of their 45-degree cornered cabinets—a great solution to the problem of "which is the front?"—is here wedged in a corner, obstructing a window.

The dumbell's squishy thud

The brilliant glassy entry demands something equally glittering and hard, but the executive office is disappointingly soft. The client reportedly wanted something "normal and livable," but no room is an island. The cushy furniture and fuzzy carpet bear little meaningful relation to the rest of the office, while the paintings decorating the walls and the objets d'art are too reminiscent of the touches that mar the hall.

Again, the decorating fluff obscures

several fine architectural effects using glass, which were clearly intended to provide the counterpoint to the entry. On the north wall, the two large windows have been turned into a solid wall window, by flattening the intervening section of wall and placing mirrors at the windows' ends. The splendid views of Central Park and the grand window are multiplied by a mirror wall opposite. But unfortunately, a sort of white bas-relief doily, stuck to the central divider, interrupts the effect.

Smoke and stone

Although its realization is blurred, the design parti in the Evans office makes a fascinating complement to that of the superbly effected FDM interior. The two offices represent dialectically related thrusts of Gwathmey Siegel's explorations in color and texture. While both color and texture weigh in each, the sophistication of the effort is concentrated on one or the other. Simplistically, the FDM offices concentrate on color, the Evans offices on texture. The color dialogue in the Evans offices is a relatively simple one between extremes: black (or dark green) and white. In FDM, shades of gray (and pink) enter into a complicated interchange. Conversely, where in the Evans office several types of smooth, reflective materials play off each other at corners, in FDM, textural juxtapositions are restricted. Planes absorb light in FDM, reflect it in Evans. Where the former is subtle, the latter is clear. To sum up the qualities expressed, one is stone, the other, smoke. [Eleni Constantine]

Data

Project: FDM Productions office, New York.

Architect: Gwathmey Siegel Architects.

Program: offices for film production company

on 34th floor of 1930s building.

Major materials: walls: mirror, canvas/paint, glass block; ceiling: aluminum tile, gypsum board; floors: carpet, quarry tile (see Building materials, p. 252).

Consultant: mechanical: Thomas Polise, PC. General contractor: All Building Construction. Costs: withheld at request of client.

Photography: Otto Baitz.

Project: The Evans Partnership Owners/ Builders offices, New York.

Architect: Gwathmey Siegel Architects.

Program: offices for development corporation

on 16th floor of 1930s building.

Major materials: walls: canvas/paint, glass block, black glass, mirror; ceiling: aluminum tile, gypsum board; floors: carpet, verde antique marble (see Building materials, p. 252).

Consultants: mechanical: Thomas Polise, PC.
General contractor: All Building Construction.

Costs: withheld at request of client.
Photography: Otto Baitz.

Opposite: Evans conference room and entry.





Cool, calm, and collective

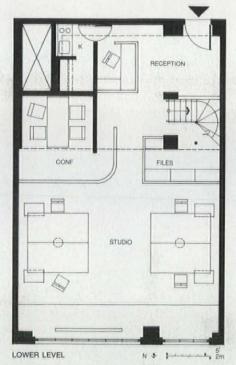
Two interior design firms known for minimalist work share renovated space in a Manhattan Beaux-Arts studio.

Long before SoHo's industrial lofts became the normal habitat for New York's artists and designers, many such people used to live and work in buildings that were specifically designed for them. Some of those studio buildings still exist, such as the famous Gainsborough on Central Park South and, in its less-known function, Carnegie Hall itself. Another one, the Bryant Park Studios, on West 40th St. overlooking Bryant Park behind the New York Public Library, recently became the new offices shared by Bray-Schaible Design, Inc. and D'Urso Design.

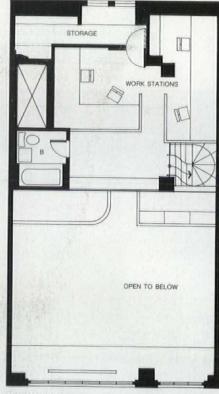
The rather elaborate, 80-year-old Beaux-Arts/High-Gothic Revival structure is the last place one would expect to find Bob Bray, Mike Schaible, and Joe D'Urso. who by now must be recognized as the young masters of High-Tech, minimal interior design. The huge, eighth floor studio room is also the last place they expected to find themselves. When the group, who have shared offices for the past ten years on the Upper East Side, began to look for larger space, they never considered leaving the old neighborhood. They certainly never considered the West 40s. "But we came to a party in this building one night," Mike Schaible says, "and that's all it took." Irving Penn's old photography studio was available, and the group decided to take it.

Having the principals of two separate firms design an office space, even for their own use, would not seem like the best prescription for smooth sailing. "But the job actually went very smoothly," Bob Bray recalls. "All of us had a clear idea of what we wanted, and agreed that the space didn't need much more than to be cleaned up." "The only compromises we made," Mike Schaible says, "had to do with the height of things like partitions and some counters, which relate to the (rather great) differences between our own heights."

The major change the designers made to the 23' x 37' x 18' high space was to remove the walls and French doors that



High studio space (right) seems much larger than it actually is. Spiral stairs (below) were sealed in a closet until renovation.



MEZZANINE LEVEL





Bray-Schaible/D'Urso offices

blocked off the back half of the room, thus opening up the mezzanine level and the handsome spiral staircase leading to it. Where the stair's risers and treads extend beyond the spiral supporting structure (detail, p. 144), the designers have left the existing enclosure intact, but removed the unneeded portions of the wall. This straightforward gesture brings to the space a very attractive design element, which is doubly appealing because of its total lack of contrivance.

The 1500-sq-ft room seems much larger than its measured dimensions. Part of this is due to the 18-ft-high ceilings, and part also to the scale of the large north windows facing Bryant Park. In responding to these conditions, the designers, in their own intervention, have generally kept new elements large, unbroken, and with smooth surfaces. At the lower level, the principals' oversized work tables take most of the front space; at the back, the conference, file, and reception areas are simply partitioned by carpeted dividers of varying heights. Four work stations have been put on the mezzanine where, now that the doors and wall have been removed, the area is pervaded with a sense of spaciousness. The height at this level gives the best relationship to the windows, and also the best view of the park and the skyline beyond.

Continuing the attitude of boldness and simplicity, the entire interior has been painted with high-gloss white enamel, and all the floors have been carpeted with charcoal commercial carpeting. Industrial lighting and exposed, round collars of the air conditioning complete the picture. If this room shows anything, it shows how simplicity, straightforwardness, lack of artifice and contrivance can, when properly administered, present an artfulness every bit as appealing as the opposite attitude at its best. [David Morton]

Data

Project: Bray-Schaible Design, Inc., D'Urso Design offices, New York.

Interior design: Bray-Schaible Design, Inc., Robert Bray, Michael Schaible; D'Urso Design, Joseph Paul D'Urso.

Program: renovation of 1500-sq-ft space for two interior design firms' offices.

Major materials: charcoal commercial carpeting, high-gloss white enamel (see Building materials, p. 252).

General contractor: Van Hyning Construction; air conditioning, Airaconda; painting contractor, Roth.

Client: Bráy-Schaible Design, Inc., D'Urso Design.

Cost: withheld at request of client.

Photography: Peter Aaron; © ESTO.





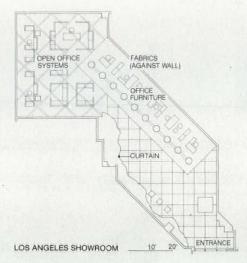
Better and better

His second and third Sunar showrooms demonstrate how Michael Graves has repeated his earlier success without duplicating it, while further adding to his client's new high-style image.

It is axiomatic that success often presents as many problems as failure does-only different ones. Thus the success Michael Graves scored with his innovative showroom in New York for Sunar, the contract furniture and fabric manufacturer (P/A, June 1979, p. 86), gave him little more than a pleasant moment's pause before he plunged ahead with further-and far more problematic-showrooms for his client in Los Angeles and Chicago. Deadline pressures have been severe in all three Sunar projects to date. Sunar wanted at least a temporary exhibit ready in its new Los Angeles showroom space at the Pacific Design Center in time for WestWeek (the annual contract interior design mart in LA), and likewise wanted its new Chicago showroom at the Merchandise Mart completed in time for the opening of NEOCON (see News), the national contract furnishings exposition held there every June.

Against this background of high-style anxiety, it is all the more amazing that such exceptionally fine designs emerged. Though of similarly high quality, the Los Angeles and Chicago showrooms are quite different from one another. They represent in the first instance a very sketchy temporary scheme, and in the second instance, the first permanent design Graves has completed for Sunar. (The New York exhibit was an interim installation, and has since been dismantled.) But both new efforts are complementary aspects of the same design sensibility, and both have qualities that mark them as worthy continuations of this increasingly admirable chapter in interior design patronage.

The Los Angeles Sunar showroom is lo-



cated in an oddly shaped space tucked into a far corner on the second story of the Pacific Design Center (P/A, Oct. 1976, p. 78). In order to increase the number of tenants able to face onto the "interior streets" of the building, the lessors have carved some extremely strange spaces from what looks to be (from the exterior of the PDC) a rather simple orthogonal plan. In reality, it is quite the contrary: when he was preparing the plans for the Sunar showroom, Michael Graves asked the architect of the Pacific Design Center, Cesar Pelli, to try to guess the location of the new project. The fact that Pelli was unable to surmise where that ungrateful space might be says something about how the Blue Whale has been subdivided, and comments on the quality of the shell Graves was given to work with.

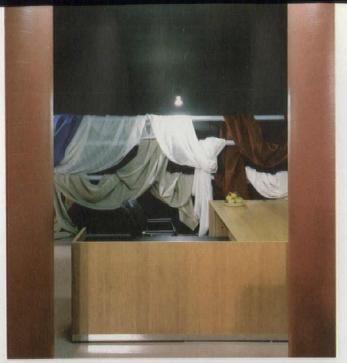
Curtain up, light the lights

The Sunar showroom is composed of three major spaces: a trapezoidal entry area, a long narrow corridor slanting diagonally toward the back of the showroom, which is in turn a fairly large rectangular space. For the temporary exhibit scheme, Graves decided to emphasize

the discrete nature of those spaces, and likewise chose to underscore, rather than to vainly mask, the ephemeral quality of the design solution. His inspiration came primarily from stage set design: a specifically theatrical frame of reference is created by the undulating curtain that unites front and back rooms, and by the rented theater lighting fixtures which cast a cold, flat light on the space. Some elements have been designed by the architect, others not: the concrete floor was painted pale aqua, but the mechanical system of the ceiling was left exposed. This combination of finished and unfinished elements is reminiscent of a movie sound stage, and one would not be at all surprised if out from behind the salmon-pink colonnade were to emerge Fred Astaire with Cyd Charisse draped over one or more of his limbs.

But as is usual with Graves's design, multiple readings of various elements are possible as well. The curving curtain of thick white cotton sheeting recalls the similar curtain partitions designed by Ludwig Mies van der Rohe and Lilly Reich for the Silk Exhibit at the Exposition de la Mode of 1927 in Berlin. The classicizing reference of the columns (again made from the tubular fiber forms first used by Graves in the New York showroom) is played off against the unadorned triads of fluorescent tubes spanning each opening in the colonnade. These fixtures in turn have a certain Art Deco air about them, and show Graves's particular skill in appropriating fairly anonymous elements and imbuing them with a strong sense of design. The show-

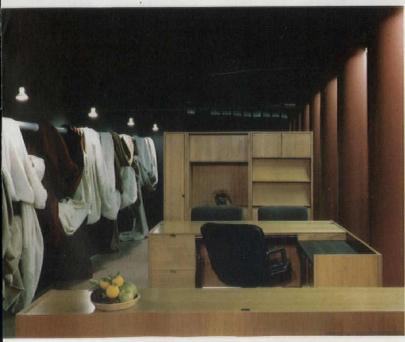
Los Angeles showroom (opposite page) contains (clockwise from top right) reception area; corridor leading from reception area to open office systems display; open office display area; office furniture and fabric display; corridor flanked by columns and undulating curtain; detail of fabric display.





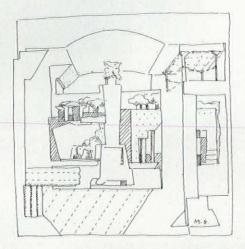






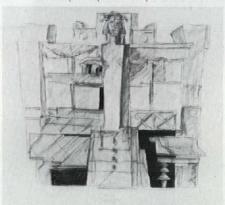


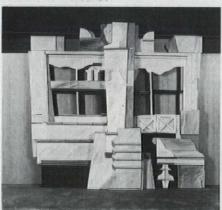
Sunar showrooms

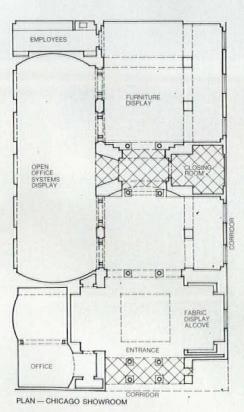




Graves drawing for invitation to opening of Chicago showroom (above left) is further development of design for P/A (see cover). But Janus, the Roman god of entrance, was transformed into Terminus, the Roman god of boundaries, by the time Graves designed the painted cardboard sculpture (below right) at the far end of the Chicago showroom (overleaf). Graves sketch for the Terminus sculpture (below left) shares bust-on-pedestal theme with Janus.









Chicago showroom is intersected by a crossaxis perpendicular to the main entrance axis, and, like the principal threshold, it is floored with verde antique marble (above). Cross-axis is topped with a barrel vault, painted cerulean blue. Semi-circular tympanum is painted metallic gold, adding to feeling of richness.

room proved to be a great success of an otherwise lackluster WestWeek, and it is easy to sympathize with the many visitors who expressed dismay at the thought of this intriguing design being dismantled. How often does interior design gain that kind of response from the public?

Intimations of immortality

Reaction to the Chicago showroom was no less strong, but was quite a bit more divided. In fact, it might be said that it was the main topic of conversation at NEOCON this year. Graves set out to create an entirely different kind of showroom for the Merchandise Mart, and succeed he did. Yet he proceeded not (as some suspected) from a desire to attract attention through oddity, or to promote his own personal style of design. Rather, he acted in response to some of the real inadequacies of contemporary furniture showroom design, discernible with encyclopedic completeness at the Merchandise Mart. The vast majority of showrooms at the Mart are rather much the same, with floor-to-ceiling plate-glass window walls facing the corridors, and interiors that more or less objectify the furniture within them. Chairs, for example, are often placed on pedestals or are put into plexiglass vitrines, floating within pools of light that give no sense at all of believable interiors, only a kind of vague Universal Space that says little about how those objects are meant to be used in real life.

Graves, however, wanted this showroom to have a sense of apartness from the surrounding corridors, with its interiors visible only through the main entrance (on the narrow side of the rectangular space) or through small windows cut into the otherwise opaque walls. His other major idea was to have the showroom read as a series of discrete rooms, so as to create an interior that would better suggest how the Sunar offerings might look in other settings





than would be possible in the more standard kind of showroom design. That latter desire was particularly difficult to plan for, since Sunar's new furniture design program is still young, and there are as yet few pieces to design rooms around. Thus, the relatively complete nature of the Chicago scheme, in which few elements are left in a state of design neutrality, helps diminish our sense that there is little to be sold there, while creating a high-style image for Sunar. Graves has given the Chicago installation a variety of roomslarge, small, high-ceilinged, and lowwhich seem likely to meet the client's needs as new introductions are added to the Sunar line.

That feeling of variety creates an immediate impression as one enters the showroom from the corridor. Two pairs of gold-tipped white columns frame the main portal, looking like the exquisite cigarettes of a fin-de-siècle aesthete. The threshold beneath those four columns is paved with squares of verde antique marble, as is the floor at the major cross-axis within the showroom, used in both places to signify an important passage. (Elsewhere in the showroom the floor is covered with rosemauve carpeting.) Stepping inside, one seems to be in quite a different atmosphere from that of the New York or Los Angeles showrooms. Here it seems a great deal cooler, richer, quieter: perhaps it has something to do with the predominant gray and blue color scheme, which also includes a warm rose-beige, but does not go

Entrance to Chicago showroom (top left) reveals glimpse of fabric display area (opposite page, top right). Views into interior of showroom (top right) were strictly controlled by Graves, in contrast to usual window-wall approach in most Merchandise Mart showrooms. Pronounced sense of depth inside showroom was created by varied color range and lighting (right).



Sunar showrooms

so far as the salmon pink of the earlier showrooms. The lighting also helps achieve that placid effect. Sconcelike segments of Classical moldings conceal indirect lighting that softly diffuses a relaxing, even glow throughout the rooms.

The illumination also helps to intensify the perception of layered space, which makes the showroom seem like a collage on an environmental scale. The diverse parts add up to a scheme of great sophistication and daring. That the Chicago Sunar showroom offers an alternative to the unthinking clichés of conventional showroom design would be significant enough even if it did not-as it does-also offer functional improvements in addition to its stylistic achievement. That its importance was lost to so many is not surprising, since it requires a rethinking of narrow attitudes that have habitually segregated the imperatives of function from the dictates of pure design. Graves has joined both into one superb unit here. Although the Chicago Sunar showroom is an assemblage of many fragments, that unity of the beautiful and the useful, of the real that is life and the more-than-real that is art, gives it a completeness that is much more than the sum of its parts. [Martin Filler]

Project: Sunar showroom, Los Angeles. Architect: Michael Graves. Steven Harris, job captain.

Program: temporary exhibit for showroom of contract furnishings manufacturer.

Major materials: painted existing walls, floors and ceilings, fiber column forms (see Building materials, p. 252).

Client: Sunar, a subsidiary of Hauserman, Inc. Cost: withheld at request of client.

Photography: Adam Bartos (p. 149).

Data

Project: Sunar showroom, Chicago.

Architect: Michael Graves. Steven Harris, job captain. Gordon Smith, construction supervisor. Program: showroom for contract furnishings

manufacturer.

Major materials: carpeted and marble floors, gypsum board walls and ceilings (see Building materials, p. 252).

General contractor: Colt Construction.

Client: Sunar, a subsidiary of Hauserman, Inc.

Cost: withheld at request of client.

Photography: Sadin/Karant, pp. 150-153, ex-

cept as noted.

Seen from showroom entrance (right), the Chicago Sunar interior is a rich composition of receding planes, accentuated by Graves's choice of colors and the soft, diffuse lighting. Sculpture of the Roman god Terminus (see p. 150) stands at far end of enfilade.





Ace of clubs

Working within strict limitations of space, budget, and client cooperation, architect Robert A.M. Stern has made a basement squash club in Manhattan into a witty architectural syllogism.

Banner-bearer of Post-Modernism, Robert A.M. Stern has spent the first two decades of his career defining, refining, and teaching the principles of the movement. Now, each novel use is a test. For example: How do P-M principles work in narrow situations, where functional demands, structural constraints, and a tight budget limit the architectural intervention?

Well—as proven by this squash club in the basement of a newly completed Manhattan apartment house. When Stern got his hands on it, the dimensions and layout of the basement had been predetermined; the operable space was a narrow, low area flanking the courts, accessible by a stair descending steeply from the street. Two of the squash courts are separated from this area by glass walls, a prefab feature installed as part of the court by the client. The third, on the far end, is the traditional solid box entered via a tiny door.

The functional program was to transform this circulation area into a lounge space. For this dead-end shoebox (14 ft wide, 57 ft long, with a ceiling that drops to 8 ft) to have any meaning, the design had to relate the lounge to the courts, yet give the space a unique, unifying identity.

Stern's appropriate and witty solution, a chain of architectural reasoning, answers perfectly. As any squash player knows, what stops the white box of a squash court from spinning into a white whirl during the game is the service line, which, together with the baseboard, defines the front wall. The inch-wide red stripe stretching across the flat, white expanse at a height of 6½ ft, and the darker metal baseboard, 2 ft high, maintain the right angles of the space.

DESK STAIR NO.

Like the string course and rustication each respectively connotes visually, the service line and baseboard define the spatial layers of the box they adorn. Above the line, the game begins with the serve; between line and baseboard, the action is focused, and a ball that hits the baseboard ends the rally.

Out of these two architectural elements, synecdoches of a squash court, Stern has constructed the lounge. The red stripe runs around the cool blue wall, as does the base, rendered here in two gray bands that play up the suggestion of rustication. As a string course would, the stripe breaks at the "windows" (the glass walls) and the doors. Between these two is, by architectural definition, the main floor; by squash definition, where the game is played.

On this first conceit, a metaphor is built. The desk, set between the two stairs, is treated in a manner suggestive of a porch; the cut-out front over the counter is scalloped into capitals at the top. A door is painted in trompe-l'oeil blue panes and white frame, becoming a false French door.

A second transformation has occurred. An interior has been set up as an exterior. The lounge, faced with a false façade, is labeled "outside," while the squash courts are "inside," behind the glass windows. As the French door indicates, the lounge is to

be read as an outdoor terrace. The illusion is completed by slate-gray carpeting and an aluminum-paneled, stepped ceiling, which picks up the sky blue of the walls.

Regrettably, some changes by the client dull the impact of the architectural parti. A second French door was to be painted on the back wall, to add symmetry and thus more credibility to the "façade," but this touch was nixed at the last minute. The reception window onto the entrance stair has the red line across it, reportedly for fear that people would otherwise put their hands through the glass. Corners appear to have been cut on lights and furnishings.

The architectural quality emerges in deft touches. A red banister down the stair announces "squash"; Art-Decoid gray and white bathroom tiling patterns pick up the vaguely retro atmosphere of the loungeterrace. The bulletin board is related to the baseboard-rustication and the stripecourse as a stucco wall might be, with the two textures suggestively juxtaposed.

Clearly an architectural winner, Stern's P-M squash club represents a somewhat ambiguous social benchmark for the style. Post-Modernism, like La Coste sport shirts, loses out when adopted without appreciation of the design's quality. It would be too bad if being merely "in style" were the price of P-M's success. [Eleni Constantine]

Data

Project: First Avenue Squash Club, New York. **Architect:** Robert A.M. Stern Architects; Mark Mariscal, assistant in charge.

Consultants: Robert Silman & Associates, structural; Gleit Olenek & Associates, mechanical; Carroll Cline, lighting.

Major materials: gypsum board, concrete block, plaster, carpet, aluminum panels.

Client: Halmor Racquet Corp.

Cost: \$48 per sq ft.

Photography: Edmund H. Stoecklein.

Facing page: entrance stair and lounge.





Modified Modernism

Reconciling almost opposite needs for open and closed offices, for a strong corporate image with personal needs, prompted a careful balance between Modernist and non-Modernist attitudes.

Two chronic afflictions plaguing the design of open office plans cannot easily be solved: the need and desire for acoustical privacy and the expression of hierarchical relationships. The term "hierarchy" here refers not just to corporate structure, but to the division of functions in terms of public, semipublic, private, and semiprivate zones.

In this case, the offices for BEA, a financial investment firm located in New York's Citicorp building, involved a slightly more intense deference to these two abovementioned characteristics of the working situation.

Tod Williams & Associates, architects, has devised a scheme that confronts these issues extremely well through a balance of Modernist rigor and the lavish though understated use of natural finishes and fabrics. It is the kind of "comfortable-modern" effect that chichi decorating houses usually claim to achieve with chrome furniture, brown suede walls, and floral prints.

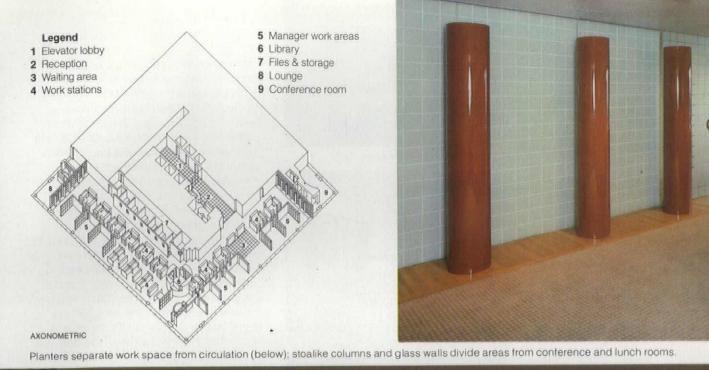
Modernist substructures

The disposition of open-plan spaces at the BEA offices, wrapping in an "L" around two sides of the tower, is executed logically and legibly. The south arm contains managers' offices and a reception lounge with a conference suite at one end; the other arm, where the more behind-thescenes functions of investment counseling take place, faces west, with lunchroom adjoining. Between, at the crook of the "L," is the president's office. In other words, from the perspective of understanding office functions, the clarity, serviceability, and hierarchical nature of the planning make a



Entry foyer from elevator (above) leads to offices and reception lounge (below).







BEA offices, New York

strong impression.

Modernism's democratizer, the grid, reigns throughout. The theme is established immediately at the elevator bank where squares of white oak flooring, 1'-10½" x 1'-10½", are set into a grid of metal strips. This grid motif repeats in custom-designed office partitions for the managers, where the panels (also 1'-10½" square), covered with Kansu silk, are set within a lacquered wood frame. At the ends of the wings, separating the conference rooms and lunchroom from the work areas, the architects sandblasted a grid pattern of 6%" squares on sliding glass walls.

The design of the lighting illustrates another area where custom detailing enriches architectural features. A tubular stainless steel fixture with fluorescent lighting is mounted in a barrel vault carved out of a dropped ceiling. It creates a cove lighting strip that extends from the elevator banks through the reception foyer. Incandescent spots mounted into a ceiling lowered over the main circulation path establish another kind of space. The ceiling over the work area is composed of metal reflective panels pierced by eight-ft-long slots three in. wide, above which a luminous fluorescent fixture is inserted. Task lighting at the work stations supplements this ambient glow.

Softening up the effect

The most noticeable thing about the offices is that the noise level is appreciably low, softened not only by the metal panel acoustical ceiling and the acoustical paneling of the managers' offices but the %-in.-thick carpeting on the floors and core walls. The only nonabsorbent surfaces are the oak flooring in the fover and waiting area, the lacquered wood partitions of the managers' offices and work stations. These and the freestanding lacquered columns in front of the etched glass walls form nicely polished, brittle counterpoints to the cushiness of the fabrics and furnishings. The furniture, a straightforward and simple "modern," has been upholstered in various muted beige tweeds, patterns, and solids, as was the architect-designed carpeting

Where there are strengths...

Despite the interior's successes, one does find flaws. Because the detailing and architect-designed carpeting, hardware and lighting are well done and so many problems thoughtfully resolved, criticism borders on carping. Nevertheless, out-of-place aspects attract attention. For example, the architects have chosen not to try to accommodate the tower's heavy-handed



Custom-design office divider.



Conference room.



Lunch room (above) Library (below).



cross bracing into their design scheme. Not that they should. However, there are points when these diagonal members intrude into the design in a way that fights the rigorous geometry to which the scheme ascribes. Particularly disturbing is the way the bracing member smashes through the sliding glass wall in the lunchroom, blocking the intersection of one translucent plane (sliding glass doors) and one transparent one (fenestration).

Second, the row of Pompeian-red columns in front of the etched-glass wall creates a smashing visual effect, a set piece of three-dimensional elements montaged against two-dimensional ones. However, the freestanding columns are not part of any formal or structural system: they are *sui generis*, not repeating or referring to anything but themselves. They are clearly there for pizzazz. This stoalike treatment, of course, signals the separation of semiprivate areas (work spaces) from semipublic (gathering places for conferences or lunch). However, one would expect to see the motif there picked up in the treatment of the library enclosure, a freestanding, circular, oak-sided object painted off-white. Because it occupies the node where the two arms of the "L" intersect, it obscures the view out. Furthermore, when seen from a distance, the off-white curved walls don't read as distinct from work stations and managers' offices. Even though the column and gridded-glass motif may have provided an instance of overkill, that or some other treatment would have been more legible.

Views out are obscured in another crucial area: when one enters from the lobby, the axial orientation of the cove lighting leads the eye directly out the window towards the Chrysler Building. However, the eye is stopped by the placement of a planter in the line of vision, located there to conform to the spacing of the planters along the length of the arm. (Nevertheless it should be said that the surprise glimpses out through windows and doorways punched into the managers' partitions work exceedingly well.)

Other cavils have to do with the choice of furnishings—that is, the burled walnut furniture in the offices. While this is a matter of subjective preference, in this kind of muted ambience, a patterned wood gains too much attention: a little goes too far.

Despite these observations, the architects have demonstrated a rare talent for combining various kinds of elements and materials sensitively. The handling of the open-plan offices, even if the budget was ample (\$80 per sq ft), merits commendation. If there are aspects that don't come off, or prove excessive, they are only mentioned with regard to similar endeavors elsewhere, whether executed by these or other architects. [Suzanne Stephens]

Data

Project: BEA Offices, New York.

Architects: Tod Williams & Associates, Architects, New York. Tod Williams, principal; Peter Wheelwright, associate in charge; Billie Tsien, associate, Alexandra Stoddard, Inc., interior consultant.

Program: design 16,000 sq ft (gross) of offices, work areas, conference and lunchrooms, accounting storage system, reception.

Major materials: custom cabinet work, lacquer finish on plywood for managers' office walls, wool carpeting, floors white oak, Kansu silk acoustical panels, metal pan ceiling, glass with sand-blast etching (Building materials, p. 252).

Consultants: Joseph Loring, mechanical, Richard Shaver of Joseph Loring, lighting.

Contractor: Citibank (general).

Client: BEA.

Cost: \$960,000 including fees, furniture, graphics, planting, or \$80 per sq ft.

Photographs: Norman McGrath.



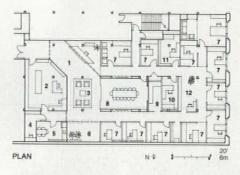
The CRA amendment

An association representing seven redwood suppliers makes a new home and showcase in reclaimed quarters.

Like many turn-of-the-century buildings in San Francisco, the Union Can Company building (1896) has had several lives. One Lombard Street, as the building is called, is now the home of the California Redwood Association, two architectural offices, and three other firms. Originally, the structure was directly on the harbor; it is now some distance inland, because of subsequent landfill operations. After some 40 years as a cooler building for Merchant's Ice and Cold Storage Company and conversion to freezers in the mid-1950s, the facility has been defrosted.

Part of the rebirth of the area near the Embarcadero, One Lombard Street was rehabilitated initially by the developer and contractor. The California Redwood Association turned to Environmental Planning & Research, Inc. to create its new office space within the existing building. Part of the program, of course, included the extensive use of redwood, demonstrating various cuts, joints, and surfaces. As EPR President Darryl Roberson points out, that request alone constitutes a complete design challenge. There were others implicit in the existing building, including the depth of the given space, and the limitation of windows to only one (narrow) end wall. Diagonal steel bracing members were added, in compliance with Bay Area earthquake standards.

Beginning with sandblasted Douglas Fir columns, beams, joists, and brick walls, EPR sought to create a warm and relaxed setting. Walls around perimeter offices are kept low, allowing the limited natural light to penetrate further, and giving a more spacious feeling. These areas surround the central conference room/audio-visual core, which extends up to the 15-ft ceiling.



Legend

- 1 Reception 2 Work/mail
- 3 Waiting
- 4 Printing 5 Coffee
- 6 Exhibit
- 7 Office
- 8 Meeting
- 9 Audio-Visual
- 10 Accounting11 Library
- 12 Secretary

Typical wall surfaces are in shiplap redwood siding, both horizontally (sapwoodstreaked clear grade) and vertically (all heart tongue & groove) applied, and finished with clear penetrating oil. The entry area and the executive office have specially milled redwood paneling to call attention to their special functions.

To complement the sympathetic combination of redwood and old brick walls, brass was used for hardware, blinds, and some furnishings. Accents of blue and rust in the furniture, door colors, office wall insets, and overhead fixtures, combine with beige carpeting; a custom-made rust, blue, and beige inset carpeting graces the gallery floor. Ducts are painted in two shades of red/brown, pipes are painted out in off-white, and fluorescent light strips are tucked into the joist spaces.

The showcase of the offices is, quite naturally, the meeting/conference room. A dropped ceiling over the center of the room conceals the lighting system, and the glass wall at the entry end allows each space to be experienced as part of the other. Behind diagonal-paneled redwood sliding doors at the other end are fabric-

covered display panels which also slide away, to reveal projection screens for audio-visual presentations. This room, in conjunction with adjacent exhibit, waiting, and reception areas, may be used for entertainment or other informal association gatherings.

CRA's offices are respectful of the existing building shell, simultaneously warm, informal, cheerful, and a fine display for the association's favorite subject. They are also another quality step in the renewal of a deserving city sector. With the coming development along that stretch of the Embarcadero, we can only hope subsequent participants will take a cue from One Lombard Street. [Jim Murphy]

Data

Project: California Redwood Association offices, San Francisco, Ca.

Architects: Environmental Planning & Research, Inc. (EPR); Darryl T. Roberson, principal in charge; Joseph D. Chance, project architect; Suzanne Straith, Allison Lasley, interior design.

Client: California Redwood Association. **Program:** 6500-sq-ft headquarters for 16-person staff.

Structural system: steel braced frame and plywood floor diaphragms in existing 3-story brick and heavy timber building.

Mechanical system: exposed spiral duct heating and ventilating.

Major materials: redwood siding, gypsum board walls, carpet.

Consultant: Peter Culley, structural.

Developer: The Ron Kaufman Companies.

General contractor: Plant Brothers Corp.

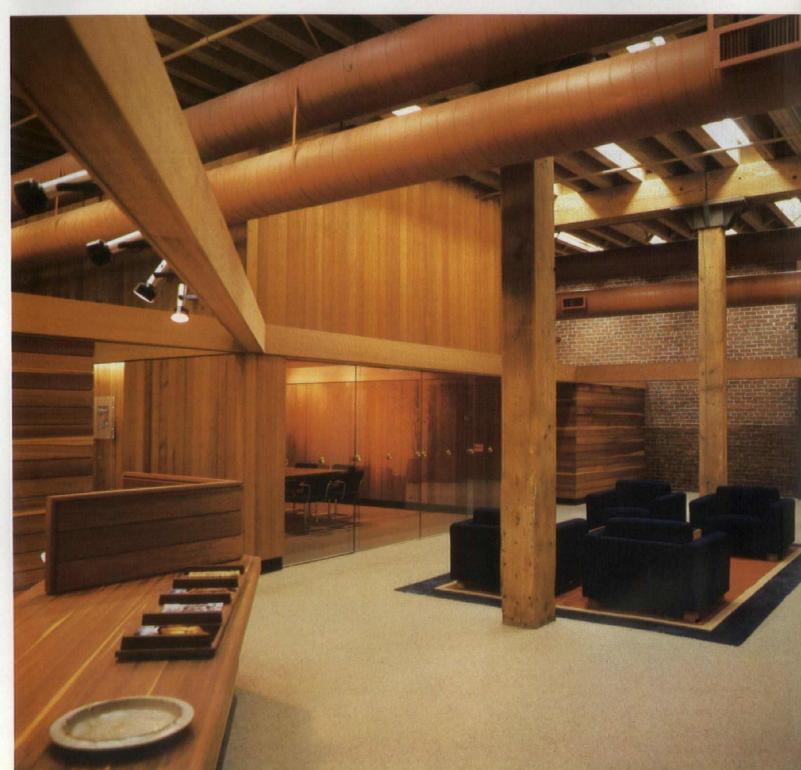
Cost: \$33/sq ft, excluding furnishings and fees.

Photography: Joshua Friewald, courtesy of the California Redwood Association.

Existing wood columns and cast-iron caps form a matrix for the design, appearing as elements within the space. Strong horizontal bands tie low perimeter partitions (opposite, top left) to full-height meeting core and reception area.







Sleek revival

Offices for a fashion design firm recreate the texture of a certain period with richness of details and materials.

Revivalism is back. One of the most fashionable sources for forages into the past has been the Art Deco Style because of its combination of simple lines, smooth surfaces, exquisite detail, and elegant materials. Unfortunately, however, interior designers and architects too frequently miss the point. They "recreate" restaurants and hotel lobbies, hair salons, and even offices in a claustrophobic congestion of chrome and suede that has little to do with the design qualities of the original period.

The executive offices for Yves Saint Laurent quite pointedly illustrate an appropriate approach; here two designers have sought revivalism without sacrificing a sense of contemporaneity.

The two, Jed Johnson and Judith Hollander, came together several years ago because of their mutual interest in collecting antiques, objêts d'art and plain old period paraphernalia. Their object-fixation developed into a passion for all the decorative arts of a period-whether it be American Empire circa 1820 or Le Style 1925-and creating entire settings. The use of original fabrics and authentic designs for wall coverings or even stenciling has become their trademark, although finding the actual fabrics is almost as difficult as locating the craftsmen to perform the stenciling. Nevertheless Johnson, a former film director, and Hollander, a private dealer, have developed a clientele that admires their intense and academic approach to decoration.

Since the offices required a certain soigné chic in keeping with the image of the firm, the usual office furnishings were avoided. On the other hand, the interiors did have to look straightforward enough, as if business could indeed be conducted

there. Johnson and Hollander came across a suite of Art Deco furniture designed around 1931 reportedly for an English couturier who had commissioned the set for an office in a private home. The pieces were correct in style and tone. The furniture, made of copper-plated steel tubing, copper sheet, copper banding, and lacquered wood, comes as a surprise from a period when most of the Bauhausdesigned or -derived tubular furniture was silver—because of the nickel or chromium plating.

Since the Art Deco pieces had to be restored, Johnson and Hollander decided to relacquer the wood from black to dark brown, and reupholster the seats in French suede cloth. While the set included one large desk-now in the reception officeseveral cabinets, a chaise, a bench and stool, plus a table lamp and floor lamp, other pieces had to be added. The two designers were able to locate an Americandesigned copper-banded desk from the 1930s for the director's office, plus some copper-plated lamps. In a couple of instances they have had 1930s lamps replated in copper. They also found two Paul T. Frankl chairs that have been relacquered to dark brown.

To emphasize the totality of this ensemble, Hollander and Johnson designed a frieze based on an American Indian motif and had it stenciled around upper walls of the reception room. The frieze, of bronze powders on an oil-base paint, subtly picks up the reverse glass trim stenciled on the desk tops. For this application, a stenciling process, developed in the 18th Century by Jean Glomi for framing prints, was used: the stenciling is applied to the underside of the glass top so that when the glass is turned over, the bronze powder pattern shows through, given extra coloration by the dark brown lacquer behind it.

While most of the operation involves what would be called "decoration"—

selection of furnishings and application of ornament to surfaces—design problems still had to be solved. Because of the small size, 600 sq ft, of the offices (they are nowbeing expanded), Hollander and Johnson decided to separate the rooms with sliding partitions—the old Modern way of opening up the space. To accommodate lighting fixtures, HVAC supply and return ducts. and sprinklers, they needed a hung ceiling but wanted cove lighting to wash the walls. Architect Michael Hollander designed the dropped ceiling with continuous fluorescent strip lighting around the edges to emphasize the room's ten-ft height. These and other elements, such as the sliding doors, have been deftly handled by the architect to provide the neutral background for the decor. The total ensemble works quite well: one can fully appreciate the furnishings, and the revivalist touches; in other words, one gets the full sense of the period, without being suffocated by overly pungent effects. [Suzanne Stephens]

Data

Project: Yves Saint Laurent Enterprises offices, New York.

Interior designers: Jed Johnson and Judith Hollander, Associates.

Program: renovate about 600 sq ft of space in an old 1920s skyscraper for executive offices of fashion couture firm. Space to include reception area, executive office, conference room, kitchen, and workroom/closet.

Major materials: paint, lacquer, carpeting, suede cloth.

Consultants: Michael Hollander, architect in charge of design; Bier, Baxt & Hirsch, detailing and construction; Benjamin Baxt, partner in charge.

Cost: withheld at request of client. Photography: Norman McGrath.

Reception room (opposite, bottom), and adjoining director's office (opposite, top.)







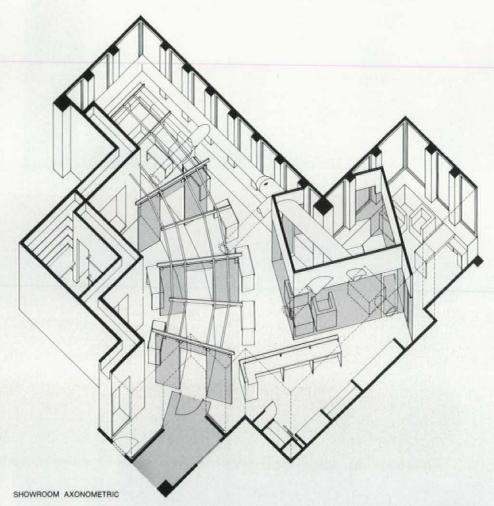
Each to his own taste

Peter Wilson Associates designs two interiors that place greater emphasis on the clients' requirements than on the architects' own design philosophy.

The successful development of a readily identifiable "look" is quite often a muchsought-after (and highly marketable) commodity in the world of interior design. Clients will flock to an architect or designer who provides an easily recognizable product, in much the same way that some people are drawn to the status objects created by this or that clothing, jewelry, or luggage designer. This is not to imply that consistent stylistic development need be an act of calculated commercialism. But it is rather unusual, especially in interior design, for one firm to shift styles markedly from one project to another. And it is even more unusual for a firm to do so with any degree of design integrity or credibility. But Peter Wilson Associates, a young New York architectural office specializing in interior design work, has managed to achieve that difficult combination of flexibility and consistency in several of its recent projects. Two of them, a New York garment-center showroom, and an apartment for a former employee of that initial client, illustrate how it can be done.

Esprit de Corp is a fairly small manufacturer of women's inexpensive sportswear. Their New York showroom is located in a large high-rise on Broadway between 39th and 40th Sts. This underappreciated structure, built in 1950 to the designs of Kahn & Jacobs, is a superb example of office building design. Its unusual exterior cladding of pale green brick set off by redframed horizontal strip windows is further distinguished by the sawtooth plan, which creates a welcome contrast to the orthogonal uniformity of the Midtown area.

The existing showroom area leased by Esprit de Corp reflected the staggered ex-



At Esprit de Corp showroom (opposite page), buyers' desks are ranged along arc that runs through space to informal seating area at rear of installation. Subtly silkscreened glass panels afford some privacy, but allow visibility, too. Clothing samples are hung along outside of arc (below).





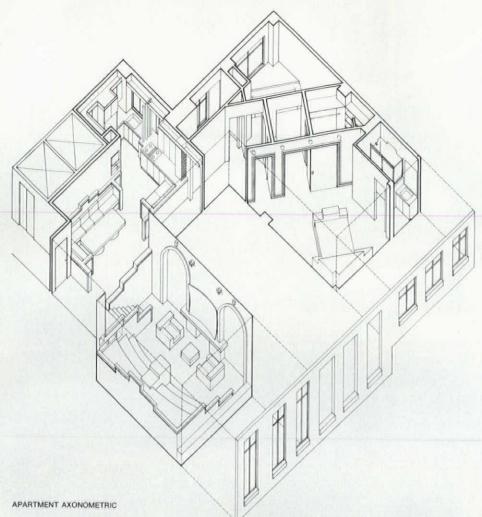
Esprit de Corp showroom and apartment

terior of the building. Zigzagging on two sides, the space was difficult to accommodate to the client's two major desires: the visibility of himself and his goods from the corridor outside the showroom, and the creation of a feeling of activity within the showroom itself. The garment trade places great store in both personality and the herding instinct, so it was deemed necessary to make both the owner's office and the buyers' tables the two visual focuses of the design. The architects thus placed the glass-walled executive office on a diagonal facing the glass-walled entrance, and ranged the buyers' tables along an arc that curves from the reception area into the farthest corner of the space. A beautifully detailed brass framework suspended from the ceiling describes the arc, and from it are hung spotlights and glass panels. The panels are silkscreened with subtle, semitransparent photographic images of fashion models, giving a sense of some privacy to the viewing areas, but still allowing the activity in those cubicles to be clearly seen.

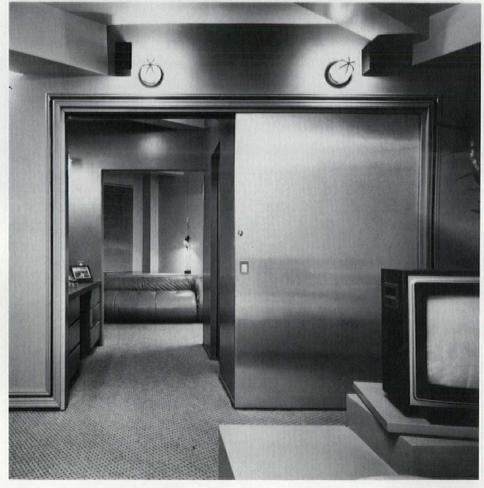
The net effect created by this showroom design is one of dynamic movement, legibility, and a strong sense of organization. The restraint of the scheme makes other showrooms in the building seem overdressed by comparison. The chief salesman at Esprit de Corp liked the results there so much that he asked Peter Wilson Associates to remodel his own apartment on Manhattan's East Side. The outcome of that project was so different from the showroom that it would be hard to guess that they were both done by the same architectural firm. Yet they both share, beneath the obvious stylistic divergences, a similar attentive response to the client's desires, which dictated the design direction of each project.

The first thing one thinks upon entering the East Side apartment is that the people who live there live differently from you and me. Looming against one wall of the sunken living room is a gigantic Advent television screen, the first of several TVs that one sees throughout the apartment, and which furnished the major design cue for the architects. The client might be fairly termed a television addict, and he does not like to be out of the sight of a TV for too long. His favorite form of entertaining is to have friends over to watch the Advent, and thus the living room has been turned into a carpeted amphitheater to accommodate unobstructed group viewing of the huge projected image.

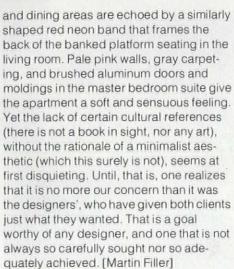
The apartment has an Art Deco feeling to it, but without any specifically historicizing quotations. Stepped bands of pink, gray, and black ceramic tile in the living



Master bedroom (below) is linked to guest room by dressing room and walk-in closet.







Project: Esprit de Corp showroom, New York.

Architect: Peter Wilson Associates.

Program: renovation of existing showroom for

women's sportswear manufacturer.

Major materials: glass and plywood walls, brass pipe suspended ceiling, carpeted floors. Consultants: Jules Fisher & Paul Marantz, Inc.,

lighting. General Contractor: All Building Construction. Cost: withheld at request of client.

Photography: Norman McGrath.

Data

Project: apartment renovation, New York. Architect: Peter Wilson Associates. Peter Wilson, principal; Jon Evans, associate; Barbara Weinstein, project architect.

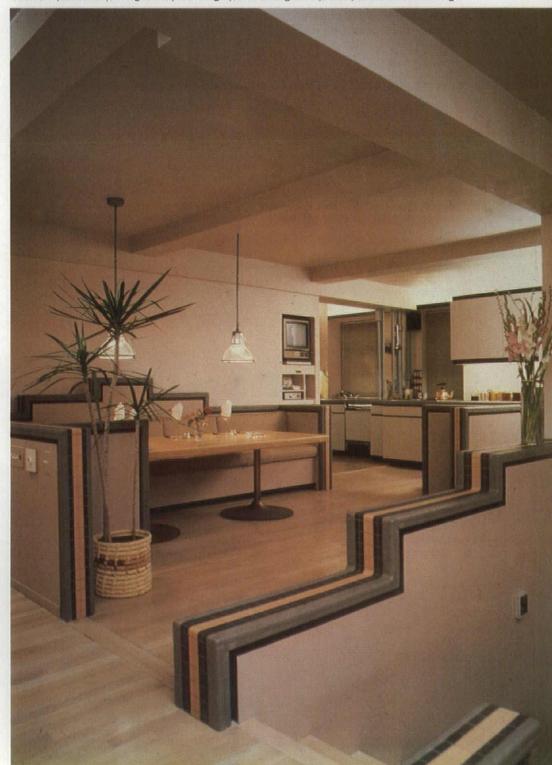
Program: renovation of apartment to create clear and open spaces, and to accommodate client's television viewing.

Major materials: painted plaster walls, carpeted and hardwood floors, plaster ceilings. Consultants: Jules Fisher & Paul Marantz, Inc.,

General contractor: J. & M. Tomlin, Ltd. Client: withheld at request of client. Cost: withheld at request of client. Photography: Norman McGrath.



Bedroom (above left), living room (above right), and dining area (below) share unified feeling.



Faux bois sans faux pas

An apartment in New York abstracts design elements from the past as a setting for an unusual art collection.

For some years now, the accepted way to display paintings to prove they were being taken seriously, whether in the museum or the home, has been against the white wall. But with a more relaxed attitude toward all of the arts today, that convention seems finally to be on its way out. Nowhere is this more convincingly shown than in the apartment Richard Gillette (P/A, Sept. 1977, p. 92) has designed around the private collection of a New York art dealer.

There is theatrical use of color, as often as not combined with such opulent fabrics as taffeta and silk. Wainscoting and other decorative moldings have been applied at will and covered with gold leaf or paint. Mirrors (on the bedroom ceiling and elsewhere) create illusions of spatial depth, while screens (across the living room windows, where you cannot not believe a garden lies beyond—but doesn't) give suggestions of (nonexistent) delights beyond. If all of this has been done before, there nevertheless seems to be a new twist here, which can probably best be accounted for by the fact that Gillette is by training neither an interior decorator nor designer, but a painter. This, one could suppose, might give him an edge on knowing the limits of combining colors and decorative elements, and on knowing just how far to push without going over.

The task for this apartment was not simple. As a collector, the client's eye runs toward the meatier side of late 19th- and early 20th-Century art, with impressive holdings from the Symbolists and pre-Raphaelites. These, with furniture by Gallé, Majorelle, and Mackintosh, with Victorian wicker and Streamline-Moderne, are underlined with Art Deco and Chinese rugs, and expected to work. Miraculously, they do.



Dining room (above) retains 19th-Century air, while kitchen (below) stays closest to the 1940s.



Photos: Tim Street Porter, except as



Living room mixes many periods to create gardenlike ambience; bedroom (below) is all Deco.

Gillette was asked to provide a sympathetic setting for rather special paintings and furnishings, and he has done so mainly through an admirable exercise of restraint relative to the objects. In the dining room, the walls and the window treatment are kept simple. Except for the colors, the space is more suggestive of the purity and calm of an 18th-Century setting than a 19th-Century one. Track lighting illuminates the room, and the fireplace surround has been gilded to blend with the frames of the paintings. Although the objects in the room are undeniably florid, there are no excesses to the room itself.

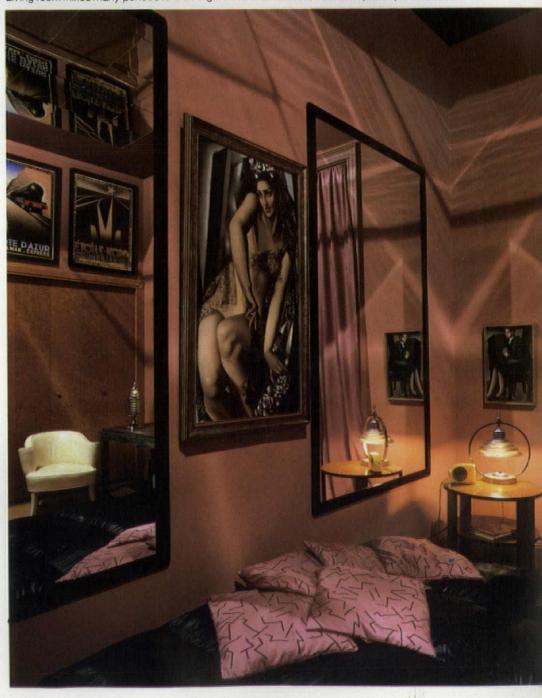
Perhaps nowhere does Gillette's painter's eye come through better than in the living room. Here, where Mackintosh, Streamline-Moderne, Art Deco, and Victorian coexist, Gillette has pulled the whole ensemble together by wrapping it in a soft, misty green, and then tying it with a wainscoting and door treatment that make a heroic, but mock, attempt to simulate real wood grain or marble—it's hard to tell which. Nevertheless, this sort of comment—a burlesque of the real that has an inherent beauty of its own-requires special vision. The flesh-tone bedroom, its mirrors and black satin, make a space as seductive as the art housed within it. Throughout, Gillette shows the way towards a new opulence, but it is an opulence that judiciously abstracts from the past with an economy of means that only one who sees beyond the surface of things could achieve. [David Morton]

Data

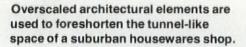
Project: private apartment, New York.
Interior design: Richard Gillette.
Program: to create appropriate setting for specialized art; in existing apartment.
Major materials: paint, gold-leaf, fabric (see

Building materials, p. 252).

Costs: withheld at request of client.



Astir in the shopping mall



An unpromising sliver of space confronted architects Sisco/Lubotsky Associates and Stuart Cohen at the Fox Valley Shopping Center. Situated on the second floor of an enclosed mall, the area leased for a housewares store begins with a generous angled front, set prominently at the head of an escalator well. From there, however, the space stretches back 140 ft, only 25 ft wide, with a major air supply duct running its length and others crossing it midway.

The design had to offer a flexible, noncompetitive background for displays of visually lively merchandise, yet the architects realized that merchandise alone would not draw the eye deep into this tunnel. To delineate the space all the way to the back and minimize its apparent depth, they placed architectural elements in it that were simple in form and color, readable from a distance, and deceptively overscaled. In a central portion, where crisscrossing ducts would permit it, they raised the head height above the prevailing hung-ceiling level to accommodate a small fabric sales mezzanine; in the spaces at either end they constructed counters projecting from the side walls in large curves, anchored at the outer ends by big round columns of no structural use whatsoever. Spanning between these "columns," a dropped soffit, suggesting a beam, gives the mezzanine a display wall and defines a smaller-scaled area along one wall between the counters.

The crucial scale trick is accomplished by giving the mezzanine pipe railings of a more or less familiar kind—but made up of 4-in. pipes, rather than the usual 1½-in., and rising almost to shoulder height. (The 1½-in. pipe is used—by contrast—as hefty support for displays.) Once such

heavy pipe was chosen, it was only logical to make the railings support the stairs by fabricating the pipe into trusses. The play of the straight chords of these trusses against the angles of stairs and landings is of some interest, but stringent safety requirements resulted in addition of some rather clumsy steel plate inserts.

All materials have been chosen to compose a neutral, yet distinctive, backdrop. The pine board walls—treated with fire retardant that turns them gray—conceal standards for shelf brackets, but they can also be nailed into. The off-white tile floor is subtly zoned, with 4" x 8" tiles in an area along the left wall—aligned with doorway and mezzanine stairs—and 8" x 8" units in the larger space. A band of more intense lighting in the aluminum vane ceiling marks off a path from door to the stairs and reinforces this division.

Entrance to the shop is through a prominent trabeated portal in the clear glass



Within the shop's neutral envelope, oversized steel elements (compared to occupants, above) minimize 140-ft depth. Portal on angled front (top right, facing page) supports architect-designed sign; lintel appears to be lifted out of sill, leaving rhomboidal slits in glass wall.

wall. Its tubular columns hold up an I-beam, with steel impost blocks where column capitals belong—somehow suggesting a version of Classical detailing. Bracketed from the back of these transitional elements is the distinctive sign, designed by the architects, with chunky Moderne letters air-brushed apple green. Originally, this green was to appear on all the steel elements—the door frame, the pipe rails, the display supports. But the client could not accept such a strong color competing with the merchandise, so the rest of the steel was painted white.

Before this article went to press, The Cook's Spoon shop felt the much more drastic impact of the client's needs. For reasons beyond the architects' control, the shop was closed after only a few months of business and all portable elements removed. Today you will find no Cook's Spoon in the Fox Valley shopping center. [John Morris Dixon]

Data

Project: The Cook's Spoon, Fox Valley Center, Aurora, II.

Architects: Sisco/Lubotsky Associates, Ltd., and Stuart E. Cohen, Chicago, II. Stuart E. Cohen, Anders Nereim, Eugene Sisco, design team; Anders Nereim, project architect; Jonathan Halper (drawings).

Client: Joe Otero.

Program: 6600-sq-ft housewares shop, upper level of enclosed suburban shopping mall; 3440-sq-ft main retail space; 460-sq-ft mezzanine for fabric sales; 2700-sq-ft storage and administration.

Structural system: exposed steel, mezzanine.

Mechanical: fanned-air heating and cooling,
with plenum return and exposed supply ducts to
area below mezzanine.

Cost: \$302,000 (\$45 per sq ft) including sales fixtures, excluding fees.

Photography: Sadin/Karant.







Hot dog heaven

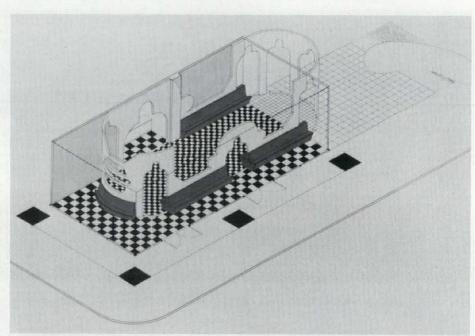
A whimsical fast-food restaurant by Richard Fernau neatly avoids cuteness, while providing an appropriate image that far surpasses those of most other such establishments in this country.

While eating hot dogs may be a national pastime, serious architectural odes to the dog are rare. A poetic rendition of this American habit is the commendable achievement of San Francisco's new eatery, Franks for the Memory.

Both designer and client are new to the restaurant world. For Richard Fernau, a recent architure graduate of the University of California at Berkeley's College of Environmental Design, this was his first commercial job. For Lewis Jonas, a recent law school graduate, this was a first step away from the legal profession.

Jonas leased ground floor, street corner space in a bland new high-rise in San Francisco's burgeoning south-of-Market office building area. Exterior alteration and signage were strictly limited; the rent was not. Jonas commissioned Fernau to create a setting that would make eating hot dogs a compelling choice for the sophisticated office worker on the go. Another client request was a mural by their mutual friend, Patrick Kennedy.

Fernau worked the givens of space, program, and art work into a design that celebrates the dog in plan, section, and elevation with spatial illusion. A skeletal screen wall with a cut-out hot dog arcade and hamburger pediment evokes the image of a gleaming white, light-filled pavilion. A seaside setting is specified by the mural's subject matter, a whale-sized wiener gently nudging the strand. The scene is not intended to advertise the hallucinogenic properties of hot dogs, if any. Nor is it subtle propaganda for Greenpeace. The real source is a childhood dream of the architect's; its visual transla-



Exterior of restaurant (below) as seen from sidewalk surrounding glass-walled corner.



tion is nicely calculated to lift the beholders out of their possibly dogged existence.

A seating capacity of 75 is accommodated by a combination of long benches on either side of the wall with single and double tables to provide flexibility of arrangement. The food preparation area is matter-of-fact and completely visible from the order counter. Lighting fixtures and underground pipes painted white and cut in half also testify to the kinds of budgetary priorities that resulted in a \$29-per-sq-ft cost for the project.

Of the \$28,000 total cost, \$15,000 went into the construction of the elliptical screen wall. Fernau counts himself lucky to have had the services of the ace dry wall team, who turned out a beautiful seamless wall. Another well-crafted element is the green painted, slatted wood bench. The elegant simplicity of the design's formal parts is complemented by a color scheme that, by picking up colors in the mural and maintaining a light overall tonality, also serves to expand the apparent size of the interior.

Although there is nothing new in the use of architecture as metaphor, particularly in food-oriented projects, a graceful escape from cliché is one of Franks for the Memory's winning aspects. Nearby are restaurants aplenty that have been ordered up over the telephone to fill vague prescriptions for expense account posh. They may showcase the fashionable formulas in food and decor, but they are rarely memorable. [Sally Woodbridge]



Project: Franks for the Memory, San Francisco. **Architect:** Richard Fernau & Associates. Design team: Richard Fernau, and Scott Glendinning with Laura Hartman. Mural: Richard Fernau and Patrick Kennedy.

Program: fast-food restaurant with 1200-sq-ft dining area and 600-sq-ft kitchen.

Site: ground floor of office building in downtown business district of large West Coast city.

Structural system: steel studs and hung ceiling.

Major materials: steel stud and gypsum board walls, acoustic tile ceilings, VAT floors.

Mechanical system: standard HVAC system. **Consultants:** HVAC: Fred Jacob, project engineer, Syska & Hennessey, Inc. Kitchen design: James Brown.

General contractor: Dinwiddie Construction Co., with Golden State Drywall.

Client: Lewis Jonas.

Costs: dining area: \$28 per sq ft, exclusive of

furniture and fees.

Photography: Richard Fernau.



Entrance (above) shows alignment of black and white tiles, which change size at threshold.



Interior (below) contains surrealistic mural of superscale weiner (above), underscoring theme.



Insiders' outlooks

To discern the shape of things to come, P/A has asked leading professionals involved in interior design to predict what is likely to happen in the 1980s. Excerpts from their statements follow.

Rita St. Clair; president, Rita St. Clair Associates, Baltimore; president, American Society of Interior Designers: Economics will define, as it usually does, the function of interior design in the 1980s. To me, that forecasts two very distinct and extremely divergent trends in the design of our interior spaces of the near future.

Due largely to cost considerations, and mostly to our sense of what cost considerations should be, I expect to see our most functional interiors adapt very comfortably to the minimal school of design. Transportation terminals, educational institutions, public buildings—interiors that house the necessary functions and assemblage of society—will impress us by their lack of embellishment and dramatic dedication to convenience, energy efficiency, and lower construction costs. It is not wrong to include in this list both the residential kitchens and bathrooms of tomorrow.

This leads to what I believe will be a most opposite side of the coin for our more personal and socially used interiors. Because the human psyche will demand a relief from minimalism, I predict that our living rooms, bedrooms, restaurants, and hotels will be designed as our "Fantasy Environments." While we will create and accept the minimal in spaces we must use, we will seek out and escape to fantasy when there is a choice to be made or a moment to relax.

Edgar Kaufmann, Jr.; architectural historian; adjunct professor, Columbia University; New York: In the next decade designers of every kind will be busy shaping symbols of energy, dramatizing the dis-

embodied, invisibly structured processes which dominate the facilities for living in our times. This will entail a devaluation of objects and mechanisms, a revulsion from acquisition of items (and a consequent loss of market value for many static expressions of art). It will mean considerable emphasis on space enlivened by the changes of natural light, on ease of movement through space inside and out, on awareness of natural rhythms as sources of human refreshment. It may well lead to an increase of interest in architecture designed for change and adaptation rather than piecemeal restructuring destructive of original values.

Donald T. Chadwick; Chadwick Design Development; Los Angeles: In probing into the 1980s for some directions on where interior design may be heading, one is obviously confronted with the ever-expanding concerns for energy conservation and distribution along with the increasing use of data communication and its impact on the work environment. With the cost and size of microprocessors being reduced, a new range of small computers will be finding their way into both the home and office, which could have alarming effects on the man-machine environment.

Having a deep concern for man's dignity while respecting the machine, I would hope that the interiors of the 80s become more humane, with less emphasis on the machine-system aesthetic. By this I mean a greater concern for spatial interest and variety, a broadened sense of personalization of work spaces, a renewed awareness of freestanding, multiuse furniture, and an enlightened view of appropriate technologies and materials on the part of manufacturers, specifiers, and users.

Today there still persists a rather distinct difference between office and home environments predicated on outdated principles and traditions. The challenge for management and interior space planners is to reassess the direction of office system planning by placing a higher priority on the investment in qualities that will help people become more "at home" in comfortable working environments. With this redirection of priorities we should see a refreshing period in the 1980s upon which interior design can have profound influences.

Lisa Taylor; director, Cooper-Hewitt Museum; New York: There is strong evidence of the emergence of a new design ethic based on the conservation of natural resources and concern for the environment. Its effect on our life style, architecture, and interior design will be visible in the 80s. In what ways, do I think?

The decline in buildings and products that pollute or squander energy; the exploration of many different forms for providing supplementary heat and energy; a rediscovery of the city; the increased recycling and restoring of older buildings; a trend toward buying rather than renting; more single people sharing houses and apartments; a preference for raw rather than finished space; interiors organized in a more practical way to serve different purposes and to meet individual needs; large, open kitchens becoming the focal point of a home; the popularity of communal bathtubs; a return to ornament, natural fibers, and old-fashioned products (down comforters, wood-burning stoves, and ceiling fans); antiques and handcrafted objects being sought after; windows taking on a new importance, whether they include greenhouse units, heavy draperies, shades, or film; the increased use of mirrors, wallcoverings, floor coverings, heatabsorbent paints and colors; a major breakthrough in electronics reflected in home computer terminals, projection television, revolutionary lighting, and new gadgets for waste sorting and disposal.

The predicted "throw away" culture will

not materialize, nor will the hearth replace television as the center of the living room. Let's hope that we shall not forget to talk and to think. The 21st Century will require extraordinary flexibility and imagination.

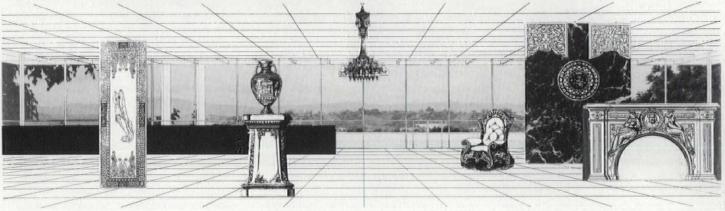
Terence Conran, chairman, Conran's: London: I expect that energy problems will greatly influence the design of both domestic and commercial interiors in the 80s: undoubtedly conventional ideas of heating and ventilating will have to be dramatically revised, and eyes could be usefully focused on traditional Indian and Arabian methods of using natural air currents for cooling and Chinese methods of conserving heat.

The medieval upholsterers' art of quilted hangings for the subdivision and insulation reach its maturity. And, as in any other disciplined profession, specialization will be necessary. The "general practitioner" interior designer/space planner must become the health care design specialist, the business systems design specialist, the restaurant, hotel, and motel design specialist, as each interior type requires different areas of design skills. The result of this design specialization will be more vital and productive environmental spaces

This concentration by the designer on the productive use of interior space instead of the decoration of interior space can be the resolution of the traditional design battle between practicality from a business standpoint and aesthetic value. design based on a reason-to-be rather than design just-to-be-different.

people will at some point wake up to the fact their work environment is pleasanter than their traditional home situation. Then people will be willing to accept good Modern into their home living.

Lawrence Lerner: interior designer; chairman, president, Saphier, Lerner, Schindler, Environetics; New York: The 80s will bring us new alternatives. Collective global forces, dominated by resource limitation, will dominate our choices. This will influence us to provide interiors that will work well with less artificial light and air. We will go back to "skinny" buildings in all but the extreme climates, so that occupants can work adjacent to operable sash to optimize natural light and fresh air. This will affect layout, traffic flow, and appear-



A premonition: The new Post-Modern interior, or Philip redecorates, photomontage by Martin Filler, 1979.

of domestic space could also provide a useful pointer and a new look, perhaps a la Christo. But just because we have at last realized that we don't have unlimited oil to burn does not mean that interior design will become reactionary, although Philip Johnson's foibles will undoubtedly cause a flutter of ersatz Sheratonism.

I hope and expect that the ingenuity of Eames, Saarinen, Nelson, and Knoll will be reactivated in America, and new interiors will have a cheerful freshness that is entirely modern and original and will owe nothing to cynical Neo-Classicism.

Undoubtedly technical and engineering design will have its influence, but as 1984 rapidly approaches, humanity, warmth, and naturalness will provide a welcome organic dulling of the harder edges.

Joan Burgasser; vice president of design, Thonet; York, Pa: A revolution in interior design in the 80s? No, but the 80s will mean an end to the "throw-away" approach to the design of both the products and the spaces in which they are used. That generation of design to come of age in the 80s will be based on the changes in design attitudes already in evidence today-a professionalism that will then

David Rowland; industrial designer; New York: One shouldn't just look introspectively into his navel and then out to the horizon to have insights into the future. Someone has said, "The future is now." I have often wondered if the ancient Egyptians could have had radio. Surely radio waves were around, and the natural abilities of the ether were there. The main missing link must have been thought, coupled with the humble desire to seek.

Similarly, one might ask today what great marvels could we have which are possible right now, except that we need to open our minds and humbly seek improvement, rather than take our well-being for granted (as we have done for so many decades of cheap gasoline). Right now we can have a far higher standard of work, play, and of living than we currently accept.

I think the directions of improvement in interiors will be towards use of ever simpler factory-built modules. The home will be built empty and then "custom" designed by the consumer who orders the modules to fill it as he/she wishes. Bathrooms, kitchens, storage spaces, and walls will be delivered as furniture and positioned in minutes according to customer whim.

The office will advance still further, and

ance. In extreme climates we will provide local controls for lighting and climatic variability. Design will show more respect for individual reactions to color, texture, light, air movement, and traffic distraction.

We will have to contend with a new era of government regulation regarding fireproofing, energy conservation, and employee safety, of comfort and-most frustrating-of aesthetics. We will be working for a more educated, receptive, sophisticated, and critical clientele. We will have to do all of these things in a manner handicapped by the diminution of availability of skilled personnel.

Charles D. Isaac; president, JG Furniture; Quakertown, Pa: Interior design will be merged with the building; both will be part of a systematic program to maximize benefits to the user. The most important benefit will be fast and low-cost change, so the users may constantly update the interior (and exterior) to match their new needs. Other benefits will include lower energy consumption, lower long-term maintenance costs, and certainly, a much improved environment for the users.

This has happened first in the office with "open planning." It will spread to all other

Preview of the 80s

places where people live and work. Expect soon to see variations of it, adapted to the very different requirements of each area—in education, hospitals, factories, and nursing homes. In each case, the building will be part of a program to support the people who work or live there.

Consider the possibilities of an open nursing home, with all amenities designed to work together for the inhabitants' benefit. For instance, a hallway with specially designed bacteria-resistant carpet, and lighting which reduces power consumption while vastly improving visibility for the sight-impaired.

Massimo Vignelli; designer; Vignelli Associates; New York: The pluralism of our contemporary culture allows for many creative expressions to coexist, interact, and stimulate each other at the same time. From minimalist rarified atmosphere to the eclecticism of Post-Modernists, from high-tech reality to decorators' surrealism, the range of experience is full of complexities, contradictions, and excitement. It is a period of transition; eventually one of the strong form-givers from any one of these main currents will prevail and set the style.

Personally, I have a renewed interest for the classical elements of the architectural tradition. The value of shadows, the value of the wall, its entity, the sense of weight and permanence. But all this could be perceived only through the framework of our experience, conditioning the results. Design and redesign, our work is proceeding in this direction.

C. Ray Smith; author, Supermannerism: New Attitudes in Post-Modern Architecture, E.P. Dutton, New York: As Post-Modern architects in the 1980s continue to develop the historical allusion and symbolism that was pioneered in the 1950s by such architects as Minoru Yamasaki and Edward Durell Stone, they may find that they are as out of sync with the interior design profession—and with the mass of potential interior design clients—as the two professions have been for the past 50 years. For while architects who consider themselves in the vanguard are rediscovering the historical ornamentation that has been the staple of most interior designers for 50 years, interior designers who consider themselves in the vanguard are increasingly developing the mainstream directions of the Modern movement that many architects have rejected.

The Modern movement has had 50 years of commercial exposure to the mass of population that forms the client base of the two design professions. That population is only now, 30 years later, rather uni-

versally aware of what the flak was all about and, liking what it knows, is showing itself consistently interested in Modern Design. Vanguard architects have passed this all by and are no longer interested in serving these human needs or desires, it appears. It will be unfortunate for architects if they are also out of touch with a general audience for interior design commissions for another 50 years. Let us hope they can remember the lesson of Inclusion—to include the full range of design possibility in their options.

Mildred Friedman; curator, design, Walker Art Center, Minneapolis; editor, Design Quarterly: In any discussion of interior design it is essential to recognize that the majority of interiors are designed not by architects but by entrepreneurs, primarily by the vendors of waterbeds, furniture "suits," and breakfast-room chrome. Of course, there are the hip equivalents of these things. Sold in the urban culture centers, they can be characterized as ad hoc, modular, and anonymous.

Another aspect of interior design and architecture involves the apparent schism between the historicists of the Post-Modernist school and those practitioners of what is still termed Modern architecture. Interior design's long-practiced historicism has become acceptable architectural form, and historic modes or attitudes are now applied to contemporary buildings—the most notorious example being Philip Johnson's use of a somewhat modified Chippendale breakfront comice on the façade of the proposed AT&T headquarters building in New York.

Positive images in the crystal ball are conjured by those architects working with the totality that has always fascinated great designers. Soane, Adam, Hoffmann, Wright, Rietveld, and Mies did not make arbitrary distinctions between the ins and outs of architecture. The hope for the 80s lies in a resurgence of that sensibility and the ability of even a few to respond to newly identified attitudes and needs.

Robert A.M. Stern; architect; New York: I cannot predict where interior design or any other kind of design is headed. But I know where it has been and where I think it ought to go. I feel certain the movement we know as Modern is over: that Modern is a style and can be reproduced. The most obvious confirmation of my claim is the media's enthusiasm for such interior design movements as "high-tech" and "minimalism" in which the vocabulary of Modernism as it flourished between the two World Wars is stylishly manipulated in order to complement the gray flannel fashion-look of the Calvin Klein generation. The revival of Modern is to be celebrated as one of a number of signs that historical

memory is a part of design again. I myself prefer to look to other non-minimalist, non-reductionist periods for inspiration, because I prefer the presence of color and texture, and a sense that the imprint of human size can contribute to the design product as well as to the processes of its making.

If I were to try to isolate the hallmark of a new Post-Minimalist way of making interiors, I would say it is the discovery that the vertical plane and not the space it defines carries most of the meaning that a work of architecture has. The wall has traditionally conveyed meaning. On it can be drawn and modeled representations of traditional architectural elements as well as everyday things and the forms of nature. Having spent 50 years attempting to erase the meaning of the past, architects should, I suggest, get serious about writing on walls again, lest spray-painted graffitists prevail and their angry illiteracies represent the only publicly legible architectural meaning in our time.

Joseph Paul D'Urso; D'Urso Design; New · York: Interior design today is a more serious business, being accepted on a popular level with fashion and finally, on a more "intellectual" level, with art, music, and dance. This is the way it should be. Feeding this new awakening of public awareness to interior design is a generation of designers educated in schools that grew out of antiquated home economics (decorating) programs that blossomed with an input of architectural thought and direction and an emphasis on the intimate aspects of the environment. The widespread and unfortunate misunderstanding of what a high school graduate needed to become an architect inadvertently resulted in an incredible influx of talent and energy into the "interior design" profession. The results are just now being felt.

The social upheavals and breakthroughs, the energy crisis, women's liberation, and the demand for equal rights by various minority groups are making a positive contribution to the quality of design being produced today.

Certain clear messages are hitting home: certainly that design must make sense in terms of maintenance and economy. The American casual life style will find more appropriate solutions, as arbitrary and ultimately shallow re-creations of "period" rooms are now being seen as demeaning, unrealistic, and uninspiring. Americans, in particular, are sensing a strong and unique freedom of expression in what we create and support; we are more comfortable with the visual vocabulary and logic of engineering and are feeling less inclined to "warm things up."

Finally as daylight is welcomed into suburban homes and city apartments

(skylights have been accepted as never before), and as meaningless clutter is being questioned, we are sensing the vitality and vibrancy of pure architectural space as opposed to static, uncomfortable (and burdensome) decorated "rooms."

Emilio Ambasz: architect, designer; Bologna and New York: In their first heroic period, Modern architects and designers were mainly concerned with arriving at "the prototypical solution," that impeccable conceptual model that would lead us slowly but surely from today to tomorrow. In their quest for that conceptual ideogram that would insure the success of "the long journey" [from an imperfect today to a harmonious tomorrow] they neglected to consider the succession of constant and new experiences, conceptual and perceptual, that occur and recur between today and tomorrow.

Our task, therefore, is to reconcile one time scale with another. One possible approach may be to search for the meanings of the rituals and ceremonies of the twenty-four hours of the day, and to design artifacts and spaces that give it structure. [excerpted from Emilio Ambasz (ed.), Italy: The New Domestic Landscape, Museum of Modern Art, New York, 1972]

Jorge Silvetti; associate professor of architecture, Harvard; partner, Machado-Silvetti; Boston: It is possible to foresee that the field of interiors will be, should be, and in fact is becoming a subject of specific concern within the realm of architecture—clearly defined as an architectural problem to be explored and studied by architects. Two years ago, my partner Rodolfo Machado presented, in the "Country House," the concept of Rooms and Attributes (drawing right) in polemic opposition to that of abstract 'space," a notion which requires an interpretation of the interior as a qualified and specific architectural entity of its own. The interior is a result of integral conscious architectural effort, and not "neutral" space that results from structural grids, mechanical and modular systems, and ready-made paneling, to which "Interior Decoration" is fashionably applied, changing with every decade. These thoughts seem now to underline developments in architecture that we are beginning to see in both professional and academic projects, such as, for example, the revival of the technique of "poché" and "figural" interior space.

All of this seems tentative and at times clumsy and questionable, yet undoubtedly it is clear that these new developments express a genuine concern and interest that to me points to more important facts: that the current professional differentiation between architecture and interior design

might disappear; that architecture is beginning to recover a part of itself that has always been its own; and finally that these new developments together with the recovery of architecture's runaway offsprings—namely city planning, urban design, and landscape design—bear witness to strengthening the whole of architecture as a discipline.

Paige Rense; editor-in-chief, senior vice president, Architectural Digest; Los Angeles: Since people design their living environments according to their tastes and in response to the world around them, the only sure prediction for the 1980s is that the field will continue to hold surprises.

I hope that interior design and architecture, after many years of a love-hate relationship, will marry and live happily ever after. One factor that will help is the increased use of built-in furniture, in part a response to the excessive amount of time it takes to receive custom pieces. Interior design should be closer to the bones of good architecture, encouraged by the inclusion of first-rate interior design courses in architecture school curriculums. It may be true that less is more, but when this principle is reduced to the inevitable grouping of two Barcelona chairs and a glass table, less is not enough.

Style and fine workmanship continue to offer timeless value. Discerning people will appreciate these qualities in the 1980s, just as they have always appreciated them. As journalists of fine interior design, we should keep our sights on that which is lasting, rather than get caught up in the passing fashions of the moment.

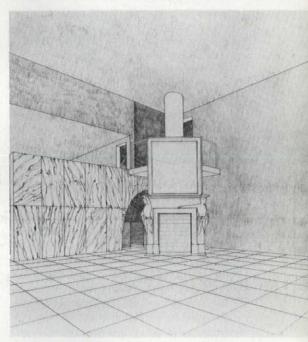
Ward Bennett; designer; New York: The 80s, I suspect, will bring an end to the stylish avant-garde of the 70s. In considering where we are, we should remember with Robert Graves that "only a mediocrity is never out of step with the prevailing fashion." What is required now is a serious reevaluation of the popular vogue with its cardboard, staple gun, window display, stage set, Coney Island billboard design for interiors and exteriors. What I would hope for is a return to craftsmanship, quality, and substance. Let design be for people, not mannequins—for living, not for life style.

We should take another look at Horta's residence, at the Soane Museum, at Wagner's Post Office, Chareau's Maison de Verre, Wright's Fallingwater and Luis Barragan's house. But let's not look at them the way Corbusier's Villa Savoie was examined and appropriated by "avantgarde" designers and architects. This magnificent building was dissected and its parts made into Mickey Mouse design and Swiss cheese architecture from Bridgehampton to L.A. Compare these

fragmented efforts with the evolutionary and integrated achievements in art, architecture, graphics, costume, shown in the recent "Paris-Moscow" exhibit at Centre Pompidou. There is a difference betwen art and fashion.

Read and re-read Gaston Bachelard's Poetics of Space. Today, designers are polluting that space. Are these inwardturning efforts a reaction of anxiety to the expansion of our knowledge? We must question the validity of exhibitionistic (stylistic) architects creating design for money-quality clients and in so doing destroying village, town, and city.

Deborah Sussman/Paul Prejza; Deborah Sussman & Co., graphics plus; Santa Monica: The simplistic approach of paint-



Rodolfo Machado, Machado-Silvetti, architects, Boston, envisages "rooms" as opposed to "space."

ing all interior walls white with "primary" colors in furnishings seems less and less relevant and may only be appropriate to Bauhaus revival architecture or certain specialized needs. Extensive color palettes with sensual combinations and unexpected juxtapositions will be more common. The ambiguity achieved by the play of close colors on different planes makes spaces active as light changes day and night. Highly pigmented paints will become more common and result in a greater variety, depth, and reflectivity to painted color's capabilities.

Design themes: The popular appeal of "Design Themes," now widespread in restaurants and related entertainment areas, will spread to more conservative interiors such as offices and institutions. Historical images integrated into the interior design can stimulate interest in the history of an

Preview of the 80s

area or an institution; using regional furniture, objects, or crafts can reinforce a sense of place; and mini-exhibits and artifacts can be used aesthetically and also educationally.

Space planning: The established office hierarchy that physically locates executives (usually male) in corner offices with good views and clerical workers (generally female) in interior spaces with no windows will be further eroded. The increasing participation of women in public life will affect the physical structure of interiors, and offices will become less rigid and compartmentalized as they gain warmth and fluidity.

Art and design: Artist, architect, and designer will collaborate more closely as the studio painting on the white wall is traded in for "art" that is more integral with the interior design. The work of artists will be considered at the outset of a program—as a force, rather than an applied after-thought. The fascination with the plain (plane) surface is on the decline. Surfaces will be warped, perforated, textured and "decorated." Decoration will return as a concept and a word that can be used without apology.

Neils Diffrient; industrial designer; Henry Dreyfuss Associates; New York: Future projections invariably build on what is current and often miss widely what actually happens. The saving virtue of this anomaly is that most people have long forgotten the projection when the expected date arrives.

My own opinion, saving you from all the details that bring me there, is that interiors of buildings will control the exteriors. Also, manufactured products used for interiors will guide built form and develop into the first manufactured architecture. Though it was expected that architecture would industrialize itself by translating the traditional construction elements from field fabrication to factory, this has never really happened, for a variety of reasons. But, the movement to industrialized interior components and systems is already established and going strong.

As an adjunct to this happening, I think there will be increased emphasis on interior performance and "features of amenity." To deal with the first point: design research will bring about better human engineering and social-behavioral planning of spaces and artifacts. Naturally, the shortage of energy will have a strong effect, and with any luck it will result in a more efficient interior environment in the same way automobile design was made more efficient in its interior space to exterior volume ratio. The last point is that the release from the iron grip of Modernism will

allow features of amenity to return from the cellar of lost styles. These would be everything, from bay windows to wing-back chairs, that elicits sympathetic human reactions, but was discarded for stark and pure Modernism.

Robert L. Propst; president, Herman Miller Research Corp.; Ann Arbor: If there can be such a thing as a total communications environment, we are likely to see it attempted in the next decade. By communications environment I mean an effort to make virtually every living space a successful theater of communication arts... rich in the ability to express our most elemental desire to explore our personal dimension and to be known to others in the most eloquent and favorable light.

As physical places, they can no longer be frozen-in-time set pieces, formal design statements. The graphic display and enrichment capabilities of upcoming communication technologies will more and more determine the form of the interior settings. Design, as we know it, will have to grow into a partnership with much more dynamic and information exploratory skills.

Far from being mechanistic or cold, these new living spaces will be yielding and expressive of the individual user—living environments that can grow and restate as fast as society and cultural norms dictate.

This is by no means a matter of casual choice by leaders in the design or architectural profession. The partner in this new era will be the incredibly energetic and vigorous electronics industry, which is just now discovering its entry potential in the living environment. It will make its mark, and the challenge will be to participate in this very profound new potential.

Michael Brill; president, BOSTI; Buffalo: 1 see interesting trends in the home and the office, which are related to each other and to the diffusion of electronic communications and computers. Home and work start to blur. The home computer and CRT are used for education ("archeology mapping at home"), for entertainment (video games and programmed music, TV and movies), for household affairs (budgets, taxes, inventories), for video mail-order shopping, and for office work without going to the office. The constantly dropping costs of this equipment and the increased costs of auto fuel make the home interior more important as a "school," a "store," a workplace, and an entertainment center. These functions will be accommodated—first, in a slipshod manner, and then modular units and whole environments for these purposes in the home will be designed and marketed.

The changes in the office will be towards increased and more intelligent use of open office, to work stations shared by a few

people, some of whom will always be out of the office or "hooked up" at home. Interestingly, much more emphasis will be placed on design of conference spaces -where persuasion, nuance, and body language really count-and of thinking spaces, carefully designed to support this fundamental work activity. The office environment will be much more responsive to individual and small group needs than it is now, with less emphasis placed on corporate image and large group identity. Much of the office will be sensitively controlled through microprocessors, operating the lights, security, sound-masking and air quality. More will be known about which aspects of the physical environment impact on productivity and job satisfaction. and designers will be asked to design for these by clients concerned with costeffectiveness

Robert Blaich; designer; vice president, Corporate Design Communications, Herman Miller; Zeeland, Mi: The office information explosion has resulted in hardware and software innovations falling into three major categories: information generation, via word processing systems, copiers, dictating systems; information filing, storage, and retrieval, where developments have focused on micrographics; communication, which combines techniques, such as automated telephone systems, video networks, etc.

These factors have influenced our approach to office interiors. But the comparatively recent wave of research into human productivity in the office will have as great an impact. The emergence of the openplan office in the past decade has allowed workers and management a greater degree of control over their environment, a more flexible attitude toward change; this now requires a new awareness of process on the part of the planner.

Another idea is what I call homework. As the need to provide offices grows at an exponential rate, the need to provide alternatives may well make home offices a commonplace. It works in Europe. Basic tools—phone lines, computer terminals, and the like—and basic trust in the ability of individuals to work without supervision are required.

Staggered shifts of office workers, flex-time arrangements, multiple shifts of white-collar workers—all these solutions will emerge as the office changes from inside pressures, such as growth, and outside pressures, such as two-career families, the more active role of fathers in parenting, etc. The office of the future may not even be an office, as we think of it today. It may be a concept, a geographically distributed network of work stations that feed into central sites where data bases are maintained and the organization's

business is controlled.

The designer will have to be less of a soloist. The interrelationships inherent in the design of process link architecture, interior design, product design, regional and city planning, managers—all sorts of people not on the scene when design dealt with objects alone.

Karen Daroff; interior designer; Daroff Design; Philadelphia: The desire to eliminate unproductive space within the office of the 80s will give rise to a sharp increase in group work areas such as shared conference facilities. With the exception of the highest level executive positions, private office interiors will be reduced to a size based upon the purest functional requirements. The design of furniture equipment, office and conference facilities will be increasingly more responsive to the human anatomy and job function.

Efforts to reduce energy consumption will play a major role in the organizational design of the corporation of the 80s. We may begin to see executives and coworkers conducting the business of the day "on line" at home, rarely finding it necessary to go into the office at all.

The possibilities for interior design in the 80s seem endless, but become more limited upon closer examination. As the availability of our most basic resources appears to dwindle, it will become more and more necessary for function to dictate the allocation of space within the corporate environment. In the 80s, status will take a backseat to economy, making way for advanced energy-saving devices, from word processing equipment to heat recovery and cooling systems. The use of such equipment, resulting from improved technology, will become increasingly common as our clients become more sophisticated and more knowledgeable about what is available to them, and more confident in the recommendations that we as professionals can make.

Pat Hoffman; executive vice president, ICF; New York: I believe we can expect to see changes occurring in the 1980s in our perception of what is a status symbol in the office. Businesses have always used interior design as a means of expressing their wealth, but in the 1980s I believe a finer line will be drawn between the expression of success and the expression of opulence. We are today appalled by the garish displays in the offices of the old Victorian railroad barons. In the corporate world of our own generation we have replaced Victorian gilt with the more "tasteful" status symbols of Barcelona chairs and burlveneered desks.

Now that we are driving smaller automobiles, living in servantless houses, universally wearing blue jeans in public,

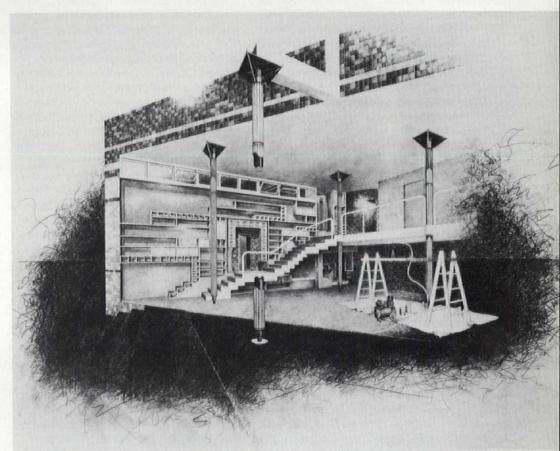
and becoming afraid to wear our furs and jewels on the streets, we are also becoming more subtle about our offices. While many are still demanding hierarchical office interiors, I predict that the more sophisticated, more secure executive will become embarrassed by these outward signs of success.

I predict in the 80s, we will see a return to simpler materials in the executive office. The quality will be there but the opulence will be the detailed workmanship, not the impressive flash. We will see more use of simple upholstery fabrics like bleached canvas, more colored painted metal rather than the shine of mirror chrome, more industrial carpets, and chair-back heights that are anatomically reasonable rather than thronelike.

electrical consumption will be enormous.

The second is competition among large corporations for the well-trained, highly motivated, stable employee. Look to the system that encourages the personal imprint of the interior designer and the client by means of a systems versatility that allows status differentiation. Only with the versatile system can the interior designer individualize the working condition that brings psychic and ego satisfaction to the executive. That thinking can have strong impact on interior design.

Carleton Varney; interior designer; Dorothy Draper & Co.; New York: The 80s will bring more and more soft simplicity into interior design. The hard-edge line of the 70s with its plastic laminate furnishings



Coy Howard, architect, Venice, Ca, foresees interior richness in Boudov house (P/A, Jan. 1977).

Harvey Probber; president, Harvey Probber; New York: Two significant factors will influence office interiors, creating demands on the interior designer of the 1980s for a more creative attitude toward space planning and design.

The first, energy, will shape interior architecture. Look for systems furniture designed in the latter half of the 1970s—systems with versatile internal wiring, hidden but accessible, requiring only random outlets for the truly integrated ambient and task lighting developed for the system, not clipped on as an afterthought. The savings in initial electrical work and in on-going

and Parsons table look will take a back seat. Fabrics will play a big part in design, and vinyls will be eliminated from decorating except in middle- and lower-price contract installations. High-priced luxury hotels will find clientele demanding quality of fabrics and furnishings if high tariffs are to be charged.

Lighting effects will be the big design element of the 80s and table lamps (excepting quality porcelains converted into lamps) will almost be extinct. Lighting will come from all sides—above, below, and from the sides. None of the lighting will be intense, but will be more in keeping with

Preview of the 80s

today's energy-saving programs.

The natural woods will be the desired finishes. Wall coverings will replace painted finishes as their effects will be greater designwise, and their costs of installation will be less than painting.

William Stumpf; industrial designer; Chadwick/Stumpf & Associates; Winona, Mn: My measure of a good restaurant, no matter how glorious its credentials, rests on two simple but seemingly contradictory notions. The first relates to the quality of a single cup of coffee. I find a really good cup of coffee an open act of civility, an expression of love between the restaurateur and myself in an otherwise banal world of boutiquism. The second notion deals with the feeling expressed by the place: that it is fulfilling a dream or purpose it once held or is currently holding dear. Places invested with good coffee and dreams are sure to be worthwhile in the 80s. Or, as Charles Moore aptly put it some time ago:

"Houses still have an important place in our society, that they can happily express the care and energies . . . even the pretensions and dreams, of the people who live in them . . ." (from "The Place of Houses" by Charles Moore, Donlyn Lyndon, and Gerald Allen, Holt, Rinehart & Winston).

Michael Pittas; director, Design Arts Program, National Endowment for the Arts; Washington: Interior design as a profession has become increasingly focused and defined in the 1970s. We believe a more formal recognition of the profession itself during the 1980s might serve to strengthen the role interior designers play in the broader region of environmental design.

Interior design is currently very component oriented. As we move into the next decade, products will continue to proliferate, but increased familiarity with them will allow designers to produce design solutions more customized to users' needs. The economics of interior design, as well as hard data about behavioral needs and responses, are areas in need of exploration. In the 1980s we may begin to see the formulation of community interior design assistance teams, similar to what has existed for urban design through the Regional/Urban Design Assistance Teams (R/UDAT) of the AIA.

At the National Endowment for the Arts we will continue to support excellence through the grant-making categories and the Design Excellence Project. The grant categories include funding for research and dissemination of information vital to the profession as well as design demonstrations. The Design Excellence Project

will include encouraging the use of design competitions, continuing to support the hiring of only the most qualified interior designers into the federal government, and increasing awareness by the public of the enrichment of life through design excellence in all areas.

Rick Hendricks, chief, Space Planning Office: Lawrence Vanderburgh, architect; General Services Administration; Washington: Most of the trends in government design are linked in some way to awareness that space costs money and that skillful planning can obviate many space-related costs. Our greatest concern is to curtail expansion of the federal space inventory, without impairing the operational viability of the work environment. Coupled with this is a growing understanding of life-cycle costs, which allows the use of high quality hardware and professional planning up front if future payback can be projected, as well-planned projects have demonstrated. Computers will enable planners to exercise greater professional judgment, the level of professionalism will increase. and penny-wise, pound-foolish attitudes about fees will fade, as will blind acceptance of professional opinions formed without regard to the realities of managing such a vast inventory. Managers and designers alike must be more tough-minded. The greatest challenge will be to plan and design environments which enhance the productivity of office workers on whom \$9 of every \$10 is spent to operate the government. It is not known precisely how great the environment's leverage on productivity is, but we fully intend to pursue the potential. The design profession will do no small part in helping us to improve government office environment and earn the benefits of increased productivity.

Norman DeHaan; architect, interior designer; Norman DeHaan Associates; Chicago: The public wants to believe the designer is a private illusionist at the same time the government wants to impose more codes and standards in the interiors field. The question remains whether the profession can satisfy and balance both demands. This double expectation unfortunately coincides with a shift in national policy, imposing "smaller is better" on a public accustomed to "big is best." Real space will continue to be the true luxury. and creating the illusion of space will be a direct design manifestation of our redirected national policy. In the context of an uncertain future, allusive design will become more discernible in both interiors and architecture, with the extremes represented by illusive interior design in lowend furnishings while abstract architectural allusions go off the perceptual deep end. This leaves the interior designer with the problem of how to remain the successful illusionist with both feet on the ground, while doing his high-wire act.

Charles Gwathmey; architect; Gwathmey Siegel Architects; New York: As one reflects, what is reassuring is that the sociopolitical and cultural purges of the 60s and the early 70s, which had an effect upon design orientations and decisions that are questionable today, are now seen as renegotiable.

There is an obvious new awareness of architecture. Architects must question, reevaluate, and redefine. These actions force us to reexamine continually the history of architecture and its qualitative relevance in both literal and formal terms. Our response is not superficially directed to tenuous historical borrowings, but rather confronts real constraints, references, and orders which support the artist's obligation to fulfill the ordinary while transcending what is expected.

The result of this awareness must evoke a more rigorous and demanding quest for interpretive accuracy. By rendering this interpretation in a more complex manner, architecture will be enriched in both form and space.

Interiors, as defined enclosures, offer a more limited reference. This opportunity for experimentation, which supports and extends the architect's perceptual and formal palette, produces occasions for continued reinterpretation and application in other projects.

Hugh Hardy; architect; Hardy Holzman Pfeiffer Associates; New York: What I wish and what I predict are two different things. I wish the adventuresome exploration which commercial clients permit on the interior would suffuse the design of exteriors. I wish the private celebrations and intimate pleasures so common to interior design could enliven the institutional hulks of our built landscape.

This is not to suggest the public display of private matters, but rather to emphasize the foolish and artificial distinctions imposed upon designers when they are cut off from the healthy discipline of resolving conflicts between exterior and interior.

Architects have, under the pressure of giant-sized opportunities to build, become preoccupied with abstract questions. The buildings which justify their profession become inhumane because they leave no direct personal concerns beyond the movement of people.

Interior designers know better, but they have become engrossed with the manufacture of special theatricalized worlds shut off from outside realities.

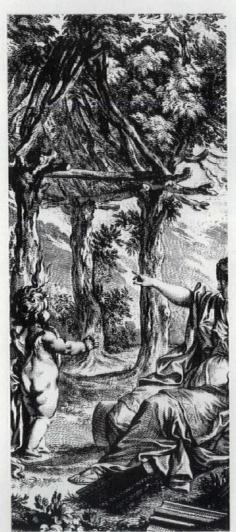
My wish that the two could join forces would be an optimistic forecast. My suspicion that they won't is my prediction. □

Reflections on a past, projections toward a future

The conscious expression of the self through interior design is one of the more encouraging manifestations in our recent cultural development, and points to a future of greater possibilities.

Interior design, as much as architecture, has always served as an accurate mirror of social attitudes and human aspirations. In some ways it even forms a microcosm of our sense of our place in the world. This understanding of the importance that interior space plays in the life of man was expressed with emotive perception in Gaston Bachelard's philosophical examination entitled The Poetics of Space (Paris, 1958). Using the house as the prototypical interior space, Bachelard observed "that the house is one of the greatest powers of integration for the thoughts, memories and dreams of mankind. . . . Without it, man would be a dispersed being. It maintains him through the storms of the heavens and through those of life. It is body and soul. It is the human being's first world. . . . The space we love is unwilling to remain permanently enclosed. It deploys and appears to move elsewhere without difficulty; into other times, and on different planes of dream and memory."

These are good words of which to be reminded as we seek to put into perspective the importance that interior design has attained in recent years. The practical aspects of this issue are easier to grasp than the deeper significance that has been faced by many who have thought seriously about the subject. Ours is a world of limits, but the outward boundaries of our lives are more readily apparent to us than the confines within. Thus when that inner landscape—whether in its literal or metaphoric sense—is the focus of our increased thought or action, it is as much an indication of the larger world as it is of the more controllable sphere of the interior.



The primitive hut, frontispiece detail, *Essai* sur l'architecture, by M.-A. Laugier, 1755.

Perhaps that very notion of control is the key reason that both the general public and designers began to pay so much more attention to interiors during the 1970s. Control of their careers (and even more, the ability to practice their art) slipped away from many architects no less palpably than did the ability of many of the

rest of us to control other aspects of our lives in the greater world. As the Romans of the Decadence took to their country villas during the final fall of their imperial rule, or as the rich folk of London fled their city in the Year of the Plague, so have we found refuge in our interiors these past ten years, finding the experiential truth in Bachelard's words of comfort and insight.

But to extract an active virtue from a reactive necessity is the task that now faces us if we are to make this interest in our interior lives and spaces into anything other than a solipsistic retreat from the increasingly complex world around us. The future of interior design can be a meaningful one only if we use the possibilities design gives us to clarify, to accommodate, to delight, to stimulate, and to promote our physical and psychic well-being. But the future of interior design could also be meaningless, if we allow it instead to become the victim of false fashion, conspicuous consumption, crass commercialism, heedless hedonism, and a host of other vices that conspire to rob our human experience of its authenticity and worth.

Not only is the choice ours, but it is one the truth of which will be impossible to conceal from others or ourselves. What we build is no less an artifact of our inner lives than the way we act is an expression of our unconscious selves. In a world of everdiminishing possibilities, it is up to us to push our horizons to their limits. There are more things in heaven and earth than are dreamed of in our philosophies, it is true. But it is also true that we have the ability to express a great many of those things, as much in what we build as in what we dream. Let us always keep in mind that as we make new spaces, we are creating not just shelter, but rather a home, for as Bachelard recognizes, that is just what interior space is: a home for man, both outside and within. [Martin Filler]

CLASSICS

See the entire collection at our showrooms, or write on your letterhead for our new catalogue and supplement. Or design your own fixture. We'll do the contract work. We do it all. And we do it here in the U.S.A.



KOCH+LOWY INC.
THE PAST, PRESENT, AND FUTURE
OF MODERN LIGHTING

Showrooms: New York • Chicago • Los Angeles San Francisco • Dallas Atlanta • Miami • Cincinnati

Circle No. 427, on Reader Service Card

940 Third Ave., New York 10022

1245 Merchandise Mart, Chicago, Illinois 60654

Pacific Design Center, 8687 Melrose Ave., Los Angeles, Calif. 90069

THE NEW "MOON ROCKS" SERIES

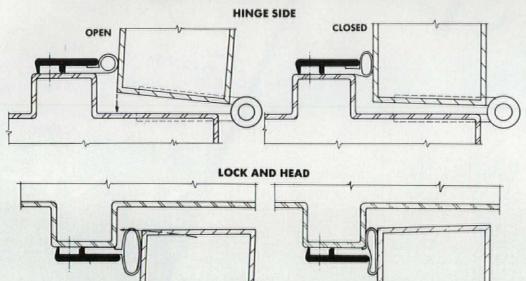
Contemporary Lunar Madness. Glowing forms create a mood. Leave some on, some off. Brighten a familiar roomscape. Soft, highly functional. Shove them around—they're tough, translucent fiberglass.

So different, they're already classics.





Reinforcing the sound barrier ...Zero Compress-O-Matic.



The Zero Compress-O-Matic® has proved itself the most effective seal of its kind. Used with sound-rated doors and Zero automatic door bottoms, it falls between 35 S.T.C. and 42 S.T.C. rating.

The Compress-O-Matic creates so tight a fit that spaces from 1/8" to 1/4" are positively, absolutely sealed. Even when doors are warped or unevenly hung!

Write for our new catalog. It contains all the facts on our amazingly effective

Compress-O-Matic-plus the whole Zero line of sound, light and weather stripping.

CLOSED

The Compress-O-Matic ... It creates one sound barrier they'll never break!





Zero Weather Stripping Co., Inc.

415 Concord Avenue, Bronx, N.Y. 10455 / (212) LUdlow 5-3230

1924-1979...55 years of opening the door to progress.





drama in stone

The Sarah Mellon Scaife Gallery, Pittsburgh, Pa.

A magnificent example of the total use of stone, inside and outside. Granite was used to blend with expanses of tinted glass to achieve the harmonious background for some of the world's greatest art. The furniture, in natural slate, adds to the splendid mood. Architect—Edward Larrabee Barnes, FAIA.

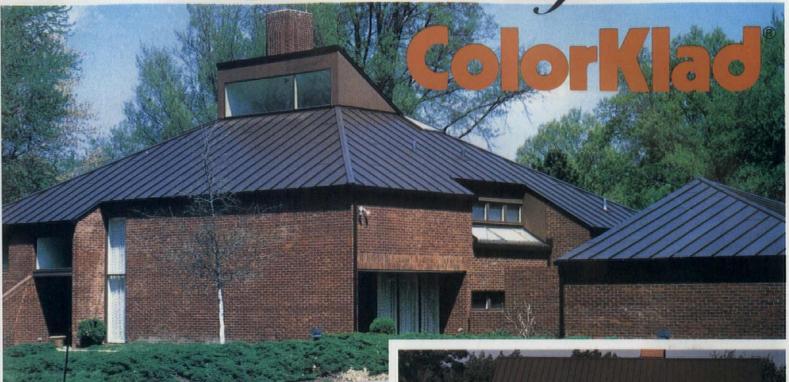
Building Stone Institute • 420 Lexington Avenue, New York, NY 10017

Circle No. 434,



The Sarah Mellon Scaife Gallery received the 1979 Tucker Award Citation for design excellence.

the Heirloom roof...



Sheet metal contractor - Zero Breese Co., Cincinnati, Ohio.

elegance, quality,durability far beyond conventional roofs!



Wise architects, discriminating homeowners and buyers are recognizing the unique, lasting values of a roof sheathed in the beauty and permanence of ColorKlad.

A HOME MORE BEAUTIFUL WITH COLORKIAD

ColorKlad prepainted sheeting has earned a solid reputation for handsome appearance, strength, durability, ease of installation and maintenance as roofing and fascia on commercial structures. Now, these same qualities, plus some additional ones, are being recognized by architects, contractors and owners for new roofs on new homes or as replacement on prestigious older homes.

Whatever the climate (rain – snow – ice – wind – sun – fire hazards), ColorKlad roofs offer protection from perils of nature that used to plague designers and homeowners using conventional roofing materials.

No wonder ColorKlad is being specified for more and more new and replacement roofs on homes being constructed by and for those who really care about lasting beauty.

Colorklad is available in nine exciting colors, two textures. A written 20 year warranty assures color integrity. Write for our free brochure and color samples.

"ColorKlad – the heirloom roof, uniqueness for generation after generation!"

Building Products Division P.O. Box 360, Mpls., MN 55440

LOCAL 612-378-1131 MINN. ONLY 800-552-1202 NATIONWIDE 800-328-7772



SEND FOR OUR NEW COLORKLAD BROCHURE AND FREE COLOR SAMPLES TODAY!

PA-9-79

| ame | | | | |
|-----|--|--|--|--|
| | | | | |
| | | | | |

Title _____

Company _______Address _____

City____State___Zip___

PORCH-LIFT



A SIMPLE SOLUTION TO ARCHITECTURAL BARRIERS.

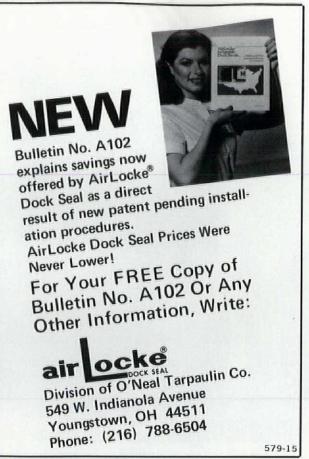
Whether you're modifying an existing building or designing a new one, accessibility to the handicapped is important. PORCH-LIFT offers you a simple, economical solution. It's a safe wheel-chair lifting platform permanently anchored beside the steps using a minimum of space. Motor and mechanism are enclosed in a weather-proof housing, "Call—Send" controls are key operated, and it runs on 110 volt current. It's available to fit varying heights and is shipped ready for installation.

WRITE FOR FREE BROCHURE AND NAME OF DEALER NEAREST YOU.

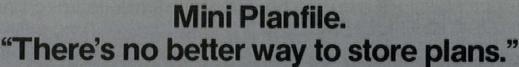
AMERICAN STAIR-GLIDE CORP.

4001 East 138th Street, Dept. PA-099 Grandview, Missouri 64030

Circle No. 311, on Reader Service Card



Circle No. 312, on Reader Service Card



60% Smaller.

Mini Planfile (requiring 7 sq. ft.) has the same capacity of 12 conventional flat drawer files (requiring 17 sq. ft.).

Lower Cost.

Mini Planfile units cost less than conventional, same capacity flat drawer file systems. The more Mini Planfile units you need, the more you save.

New Concept.

Patented vertical filing gives ultimate drawing protection and surprisingly easy, same height access. Unique compression system keeps drawings perfectly flat and smooth.

1200 Sheets.

Up to 1200 active drawing storage in a slim 14" profile. Removes flat drawer bulkiness.

Write for our free brochure. 2120 Fourth Ave.

Lakewood, New York 14750 Telephone 716/763-1815 ULRICH PLANFILING EGUIPMENT CORPORATION



When your clients ask, "What about solar?" You can get the answers from us.

Solar energy systems are here. Now. They are practical, efficient products that offer very significant benefits. And whether your client is a developer, a commercial business, a federal agency, or an agricultural enterprise — knowledge of solar equipment is now a standard requirement of your profession.

Are you prepared?

It's already happening in California. And in Washington.

Look at the leading indicators. There are already over 35,000 solar installations in California alone. With the State Energy Commission projecting 1,500,000 by 1985. And the rest of the country is right on their heels.

At the federal level, Washington has established significant grant and tax credit programs for both the business and private sectors. And the National Energy Plan estimates that solar will supply 20% of all our energy needs by the year 2000.



It is important that you, as a professional, act now.

Solar energy is a practical, noninflationary solution to our energy needs. And you will be called upon to design, specify, supervise or install solar equipment on an everincreasing number of structures.

But this is not just another new idea. It is an unprecedented opportunity. And for those who are able to demonstrate expertise immediately, the potential is monumental.

This is where the "Solar Specialist" concept becomes very important to you . . .

The Sunfire Solar Specialist™ makes solar practical for you, the professional.

We've concentrated on making Sunfired™ Energy Systems prac-



tical for the people who have to deal with them on a day-to-day basis. We supply quality products that not only work, but last. And products that are compatible with conventional design and installation practice.



architect/engineer handbook, product specification catalogs and other support materials which allow you to specify Sunfired™ Energy Systems as easily as conventional systems.

But most importantly, we are in the process of expanding an international network of full-service Sunfire Solar Specialists™ who can provide complete sales, design, installation and maintenance services for you and your clients. As a result, you can confidently design and install "solar powered" energy systems.

Contact us now for complete product information and the name of your nearest Sunfire Solar Specialist™.

Solar is our only business. We can provide everything you need to design and install "solar powered" energy systems. And of course we can arrange for one of our Sunfire Solar Specialists™ to visit your office.

So get in touch with us today. And the next time your client asks, "What about solar?", you can answer his question with confidence.



P.O. Drawer 1048, Dept. PA Gainesville, FL 32602 (904) 377-6527 TWX 810-825-6323

West Coast Operations Santa Rosa, CA (707) 584-7161



HARD, THICK WASHABLE FACE, IDEAL FOR FAST-FOOD, HOSPITAL, COMMERCIAL & INSTITUTIONAL KITCHENS

EASY INSTALLATION-EDGE TILES CAN BE FIELD CUT WITH A KNIFE.

Baked White Enamel Finish

UNPERFORATED ALUMI-NUM-CLAD CEILING TILE NUM-CLAD CEILING TILE QUALIFIES FOR QUALIFIES FOR 2 HOUR FIRE-RATING

Can be repeatedly washed for easy maintenance. Approved for use in food processing areas by U.S. Dept. of Agriculture

Available directly from mnfr. SIMPLEX CEILING CORP.

50 HARRISON ST., HOBOKEN, N.J. 07030 • PHONE (212) 349-1890

Sales "Reps" needed—Write to Simplex for information

Circle No. 389, on Reader Service Card

The hinge that hides





NOW YOU SEE IT

NOW YOU DON'T

The Soss Invisibles - for a custom look for any room! These amazing hinges hide when closed, eliminating unsightly gaps, hinges, and door jambs. They're the perfect hidden touch for doors, doorwalls storage cabinets, built-in bars, stereos, and TV's. Specify the Soss Invisibles wherever looks matter. See listing in Sweet's or

write for catalog: Soss Manufacturing Co., Division of Core Industries. Inc, P.O. Box 8200, Detroit, Michigan 48213.



Circle No. 635, on Reader Service Card

The Collection.

Focal Point, the unquestioned leader in architectural accent through modern polymers, presents its award-winning collection of

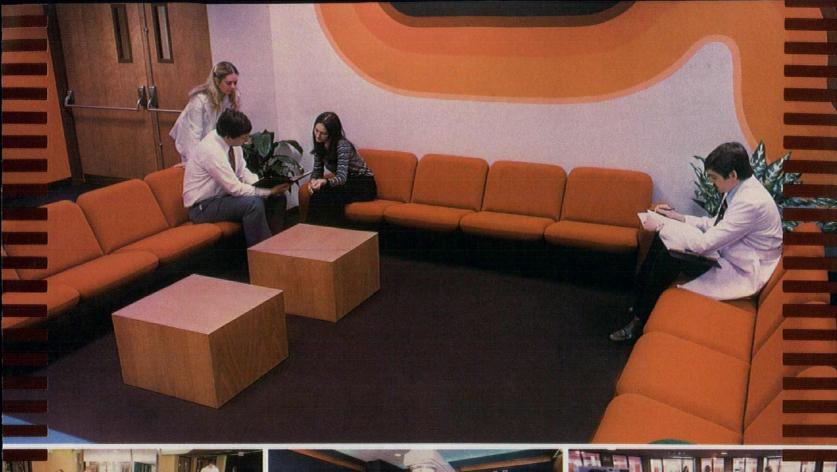
DURABLE!

cornice mouldings and other accents. Delicate beauty...incredible strength. Absolute integrity...pre-engineered installation.

FOCAL POINT INC.

There's far more to The Collection than moulding. Focal Point has prepared a catalogue featuring its recessed domes, niche caps, medallions, mantels, overdoor pieces, stair brackets and more.
Your complimentary copy awaits your request.
Ask for THE COLLECTION.

Dept. R-11 (404) 351-0820 2005 Marietta Rd. N.W. Atlanta, GA 30318)









PRIENTINE

Atlanta's St. Joseph's Hospital prescribed a sure remedy for its cold bare floors: a Zeflon 500™ Solution Dyed Nylon carpet that looks like wool, hides soil, controls static and has a long life expectancy.

Badische Corporation's new high-performing Zeflon 500 Solution Dyed Nylon heather is the only BCF nylon that imparts the soft luster and color clarity of wool to contract commercial carpets. Because the fiber is solution dyed, it produces exceptional color uniformity as well, eliminating side-to-side color matching problems—a big plus in large installations such as this one of 12,000 square yards.

The hospital carpet shown here has been tested and Performance Certified by Badische Corporation for extraheavy traffic use. It has a unique soil hiding property and is treated with a special soil retardant finish for easy cleaning. Even difficult hospital stains can be removed, for Zeflon 500 is not harmed by harsh cleaning agents.

The carpet also carries the Zefstat® anti-static warranty for the life of the carpet and the Zefwear® 5-year durable carpet warranty.

Carpets of Zeflon 500, as well as contract commercial carpets made of other Badische yarns and blends, are available in a wide selection of styles. See them in our Carpet Selection and Specifications Guide. For your copy, call or write Badische Corporation, Contract Carpet Consultants Service, CREATE® Center, Williamsburg, VA 23185, (804) 887-6573.

PERFORMANCE CERTIFICATION



Badische Corporation Williamsburg, VA 23185

Member of the BASF Group

BASF

Zeflon 500^{18} is a trademark and Zefstat " and Zefwear " are registered trademarks owned by Badische Corporation, formerly Dow Badische Company.

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

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

Circle No. 411, on Reader Service Card

THOUSANDS OF **HEALTH OFFICIALS** RELY ON THIS SEAL



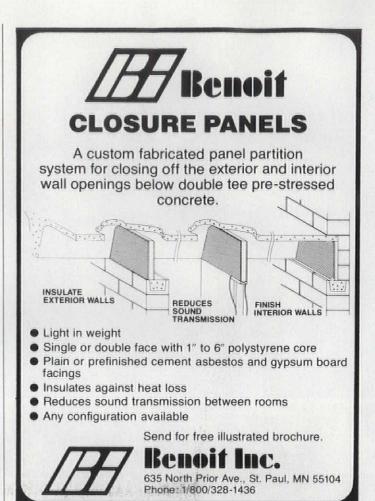
Why? Because the NSF seal or logo assures them that a health-related product bearing the NSF mark has been manufactured, inspected and tested in accordance with an NSF standard. The public health official knows that the standard itself has been written with the assistance of nationally recognized public health professionals and submitted to peer review by the NSF Council of Public Health Consultants.

Health officials know, too, that for decades NSF has monitored the design manufacture and performance of millions of health-related items of equipment bearing the NSF seal. For example, specimens of such products are evaluated at random on unannounced factory visits by NSF representatives. When necessary, sample products may be sent to the NSF Testing Laboratory for performance tests.

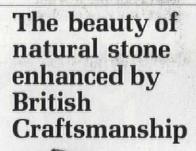
In accepting a product with the NSF seal or logo, the health official has the reassurance of a professionally developed voluntary standardbacked by scientific testing in the laboratory of a foundation which is named "national" but is recognized throughout the world.

National Sanitation Foundation—an independent non profit, non governmental organization dedicated to environmental quality. Offices and laboratories: NSF Building, Ann Arbor, Mich. 48105 (313)-769-8010

Circle No. 373, on Reader Service Card



Circle No. 431, on Reader Service Card

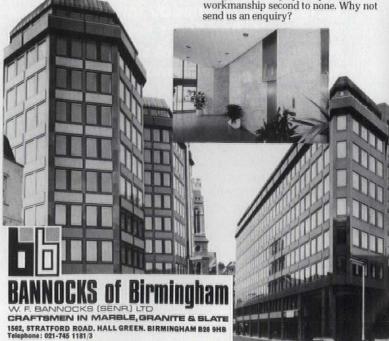


Marble, Granite or Slate, used inside or outside and finished to suit your demands and the needs of climate and situation.

Our picture shows Wellington House in London finished externally with both flame textured and polished Dakota Mahogany Granite and internally in Calacata gold vein marble

Architects: Fitzroy Robinson & Partners Developers: Land Securities Contractors: Wimpey

Our prices are highly competitive. Our workmanship second to none. Why not send us an enquiry?



Circle No. 313, on Reader Service Ca

The furnishings game

William T. Lohmann

Specifying for interiors may require careful forethought. Standard procedures for built construction do not apply.

Specifiers often find themselves floundering when trying to develop bid documents for interior furnishings—rugs, carpeting, lamps, furniture, draperies, and accessories. The designer is talking about quantity lists and item descriptions in the bid form. The familiar AIA A201 General Conditions and old standby ASTM reference standards do not seem to fit. Our rules for "normal" architectural documents no longer apply. Somehow the contract furnishings industry has a different way of looking at things.

The primary difference is found in the method of bidding work. Like civil engineers, interior designers prefer to receive bids on a unit-price basis. The documents establish the quantity for each line item, and bids are evaluated on a summary of extended unit prices. Although actual quantities are usually known at the time of bidding (unlike much civil engineering work), the unit-price approach allows the designer to revise quantities within a specified range after the work is under contract. The unit-price bid also provides a reliable breakdown of the total cost for negotiation before signing the contract.

The major difficulty with the unit-price system lurks in its documentation. Some designers find themselves trying to correlate several overlapping schedules—item numbers, finishes, quantities, alternates. Some properly show the location of each item on floor plans, then duplicate the information on schedules. Bid forms become unreasonably long when a full description of each item is included with the item number. Quantities are sometimes shown in three places. It is almost impossible to make accurate last-minute changes.

A reasonable solution is found in consistent, simple numbering on the drawings and a full description of each item in the specifications. The bid form lists only numbers, item names, and quantities with blanks for the bidder's unit prices and extensions. Duplication of information is reduced to a minimum.

Specifications for furnishings (most are under CSI Division 12) vary greatly in required verbiage, particularly for furniture items. If a unique product has been selected, the manufacturer's model number (and data on finish, color, fabric, and construction options) will be adequate. When competition is mandatory, as for public work, at least two acceptable products must be named, or the item described in greater detail. Enough must be said about materials, construction, fasteners, hardware, and finishes to assure bidding at the desired quality level.

Carpeting, draperies, and accessories are specified in the same manner. With few existing reference standards available,

carpeting construction (minimum number of tufts and rows per inch, height of pile, backing, etc.) must be defined in detail unless selected products can be named. In both instances, bidders need to know exact installation requirements. Construction of draperies is usually specified in terms of pleat spacing and height, percentage of fullness, linings, hems, and seams. Accessories are normally culled from standard product lines and specified individually or in sets.

One-of-a-kind items, such as an antique breakfront, artwork, or an oriental rug, escape the normal specification and bidding process. They are best purchased under a stipulated allowance or directly by the client.

Equally important in specifying furnishings are the contract provisions under which they will be fabricated, shipped, assembled, installed, and cleaned. By far, the most reliable starting point is AIA Document A271, "General Conditions of the Contract for Furniture, Furnishings, and Equipment," 1977 Edition. It covers most normal conditions in court-tested language. Supplementary conditions are required, however, for insurance limits, bonds, and assignment provisions when they are applicable. Submittal of shop drawings and samples, final cleaning, acceptance of portions of the work, and coordination with other contractors must be amplified in Division 1 of the specifications.

Perhaps of greatest impact on successful completion of the contract are the coordination items. Coming on the job last and laboring under the ultimate occupancy deadlines, the furnishings contractor finds other finishing trades racing to complete their work. Use of the freight elevator becomes critical. Storage areas for delivered merchandise are suddenly not available. Access to work areas must be scheduled with the general contractor. So must delivery of built-in casework and items requiring final electrical connections for lighting and convenience outlets. Carpeting must be protected. Rubbish must be removed. Somehow, the specifier must anticipate as many potential problems as possible and at least alert bidders to the conditions under which they will be working. Their job will be difficult enough under the best of circumstances.

Author: William T. Lohmann, AIA, FCSI, is Chief Specifier for C.F. Murphy Associates, Chicago, Illinois.

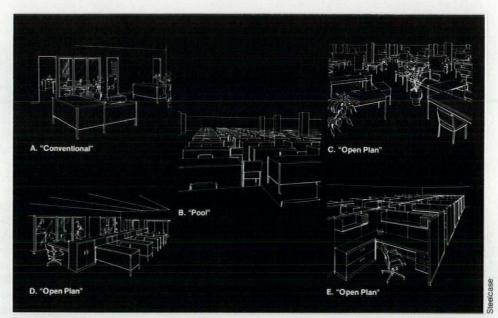
Pssst...shhh!

Office acoustics is a tough design task. Although the principles are simple, solutions use sophisticated techniques expanding on the acoustical technology.

Sounds can delight us, alarm us, embarrass us, or make us laugh. They can also bring us pain, or just be plain annoying. Sounds are part of the richness of life. They are part of architecture whether they come as featured performers, invited guests, or just bang on the door.

The most common role of sound in our lives, however, is probably communication. Although not so swift as light, sound can communicate at any time of day, overcome barriers, and can admirably combine the voice, ear, and even sense of touch to great advantage in communication. When the Quickborner Team experimented in Germany in the late 1950s with their Bürolanschaft concept of office planning, communication was at its core. When Eberhard and Wolfgang Schnelle brought their management expertise to office planning, they literally tore down the walls and paved the way for the open-plan office. The acoustical technology to make the shift was, at that time, undeveloped.

When the Bürolanschaft came to this country in the late 1960s, it found good company. The Herman Miller Action Office concept was then well underway. This exciting history of interior design revolution has been well documented by P/A, as far back as October of 1968. In the June 1977 issue. John F. Pile's 14-page article, "The Open Office: Does it Work?," explained and explored the history and future of the open office or office landscape concept. A chunk of history that has taken place since the story by John Pile was the "Steelcase National Study of Office Environments: Do They Work?" The poll, commissioned by Steelcase Inc. in April 1978, was conducted by Louis Harris & Associates and



The drawings above represent typical office work environments as described in the Steelcase "National Study of Office Environments: Do they Work?" conducted by Louis Harris & Associates

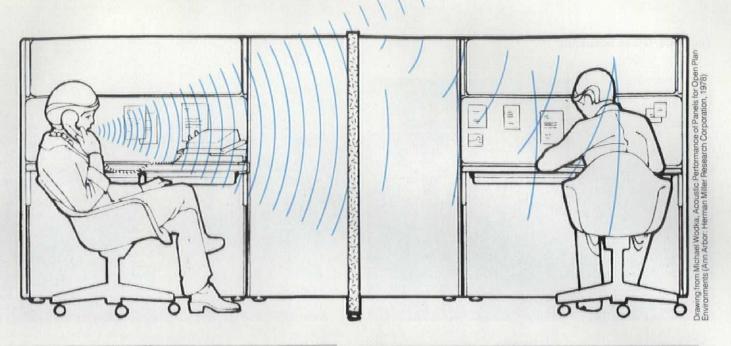
surveyed office workers, corporate office planners, and professional office designers. The study is a fascinating array of information on the anatomy of office design and performance. One conclusion stands out as of paramount interest to office designers: "Privacy-related considerations are important to office workers and are, in general, the least satisfactory aspects of office workers' offices today." The report continues: "Visual privacy is considerably less important to office workers than conversational privacy or ability to concentrate without noise and other distractions."

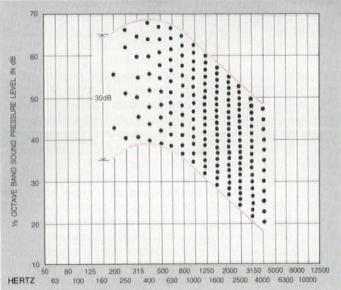
The acoustical technology to cure this major ill of the open office exists today. It is relatively simple to understand but sophisticated to apply. Its ramifications extend beyond open office to other conditions of privacy.

In the mid-1940s, the researchers at Bell Laboratories analyzed the sound structure

of the conversational human voice to optimize performance of microphones, telephones, and receivers. The study resulted in a methodology for expressing the situation called Articulation Index. The conversational human voice has an upper and lower range in loudness of about 30 dB. This range is expressed by graphing the upper and lower intensity ranges of speech as a function of sound frequency. The higher-frequency sounds are the most important to our speech comprehension. More recent extensions of the concept show weighting of the frequencies, expressed by a pattern of 200 dots dispersed at each frequency according to their relative importance to speech clarity. Perfect articulation in a microphone meant all of the dots were exposed, for an evaluation of AI = 1.

Closed office: Articulation Index was not applied in architectural acoustics until the early 1960s. Owens-Corning Fiberglas





NORMAL SPEECH LEVELS SHOWING CONTRIBUTION OF FREQUENCY BANDS TO SPEECH ARTICLILATION INDEX

MAXIMUM LEVEL OF INTRUDING SPEECH

DIFFERENCE IN LEVELS IN dB

BACKGROUND NOISE LEVEL

DEPARTMENT OF THE PROPERTY OF THE PROPE

Top: Sound between work spaces can travel around the sound screen over it or through it. **Left:** The 30 dB range of conversational speech is generally confined to the area between the two curves. Frequency bands are weighted indicating their importance to speech clarity by the unequal distribution of 200 dots. **Above:** Because of the weighting characteristics of the frequencies, the calculation of Articulation Index is also weighted. The difference of the sound level between the signal and the masking sound is calculated in the five frequency bands shown. These differences are represented as A,B,C,D, and E values in the formula. The weighting factors are as follows: $W_1 = .002$, $W_2 = .005$, $W_3 = .007$, $W_4 = .010$, $W_5 = .008$. The Articulation Index, or Al can then be calculated by entering these values into the formula shown.

asked acoustical consultants Bolt Beranek & Newman Inc. to simplify the method by which office acoustics could be designed and evaluated for privacy. Several significant discoveries were made in the process. In a paper published in 1962, BBN explained that speech privacy was related to speech intelligibility rather than the sound level or loudness of the source. More important: "An increase in the background level has the same effect on intelligibility as an increase in noise reduction [between spaces]." Noise reduction alone is ineffective in fully describing the privacy situation. BBN chose, therefore, Articulation Index as the basis of their system of designing for speech isolation in closed offices. Al is based completely on intruding level of signal and the masking sound.

The result of this study was the development of "The Speech Privacy Design Analyzer," a set of manuals designed to

aid architects and consultants in acoustical design. The analyzer serves to delineate the possible paths that sound might travel from one work space to another. The sound generated on the listener's side of the wall was usually "masked" by a combination of office sounds, mechanical noise, and the possibility of a sound speaker system solely for the purpose of masking sound. By identifying the part of the speech spectrum which was left audible and unmasked, a calculation was possible that would rate the listening space in Al. Remember, an Al of one leaves the entire speech spectrum exposed. An AI of zero means that speech has no intelligibility. On the basis of experimental proof, an Al of .05 was defined as confidential privacy. An Al up to .20 represents a normal standard of speech privacy. It is important to recognize that AI was originally intended as a number to be kept high for a microphone and now was to be kept low

for sound isolation in the closed office.

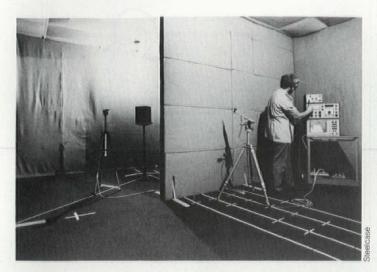
Speech privacy in the open plan:

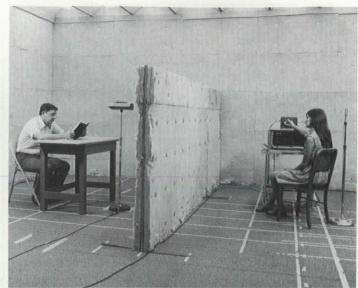
Richard Hamme has been called the "father of open-plan acoustics." Whether Hamme's work is the cart or the horse, his contribution to our understanding of acoustical technology is undeniably large.

Hamme's first professional contact with the "open plan" was as acoustical consultant for the Toledo Edison building in Toledo, Oh. In combination with the Quickborner team, Hamme admittedly approximated his way to successful acoustics. As a result of this experience in the late 1960s, the Public Buildings Service of GSA approached Hamme to research and formulate an acoustical specification which could be used for open-plan applications in government buildings.

Hamme's specification, finished by 1969, required a thorough study of users' needs, objective testable criteria, and effective methods of test. The result was a

Technics: Office acoustics





set of performance specifications for the open plan. Hamme's story of the project is a fascinating one.

To solve the problems of the office landscape, Hamme literally took the issue to the natural landscape surrounding his laboratory near Ann Arbor, Mi. Two researchers in the open field could plainly converse at close range. The background noise level was measured as being approximately 40 dB, but the roughly 60 dB level of the voices could easily be heard above it. With the two people separated a distance of ten feet, the conversational sound level was measured as being reduced by about 10 dB. The 40 dB of background noise, combined with the added spreading reduction in sound (or sound attenuation) of 10 dB, still left 10 dB (out of the conversational 60 dB level) to be shielded. A sound-absorbent screen five feet high equally spaced between the two speakers finally produced speech privacy in an open field.

Armed with his success in Michigan farmland, Hamme and his staff returned to the laboratory to try to achieve the same result. Two major differences were present in the laboratory. The background noise had to be artificially introduced, and the ceiling was not as perfect a sound absorber as the sky.

Experimenting with human response to background masking devices proved that there were definite limitations on the shape of the sound spectrum used to mask spoken words as well as the loudness (or intensity level) of the sound. People with average hearing were annoyed by higher-frequency sounds at high intensity. They were more comfortable with a masking sound that simulated sounds in the building that were already familiar to them, such as air conditioning. Similar masking devices had been used in the closed office as early as 1961. Hamme formulated a successful masking device that averaged

the complaints and could effectively replace the 40 dB background sound which was present in the open field. He found that raising the masking sound beyond this level caused people to raise their voices, defeating its purpose.

With the ceiling, however, Hamme was temporarily stuck. The sound was traveling over the five-foot partition and bouncing off a reflective ceiling, gaining back the 10 dB which had been lost to the sky. The ceiling was acting as a mirror for the sound. As Hamme puts it: "What we did was to take the mirror and paint it black."

The acoustical ceilings then in common use had an absorption characteristic of about 50 percent, meaning that about half the sound reaching the ceiling was absorbed. Adding this ceiling in the lab increased the sound attenuation by 3 dB. If the ceiling could be 25 percent more absorptive, 3 dB in sound attenuation could be gained over the screen. At 75 percent, the ceiling was still 25 percent away from perfect. By halving that difference (86.5 percent absorptive), 3 dB more was gained in attenuation, totaling 9 dB lost. To achieve the total 10 dB attenuation necessary, the ceiling had to be over 90 percent absorptive.

Old becomes new: In the 1940s, when partition walls extended from structural floor slab to structural floor slab, available ceiling treatments had this type of high absorption capability. With the predominance of the demountable partition, the dropped ceiling, and the development of the modern office building, the product lost effectiveness. The sound went up through the ceiling of one office and down through the neighboring ceiling. To prevent this flanking path, some of the porosity so effective in ceiling products for absorption had to be filled with gypsum plaster. The panels were also sometimes backed with other, more solid materials. The typical ceiling became a fire-rated

ceiling board, while the old product stayed in the background. With the new use of the open plan, the full-height partitions all but disappeared. The office became one large room again, and the absorption characteristic of the ceiling had to return to its former efficiency of over 90 percent.

Armstrong research: Ceiling manufac-

turers responded to the news with some research of their own. With the comments and suggestions of Hamme, for example, G. Robert Spalding and Dr. Thomas Mariner performed a series of tests at the sound laboratories of Armstrong Cork. The work at Armstrong concentrated on understanding the characteristics of speech privacy as a function of design variables. They found, for example, at a separation of 3 ft, in a sound-absorptive environment. speech sound attentuation could be doubled by turning the talker and listener back to back. The attenuation could be doubled again by increasing the distance between the people to 10 ft-6 in. Placing a barrier between them again halves the speech sound level. (The rule of thumb inside a highly absorbent space like the open office is that 5 dB are lost every time the distance from the source is doubled.) The researchers also discovered that light fixtures had a significant destructive effect on the sound attenuation when the hard surfaces of the light lenses were placed where they could again reflect sound over the screen. They found that increasing the height of the screen made only marginal additions to the attenuation over it, depending on its covering. Allowing sound to reflect off a carpeted floor under the panel sound barrier (by raising the panel off the floor) significantly alters its effectiveness. Square panels, five feet on a side, worked almost as well as very long screens of the same height. Spalding presented many of these results at a symposium on word intelligibility held in Liege, Belgium in 1973.



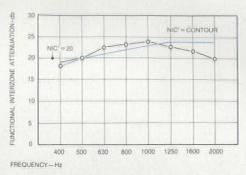
From simple to not so simple

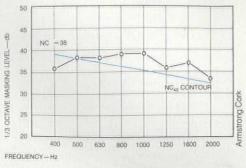
One hour spent in an acoustical laboratory is sufficient to demonstrate the rudiments of sound isolation in the open office. Experiments such as those of Hamme and Spalding are at the base of the theory and practice of design for acoustical privacy. Unfortunately, acoustical failures in application are much more accessible to most of us. The designer stands between the simple truths of the laboratory and the actual office space being used by 50 percent of the working population. The design methodology must be accurate, consistent, and relatively fast. There are today many schools of thought about how such design for effective speech privacy can be accomplished

BBN and the OPLAN: To accommodate the open-plan office, one large acoustical consulting firm, Bolt Beranek & Newman, has resorted to the computer. In a nutshell, what Parker Hirtle of BBN has done in writing the program is to extend the principles of the "Speech Privacy Design Analyzer" developed in the early 1960s to the open office. Hirtle was one of the original authors of the "analyzer." The difference between the two design situations is largely the number of possible paths the sound can follow and the time it takes to make the necessary calculations to predict Articulation Index. In use since 1976, OPLAN has been devised for designer interaction with the program. By means of questions and simple responses, the user is led through the basic design decision-making process. P/A has reproduced a sample application of the program on the following pages to demonstrate its use.

The PBS system

When Richard Hamme wrote his performance specifications, he did not choose to use Al. Based on the experimentation already discussed, he felt two other variables were necessary to evaluate the





NIC' AND NC VALUES ARE DETERMINED BY COMPARISON TO STANDARD CONTOURS

The two photographs on the facing page represent (I) the objective and (r) subjective methods of test used in the PBS system. The objective test involves only an electronic speaker and microphone with sound level measurements eventually averaged to produce a test curve. The test curve is then matched to the NIC' contour as shown above. The curve position at 500 Hz is noted and becomes the NIC' value. If the subjective test is used, the listener adjusts the sound equalizer, as shown at the left, until the talker is no longer intelligible. The SPP for the ensemble is then calculated. The curve of test levels on the sound equalizer is matched to the NC40 contour as shown above. The position of the curve at the 500 Hz frequency band is noted for the single number rating necessary to complete the subjective test.

speech privacy potential of a space. One variable is the level of the masking sound; the other is the measure of the speech attenuation from one space to another. If the two contributions add up to sufficiently destroy speech clarity, the assumption is that privacy is maintained. For masking-sound measurement, Hamme used the Noise Criterion (NC) curves that already were established and in common use for evaluating sounds from air-diffusion equipment. The NC40 contour was made the basis of the masking sound. The noise isolation class contour was redefined in the eight one-third octave band frequencies within the normal range of speech privacy and were renamed NIC'. Hamme then originated the formula:

SPP = NIC' + NC₄₀ \geq 60 SPP = Speech Privacy Potential.

Why does it work? What we want to accomplish is speech privacy. We could meet this requirement by specifying that the sum of the masking sound level and the sound attenuation for each third octave frequency common to human speech should not fall below 60 dB. We would also have to specify that the masking sound not exceed certain sound levels for certain frequencies. The NIC' and NC40 are single numbers. If the sound-masking system conforms to the NC40 contour, it will never have a high-frequency sound which is too loud. The NIC' rating for the ensemble will always be equal to or greater than NIC' = 20 (assuring the total rating of attenuation and masking will always destroy speech clarity). Normal variations in a real space permit minor variations.

The tests: The shape and intensity of a sound-masking device are usually controlled by a sound equalizer. Basically, a sound equalizer is a random sound generator and speaker with a volume control and several levers which are connected to electronic sound filters. By adjusting the levers, intensity of each

one-third octave sound frequency can be separately controlled. Commercial sound-masking devices are sold either with a fixed sound spectrum or with the ability to alter the shape as described above. In the laboratory, a variable adjuster is of course always used.

Hamme devised two separate tests for determining the SPP values. One is objective; one is subjective. With the objective test, a series of measurements is made using an electronic speaker in one hypothetical work space and a microphone and sound-level metering device used on both sides of the screen to measure attenuation. The location of the microphone is varied and the sound attenuations at different frequencies are measured at each new location. When the process is complete, the sound-level measurements are averaged for each third octave frequency and the resulting curve is then fitted to the prescribed NIC' contour to arrive at the NIC' rating.

The subjective test involves the judgment of three separate jurors. A voice tape is used or a live speaker is asked to maintain a constant level of speech in one simulated work space while a listener in the other sits at the controls of a sound equalizer. He or she is asked to raise the level of the masking sound until the voice is sufficiently masked. Clearly the need of raising the masking sound to an undesirable level, if unanimously necessary, will disqualify the system being tested. The SPP rating for a system need only comply with one or the other of the tests.

To use the PBS system in the design process, the designer must either use previously established data for his choice of materials or actually conduct laboratory testing. Various laboratories throughout the country do this type of testing. The construction of the mock-up can be an expensive process.

Delta Dee Bee Aaay: A simple-minded

```
CLIENT: P/A
PROJECT NAME: DEMONSTRATION
PROJECT NUMBER: 1
                 BO YOU HANT TO SEE THE "DESIGN" CRITERIA?: YES
                OCTAVE BANDS
                                                                                                                                                                                                                                                                                    250
                                                                                                                                                                                                                                                                                                                         500 1000 2000 4000
                 BARRIER "DESIGN" TL
BARRIER "DESIGN" ARSOMPTION COEFFS
"DESIGN" RHBIENT
                                                                                                                                                                                                                                                                        13.00 20.00 24.00 24.00 24.00
0.30 0.70 0.90 0.90 0.90
49.00 45.00 40.00 33.00 26.00
2 FOR CONFIDENTIAL PRIVACY, AI = 0.05
FOR MORNAL PRIVACY, AI = 0.20
                                                                                                                                          DEEN PLAN EVALUATION
               LAYOUT NAME: FIRST FLOOR
LAYOUT NUMBER: 101
                DO YOU MANT TO USE "NORMAL" VOICE LEVELST: YES ARE SOURCE AND RECEIVER NORMALLY BACK-TO-BACKT: NO
              ARE SOURCE AND RECEIVER NORMALLY EACK-TO-EACK?: NO
DISTANCE FROM SOURCE TO RECEIVER (DECIMAL FRET), DSR: 10
CELLING HEIGHT, CHT: 10
SPECIFY THE TYPE OF CEILING

1. PLASTERS SYPSUM BOARD: CONCRETE, ETC.
2. FISSUMED MINERAL LAY-IN PANELS
3. FISSUMET MINERAL TILE
4. HIGH-PEREDRHANCE MINERAL FIBER PANELS
5. 374-IN. GLASS FIBER PANELS
6. I-IN. GLASS OR MINERAL FIBER PANELS
7. 1.5-IN. GLASS OR MINERAL FIBER PANELS
8. SPECIFIED BY OCTAVE BANDS
SELECT A NUMBER FROM ABOUE: 3
IS THE FLOOR CARPETED?! YES
STEEPE A BANDERS?! YES
            SELECT A NUMBER FROM ARQUE: 3
IS THE FLOOR CARPETED?! YES
IS THERE A RARRIER?! YES
DO YOU WANT TO USE TESIGN' IL FOR THE PARRIER?! YES
DO YOU WANT TO USE TESIGN' IL FOR THE PARRIER?! YES
EARRIER HEIGHT ARQUE FLOORS BHIF: 5
IS PARRIER OPEN AT THE LEFT END?! NO
IS PARRIER OPEN AT THE RIGHT END?! YES
DISTANCE FROM END OF BARRIER TO LINE-OF-SIGHT SHP: 4
IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?! N
IS THERE A HALL OR HINDOM PERLECTION ON THE RIGHT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

IS THERE A HALL OR HINDOM PERLECTION ON THE LEFT SIDE?!

                                                AMB (1000):
                                                AMB (4000): 20
                                                                                                                                              ARTICULATION INDEX: AI = 0.59
THIS IS INADEQUATE SPEECH PRIVACY.
               AMBIENT IS LOW.

CAN IT BE INCREASED?! NO

THE RIGHT HALL REFLECTION LIMITS PERFORMANCE.

CAN YOU USE A MORE EFFICIENT SOUND ASSOMBING MATERIAL ON THE HALL?: NO

CAN YOU ELIMINATE THIS REFLECTION BY MOVING

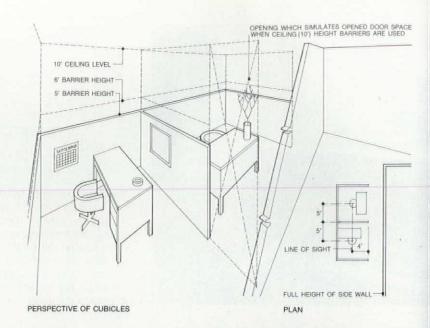
THE REFLECTING SUMPACE OR PHOVIDING A BARRIER?: NO

PATHS AMOUND BARRIER ARE MEAK.

CAN BARRIER SIZE BE INCREASED?! YES

BARRIER HEIGHT ABOVE FLOOR; SHIF = 5.00
```

THE OPLAN SYSTEM
COPYRIGHT (C) 1978 BBN
BOLT BERANEK AND MEHMAN INC
30 JULY 1979 4:12:57PM-EDT



TYPICAL OPLAN COMPUTER RUN EXPLANATORY NOTES

1 At the appropriate point during the running of the OPLAN program, the consultant is asked if he wishes to use the "Design" TL (Transmission Loss) values for the screen barrier occurring between two work stations. When the question of sound reflection off barriers or wall surfaces is raised by the computer, the consultant will also be asked if he wishes to consider using the "Design" Absorption Coefficient values for the acoustically treated surface. These barrier TL and absorption coefficient values are part of the program's data base and are displayed by the computer at the beginning of the computer run at the designer's request.

2 If the consultant wishes to use other barrier TL and absorption coefficient values (that may be available from the manufacurer of the particular barrier that he proposes to use), the consultant may reject the "Design" values and type in these alternate values, for each of the five octave bands. Single-number STC and NRC values do not suffice.

3 These background noise level numbers assume a fairly quiet airconditioning system. The noise is in the NC-30 range, or 6 dB below the "design ambient."

4 The first improvement that is proposed here by the designer is the use of a higher barrier. However, the improvement gained by using a 6-ft barrier in place of a 5-ft barrier is insignificant.

5 The designer decides to use a much more efficient ceiling material. Again, the improvement in the AI is insignificant.

method exists for folks who can't believe it has to be all that hard. For lack of a better name it is called Delta dB"A". A speaker is placed in one work space and a sound level meter (adjusted to the "A" scale) "listens" to it in the adjacent space. The search has been for a sound source that will yield meter readings which accurately approximate NIC' numbers. The "A" scale on a sound level meter is itself weighted to favor the sound frequencies more likely to be heard by the human ear. Armstrong's Robert Spalding has published results of his studies using Delta dB"A". The idea is to be able to measure actual sound attenuation in a space quickly and simply. The technique is most commonly used as a diagnostic tool in the field. The problem is that the averaging that takes place in the meter makes it impossible to discover those particular frequencies that may pre-

sent problems for the masking device.

One and the same

All these systems are just three different rulers for measuring the same thing. They all have their strengths and weaknesses, their proper place and use. Like a Polaroid snapshot, the Delta dB"A" method can make a series of acoustical records in rapid succession. There are certainly situations where cost would prohibit any other method. The accuracy is only marginal.

Using controlled laboratory methods to evaluate work situations and obtain NIC' data allows for the introduction of many real-life variables that could never be programmed into a computer. Allowing the subjective test procedure returns the ultimate standard of the acoustical privacy to its source—the human being. Manufacturers complain, however, that the laboratory

size requirements and specifications (5'-0" screens and 9'-0" ceilings) are too limiting. If government officials do not permit the use of prior data in accepting NIC' numbers, the expense of the duplicate testing can be considerable.

The computer is an excellent analytical tool and a flexible design aid. It can give us a hundred possibilities while we contemplate building a single laboratory mock up. The computer, however, is only as good as the person who uses it and the data that are put into it. The OPLAN program does include years of data collecting from real-life experience. Its critics attack the fact that light fixtures are not part of the primary program (they can be added manually by an experienced programmer). The absorption coefficient of a material can change significantly with angle of incidence. This information is as yet un-

CHANGE TO: 6
IS BARRIER OPEN AT THE LEFT END?: NO
IS BARRIER OPEN AT THE RIGHT END?: YES
DISTANCE FROM END OF BARRIER TO LINE-OF-SIGHT BHR = 4.00
CHANGE TO: 4

RETICULATION INDEX: AL = 0.57 THIS IS INADEQUATE

THIS IS INADEQUATE

AMBIENT IS LOW.

CAN IT BE INCREASED?! NO

THE PIGHT HALL REPLECTION LIMITS PERFORMANCE.

CAN YOU USE A MORE EFFICIENT SOUND ABSORBING MATERIAL ON THE HALL?! NO

CAN YOU SELIMATE THIS PERFLECTION BY MOVING

THE REFLECTION SURFACE OR PROVIDING A BARRIER?! HO

CEILING SOUND ABSORPTION LIMITS PERFORMANCE.

CAN YOU USE A DIFFERENT CEILING?! YES

SPECIFY THE TYPE OF CEILING

43. FISSINED MINIERAL TIBER PANELS

5. 374—IN. GLASS FIRER PARELS

6. I'IN. GLASS FIRER PARELS

7. 1.5—IN. GLASS OR MINERAL FIRER PANELS

8. SPECIFIED BY USCIANCE BANDS

SELECT A NUMBER FROM AROUSE! 7

FRITCOLATION INDEX, AI = 0.54

THIS IS INADEQUATE SPEECH ERIVACY.

CHETENT IS LOW. BRITCULATION INDEX: AT = 0.57 THIS IS IMADEQUATE SPEECH FRIDACY.

CAN IT BE INCREASED?: NO
THE RIGHT HALL PEFLECTION LIMITS MERFORMANCE.

CAN YOU USE A MORE EMPICIENT SOUND ABSORBING MATERIAL ON THE WALL?: NO
CAN YOU CLIMINATE THIS REFLECTION BY MOVING.

THE REFLECTING SURFACE OR PROVIDING A PARRIER?: NO
PATHS ADDUND BARRIER ARE MEAN.

CAN BARRIER SIZE BE INCREASED?: YES
BARRIER HEIGHT ABOVE FLETOR BHTF = 6.00
CHANGE TO: 10

THE BARRIER OPEN AT THE CEILING
IS BARRIER OPEN AT THE LEFT END?: NO
IS BARRIER OPEN AT THE PIGHT END?: YES
DISTANCE FROM END OF BARRIER TO LIME-OF-SIGHT BHR = 4.00
CHANGE TO: 4 CHANGE TO: 4 AMTICULATION INDEX: HI = 0.53 This is inadequate Speech PRIVACY HABIENT IS LOW.

CAN IT BE INCREASED?: YES

DO YOU MANT TO USE THE "DESIGN" AMPIENT?: YES

DO YOU MANT TO USE THE "DESIGN" AMPIENT?: YES

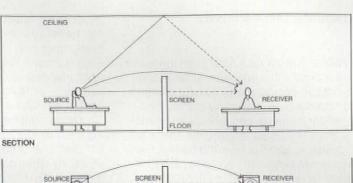
THIS IS INABERUATE SPEECH PRIVACY.

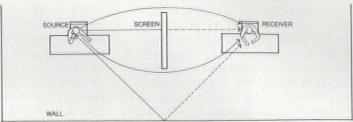
THE RIGHT MALL PEFLECTION LIMITS PERFORMANCE.

CAN YOU USE A MORE EFFICIENT SOUND ASSORBING MATERIAL ON THE MALL?: YES

SPECIFY THE MALL MATERIAL

PLASTERS GYPSUM ROARD, GLASS, ETC. HHBIENT IS LOW. 2. WALL CAPPET
3. REDUSTION LOUVERDMAPE
4. DESIGN BARRIER
5. I-IN. FARRIC COVERED GLASS FIRERROARD
6. 2-IN. FARRIC COVERED GLASS FIRERROARD
7. SPECIFIED BY DETAUE BANS
SELECT A NUMBER FROM ABOVE: 5
HATICULATION INDEX: AI = 0.03
THIS IS CONFIDENTIAL SPEECH P THIS IS CONFIDENTIAL SPEECH PRIVACE. Is "NORMAL" PRIVACY ACCEPTABLE?: YES
BO YOU WANT TO TRY A SHALLER BARRIER?: YES
REDUCED BARRIER DIMENSIONS ARE: AMTICULATION INDEX: AT = 0.20 Detional Barrier Dimensions are: EMTF = 5.25 BMR = 1.50 ARTICULATION INDEX: AI = 0.19
THIS IS NORMAL SPEECH PRIVACY,
DO YOU HANT TO CHANGE ANYTHING?! NO
DO YOU HANT TO CONSIDER ANOTHER REFLECTION PATH?! NO DO YOU HANT TO EVALUATE ANOTHER LAYOUT?: NO END OF EXECUTION CPU TIME: 8.51 ELAPSED TIME: 8:32.90 EXIT.





PLAN

6 Here, a full-height barrier is considered, but because of the low background noise, as well as the dominant importance of the sound reflection off the side wall, the improvement is, again, insignificant. At this point, the arrangement is very similar to an enclosed office situation, but with the door left open. The 4-ft "door" opening even simulates the presence of an open, sound reflective door since the plaster core wall that runs along the right-hand side of the talker's desk is not yet treated with a sound absorbing material. Even with the full-height barriers, the Al is much too high.

7 By raising the background noise 6 dB to the "design ambient" level, there is a significant improvement—but the AI is still much too high. The side wall reflection is now the major problem.

8 Eliminating the sound reflection off the core wall (or open "door") can achieve a confidential degree of privacy, even with a 4-ft-wide clear opening.

9 A normal degree of privacy, not confidential, allows a smaller barrier. The program suggests that even a 5-ft-high barrier will be adequate, with the proper ceiling material, a 6 dB higher ambient noise level and sound absorbing treatment on the side wall. An open-plan arrangement may be far superior to an enclosed office situation where the door is left open, a common situation in most enclosed-plan offices.

10 Elapsed time indicates that this analysis required less than 10 minutes of time working at the computer terminal.

known and therefore cannot be entered accurately into a computer memory (or a human one). Gasket failures in open office systems can play a large role in acoustical failure. Poor workmanship is difficult to predict in any design situation or computer program. Complex geometries still involve hand calculations before they are entered into OPLAN, but all ceiling heights and panel dimensions are possible. In its defense, Parker Hirtle explains: "You can't use the program without judgment." He continues: "At the present time we are relying on the experience of the user." Hirtle cannot predict total accuracy; he only "can predict better than anyone else."

How are they all the same? The NIC' curve and the NC₄₀ contour can be superimposed on the graph showing the Articulation Index dot array. Subtracting

the NIC' curve from upper and lower speech frequency curves will yield new curves that represent the signal that reaches the listening room. All of the dots below that curve that are not masked by the NC40 contour represent the portion of speech that actually is heard in the listening space. Calculating the Al for the area between the signal and masking sound yields an Al number of about .10, almost confidential privacy. Using PBS or Al methods, the results are nearly identical.

Why so many names for the same thing? This acoustical technology is less than 15 years old. It is changing faster than we can monitor it. The noise criterion curves have been altered, for example, since Hamme began using NC40, and the Canadians prefer the term SPNAC (Speech Privacy Noise Attenuation Class) to NIC', confusing labeling problems. For

the moment, PBS is the only published standard. It is time for someone to step in and create order. ASTM Task Group E33.04C is about to do just that. It may take one year; it may take three. The committee is now in session to write the standard for recommended practice and testing procedures.

The design

Clearly, designing a good work environment needs careful acoustical consideration. Each designer has his own design methodology but there are always four basic ingredients: the envelope of the space, the furniture (and equipment), the masking sound, and the people. All of these contributions must be coordinated and conceived as a single system.

The envelope: Traditionally, most of the research money gets poured into the en-

Technics: Office acoustics

velope. The concept most often ignored by designers is that perimeter space conditions can destroy the acoustical efforts in an interior zone. A window or masonry wall, for example, can provide a reflective surface that could return to the space the 10 dB that we soak up in the ceiling. Vertical surface geometry and acoustical coverings help to avoid such problems. (Investigation of these problems is sometimes done using visible light beams and mirrors.) Normal carpeting has been shown to absorb over 20 percent of the sound that strikes it. Its main contribution, however, is to dampen the sound of feet and scraping chairs.

The choice of light fixtures should be made with care. The placement of a ceiling light fixture on a path of reflection can wreck the privacy of the space. Coffered ceilings have proven to be very successful in helping to create sound privacy. They should not be used without clear understanding of the coffer angles and their possible destructive reflections.

The furniture: Much of the progress in furniture design so far has been through common sense and ingenuity, rather than precise research. Combining task lighting with the furniture, for example, might eliminate the need for lighting in the ceiling and give full benefit to the sound absorption installed there. Layouts that avoid reflection and direct sound paths also help.

Much of the ongoing laboratory research today, however, is turning to a more precise understanding and measurement of the acoustical contribution of furniture. Manufacturers are also intent upon reducing the office equipment sounds at the source. The attraction of open plan often begins with the furniture. An owner may feel when he has bought the furniture, he is finished. He is in for a big surprise!

The masking sound: In the early 1960s, acoustical masking sound was effectively used to augment air-conditioning noise in closed office acoustics and often as a remedial measure for designs which did not work. The real discovery of open-plan acoustical technology was the rediscovery or extension of masking sound. So much was learned in the open plan, that acoustical technology is on the threshold of increased awareness in the closed plan. The use of masking sound has caused us to reevaluate the concept of the word "quiet." A library is thought of as quiet, yet a squeaky new pair of shoes can interrupt reading there. Rather than spend money and time making it soundless, perhaps we should study the potential of using the proper background sound for reading and concentration. Hospitals are also supposed to be "quiet," yet a nurse's footfalls can be heard down the hall. Why not use masking sound? The open-plan school? Says Hamme: "We could go back to the open plan now and handle the situation very well." Hotels and apartment buildings could also make use of masking sound.

One important reason other than improving the quality of the acoustics is cost. The per-sq-ft cost of sound masking is considerably less than that of solid acoustical materials. To date the most effective systems are speakers mounted within the ceiling plenum on 10–15-ft centers. They are very expensive to install as an after-thought. (The future holds the potential for sound masking incorporated into furniture.) A centralized system holds the additional advantage of providing a paging system or fire protection warning.

The people: Successful office design needs an integrated system. It should also be clear that sound is an integral part of our total perceptual powers. Light, for example, is psychologically linked to sound. In a candle-lit restaurant, the speech often comes in whispers. At the brightly lit PTA dinner, the room rings with laughter and conversation. Sound can be linked to thermal comfort. When masking sounds are stopped abruptly, office occupants who believe it is the air-conditioning system begin to sweat. (Cool and warm colors can create a subjective reaction to temperatures of as much as 3 F difference.) Psychologists also ask: Is the discomfort of the open plan due to actual loss of privacy or the fear of loss of privacy? What is disturbing to one person may not be disturbing to another. One acoustical specialist adds: "Most people don't require confidential privacy." A pressroom has a din of unintelligible voices, and therefore speech privacy is maintained without any need for artificial sound masking. How does the comfort of the chair affect our sensitivity to intrusive noises? One justification for the laboratory simulation of acoustical environments and subjective testing is that the real objective is the sensation of privacy, not necessarily the mechanical measurement of it. Maybe what we all need is earplugs.

A more perfect match: Perhaps the greatest guarantee that we have of succeeding at the design of a successful office, open or closed, is that we recognize its function as a tool and use it effectively. Open plan, for example, cannot be successful for confidential privacy at the sound level of the raised voice (about 70 dB). Even the natural landscape, as discussed, can only accommodate a voice level around 60 dB. A comprehensive study is needed that will relate the acceptable sound levels for various kinds of tasks, not only for confidential privacy, but for normal working conditions. We have

the technology to control speech privacy. What level do we need?

For BBN's Robert Newman, "The problem is making architects aware of knowledge that is already there." As architects, we have several possible methods for achieving design success. We can, of course, hire a consultant experienced in office acoustics and even buy time on OPLAN. He or she may calculate Al or prefer the PBS system. Unfortunately, the primary design tool to date, if we are to believe the Steelcase report, has been dumb luck. We can do better.

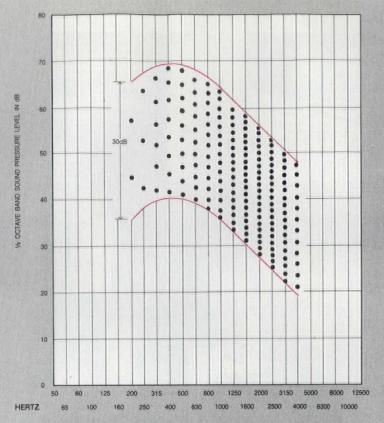
The Office "Landscape" Users Group is an organization of 46 office planners who are involved in implementing the office landscape planning concept. Their goal in meeting and dispersing information is to pool their resources to make it all work. Manufacturers are also becoming acutely aware of design problems and are offering system packages which incorporate lighting, ceiling, masking sound, and furniture elements. (Even air handling must be considered part of the system.) In certain situations, manufacturers will even guarantee their system's performance.

Eavesdropping versus concentration: If you don't believe all of this about sound privacy, find the two biggest gossips in your office and try to reread this article while sitting 10 ft from them. If hearing about the best chicken salad in New York doesn't destroy your concentration, you can at least rest assured that it does mine. [Richard Rush]

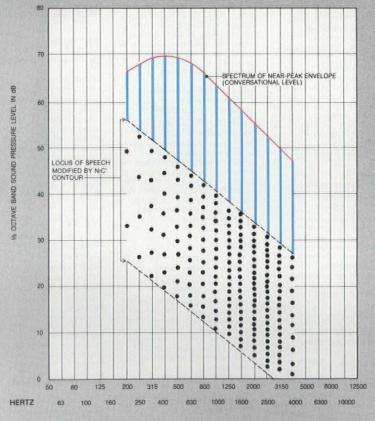
Acknowledgments

We wish to thank the following acousticians, organizations, and manufacturers for their help in preparing this article: Altec Corporation; American Institute of Physics, Acoustical Society of America; American Seating Co.; ASTM; Amweld Building Products; Armstrong Cork Co.; ASARCO; Bolt Beranek & Newman Inc.; L.E. Carpenter & Co.; Castle Assoc.; Ceilings & Interior Systems Contractors Assoc.; The Celotex Corp.; Chicago Metallic Corp.; Control Electronics Co.; Conwed Corp.; Donn Products; GSA; Geiger & Hamme, Inc.; General Fireproofing; GF Business Equipment; Gold Bond Building Prod., Div. of National Gypsum; Harter Corp.; Haworth, Inc.; Haws-Domore, Inc.; Insul-Coustic Corp.; JG Furniture Co.; Johns-Manville Corp.; Knoll International; Masonite Corp; Herman Miller Research; National Gypsum; The Office; Office "Landscape" Users; Owens/Corning Fiberglas; Proudfoot Co.; Rosemount Office Systems; Simplex Ceiling Corp.; Soundalier, Inc.; Stark Ceramics Inc.; Steelcase, Inc.; 3M Co.; U.S. Gypsum; Westinghouse ASD; Zero Weather Stripping Co., Inc.

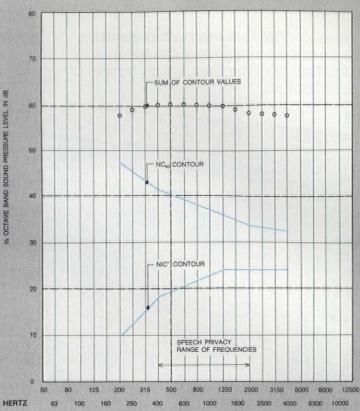
For office acoustical product and literature information see p. 238.



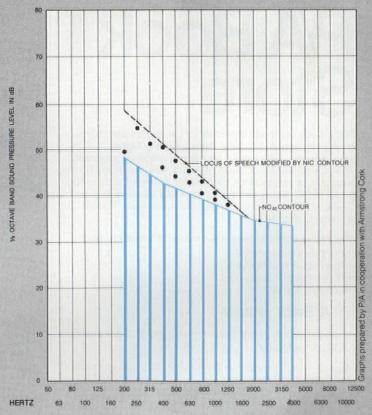
GRAPH A: The two curves above enclose the upper and lower limits of conversational speech. The dot array emphasizes the importance of certain frequencies to speech comprehension. It represents the conversational speech spectrum of a male talker at three feet in front of a listener. (The spectrum has been lowered 5 dB from the original graph made in the early 1940s by Bell Laboratories to more accurately portray true speech.)



GRAPH C: Using the NIC' contour from graph B as an idealization of the sound attenuation characteristics of a space, a new conversational spectrum can be created. In each third octave band frequency the value of the NIC' curve is subtracted from the contour values of conversational speech. The dashed line approximates the new upper limit in the listening space. This curve represents the new "signal" for the space.

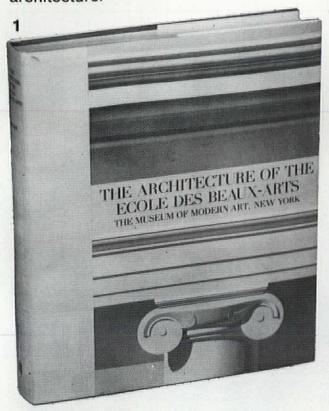


GRAPH B: The two base contours are shown above for NIC' and NC₄₀ determination. No real test situation will yield a curve matching them precisely. By matching real curves to these, under rules designed to average the deviation from them, a single number can be assigned to each test situation. The hollow dots represent the sum of the NC₄₀ value and the NIC' contour at each band frequency. The sum approximates 60 dB.



GRAPH D: Using the NC₄₀ contour from graph B as an idealization of the shape of a masking sound curve, the conversational speech spectrum that remains from graph C can also be reduced. The masking sound will destroy the speech clarity of the sound below its curve. The Al can then be calculated for the area of sound which remains comprehensible between the upper level of the signal curve and the NC₄₀ masking contour.

Here, for the first time in this century, is an opportunity to re-examine the philosophy of the Beaux-Arts school of architecture.



P/A Book Store

Each book has been selected for it's usefulness to you in your professional practice. Prices slightly higher in Canada. Foreign orders must be accompanied by payment. It is not necessary to send payment with the order. Circle appropriate numbers on the Reader Service Cards in the back of this issue, add your name and address and mail. Local sales tax must be included with payment. Prices subject to change.

For faster service, send the card in an envelope to:

Mrs. Eleanor Dwyer Progressive Architecture, 600 Summer Street, Stamford, Ct. 06904

P/A Back issues

A limited supply of the following issues of P/A are available at \$5.00 per Copy:

August California banks/English projects/Plastic laminates

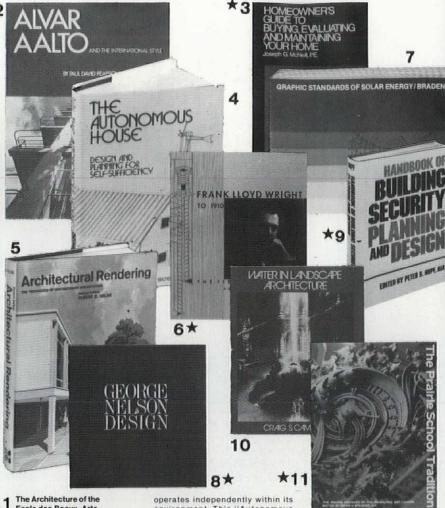
Corporate architecture/ July...... Innovations in wood

Small-scale buildings/Legal center/ Information storage

..... Monumentality/Institutional Kitchens April Energy conscious design

Send both to:

Mrs. Eleanor Dwyer Progressive Architecture 600 Summer Street Stamford, Ct. 06904



Ecole des Beaux-Arts

Edited by Arthur Drexler with essays by Richard Chafee, David Van Zanten, Neil Levine and Arthur Drexler 423 pp., illus ... \$55.00

The most comprehensive analysis

and documentation of Beaux-Arts architecture ever published. Includes large-scale drawings of elevations and plans and photographs of major French and American Beaux-Arts buildings (including Pennsylvania Station and Grand Central Terminal). Circle B601 under Books

2 Alvar Aalto and the International Style

By Paul David Pearson, 240 pp., illus. . . . \$27.50

Although Aalto's heritage is being carried on by those he worked with and personally influenced, he left no written legacy of his design philosophy. This timely critical study fills that void by analyzing his personal form of exression as the last great leader of 20th century architecture Circle B602 under Books

NEW*

3 Homeowner's Guide to Buying, Evaluating and Maintaining Your Home

By Joseph G. McNeill, 324 pp.... \$14.95

This handy reference offers the most effective techniques available for reducing costs when buying, evaluating or maintaining a home. Includes step-by-step home improvement plans and tips on cutting energy bills by 20% without losing efficiency. Circle B603 under Books

4 The Autonomous House

By Brenda and Robert Vale. 224 pp., illus., . . \$12.00

Two architects offer practical solu-tions to the design of a house that

environment. This "Autonomous House" is not linked to utility lines for gas, electricity, water, or drainage, but instead uses the energy of sun. wind and rain to service itself and pro-

cess its waste.
Circle B604 under Books.

5 Architectural Rendering: The Techniques of Contemporary Presentation

By Albert O. Halse, 326 pp., illus., 2nd edition, 1972...\$37.00

This completely up-dated revision of the most widely used guide to archi-tectural rendering covers all working phases from pencil strokes to finished product — and shows how to obtain the desired mood, perspective, light and color effects, select proper equip-ment and work in different media. Circle B605 under Books

NEW*

6 Frank Lloyd Wright to 1910 The First Golden Age

By Grant Carpenter Manson, 228 pp., illus. . . . \$9.95

This profusely illustrated paper back tells the story — both personal and professional — of one of the greatest architects who ever lived, Frank Lloyd Wright. It takes the reader up to 1910, a turning point in Wright's life as an architect and as an individual

Circle B606 under Books.

7 Graphic Standards of Solar Energy

By Spruille Braden 224 pp., illus., \$19.95

A timely design reference guide for those involved in the structuring of our environment. The author melds energy-conscious design with mechanical systems for commercial, institutional and residential buildings, providing quick and efficient extrapo-lation of data from design concept to working drawings

Circle B607 under Books.

NEW*

8 George Nelson on Design

By George Nelson, 192 pp., illus. . . . \$17.95

A compilation of 19 essays, written during the 1960's and 1970's by George Nelson, brings his practical experience as industrial designer and architect and his critical skills as edi-tor, writer, teacher and lecturer to bear on the major issues confronting de-signers. These essays will delight outrage, teach and provoke though for years to come. Circle B608 under Books

NEW *

9 Handbook of Building Security Planning and Design

Edited by Peter S. Hopf 657 pp., illus. . . . \$34.50

Whether caused by nature or human malevolence, damage and disruption to buildings can be avoided or mini-mized by proper planning and design This one-of-a kind Handbook meets the needs of our increasingly troubled times by presenting information on the practical aspects of planning and designing for the physical security of buildings of all types. Circle B609 under Books.

10 Water in Landscape Architecture By Craig S. Campbell 128 pp., illus. .

This profusely illustrated book is the first published work that deals in seb-stantial detail with the technical as well as the aesthetic principles of fountain design. Covers basic hydraulic principles, practical limita-tions, environment and available

Circle B610 under Books.



zon. Circle B611 under Books

Carpenter Gothic 19th Century Ornamented Houses of New England

enous American architectural style and philosophy. This book surveys the profound impact of the Prairie

School on American architecture in

three stages: roots, growth and hori-

By A deC. McArdle & B. McArdle 160 pp., illus. . . . \$24.50

The origin of Carpenter Gothic, a uniquely American architectural amalgam of the 19th Century, is traced to its roots in the picturesque revolt against the rigid, symmetrical

demands of classic forms. The authors document the influence of Pugin's Gothic, culminating in Andrew Jackson Downing's rural Gothic. Circle B612 under Books.

NEW*

13 Anthropometrics for Designers

by John Croney, 176 pp., illus. . . . \$4.50

This unusual book provides an illustrated account, principally through diagrams, of man's dimensions and other physical data, his limitations and his peculiarities — data essential in many specialized fields of industrial or commercial design.
Circle B613 under Books

NEW*

1 4 Architectural Illustration The Value Delineation Process

by Paul Stevenson Oles 288 pp., illus. . . . \$34.50

In this copiously illustrated, clearly organized explanation of his value delineation system, the author presents a winning delineations that show realis tically how a designed structure will appear when built Circle B614 under Books

Structure in Nature Is a Strategy for Design 15

By Peter Pearce. 245 pp., illus. . . . \$45.00

Ann innovative and completely illustrated approach to architectural and environmental design, based on a study of responsive and adaptive structures in nature (molecules, crystals, living cells) that conserve energy

Circle B615 under Books.

NEW*

16 Earth Sheltered Housing Design Guidelines, Examples, References

Prepared by the Underground Space Center University of Minnesota 318 pp., illus. . . \$17.95

This comprehensive and timely study offers a comfortable and econ omic approach to underground housing based on modern construction techniques. Provides plans, de-tails and photographs of existing examples, and shows how to design homes using such low-cost natural resources- and energy-saving systems as layers of soil insulation and passive solar heating

Circle B616 under Books

17 Drawing File for Architects, Illustrators and Designers

By Marc Szabo 251 pp., illus., . . . \$13.95

This book provides over 200 pages of figures — in the most common and natural positions, activities, and types of wearing apparel, as well as dozens of drawings of boats and cars, all of which can be copied freely - by

easily to form an easily accessible fingertip scrap file.

Circle B617 under Books

18 Living by Design

By the Partners of Pentragram 300 pp., illus. . . . \$15.00

Introduction: Using Design is by Peter Gourd. This informative book on the use of design covers product design, environment design, identity design, interior design, graphic design, living by design, exhibition design. (Soft

Circle B618 under Books.

NEW*

19 Living Spaces: 150 Designs from Around the World

Edited by Franco Magnani Translated by Bobbi Mitchell, 120 pp., illus. . . . \$22.50

magnificent book provides a wealth of imaginative and practical ideas for homeplanning and decora-tion for people confronted with the problems of confined living space and the resulting tensions which are often exacerbated by noise and pollution. The superb full-color photographs demonstrate interiors to satisfy aesthetic as well as practical needs Circle B619 under Books

20 Working Drawing Handbook A Guide for Architects & Builders

By Robert C. McHugh, 166 pp., . . . \$13.95

This guide is a step-by-step presentation on how to produce working draw-ings as an integral aspect of communication between designer and builder. Includes convenient check-lists, budgeting information, and data on dimensioning that helps minimize chances of errors

Circle B620 under Books.

21 The Architecture of Frank Lloyd Wright A Complete Catalog Second Edition

By William Allin Storrer 456 pp., illus. . . . \$15.00

This second edition, which documents all of the buildings designed by Wright, replaced a number of photographs with new ones that show the buildings to better effect, changed some copy in the text, and incorpora-ted factural information that has come to light since the original publication in

26

Circle B621 under Books.

NEW*

22 Design and Planning of Swimming Pools

By John Dawes, 276 pp., illus. . . . \$49.95

A comprehensive manual that describes the essential characteristics and consequent design requirements of every type of pool imaginable. Also deals in great detail with more technical matters, such as structural problems and how to solve them, finishes filtration, circulation and water treatment, heating and ventilating. Circle B622 under Books

23 Architectural Presentation Techniques

By William W. Atkin, 196 pp., illus., . . . \$16.95

This book includes presentations ranging from simple sketches in pencil and pen-and-ink to elaborate drawings, photographs, slide presentations and various combinations of media achieved with overlays, camera techniques and modern reproduction methods. Circle B623 under Books.

24 Rendering With Pen and Ink

By Robert W. Gill, 368 pp., illus., . . . \$8.50

This paper-back edition is a copiously lustrated guide to the techniques and methods of rendering, including sections on perspective, projection, shadow, reflections, and how to draw cars, ships, aircraft, trees, and human figures. The author also describes the very wide range of instruments and equipment currently in use. Circle B624 under Books.

NEW*

25 Trees for Architecture and the Landscape Condensed Edition

by Robert L. Zion, 208 pp., illus. . . \$10.95

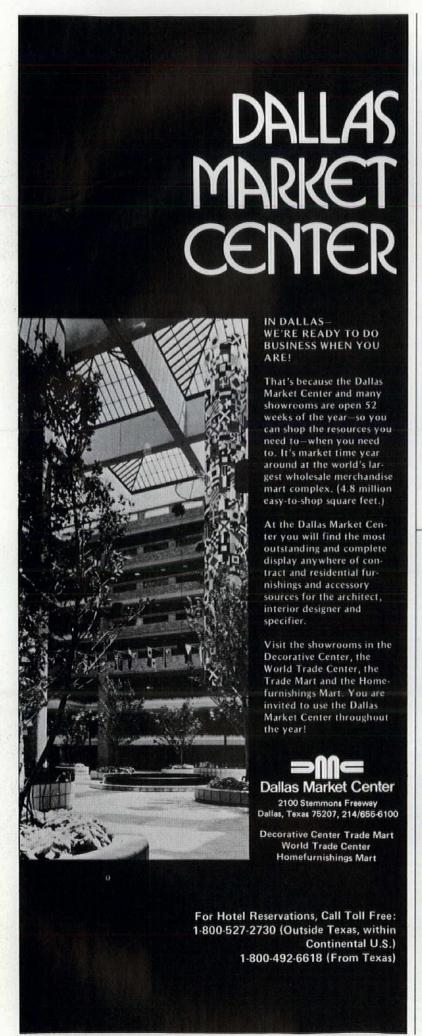
This attractive book will aid communication between landscape architect, architect and layman with a comprehensive collection of photographic portraits of trees whose structure, habit and other characteristics make them especially useful in relation to buildings and outdoor spaces. Circle B625 under Books.

26 Downtown USA Urban Design in Nine **American Cities**

By Kennerh Halpern, Forward by Edward Koch, Mayor of the City of New York 256 pp., illus. . . . \$27.50

The author, newly appointed Director of the Mayor's Office of Midtown Planning & Development in New York City, shows the different approaches taken, or deliberately not taken, to give a sense of order to the unpredictable, constantly changing organism

Circle B626 under Books.





Circle No. 392, on Reader Service Card

HAWS drinking fountain has wheelchair access





With ample knee space from three sides for easy approach and a selfclosing 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.



DRINKING FOUNTAINS

See the colorful world of Rimini... a new vinyl wallcovering from VICRTEX

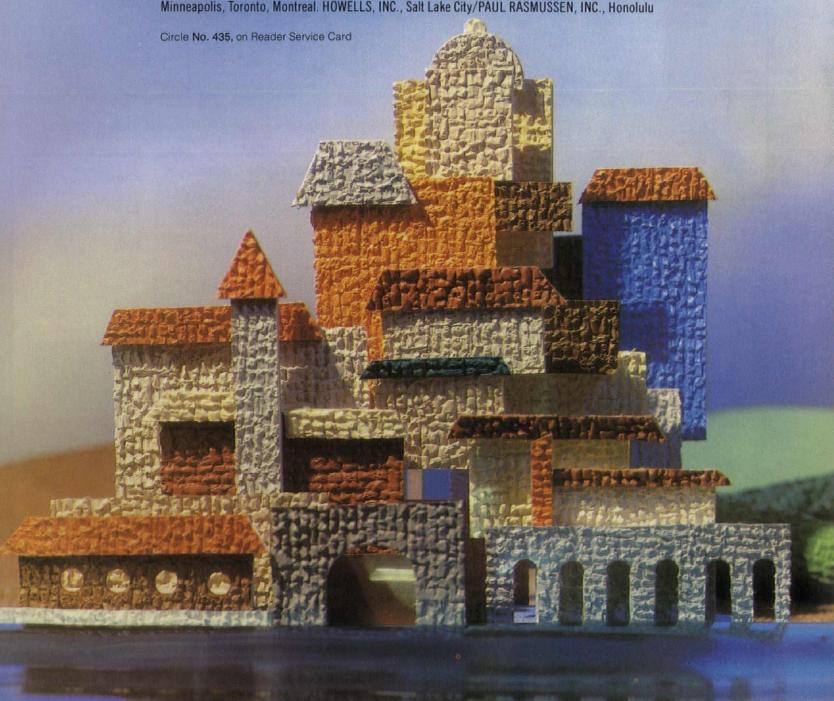
Richly and deeply textured, "Rimini" has the appealing color story of Italy itself.

Virtually impervious to scuffs, stains and mildew—requiring no additional backing

"Rimini" is available in 25 span-the-spectrum colors in a 54" width.

Marvelously applicable to contract and residential interiors. Swatches available.

L.E. CARPENTER and Company A Dayco Company. 170 North Main Street, Wharton, N.J. 07885, (201) 366-2020/NYC (212) 751-3565
DISTRIBUTED BY: VICRTEX SALES DIVISION, New York, Atlanta, Chicago, Dallas, Los Angeles, San Francisco, Boston,
Minneapolis, Toronto, Montreal. HOWELLS, INC., Salt Lake City/PAUL RASMUSSEN, INC., Honolulu





beauty on track

now you can
have light
where you want it
as you want it...
beautifully.
18 design collections,
over 60 different models—
The ultimate in
tracklighting systems by
Omega, and **ERCO** of Germany.





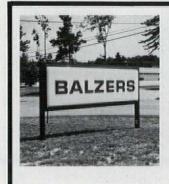
EMERSON ELECTRIC CO. 270 LONG ISLAND EXPRESSWAY/MELVILLE, NEW YORK 11746 516-293-8500

In Canada: EMERSON ELECTRIC CANADA LTD., P.O. Box 150, Markham, Ontario, Canada, 416-294-9340

Laminette II



Circle No. 644, on Reader Service Card







Architectural Signage by

zax

Interior & Exterior Signs Directories Letters

Send for FREE Catalog

ZAX Corporation

17 Otterson Street Nashua, NH 03061









Architectural accessories by Landscape Forms are notable for meticulous design and imaginative use of woods and fiberglass in tables and seats, benches, planters, planter-benches and receptacles. The complete catalog includes more than 5,000 products in a great variety of styles, sizes, materials, and finishes. For more information write to: Landscape Forms, Inc. Route 3, Kalamazoo, Michigan 49001 or call 616/381-0396.

LANDSCAPE FORMS

Circle No. 367, on Reader Service Card

Zoning changes affecting construction

Norman Coplan

A builder with a valid permit has vested rights when the foundation is completed prior to a zoning change barring such a structure. What if he is unreasonably prevented from completion until after the zoning change is made?

A change in the municipal zoning ordinance, which prohibits a property use which had been appropriate prior to such change, cannot be constitutionally applied to a property owner who had acquired a vested right to such use. If, for example, the property owner had completed the foundation for a project which would be barred by the change in zoning, it has been generally held that the builder has acquired a vested right to complete the project for his originally intended use. On the other hand, if the foundation was incomplete at the time of such change, many jurisdictions would hold that no such vested right was acquired, unless the municipality had interrupted construction by unlawfully suspending the building permit or had intentionally or negligently delayed in acting on the application for such permit, until the change in zoning had occurred. In either of such latter events, the courts could estop enforcement of the ordinance as modified.

A different question is raised, however, if a builder fails to acquire a vested right before a change in zoning because of the interference and obstruction of community groups who oppose his intended use of the property. This was the issue litigated in the recent case of Faymor Development Co., Inc. vs Board of Standards and Appeals, 45 N.Y. 2d 560. The plaintiff in the Faymor case was the owner of an undeveloped parcel of land. He applied for a building permit to erect a six-story multiple dwelling which was authorized under the prevailing zoning ordinance, and such permit was granted. Some weeks later, the Building Department revoked the permit when a community planning board raised various objections, but upon appeal, the Board of Standards and Appeals reinstated the permit. Community groups then brought a legal action against the Board to annul its determination. Simultaneously, hundreds of residents of the community proceeded to the work site, surrounded it with parked cars, and refused to allow the owner's construction crews to enter. The owner's efforts to enter his property and resume construction on subsequent days continued unsuccessfully. The owner obtained court orders directing the protesters to cease interfering with the construction, but these orders were ignored. The owner also requested assistance from the police and fire departments in order to gain access to his property, but this assistance was not forthcoming or was ineffectual. The vehicles blocking the site remained in place until the city legislature rezoned the property, placing it in a category which only permitted the construction of one- and two-family homes.

The Building Department then informed the owner that its building permit had been revoked in that the foundation of the

project had not been completed by the date the change of zoning took effect. The owner appealed the decision of the Building Department, pointing out that it had incurred costs and obligations in excess of \$1,380,000 and had been prevented from completing the foundation and thereby obtaining a vested right because of mob action by area residents abetted by the inaction of city agencies who had the duty and obligation to enforce the law. The Board of Standards and Appeals supported the action of the Building Department in revoking the permit on the ground that it had no discretion but was required to strictly apply the provisions of the zoning resolution. The owner then challenged this decision in court, and the lower court ruled that the owner had not acquired a vested right and that he was not entitled to equitable relief because, unlike other precedents relied upon by the owner, "the City had not actively interfered with construction." The court ruled that it could not "be said that the independent action of private citizens, even if illegal, is sufficient to give rise to a vested right."

Upon further appeal, the decision of the lower court was reversed, and the appellate court directed that the building permit be reinstated. The appellate court said:

"... the city relies on the principle that 'A public body cannot be commanded ... to perform an act not authorized by the statute from which it derived its power.'... The city argues that once the property was rezoned, the board ... was only permitted to reinstate the permit if the foundations had been completed....

"(However) petitioner's efforts to proceed with construction were delayed, obstructed and ultimately frustrated because of violent opposition from area residents. They commenced dubious, if not frivolous lawsuits. . . . They took to the streets and physically excluded petitioner from its property in disregard of law and court orders to cease interference.

"But the city played a part as well. Throughout the period city officials displayed a willingness to appease the protesters at petitioner's expense. . . . City police officials stood by while a law-less mob prevented petitioner from vesting its rights under the existing law.

"The rule of law must prevail. The right to proceed pursuant to a valid building permit, no less than any other civil right, is not to be lost because others resort to the streets, or because governmental authorities have improperly placed hurdles barring the appropriate exercise of such right."

In concluding that the building permit should be issued, the appellate court stated:

"In sum, as a result of the combined action by area residents and the action and neglect of public officials, the petitioner was denied all opportunity to proceed with construction as it had a right to do under the permit. In fairness the city cannot now rely on the failure of the petitioner to complete its foundations as a ground for denying reinstatement of the permit."

THE WALL THE ROOF THE TOTAL ENVELOPE



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



Phillips Andover Academy Johnson Hotvedt DiNisco & Associates, Inc., Architects

KALWALI

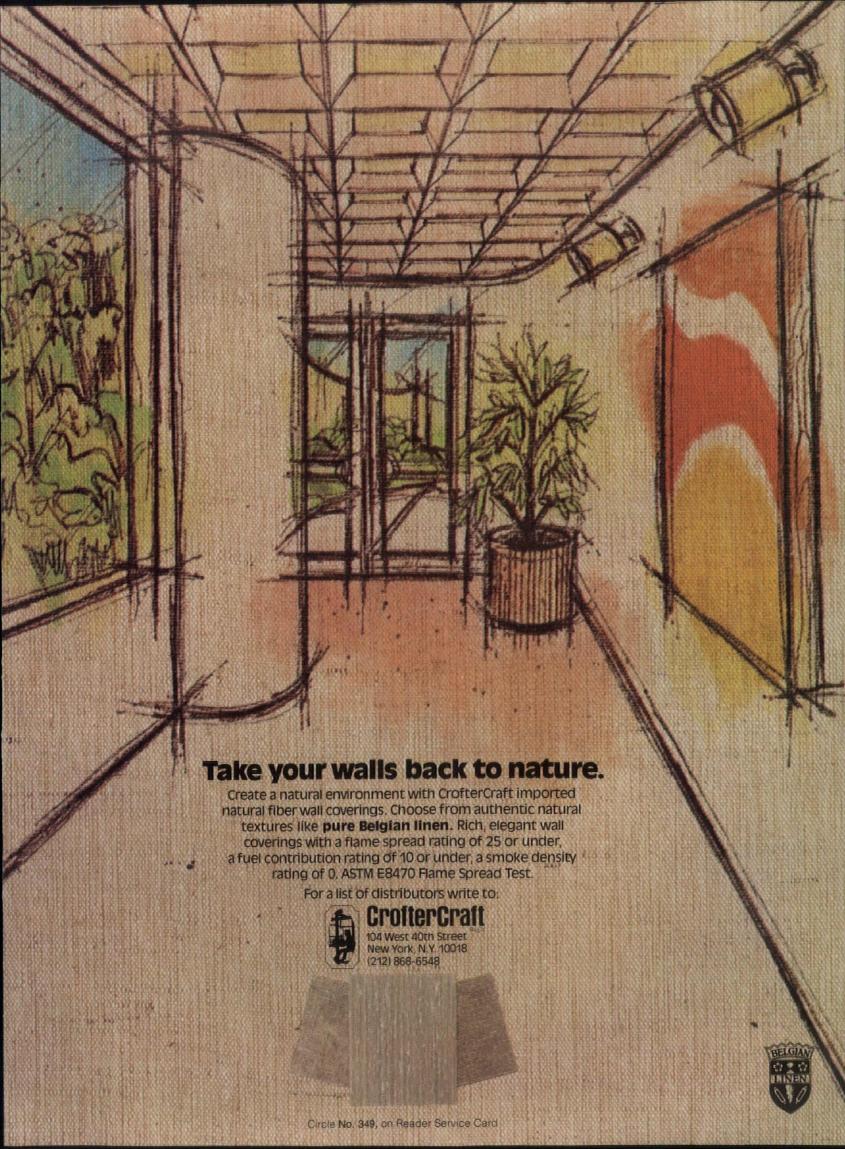


Jackie Robinson Middle School Stull Associates, Architects

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

Kalwall Corporation, 1111 Candia Road, Manchester, NH 03103, 603-627-3861

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



Steel framing saved more than \$150,000 in four-story retirement complex

Local code restrictions for wood frame construction would have limited Casa de los but four stories were needed to provide the stories but four stories were needed to provide the stories but four stories were needed to provide the stories but four stories were needed to provide the stories and the stories were needed to provide the stories and the stories were needed to provide the stories and the stories were needed to provide the stories and the stories are stories are stories. Local code restrictions for wood frame construction would have limited Casa de los amigos in Redondo Beach to only three stories, but four stories were needed to provide the desired 1.36 living units on the land available for this HLID approved senior citizens' project. Amigos in Redondo Beach to only three stories, but four stories were needed to provide the desired 136 living units on the land available for this HUD approved senior citizens' project.

In seeking alternatives, sett leture combining steel framing on the first floor with the desired of the seeking alternatives. In seeking alternatives, a structure combining steel framing on the first floor with three soft wood framing above was shown to have many problems. The accepted solution as

In seeking alternatives, a structure combining steel framing on the first floor with three stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution, a stories of wood framing above was shown to have many problems. The accepted solution is a stories of wood framing above was shown to have many problems and also reduced costs by a stories of wood framing above was shown to have many problems. design prepared with the help of inryco engineers, used inryco/Milcor roll-formed steel stand joist framing throughout. It solved construction problems and also reduced costs by \$155.470

TOD,470.
You Get More Than Just Product When You Specify Inryco/Milcor Steel Studs and Joists:

Architectural and structural design assistance from our experienced staff 1. Architectural and structural design assistance from our experienced staff. 2. Counsel for owner, designer and contractor based on our longtime involvement in a construction — including an honest appraisal of its suitability for your project. 2. Counsel for owner, designer and contractor based on our longtime involvement is steel frame construction — including an honest appraisal of its suitability for your project.

The combination of benefits inherent in our evertence design flexibility. \$155,470.

3. The combination of benefits inherent in our systems: design flexibility that the combination of benefits inherent in our systems accombined that the combination of benefits inherent in our systems.

3. The combination of benefits inherent in our systems: design flexibility . . . thermal energy thermal energy assemblies . . . thermal energy construction speed through advance fabrication of framing assemblies . . . numerous one efficiency capacity to withstand heavy seismic and high wind loads and two-nour tire rated assemblies . . . insurance advantages of non-combustible components.

Let us help you increase construction efficiency and reduce costs on your projects. See the information on our steel framing systems in Sweet's: General Building File, section 5.3 / Inr. (Or write for Catalogs 37-1 and 37-2.) Then give and Light Construction File, section 5.3 / Inr. (Or write for Catalogs 37-1 and 37-2.) and Light Construction File, section 5.3 / Inr. (Or write for Catalogs 37-1 and 37-2.)

nance to discuss their application to your projects.

Milcor Division; INRYCO, Inc.; Dept. J-4069; P.O. Box 393; Milwaukee, WI 53201. us a chance to discuss their application to your projects.

Inryco/Milcor® Steel Framing Systems

Casa de los Amigos, Redondo Beach, California
Architect: Arthur Hugh Kensler, A.I.A., Los Angeles, Invine, CA
General Contractor: J. R. Slaught Construction Park, CA
Framing Contractor: W. C. Froelich, Inc., Buena Park, CA Casa de los Amigos, Redondo Beach, California

Inryco an Inland Steel company A9-37-1





Ceramic tile floors and walkways are used in virtually all shopping malls in the U.S. And Gail Unglazed Brickplate has been used far more often for a combination of reasons:

Slip-Resistant – Gail Unglazed Brickplate has an abrasive surface which helps prevent accidents; Longer-wearing – Gail Unglazed Brickplate outlasts others because the

1481 North Main Street
Orange, California 92667
Phone: (714) 997-9383

1201 Douglas Avenue
Redwood City, California 94063
Phone: (415) 365-6212

millions of shoppers; **Economical Maintenance** – non-absorbent body resists acids, oils, chemicals, and other abuses... cleans quickly without heavy scouring or waxing; **Frost-proof** – patterns and colors can be coordinated, indoors and outdoors; **Widest Selection** – a myriad of natural,

6265 McDonough Drive Norcross, Georgia 30093 Phone: (404) 448-8304 earthtone colors and sizes (2½ x 10, 4 x 8 5 x 10, 8 x 8). For more than 85 years, Gail Brickplate has proven itself all over the world under the most severe conditions. For additional information or the name of your local distributor contact one of our four regional sales offices.

Ceramics Circle No. 344,

388 Pompton Avenue Cedar Grove, New Jersey 07009 Phone: (201) 239-7117

Shown above: 1. Greenwood Park, Indianapolis, Ind. Over 93,000 Sq. ft. of Gail Unglazed Brickplate installed; Architects: Charles Kober Associates; Developers: Melvin Simon Associates, Inc. 2. The Meadows Shopping Mall, Las Vegas, Nevada; Over 45,000 sq. ft. of Unglazed Brickplate (English Red and Leather) specified for floors by architects, Charles Kober Associates; General Contractor: Ernest W. Hahn, Inc. 3. Lougheed Mall, Vancouver, B.C., Canada Architects: Dirrassar, James & Jorgensen; Developers: Trizec Corp., Ltd. 4. Woodland Hills Mall, Tulsa, Oklahoma Architect: Charles A. Kober Associates; Developer: Dayton-Hudson Properties. Gail Unglazed Brickplate on floor surfaces. 5. Capitol Mall, Olympia, Washington; Architects: John Graham & Co., Seattle; Developers/General Contractors: Ernest W. Hahn, Inc., El Segundo, California.







FOAM PRODUCTS COMPANY

the leader in the industry with the first FM approved urethane composite insulation, Millox, proudly introduces its next generation of insulation.

PYROX
PYROX
PYROX
PYROX

WARNING: This product will decompose and/or burn if exposed to sufficient heat or an ignition source of sufficient intensity. It should not be used in exposed or inadequately protected applications. It should be installed according to APACHE specifications.

This product contains asphalt saturated asbestos felt. The Occupational Safety and Health Administration (OSHA), an agency of the United States government, believes that repeated inhalation of asbestos fiber is a health hazard and may cause various diseases including asbestosis and mesothelioma.

Our new non-composite FM Class I approved roof insulation. PYROX has it all.

For more complete information, contact:

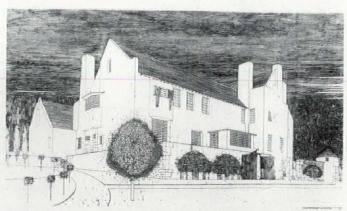


FOAM PRODUCTS COMPANY

MILLMASTER ONYX GROUP . KEWANEE INDUSTRIES, INC.

2025 East Linden Avenue Linden, New Jersey 07036 • (201) 486-6723 **Books**

Big Mac



Hill House, 1902.

Charles Rennie Mackintosh and the Modern Movement by Thomas Howarth. Routledge & Kegan Paul Ltd., London and Boston, 1977, 335 pp., 96 plates, \$37.50.

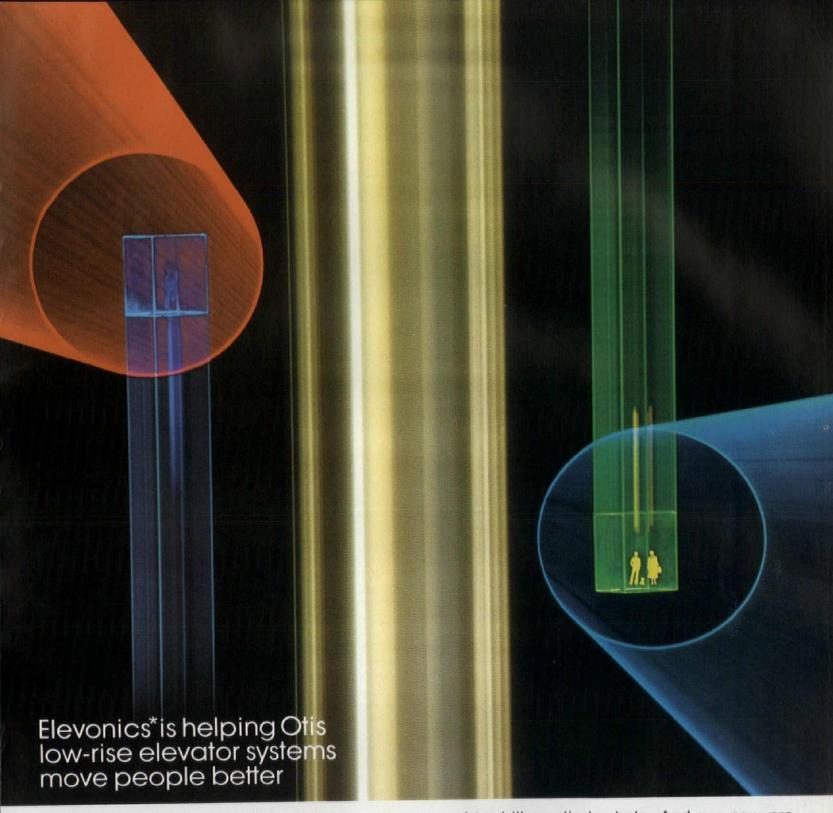
Reviewed by Malcolm Holzman, principal in the firm of Hardy Holzman Pfeiffer Associates, New York.

It is 80 years since Charles Rennie Mackintosh's most prominent buildings were constructed. During this time Thomas Howarth has been the only major chronicler of his achievements. Howarth became familiar with these buildings firsthand from teaching at both the School of Architecture and the School of Art in Glasgow from 1939 to 1946. His 1952 publication of Charles Rennie Mackintosh and the Modern Movement has been the only available text in English that describes in detail the events of Mackintosh's life. The book provides information about his personal dealings and an understanding of the context and circumstances in which he worked. Recently this book has been reissued.

The factual parts of the text are informative and enlightening, but interwoven throughout is an almost unstated critical measuring stick which is not appropriate to Mackintosh's architecture or his philosophical intentions. Howarth makes his position clear in a paragraph about Windy Hill and Hill House, two of Mackintosh's most picturesque projects: "Originality and unorthodoxy in themselves are not always to be commended, though in our present unstable society they are usually considered to be so. Neither have anything whatever to do with the merit of a building—or a painting, or piece of sculpture—as a work of art. It is always the unity, the wholeness of such a work, and the beauty of its form and proportions, the relationship of part to part, which proclaim its true worth. Unity and wholeness in the architectural context, or course, imply fitness for purpose..."

As elements of an architectural philosophy, "unity" and "wholeness" are more than a satisfactory premise, but these were not the underlying concerns or influences in Mackintosh's architecture; they are rather the author's imposed means of measure.

Mackintosh was employed by the successful Glasgow firm of John Honeyman & Keppie, where he eventually became a partner. The design for Queen's Cross Church was his first significant work to be constructed. In a 1945 lecture at the Glasgow School for Architecture, Howarth presented some of his early thinking about this project: "The main façade to Garscube Road is more [Books continued on page 220]



Elevonics engineering is helping Otis® provide the finest in low-rise hydraulic elevator systems. We offer standard, holeless or preassembled units to meet your building needs. They can save you money, construction time and operating costs while giving your passengers quiet, dependable, comfortable rides. And now available is a new, battery-powered emergency system that overcomes power failures. A distinct safetyedge for your building.

Our standard LR hydraulic line, for up to six stops in a range of duties, offers a new, solidstate controller small enough to be wall mounted. The Otis holeless can be installed almost anywhere in new or old buildings because there's no

need to drill a cylinder hole. And our new preassembled unit, for two-story apartment buildings, can usually cut conventional hydraulic onsite installation time in half.

When you're looking for the best way to meet new handicapped codes, modernize a walk-up or add a passenger emergency system in your building, call your local Otis office. We've got answers for the best buy in town.

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

OTIS ELEVATOR COMPANY



BEST® SIGNS MEET CODES!

Both DHEW & ANSI now require raised letters. DHEW - #4.12 (8-78) ANSI - #117.1 MIL SPEC - LP 3870 -TYPE NDD V.A. SPEC

OSHA LOCAL FIRE CODES -RATED "SELF EXTINGUISHING"













SPECIFICATIONS: 6" X 734" X 1/8" BEST "ES" PLASTIC - MEET ALL SPECS ABOVE AND AVAILABLE FROM STOCK IN MORE THAN 40 STOCK DESIGNS.

| QUANTITY | PRICE EACH |
|-------------|------------|
| 1-24 | \$9.00 |
| 25-49 | \$8.25 |
| 50-99 | \$7.50 |
| 100 OR MORE | \$6.75 |

SOME DO NOT!

Subsurface printed, silk screened, hot stamped will no longer meet DHEW nor ANSI specs requirements and are highly flammable.



IN CASE OF FIRE Which sign would you prefer?

The sign on the right was consumed in four minutes time and was made of subsurface printed stock by a large sign maker. The BEST® Sign on the left could not be ignited during the four minutes.

Write for complete catalog or phone your order toll free. 1-800-821-3416

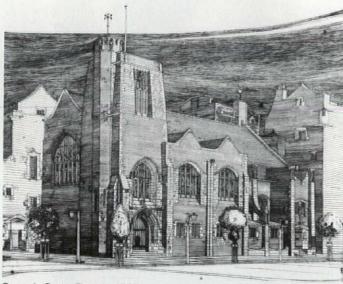


3214 TROOST K.C., MO, 64109

See us in Sweets 10.11a

Circle No. 321, on Reader Service Card

Books continued from page 218



Queen's Cross Church, 1897.

noteworthy for its interesting details than for its general form and proportions, which seem to have been sacrificed largely for internal considerations." Howarth's opinion solidified by the time of his 1952 first edition, and is still unchanged in the current edition. The building is relegated to a chapter on miscellaneous projects: "Queen's Cross Church is not one of Mackintosh's best buildings: it lacks unity and is interesting mainly for its ingenious details and bold constructional features.

In the Church design Mackintosh created a building whose outward appearance was determined by a combination of different elements, rather than one of unified form and proportion. The Church exterior relies on a number of classical shapes and is rooted in the past, but it is significant because it establishes the parameters for his future work: definition of building form through profile, solid massing, and additive geometric forms; variation in fenestration and massing as a means to change apparent building scale and size; asymmetry; and nonhistoric decoration.

In Queen's Cross Church and subsequent structures Mackintosh did not opt for an expressionistic use of new technologycast iron and skeletal frame construction. Instead he developed a unique adaptation of masonry construction employing current structural techniques to further his design intentions. His work was infused with a knowledge of historical conventions but resulted in an admixture of modern and historic elements with a distinctive architectural image. Rejection of the elaborate details of the revivalist and the puritanical vocabulary of the engineers eventually allowed Mackintosh the liberty of producing completely different façades for the same building.

The north façade of the Scotland Street School (another project Howarth placed in the chapter on miscellaneous projects) combines various geometrical elements to determine the overall form. By comparison, the south elevation could belong to another building. The façade is a shear plane ground to eave with special masonry and terra cotta details plus three horizontal rows of unornamented double-hung windows. In the text Howarth describes changes in the exterior design of the building which would make it a better project by providing more "unity" to the

This book is required reading for those interested in Mackintosh, but it leaves obscure the architect's philosophical intentions. Mackintosh's buildings have been difficult for most histo-[Books continued on page 224]



Florida Tile has combined the tradition of Italian craftsmanship with a distinctive blend of nature's own clays. The result is Natura. Here is a classic ceramic tile available in a fascinating spectrum of decorator colors, textures and fired glazes. Perfect for walls and floors. Although Natura is European by heritage, it's made in America. This means it's competitively priced, with a complete back-up inventory to make it available to your discerning clients when they want it. Return this coupon with a \$1.00 check or money order to help defray expenses. We will send you the name of our distributor near you, additional information, and an actual sample of Natura. It's an experience from Florida Tile that you won't want to miss.



Natura is a registered trademark of Sikes Corporation

| I would like additional information concerning Natura tile. Please send me the name of my local Florida Tile source at no charge. | | | | | | |
|---|--------|-----|----|--------|--------|----|
| Enclosed is Natura. | \$1.00 | for | an | actual | sample | of |

Name____

Company____

Address____

City____State____Zip___

orida Tile flomida

Telephone





OUR BLOCKS FLOORED 'EM AT OCEAN SPRAY...BEAUTIFULLY.

As it happened, the people at Ocean Spray got bogged down when it came to choosing a floor for their new Cranberry Museum in

Plymouth, Massachusetts. The floor had to be just right to correctly accent the long-renowned cranberry and it had to be natural, like the cranberry.

Jennison-Wright had the solution: Kreolite Wood Block Flooring, a natural

wood product that combines warm beauty and excellent durability. First of all, the block was pressure treated with a colorless preservative that allowed the rich grain of the wood to show. Then, using a unique installation procedure, the block was installed with a

Circle No. 362, on Reader Service Card

provision for expansion around each block in the floor and finished with a durable transparent surface material.

Kreolite Wood Block Floors fit anywhere: shopping centers, museums, fine restaurants, offices and malls. Kreolite Wood

offices and malls. Kreolite Wood
Block Floors are durable, incredibly
strong and very luxurious to look
at and walk on . . . for years
to come and go, beautifully.

Please write us. We'd like to tell you more.



P.O. Box 691 • Toledo, Ohio 43694

Also in Sweet's Catalog and your Yellow Pages

Nobody orchestrates your specifications like Cohama Specifier

Harmony of design and color. That's what specification of the right contract fabric is all about. For Drapery, Bedspread, Upholstery, Wallcovering. We

all into a single symphonic composition.

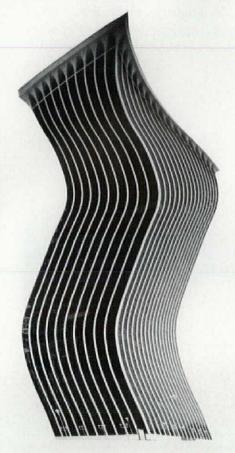
Traditional. Classical. Contemporary. Our repertoire is unlimited. But, we also custom compose. Among our newest fabric hits is Nocturne...an all-nylon composition in three striking solids of 17 colors each and a textured multi-fabric in 18 dreamy colors. For a full symphony or a symphonette...we're ready to wield the baton to orchestrate your special requirements.



295 FIFTH AVENUE, NEW YORK, N.Y. 10016 • 212-564-6000 • UNITED MERCHANTS AND MANUFACTURERS, INC.

IF YOUR BUILDING DOESN'T MOVE ...PAINT IT.

IF IT DOES MOVE, and we know it does, COAT AND SEAL IT WITH VIP WATERPROOF COATINGS.



We know the dynamics of any building will cause leakes at seams and joints, and cracks in masonry and concrete. That's why VIP is what it is - An extremely flexible finish that lets your building move all it wants to. VIP COATINGS and SEALANTS seal and protect masonry and concrete like nothing ever has before, and for just pennies more than paint. VIP TER-POLYMER COATINGS, will seal, waterproof and protect your building for five full years, guaranteed!!!!!! For exposed masonry and poured in place concrete VIP OMBRELLA CLEAR and SEMI-OPAQUE are also available. For information and specifications on the full line of VIP Coatings, Sealants, and Roofing Systems, call Pete Anderson 305/592-6045, or Mike Cox, 415/653-9633. You'll be surprised how fast they can move to help you evaluate your buildings.

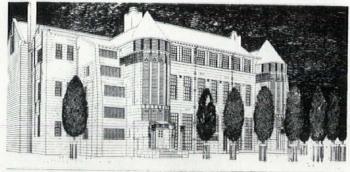
VIP-The leader in Ter-Polymer Technology. . . since 1958.



VIP Enterprises, Inc. 7245 N.W. 43rd St. • Miami, Fla. 33166 Phone (305) 592-6045

VIP West, Inc. 1287 - 66th St. • Emeryville, Ca. 94608 Phone (415) 653-9633

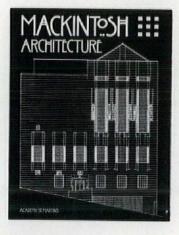
See Sweet's Catalog 7.9/Vi or contact VIP for your individual copy. For product availability, call Sweet's BUYLINE 800-447-1980. In Illinois call 800-332-4410. Books continued from page 220



Scotland Street School, 1904

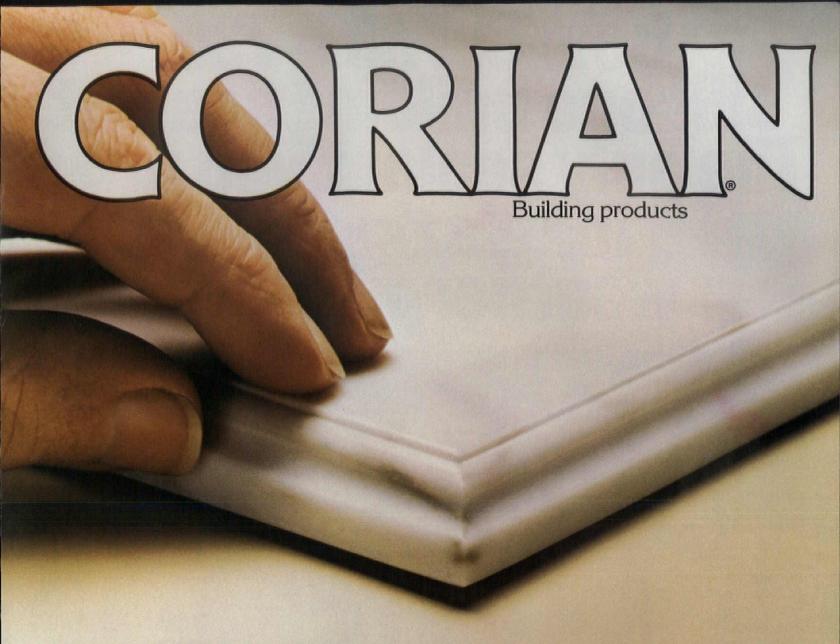
rians to "fit into" the development of the "Modern movement" in architecture. He is well known today because of the revival of interest in the Art Nouveau period and the major role he played in it as a decorative artist, furniture designer, and watercolorist.

Mackintosh's architecture was not Modern nor 19th Century, and it cannot be measured by the standards of either; rather it was a transition and resolution between the two. Perhaps his work will be critically revaluated during the current era, when many architects are addressing or are confronting similar conflicts between concerns generated during the "Modern movement" and current ideas about historical references. Mackintosh's work is not even vaguely similar in "look" or "style" to today's architecture, but his intentions and impulses to resolve conflicts were.



Mackintosh: Architecture, edited by Jackie Cooper with an introduction by Barbara Bernard. St. Martin's Press, New York, 1978, 111 pp., heavily illustrated, \$15.95.

This large-format, 111-page volume catalogs the body of Charles Rennie Mackintosh's architectural achievement, which spanned the years between 1894-1906. With only a very brief foreword and introduction, the remaining contents are divided into three sections, arranged chronologically, that document with visual material and short, factual statements the 14 completed buildings, the interiors and alterations, the unexecuted designs and competition entries. This book, unlike the Howarth volume reviewed above, does not attempt an exhaustive, scholarly analysis of the work of Mackintosh, but it could serve as a handsome survey for anyone wanting a quick introduction to the brief 30year career that produced one of the most important bodies of work of the transitional period from 19th- to 20th-Century ar-



CORIAN® makes your most imaginative ideas suddenly practical.

With opalescent beauty. Easy care. Wood-like workability.

CORIAN® building products are your ideal choice for interior horizontal and vertical surfacing applications where you need a combination of beauty, durability and easy care.

Add to this a workability that approaches that of a fine hardwood, and you can quickly see that many of the imaginative customizing ideas you may have considered and abandoned are now beautifully practical with CORIAN.

All this is possible because CORIAN, unlike laminated or coated synthetic products, is solid, with color and pattern all the way through.

The result is a deep, opalescent quality...a smooth, pleasing touch...exceptional stain and impact resistance...plus simplified care and repair.

Quite simply, CORIAN brings you "practical elegance"...practicality with a flair. And isn't that really at the heart of every design problem?



CORIAN* is available in sheet stock for kitchen and bath countertops, wall wainscoting, bathtub and shower surrounds and custom surfaces. One-piece molded tops and bowls of CORIAN for kitchen, bath or bar also available. For more information, write: Du Pont, Room 36980, Wilmington, DE 19898.

*CORIAN is Du Pont's registered trademark for its methacrylate building materials.

Circle No. 300, on Reader Service Card





Dow Corning® 795 silicone building sealant. Our one-component, low-modulus, architectural-grade sealant. It has excellent adhesion, without any primer, on glass, metal, masonry, plastic, and just about any other building material you can name.

Now *one* sealant does conventional and plastic glazing, perimeter sealing, and weatherproofing of expansion and control joints on practically any building material. Or combination of materials.

And like all Dow Corning silicone sealants, it offers you unmatched weatherability. No softening, shrinking, hardening, cracking, or pumping out of joints like non-silicone sealants.

The low-modulus/high-elongation capability of Dow Corning 795 silicone building sealant allows for ±50% joint movement. And it will retain its original elastic properties for many years in sun, rain, wind, summer heat and winter cold.

Specify Dow Corning 795 silicone building sealant. Now the *only* building sealant you need. From the world's leader in silicone technology.

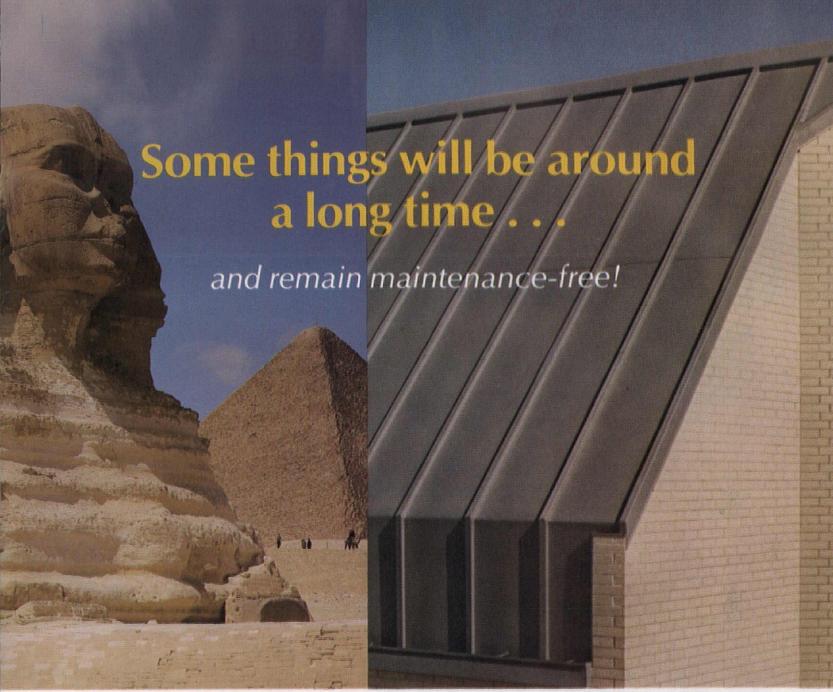
To learn more, use Sweet's "Buy-Line" to find your Dow Corning representative. Or write us for more detailed information. Dow Corning Corporation, Dept. B-9026, Midland, Michigan 48640.

©Copyright Dow Corning Corporation 1979

DOW CORNING



DOWCORNING



National Federation of High School Associations Headquarters, Kansas City, MO., Architect: Klene & Bradley Partnership, Topeka, KS., Installation: Kaw Roofing & Sheet Metal, Inc., Kansas City, KS.

MICROZINC 70

factory-formed roofing systems

You'll never encounter call-back problems with Microzinc 70 roofing systems. Install them and forget them. And that includes coping, flashing, fascia and mansards!

Microzinc 70, widely specified for its beautiful pre-weathered patina, is even better known for its maintenance-free qualities—no leaks, no run-off stains and no rotted materials.

Whether you specify Batten-seam or Standing-seam, our LOK roofing systems are custom engineered, factory made and delivered directly to the job. Installation is so simple it greatly reduces labor costs. Other on-site savings include - no cleaning, no priming, no painting. And no soldering needed.

For further information, write or call Ed Pejsa at 615/639-8111.





Greeneville, Tennessee 37743 615/639-8111

Design flexibility and good engineering have been major objectives in the development of Blum railing systems. Components of the several systems are interchangeable to offer the designer the widest possible selection of metal, acrylic/wood and plastic components. Examples shown here illustrate the variety achieved by designers and executed through the ability of metal fabricators.

Blum's comprehensive catalogs supply data and methods for

engineering design as well as clear and complete details of stock components. Thus the designer can specify Blum railings for style and appearance, for economy and structural soundness, and design railings to meet applicable codes or safety requirements.

All components are carried in warehouse stock in quantity and are available through architectural metal fabricators in all parts of the United States. Refer to Sweet's catalogs or request Catalog 13.

RAILING SYSTEMS

Carlstadt*

Acrylic/Wood Colorail[®] Connectorail[®] Ornamental



JULIUS BLUM & CO., INC., CARLSTADT, NEW JERSEY 07072 N.J. (201) 438-4600 • N.Y. (212) 695-2236 • TELEX 13-3491

THE MOST COMPLETE SOURCE FOR ARCHITECTURAL METALS

Member of NAAM, NOMMA, NAAD & Steel Service Center Institute



Acrylic/Wood-KOKOSING OFFICE BUILDING



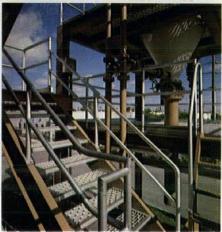
Colorail-CARD EMPORIUM



Ornamental - BROOKS BROTHERS



Connectorall-HICKORY HOLLOW MALL



Connectorail-WASTEWATER PLANT

KOKOSING OFFICE BUILDING, Fredericktown, Ohio— Arch/Designer: Kokosing Construction Co.; Fabr: The Ornamental Iron Work Co.

CARD EMPORIUM, New York, New York—Arch: Lee Kennedy; Fabr: Allied Bronze Corp.

BROOKS BROTHERS, Dallas, Texas— Arch: Mayer, Garfield, Gawron & Associates; Fabr: Trinity Brass & Copper.

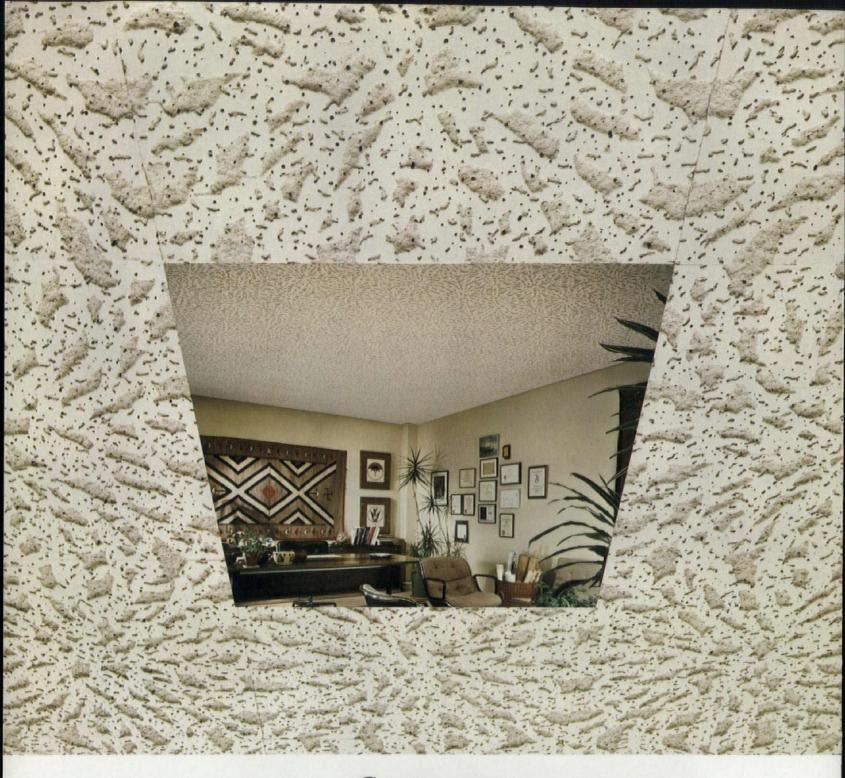
HICKORY HOLLOW MALL, Nashville, TN = Arch: Cooper Carry & Associates, Inc.; Fabr: Justice Steel Company.

17TH STREET WASTEWATER TREAT-MENT PLANT, Ft. Lauderdale, Florida — Arch/Engr: Ross, Saarinen, Bolton & Wilder; Fabr: Dixie Metal Products, Inc.



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

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



Corona. Above all, elegant.

It's the new designer ceiling from Conwed. And it's beautiful. The deeply eroded pattern is completely registered for a truly monolithic look. The multidirectional sculptured design creates a radiating pattern which is visually intriguing from any angle or viewpoint. The warm ivory tone and subtle shadows produce a look that builds the elegance and

strength of your best designs.

When you want beauty above all, you

want Corona. From Conwed. Available in standard 12" x 12" concealed tiles and 2'x2' reveal edge tiles or U.L. Time Design Fire Rated, all manufactured to assure excellent dimensional stability and acoustical control, as well as aesthetic appeal. For more information, write or call

Conwed Corporation, Ceiling Products Division, 332
Minnesota Street, P.O. Box
43237, St. Paul, Minnesota 55164. Phone: (612) 221-1184.

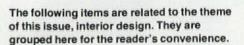


innovative products for better environments



Progressive Architecture

Products and literature



Interior design Products

Radial rubber floor tile has 1-in.-diameter raised studs to allow spilled liquids to drain off the walking surface and provide traction. The tough, resilient surface contributes to safe footing and makes the tile suitable for high-traffic areas, such as air terminals, shopping centers, ramps, elevator lobbies, and stair landings (stair treads are also available). High profile (0.50-in. raised design) is suitable for areas requiring exceptionally safe footing; low profile (0.025-in. raised design) can be used in areas having light vehicular traffic, such as shopping carts. Tiles are 18 in. square and come in ten solid colors. Flexco Division of Textile Rubber Co., Inc. Circle 129 on reader service card

The Satinesque Designer Collection of textured wallcoverings in fabric-backed vinyl have the look of grasscloth, burlap, corduroy, tweed, linen, leather, silk moiré, and other materials. Subtle stripes, plaids, and patterns are primarily in gray, beige, and oatmeal, with soft pastels also available. Metallics with a muted sheen are in the group. Columbus Coated Fabrics. Circle 130 on reader service card

'Natural Classics' Vicrtex vinyl wallcoverings include linens, wools, wool knits, and woven cottons. Shown is IC-709, an Indian cotton in a textured weave. L.E. Carpenter and Co. Circle 131 on reader service card

The Sof-Tech stack chair, designed by David Rowland, is made of plastic-coated meshlike springs, of the type formerly concealed in furniture, that are thin enough for stacking and soft enough for comfort. Frame finishes include polished chromium and powder coatings in a choice of colors. The powder-coated versions can be used outdoors. An optional detachable upholstery sleeve is also available. The chairs stack 30 high in about 5½ ft of space. Thonet Industries, Inc.

Circle 132 on reader service card



Radial rubber floor tile.



Sof-Tech chair.



Chicago Chair.



Energy distribution system.



Additions to the Le Corbusier Collection are "Siege Tournant," a padded stool with or without backrest, "Siege Salle de Bains," a bathroom stool with a removable seat, and two- and three-seat sofas to coordinate with LC/2 and LC/3 armchairs. The stools, designed in 1929, were part of a catalog of metal furniture designed by Le Corbusier in collaboration with Pierre Jeanneret and Charlotte Perriand. They are shown with existing classics in the collection. Atelier International Ltd.

Circle 134 on reader service card

Energy distribution system, part of Action Office® system, provides two- or four-circuit capacity, with outlet flexibility. Designed for use with power supply sources in walls, ceiling, columns, or floors, it distributes power only as far as needed. The system consists of wire man-



Satinesque wallcovering.



Natural Classics.



Le Corbusier Collection.

agement via raceways below panels and multioutlet electrical distributors that provide additional receptacles at varying heights on the panel. It meets National Electric Code standards and is Underwriters Laboratories listed. Herman Miller, Inc.

Circle 135 on reader service card

Oak executive series, Circa 90, includes executive and secretarial desks, credenzas, bookcases, conference and occasional tables, executive and side chairs. Designed by Carlos Lopez-Benitez, the group has rounded edges and finishes of oak and oak veneers. A correlated lounge group is available. Monarch Furniture.

Circle 136 on reader service card

Contract upholstery fabric, circular knit of 100 percent nylon, is a 54-in.-wide textured fabric available in two patterns, Majestic and Premier. Colors of both include a wide range of solids and heathers. Pliability of the knit makes it easier than woven fabrics to mold around contours and edges of chairs and sofas. Collins & Aikman Corp., Cavel Div.

Circle 137 on reader service card
[Products continued on page 234]

Masterpiece.

Consider the bird nest. Functional perfection. Something you as an architect strive for along with the esthetics that give your design pleasing form. We're reminded of your goal each time we produce signage for you.

At Matthews, we've developed the technical expertise and production capability to make your ideas sing. We'll produce one sign or an entire signage system, and we'll do everything from fabrication to installation. Whatever it takes to bring your designs to signage. Interior or exterior.

We offer a wide range of signage; post and panel assemblies, monoliths, pressure sensitive legends, internally lighted signs, symbol signs, metal letters and cast tablets and plaques. As well as specially produced custom signs. Many of our signs are available in a variety of materials and all offer dozens of letterstyles and sizes.

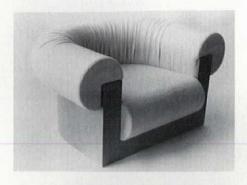
If you'd like more information on how we can help bring your designs to signage, call (800) 245-6574, toll free, or write Matthews, 1315 West Liberty Avenue, Pittsburgh, PA 15226.

Matthews

Circle No. 368, on Reader Service Card



Products continued from page 232



Circolo lounge chair, designed by Vignelli Designs, has a lacquered or veneered wood shell with flexible foam padding and 10-in. foam and kapok cushion. Chair height is 26 in.; seat height is 16 in. Circolo is also available as a 72-in.-wide settee or a 96-in.-wide sofa. Sunar Ltd. Circle 138 on reader service card

The String, a ceiling-attached floor lamp, has a bottom weighted to create tension and adjusted to hang just off the floor. The light fixture, in black only, glides along a black nylon cord to desired height. Light is controlled by a foot switch on the electric cord. Koch & Lowy. Circle 139 on reader service card

Office, lounge, and conference room tables, with wood-grain tops and leg panels, have top edges banded to protect the surface. Laminated plastic tops resist burns, stains, and scratches. Tops are supported on square, chromium finished tubular steel legs. Virco Manufacturing Corp.

Circle 140 on reader service card

Lounge seating group 122 consists of 36-in.-wide chair, 62-in.-wide settee, and 90-in.-wide sofa. Knife-edge cushions on seat and back are reversible. Covering is leather, suede, or customer's own fabric. Cumberland/Orsenigo. Circle 141 on reader service card



Focus 1 chairs, designed by Earl Koepke, follow body movements to support the spinal column in any working position. There are 15 models suitable for executive to clerical needs. Chairs have five-point oak bases and are available without arms or with arms that are curved oak or upholstered. Kimball Office Furniture Co. Circle 142 on reader service card

Modular lounge seating is upholstered over high-density foam for firm seating. Units are joined in the field by simple u-shaped channels. Chair with or without arm, and inside or outside wedges can be joined in a variety of configurations. Hiebert, Inc.

Circle 200 on reader service card

Folding tables, in 19 top sizes, have tubular steel base and column, equipped with concealed locking mechanism. Aluminum skirt is finished in black epoxy, with protective bumpers on each corner for stacking. Folded table stacks in 3½ in. of space. Berco Industries. Circle 201 on reader service card

Hardware dining/conference tables, designed by Mario Bellini, have walnut, acacia, or ashwood bases with either glass or wood tops. Because of their simplicity of design and materials, they complement many seating styles. Tops are available either round or rectangular. Atelier International, Ltd.

Circle 202 on reader service card

String wallcoverings, called "Kind Regards," consist of ten vertical yarn variations and five overprint patterns, which can be coordinated with five background yarn solids. Prints are 28 in. wide; solids are 30 in. Gilford Inc. Circle 203 on reader service card

Lounge seating, a companion group to office and conference seating of Maslan 9000 series, is made up of one-, two-, and three-seat modules, with or without arms. They can be combined to form longer seating using a common arm. Also available are tables and benches. Fixtures Manufacturing Corp.

Circle 204 on reader service card

All-wood office furniture in the Rondo Plus group includes desks, credenzas, and tables in a choice of drawer arrangements to meet individual needs. L-shaped executive and secretarial desks have a one-piece side panel. Woods are natural grain walnut or oak. Domore Office Furniture, Inc., IKD Corp.

Circle 205 on reader service card

Literature

Office and lounge seating and tables are illustrated in color, with brief descriptions, in a 10-page folder. Office chairs, with or without arms, have swivel, five-prong bases and adjustable seats. Lounge groups, including leather- or vinyl-topped tables, are modular and easily interchangeable. Edges of seating are rounded for added comfort. Euro-Chair of America.

Contract Carpet Specifications Guide, in a revised edition, explains the step-by-step process of specifying carpet. Current government regulations are included. Carpet index lists approximately 250 performance-certified lines. Various carpet and yarn manufacturing methods are explained in layman's terms. Badische Corp. Circle 207 on reader service card

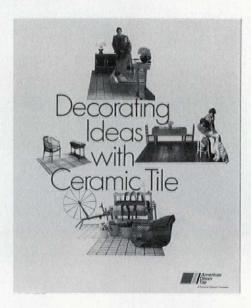
Resource list of residential/commercial carpet using Anso fibers provides mill name and address, fabric name, type of construction, and fiber content. Recently introduced products are listed first, followed by a list of carpets made of Anso and Anso-X fibers. Allied Chemical. Circle 208 on reader service card

Open office system components and features are described and illustrated in a 16-page full-color brochure. Features include: flexibility of panel and cabinet arrangement; acoustical panels for noise control and privacy; preengineered power and communication systems; paperwork storage adaptability to suit tasks; and ambient and task lighting. American Seating Co.

Circle 209 on reader service card

Mipolam® floor and wall coverings with high PVC content are said to provide unequaled indentation recovery rate, excellent resistance to abrasion and chemical attack, and dimensional stability. Flooring comes in 40 colors and patterns, with antistatic and conductive grades available. Wallcoverings are Wall System T, 4′ x 8′ rigid panels in standard white; and flexible Fein 2000 in rolls 3′4″ x 34′6″, available in 15 colors. Specifications for floor coverings and wall coverings, and list of chemicals to which floor coverings are resistant are provided in eight-page brochure, along with product descriptions and illustrations. Dynamit Nobel of America, Inc.

Circle 210 on reader service card



'Decorating Ideas with Ceramic Tile.'

Sixteen-page color brochure shows pictures of design ideas for kitchens, baths, living rooms, foyers, and recreation areas. Shown are suggestions for color coordination of tiles and bathroom fixtures. The brochure is 50¢ a copy from: American Olean Tile Co., Lansdale, Pa 19446.

'Modular Grid Ceiling System' is a 4-page color brochure describing metal framing from which decorative baffles or fins can be suspended vertically. Lighting fixtures, dividers, and other components can be attached easily to the grid. There is also easy access to mechanical and electrical services. Power-Strut, Van Huffel Tube Corp.

Circle 211 on reader service card
[Literature continued on page 238]

Bally created the state of the art

...backing your judgement all the way when you specify Bally Prefab Walk-In Coolers/Freezers and Refrigerated Buildings

CLASSIC EXAMPLE: WHAT WE DO WITH OUR PATENTED SPEED-LOK®.

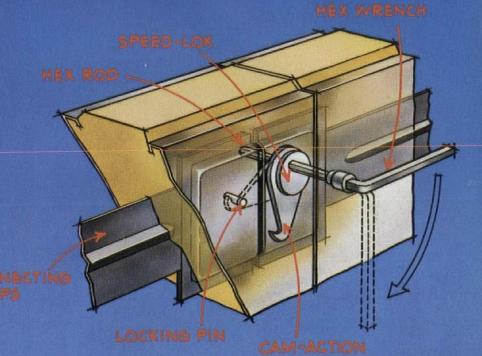
We make it an intricate part of every panel, along with a patented steel strap joining system that breaks records for fast, easy and accurate assembly of Bally Walk-In Coolers/Freezers or Refrigerated Buildings. The "lock to lock to lock" straps gird the entire perimeter of every Bally Prefab. This provides maximum strength and an absolutely airtight panel seal that requires no caulking. It also makes it possible for Bally panels to be easily taken apart for enlargement or relocation of the Prefab. Bally Walk-In Coolers/Freezers/Refrigerated Buildings can be assembled in any size for indoor or outdoor use. Refrigeration systems from 50°F. cooling to minus 40°F. freezing. Subject to fast depreciation and investment tax credit (ask your accountant).

Write today on your letterhead for our 182-page Working Data Catalog or see your Sweet's Catalog 11.23b/Ba for immediate information.

Specify a Bally-it's something special.



Circle No. 315, on Reader Service Card







Bally Case & Cooler, Inc., Bally, Pennsylvania 19503

Phone: (215) 845-2311

ADDRESS ALL CORRESPONDENCE TO DEPT PA-9



For safe footing and good looks in high traffic interiors

This unique new rubber floor tile is designed especially for the interior floors where safe footing is required and handsome, easy to maintain appearance is desired. 1" diameter raised studs molded onto a special compound of tough, extra resilient rubber provides greater traction by allowing dirt and spilled liquids to drain off the walking surface. Extra resilience contributes substantially to safe footing,

Radial rubber tile is recommended especially for high traffic areas such as air terminals, shopping centers, ramps, elevator lobbies and stair landings. It is made in two profile designs and in overall

Radial Rubber Stair Treads

have exclusice metal reinforced nose. Available in round and square nose.

thicknesses of 1/8" and 3/16" with smooth back, and .210" and .235" with Acoustibak™.

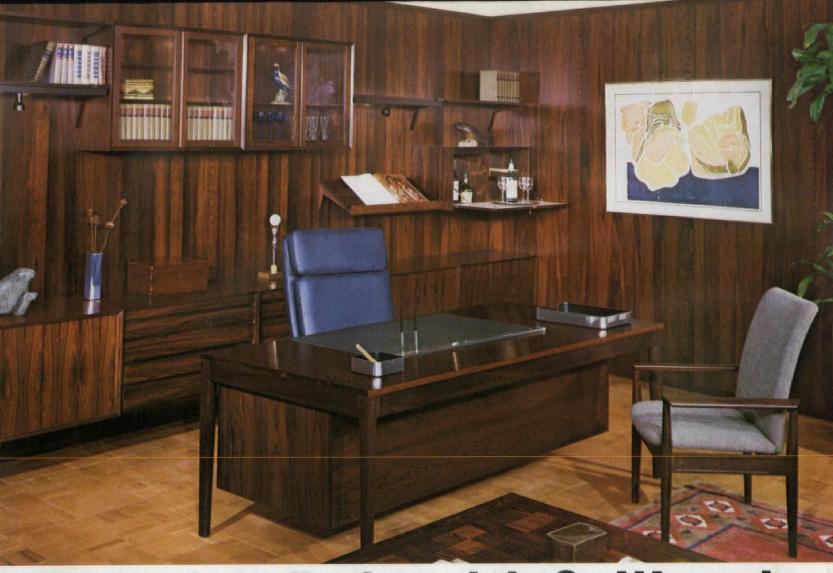


Flexco also makes matching radial rubber stair treads as well as a complete line of rubber and vinyl treads, risers and stringers, rubber tile, conductive vinyl tile, cove base and vinyl carpet accessories.

For samples and complete technical information write or call (toll free) 1-800-633-3151.

For areas which require Class A fire rating, Flexco can supply on special order Radial Tile, Stair Treads, and accessories which meet ASTM-E84-77A flame spread rating of 25 or less and smoke density of 75 or less.

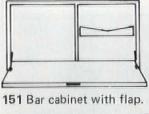
FEX® division of TEXTILE RUBBER COMPANY, INC., Tuscumbia, Alabama 35674

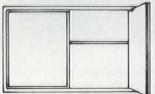


Seeing is believing, right

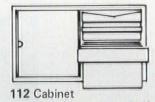
The most noticeable feature of CADO furnishings is eminent beauty, which is the result of combining the highest grade woods with today's finest craftsmanship. But there's a more important reason to specify award-winning CADO furnishings. And that's design. You see, CADO is a component system, where each unit functions individually, or combines to create an efficient and versatile office environment. The advantage? You can create according to exact specifications for display, storage or entertainment. From rugs, furnishings and lighting to our renowned wall systems, a CADO office is the unity of form and function, not just a beautiful room.

Shown are a few of the many components available to create a CADO wall system.

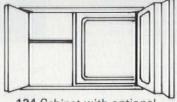




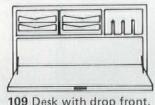
124 Cabinet with doors.



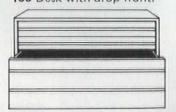
with filing, tray, shelf.



134 Cabinet with optional refrigerator. For information on the complete line of CADO office



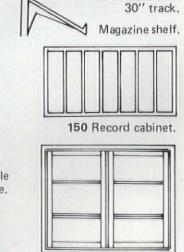
109 Desk with drop front.



110-F Chest of drawers with file drawer for legal or letter size.

furnishings, please contact: CADO/ROYAL SYSTEM, INC., Dept. A, 155 Helen St., So. Plainfield, NJ 07080. Showrooms: 979 Third Ave., NYC/Atlanta/Cincinnati/ Los Angeles/San Francisco/Denver/Houston/Seattle/

Miami/Chicago/Dallas/Philadelphia.



139 Cabinet with wooden framed glass doors.



RS-204 Fluorescent light To be used with Products continued from page 234

The following items are related to the article on acoustics appearing in this issue beginning on page 198. They are grouped here for the convenience of the reader.

Acoustics products

Soft Look ceilings, with a nonglare, porous, modacrylic fabric surface on a mineral fiberboard substrate, absorb 60 percent of the sound striking them and reduce sound transmission into adjacent areas. Tegular edges of the 2' x 2' panels, which can be installed in any type of suspended grid system, extend ¹³/₃₂ in.

below the grid. Armstrong Cork Co. Circle 212 on reader service card

Acoustical panels for open-plan offices have a fiberglass core and a dimpled surface to provide a greater area for sound absorption. An aluminum foil back is bonded to the panel. Privacy 2[™] panels are designed for maximum absorption of less desirable high-frequency sound in the range of 1000–8000 cps. American Seating Co.

Circle 213 on reader service card

Acoustical mineral fiber ceiling panels, Le-Baron and Texture-Tone, have a Class A fire rating. The 2' x 2' lay-in panels, for residential use, are ¾-in. thick. Acoustical rating for both is NRC .65–75, and they meet Federal Specification SS-S-118A. The Celotex Corp., Building Products Div.

Circle 214 on reader service card

Background Sound System to mask sound has two basic components. The Sound Center transistorized control system comprises a sound generator, a set of 1/3-octave band filters, and a power amplifier, enclosed in a compact cabinet. The Speaker Array loudspeakers and transformers, in circular aluminum baffles, are suspended 10 to 15 ft apart in the overhead plenum space and provide uniform masking sound. Individual speaker adjustments are possible to meet specific needs. Owens-Corning Fiberglas Corp., Building Materials Group. Circle 215 on reader service card

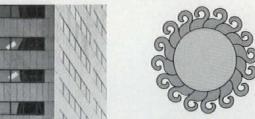
Standard acoustical panels, with a noise-reduction coefficient of .85, also have a Class A fire rating. The aluminum-framed panels are covered with flame-resistant, color-fast polyester fabric in a variety of colors, stripes, and graphic designs. Panels are 2 in. thick, 48 in., 62 in., or 80 in. high, and 1 to 5 feet wide in 1-ft increments, except for graphic designs, which are 62 in. or 80 in. high, 2 to 4 ft wide. Haworth. Circle 216 on reader service card

Vicracoustic 80 panels are lightweight, noise-absorbing, 1-in.-thick panels of dimensionally stable glass fiber with rigid edges. They come 47 in. wide, 95 or 119 in. long, or in custom sizes. The panels are mounted with two clips to wall-mounted Z-bars, or directly to the wall with adhesive, magnets, or Velcro. Sound absorption is said to be excellent in middle range and exceptional at high frequencies. L.E. Carpenter. Circle 217 on reader service card

Vandalproof KrinkIglas® combines reinforced, impact-resistant, transparent fiberglass and a metal inlay, which is sandwiched between plastic layers. It provides vandal protection in outdoor installations such as windows, skylights, canopy roofs, fencing, and railings. Various thicknesses and over 75 color combinations are available. Dimensional Plastics Corp. Circle 218 on reader service card



Insul-Art™ acoustical products, with cores of glass fiber materials for sound control, include wall panels and ceilings suitable for offices, schools, auditoriums, gymnasiums, and other commercial buildings. Wall panels ranging up to 5′ x 12′ x 2″ thick are available straight or curved, with square-cut, beveled, or radiused edges, and square-cut or radiused corners. Ceilings include coffers, lay-in panels, and duct-type tubes. Company's standard fabrics [Products continued on page 240]



An ever-changing panorama of natural texture changes as the sun goes around. Truly, the perfect balance between architecture and nature.

Natural Buckingham Slate®

The award-winning 100 WILLIAM STREET building in Manhattan.

Architects: Davis Brody & Associates and Emery Roth & Sons

Owner-builder: Sylvan Lawrence Supplier: Domestic Marble & Stone Corporation

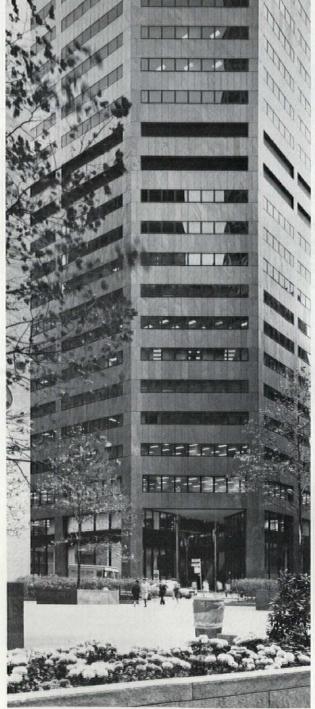
Photo: Robert Gray

The fine design of this stately building is well executed in the rich individuality of Buckingham Slate. Fine grained density, hardness and soundness assure unfading permanence. Natural qualities conserve heating and cooling energy...saving big dollars of fuel costs. Maintenance free durability saves even more long-term dollars. Available in both interior and exterior paneling, flooring and paving. Write or call for information or see our catalogs in Sweet's Architectural Files or B.S.I. Stone Catalog.



Buckingham-Virginia Slate Corporation

4110 Fitzhugh Avenue Richmond, Virginia 23230 Telephone: 804/355-4351



Circle No. 433, on Reader Service Card



Architectural direction in soft radial contours expressed in oak.
Endless applications for patient chair, guest chair, lounge seating, bench and tables. Totally engineered for comfort, support and ease of maintenance. Scaled for today's interiors. Gunlocke and William Sklaroff. Perfect harmony of fine design, function and the needs of the human form. the human form.

> THE GUNLOCKE COMPANY Wayland, New York 14572 (716) 728-5111 A Sperry and Hutchinson Company

Showrooms:
919 Third Avenue,
New York (212) 832-2202
11-114 Merchandise Mart,
Chicago (312) 642-1138
9009 Chancellor Row,
Dallas (214) 631-5207
210 Pacific Design Center,
Los Angeles (213) 657-8922

Circle No. 348, on Reader Service Card

Products continued from page 238

and vinyls, custom materials, or customer's materials can be used for surface treatment. Insul-Coustic Corp.

Circle 219 on reader service card

Acoustics literature

'Acoustical Ceilings: Use & Practice.' Discusses sources of sound, its reduction by absorption, and the basic properties common to all acoustical ceiling materials. Describes tests used to evaluate materials for sound and other properties such as light reflectance, flame spread, fire resistance, and maintenance. Instal-

lation information covers job site conditions, methods of installation, and thermal insulation aspects. A glossary explains the terminology. Copies, at \$2 each, are available from: Ceilings & Interior Systems Contractors Association, 1800 Pickwick Ave., Glenview, II 60025.

Acoustical ceiling suspension systems described in a 12-page brochure include exposed tee and concealed grid systems. Fire-rated suspension systems and Coordinator modular systems, which can be installed flat, coffered, or pyramidal, are also included. Donn. Corp. Circle 220 on reader service card

'National Study of Office Environments: Do They Work?' Report, based on a questionnaire designed by Louis Harris & Associates and on

personal interviews by their staff, presents a summary and a detailed analysis of their findings, tabulation of results, and explanation of the methods used. The 130-page report is the result of interviews conducted with 1047 office workers, 209 executives responsible for office planning, and 225 office design professionals. Areas of questioning were: job satisfaction; job performance; satisfaction with tools, equipment, tasks, and workspaces; participation in office planning and design; and anticipation of changes on the job and in the workplace. Steel-

Circle 221 on reader service card

Acoustical Systems catalog for 1979, 24 pages, describes the various acoustical ceiling panels available and provides thermal conductance data in tabular form. Specifications, insulation practice, and maintenance procedures are included. Color photographs show typical ceiling installations. The Celotex Corp. Circle 222 on reader service card

'Plywood Construction for Noise Control' is a 12-page publication about plywood floor/ceiling assemblies and wall systems for the effective reduction of sound transmission. It includes information on the types, control, and measurement of noise and the results of acoustical tests on several plywood construction systems. American Plywood Association. Circle 223 on reader service card

Soundsoak[™] fire-resistant and Soundsoak 85 wall panels are shown, in an installation, in a six-page brochure. Physical properties, and installation drawings and information for both types are also provided. The 1-in.-thick Soundsoak 85 panels absorb 85 percent of the sound striking them. Both panel types are available in six neutral, natural colors and six accent colors. Armstrong Cork Co. Circle 224 on reader service card

The Action Office Acoustic Handbook. A guide to controlling noise in open plan offices, this handbook is a source of information for the manager, planner, and designer of these facilities. It discusses objectives, noise sources and their control, and how sounds travel. A checklist helps to determine where acoustic problems are and how to adjust elements in the area to eliminate intrusive sounds. Special problems and possible solutions are also covered. There are a glossary of terms and a list of useful sources of information about acoustics. The Handbook, \$7.50 per copy, can be ordered from: Publications Department, Herman Miller Research Corp., 3970 Varsity Dr., Ann Arbor, Mi 48104

Acoustical materials. Wall and ceiling panels designed for sound absorption and reduced sound transmission are covered in a 28-page brochure. Panels also offer fire endurance and thermal insulation. Color photos illustrate the several types, and detail drawings show installation methods and panel profiles. Charts of sound performance and architectural specifications are included. Gold Bond Building Products Div., National Gypsum. Circle 225 on reader service card [Literature continued on page 244]



RHYTHMICAL

An Eye~Catching Stage Shelter By Helios Tension.

This tensioned membrane stage shelter at the Florida State Fairgrounds at Tampa is both beautiful and practical, Besides forming a backdrop and shelter for performers, it serves as a highly visible landmark for the fairgrounds. It's exciting curvilinear shape though light and delicate in appearance is exceptionally strong. It has been thoroughly engineered to withstand the rigors of hurricane force winds, rain and ultraviolet rays of the sun.

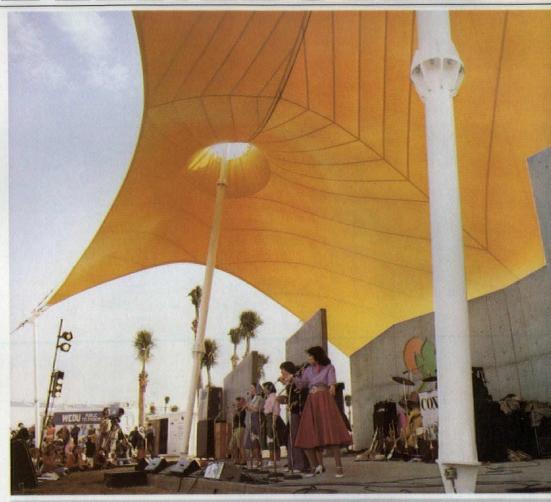


When your imagination calls up dramatic soaring shapes or great enclosed spaces, Helios Tension Products are the people to bring your ideas into existence. We're specialists in helping architects produce innovative membrane structures. We can tell you if your design concept can be built and exactly how. Our expertise includes design and engineering, fabrication and erection. We offer a total comprehensive service unmatched in the U.S.

If you have a project in mind, or simply would like more information, write or call us: Dept.P-9, Helios Tension Products, Inc. 1602 Tacoma Way, Redwood City, CA 94063. Telex 345590 Phone (415) 364-1770



Circle No. 355, on Reader Service Card





Caption: Amphitheater Stage Shelter, Florida State Fairgrounds, Tampa. Project Architects: Robbins & Associates, Architects, Inc.



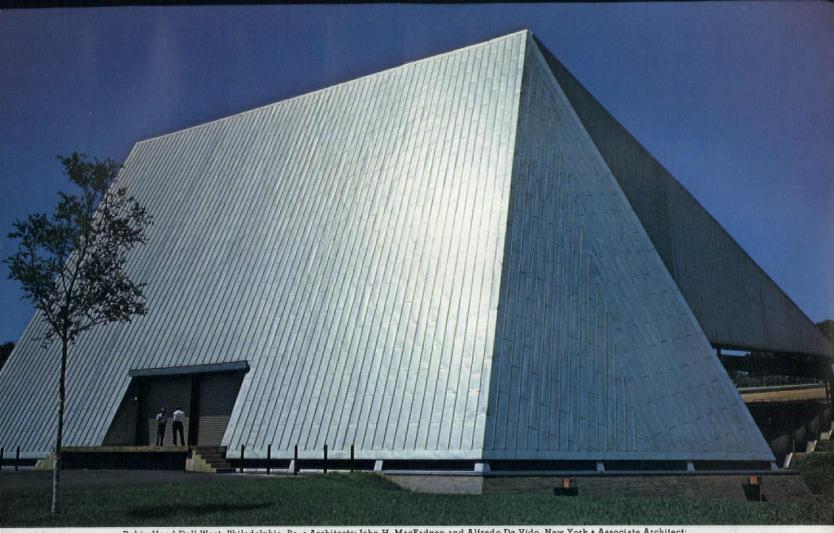
Break the barriers of accessibility, cost and space.

Barrier-free Bradpack wash centers are completely pre-assembled to save you time, space and money. Everything (including light, towel and soap dispensers, mirror, faucet and many other features) has been designed for convenient use by everyone, including the physically disabled. A Bradpack wash center comes to you in one piece—so you can set it into place and connect the water and electricity. With significant savings in floor and wall space as well as installation

labor, these units are equally suited to remodeling or new construction applications.

Find out how you can break barriers to efficient washroom design. Send for our Bradpack catalog. A 30 minute educational film, "Barrier-Free Washroom Design" is also available for viewing. Contact your Bradley representative or Bradley Corporation, 9101 Fountain Blvd., Menomonee Falls, WI 53051 (414) 251-6000.
TELEX 26-751.





Robin Hood Dell West, Philadelphia, Pa. • Architects: John H. MacFadyen and Alfredo De Vido, New York • Associate Architect:
I. Demchick, Philadelphia, Pa. • Roofing Contractor: Warren-Ehret-Linck, Philadelphia, Pa.

TCS...THE LOGIC OF ITS USE

Rarely if ever has metal roofing been employed with more stunning visual impact than on Robin Hood Dell West, the Philadelphia Orchestra's new summer home, which will also serve as a creative center for other groups in the performing arts.

In specifying over 80,000 square feet of TCS (Terne-Coated Stainless Steel) on this exciting structure, the architects were primarily influenced by several practical as well as aesthetic considerations. Among them was the material's unsurpassed durability which is measured in generations rather than years. They were also aware that TCS weathers naturally to a uniform and attractive warm gray; that, properly installed, it will never need maintenance; and that it is highly resistant to even the most severe corrosive attack.



Profit from our experience Rockefeller Center Construction Corporation Quality interior construction specialists for over forty-five years: ☐ Building construction ☐ Retrofitting ☐ Initial tenant installation □ Construction management ☐ Construction consulting Please write or call us: 1230 Avenue of the Americas New York, N.Y. 10020 Telephone (212) 489-4411 Offices also in: Los Angeles, San Francisco, Washington, D.C. A Rockefeller Realty Group Company

Literature continued from page 240

Sound absorber panels and screens are illustrated and described in an eight-page, full-color brochure. Panels attach to walls, pillars, and backs of files. Freestanding divider/screens are framed in oak or walnut, with open or closed base, and feet that can be set in desired position. A choice of standard fabrics is offered, or coverings can be in customer's material. Conwed Corp., Office Interiors Div.

'Speech privacy in the open office' discusses the elements of a system to control speech privacy in these spaces with: office dividers, acoustical ceilings, masking sound, and light selection. Each is described in relation to its acoustical contribution. A 12-page brochure. Owens-Corning Fiberglas Corp., Interiors Marketing Div.

Circle 227 on reader service card

'Acoustics and the Open Plan' is a 28-page brochure which discusses the history of architectural acoustics and efforts to eliminate annoying, fatiguing, high-frequency noises. It covers the components to be considered in creating an effective system: ceilings, furniture, interior surfaces, and work station orientation. A glossary of acoustical terms is included. American Seating Co.

Circle 228 on reader service card

SCAMP® (Self-Contained Audio and Masking Package), which produces a sound spectrum to mask noise, is described in a six-page brochure. Guidelines are offered for providing an acoustically better working environment in open office plans, with criteria for ceilings, lighting, acoustical screens, draperies, flooring, and background masking. SCAMP System specifications are included. Control Electronics Co. Circle 229 on reader service card

'Acoustical Environment in the Open-Plan Office' was prepared by an ASTM Task Group of the Applications Subcommittee of the Committee on Environmental Acoustics. It discusses open-plan office theory, taking into consideration noise sources, noise transmission elements, and the people who occupy the offices. The report summarizes the elements that must be balanced to make the best open office design. Owens-Corning Fiberglas Corp., Architectural Products Div.

Circle 230 on reader service card

Aluminum acoustical ceilings. Eight-page brochure discusses several types of aluminum-clad ceiling panels, perforated and unperforated, to suit various installations. Flush-panel acoustical ceilings have an 80 percent noise reduction coefficient. Ceilings with two-hour fire rating are scrubbable Wash-Alume® and acoustical Pyrosone®, both of aluminum-clad %-in.-thick water-felted mineral board. Illustrations show panels, typical installations, and details of assembly, lighting integration, and panel construction. Simplex Ceiling Corp.

Circle 231 on reader service card [Literature continued on page 250]



East Building, National Gallery of Art, Washington, D.C. Architect: I.M. Pei and Partners, NYC. Claude Engle, Lighting Consultant. Dennis Brack, Photographer.

Rambusch adds lighting to a structure that reaffirms a nation's commitment to excellence.

The National Gallery's new East Building, by architect I.M. Pei. A spectacular addition to our national heritage.

Combining enlightened philanthropy with architectural genius and painstaking craftmanship...it reflects a profound regard for, and insistence on ... excellence.

Rambusch is pleased to have engineered and manufactured the quadruple cylindrical fixtures that illuminate the monumental expanses of the museum's walls.

RAMBUSCH

40 West 13th Street, New York, N.Y. 10011 (212) 675-0400 By day, they supplement the natural light from the skylight roof. By night, they maintain the integrity of its design while efficiently fulfilling the building's complex lighting requirements.

Rambusch is proud to add this 'crown jewel' to its own eighty year heritage of excellence.

lighting/stained glass/metal/wood/painting/refinishing • consultation/planning/design/fabrication/installation

TO SPECIFY FALCON LOCKS IS A REFLECTION OF YOUR GOOD TASTE.



DIVISION OF NORRIS INDUSTRIES 4100 ARDMORE AVE. SOUTH GATE, CA 90280

M2000 Series in Troy - Napa design

Back to nature with Franciscan New Naturals.

Inspired by Nature, four new colors have been added to the Franciscan Terra Grande palette. The "new naturals" have been designed to work equally well with each other as well as individually. Popcorn, a clean, clear white and Vanilla, a warm creamy white are subtly neutral. Mesa is a rich, red clay color and Chocolate is a deep warm brown.

The "new naturals" available in both 3" x 6" and 6" x 6" work beautifully with other natural materials such as wood, stone and woven fibers. They also coordinate with the newest kitchen appliances and bathroom fixture colors. The naturals are suitable for floor as well as counters and vertical surfaces.

The new naturals...a natural choice for today's living and years to come.

For further information see Sweet's Architectural or Interior Design Files or contact Franciscan Tile, 2901 Los Feliz Blvd., Los Angeles, California 90039.



Circle No. 302, on Reader Service Card



instant typography

... at a fraction of 'outside costs'.



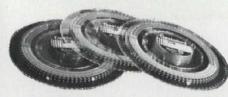
Now you can dial your own headlines, copy, labels, titles, forms etc., instantly, economically and with professional results.

Easy to operate. Self-spacing. Produces dry repro type on self adhesive tape... ready to stick down immediately. You may never have to 'send out' for costly type again.

The Gestetner 88 Lettering Machine

Completely dry process. Eliminates chemicals or messy developing. Gestetner 88's easy loading snap in tape cartridge delivers your clear, crisp, reprotype ready for use.





101 styles and sizes of type available...on Gestefont Discs. Change type or size by changing the disc...just like a record and just as simple. Gestetner 88 Lettering Machine. Your Desk-top typographer...at your finger tips.

Incidentally, we set the headline type for this ad on the Gestetner 88 Lettering Machine.

We'll demonstrate the Gestetner 88 right in your own office. Fill in and mail the coupon today or call. 800-431-2455

(In N.Y. State call 914-968-1216)

Gestetner

Gestetner Park, Yonkers, NY 10703

Dept.PAG-9

I'd like a demonstration

Send complete details

NAME—
ORG._____

ADDRESS—
CITY______STATE _____ ZIP____

Circle No. 307, on Reader Service Card

Literature continued from page 244

Constrained layer damping brochure explains and illustrates this type of vibration and noise control. Entitled "This brochure might have saved Jericho," it discusses a cost-effective technique for reducing noise and vibration, including products that can prevent damaging effects of flexing in skyscrapers caused by high wind. 3M Co., Industrial Specialties Div. Circle 232 on reader service card

Harter/Wall acoustical wall systems offer flexibility in dividing office space. A 16-page, full-color brochure illustrates installation procedures, details of joining method, acoustical cross-sections, and techniques for hanging components. Harter Corp.

Circle 233 on reader service card



Eckoustic® Functional Panels reduce background noise and reverberation in auditoriums, offices, swimming pools, gymnasiums, restaurants, and similar installations. Zinc-coated steel or aluminum facings are perforated, ridged, and flanged at top and sides. Two-in.-thick glass fiber insulation can be enclosed in plastic in dust-free clean rooms or where it is exposed to high humidity, oil, or grease vapors. Four-page brochure shows typical installations, and has table of sound absorption, specifications, and detail drawing of typical installation. Eckel Industries, Inc. Circle 234 on reader service card

Building materials

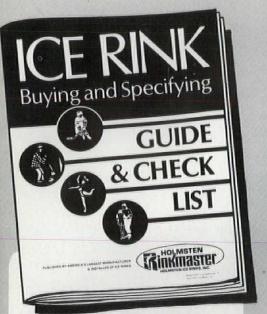
Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

FDM and Evans offices, New York (p. 140).

Architects: Gwathmey Siegel Architects, New York. Paint: Benjamin Moore. Glass Block: PPG Industries. Black glass: LOF. Aluminum tile: Simplex. Carpet: Lanes. Quarry tile: American Olean. Marble: Vermont Marble Corp. Lighting: Lightolier. Files: Steelcase. Chairs: Knoll, Inc. Blinds: Levolor.

Bray-Schaible Design, Inc., D'Urso Design offices, New York (p. 144). Interior designers: Bray-Schaible Design, Inc., Robert Bray, [Building materials continued on page 252]





FREE FROM AMERICA'S LARGEST MANUFACTURER & INSTALLER OF ICE RINKS

For your free copy, just write or call. This 28 page guide contains essential information for the architect on the following:

- Latest ice rink developments.
- Kinds of rink refrigeration.
- Indirect Brine versus Direct Liquid Refrigeration.
- Utilizing waste heat.
- Initial cost and operating cost comparisons.
- Ice temperature control.
- · Ice hardness requirements.
- Subsoil heating and when needed.
- Dehumidification and when required.

SERVICES PROVIDED TO ARCHITECTS:

- Typical ice rink plans, specifications, options.
- 2. Preliminary cost estimate.
- Customized plans and specifications for your project.
- Accurate project cost estimate for budget protection.
- 5. Total BONDED ice rink responsibility including refrigeration, installation, concrete rink floor, subsoil heating, waste heat recovery, dasher boards, nets, scoreboards, etc., etc., etc.

ARCHITECTS DO BETTER WITH HOLMSTEN

HOLMSTEN ICE RINKS, INC.



2301 Como Ave., St. Paul, MN 55108 612-646-8625 Building materials continued from p. 250

Michael Schaible; D'Urso Design, Joseph Paul D'Urso, New York. Paint: Pratt and Lambert. Carpeting: Wellco. Lighting: Harry Gitlin. Files: Stacor. Custom drafting tables: Apollo Woodworking. Chairs: Interior International. Stools: Adjusto. Rolling files: Design Craft. Cabinetwork: Alliance Woodworking.

Sunar showroom, Merchandise Mart, Chicago (p. 148). Architect: Michael Graves, Princeton, NJ. Carpet: Karastan. Marble: Phillipsburg Marble. Hardware: Baldwin. Sliding door track: Stanley. Brass fabric display rods: Steinbridge Mfg. Co. Brackets: Atlas Rapid-Rachs. Paint: Benjamin Moore; Pratt & Lambert.

Sunar showroom, Pacific Design Center, Los Angeles (p. 148). Architect: Michael Graves, Princeton, NJ. Columns: Sonotube. Theater lighting fixtures: Olesen. Installed lighting: Swivelier. Paint: Dutch Boy (floor); Benjamin Moore: Pratt & Lambert.

BEA Offices, New York (p. 156). Architects: Tod Williams & Associates, New York. Work stations: Intrex Furniture Inc. Architect-designed floor carpeting and wall carpeting: Lane Carpets. Glass: American Patterson. Etched glass: Carved Glass. Metal pan ceiling: Simplex Ceiling. Kansu silk panels on partition walls: Jack Lenor Larsen. Window shades: General Drapery. Architect-designed reception cove light: Edison-Price. Architect-designed work station lights: Harry Gitlin. Incandescent downlight: mcPhilbin, Omega. Strip fluorescent lighting: Neo-Ray. Architect-designed bronze hardware: Treitel. Architect-designed spun aluminum hardware: Gratz. Chairs: Knoll, Jack Lenor Larsen fabrics, Intrex, Ward Bennett (Brickel Assoc.), Henry Urban.

Esprit de Corp showroom, New York. Architect: Peter Wilson Associates, New York. Brass pipe support: Allied Bronze. Spotlights with plugs: Staff Lighting. Plastic laminates: Formica. Chairs: Thonet. Couches and chairs: Artflex. Upholstery fabric: Beylerian.

Private apartment, New York. Architects: Peter Wilson Associates, New York. Paint: Colorizer Paints. Ceramic tile: American Olean. Carpeting: Stark Carpet. Lighting: Lightolier; Crouse-Hinds; Holophane. Erasmos chairs: B&B Italy. Anfibio sofa: Giovanetti Italy. Blinds: Levolor Lorentzen. Neon: Artkraft Strauss Sign. Kitchen appliances: Frigidaire; General Electric; Jenn-Air; Kitchen Aid. Master bed: Dura.

Private apartment, New York (p. 168). Designer: Richard Gillette. Wall paint: Benjamin Moore. Track lighting: Lightolier.

The Cook's Spoon, Aurora, II (p. 170). Architects: Sisco/Lubotsky Associates and Stuart E. Cohen. Rough pine board walls, hidden shelf standards. Tempered glass and painted rolled-steel storefront. Aluminum vane ceiling: Integrated Ceiling. Glazed tile floor: Gail Clay Products. Sales counters and fixtures: Capital Construction and Millwork.



Circle No. 337, on Reader Service Card



Naturescapes

Top: "Dogwood Forest" by David Muench. 9' high, 14' wide.

Bottom: "Birches, Walden Pond" by Ed Cooper. 9' high, 7' wide.

Upholstered furnishings by Schweiger Industries, Inc.



Offers the residential or contract designer the largest selection of quality photomurals available. Naturescapes are dramatically realistic, you actually feel the sun's warmth, hear the rustle of leaves and the pounding of surf.

This sense of aesthetic dimension is achieved by photographers who are renowned naturalists, who understand and love the great outdoors.

Each mural is reproduced on the most stable grade synthetic available. Naturescapes are durable, dry strippable and meet all commercial/institutional standards. Write for full color brochure.

Naturescapes, Inc., Brenton Cove, Newport, RI 02840. (401) 847-7464.

Circle No. 372, on Reader Service Card

Job mart

Situations Opened

Architect: Los Angeles area Marketing experience essential. Professional degree and registration preferred. Successful applicant will serve as deputy to principal architect who heads office. Send resume in confidence to Box 1361-294, *Progressive Architecture*.

Architectural Designer: Designer with broad background and capability, with minimum 5 yrs primary design responsibility on large complex projects. Medical facility experience desirable, Submit detailed resume to Gosnell/Essinger/Rettstatt/Weithman/Architects, Inc., 6665 Busch Boulevard, Columbus, Oh 43229. Equal Opportunity Employer.

Architectural Historian (\$14,099):MA in Architectural History or related field. Send resume to: Montana Historic Preservation Office, Montana Historical Society, 225 North Roberts, Helena, Mt 59601.

Architectural Marketing Representative: A major design oriented A/E firm in the Midwest has opening for a representative to work directly with partner in serving architectural marketing and client contact requirements in corporate governmental and institutional areas, minimum ten years experience. Excellent growth potential. Submit resume outlin-

ing education and experience in confidence to: P.O. Box 1361-296, *Progressive Architecture* to establish basis for further discussion. An Equal Opportunity Employer.

Architectural Production: Experienced architectural draftsmen and production managers needed for major Nevada firm. Scope of projects range from 3 to 7 million dollars. Excellent opportunities for rapid promotions. Complete fringe benefit program. Direct resumes and salary requirements to: Jack Miller and Associates, Inc., 522 E. Twain Ave., Las Vegas, Nv 89109, Attention Robert A. Fielden, AIA.

Chief Draftsman: Position open for qualified professional with 8 + yrs. intensive exp. in supervision of complete contract document prep. Individual must possess ability and exp. in effective supervision of 10–25 production draftsmen and all assoc. drafting room admin. functions while maintaining all multiple project schedules. Degree helpful but not mandatory. Position offers excellent compensation with growth oriented Architect in North Virginia area. Respond in confidence to our representatives at: G. Marshall Assoc., P.O. Box 66083, Chicago, II 60666.

Design/Project/Production Architects: Important new commissions from prestigious clients have generated unusual opportunities for creative and talented architects in all phases of architectural design. Positions require outstanding academic achievement and five or more years comprehensive experience in the design of commercial, industrial, airport, high-rise office or institutional structures. Must have proven ability in programming, design, working drawings or specifications. A consuming interest and concentration in one or more of these areas is essential. Consideration will

also be given for contributions to award-winning designs. Send qualifications to: Director of Human Resources, Heery & Heery, 880 W. Peachtree St., N.W., Atlanta, Ga 30309.

Historical Architect (\$14,099): BA in Architecture, plus two years experience. Send resume to: Montana Historic Preservation Office, Montana Historical Society, 225 North Roberts, Helena, Mt 59601.

Marketing Coordinator: Exceptional growth opportunity with a major multi-discipline national AE firm headquartered in St. Louis for an aggressive self-starting individual. Architectural or engineering background desirable but not essential. Send resume, including compensation requirements to: Joseph G. Weiss, Peckham Guyton Albers & Viets, Inc., 10 Broadway, St. Louis, Mo 63102. An Equal Opportunity Employer M/F.

Marketing Director/Middle East: Highly qualified architect with international career, interested in marketing professional services of quality AE firms in the Middle East. Strong in design, management and technical ability. Proficient in English and Arabic. Familiar with cultures of Middle East. For more details write Edmund Khouri, 5795 Stevens Forest Road, Columbia, Md 21045.

Project Architects: Project Architect with a minimum 5 yrs primary responsibility in management of large complex projects. Medical facility experience desirable. Excellent salary and benefits. Submit resume to Gosnell/Essinger/Rettstatt/Weithman/Architects, Inc., 6665 Busch Boulevard, Columbus, Oh 43229. Equal Opportunity Employer.

Senior Draftsman/Job Captain: One of the nation's largest, most prestigious interior design and space planning firms needs to fill this important position. Your job will include responsibility for working drawings, client consultation and field supervision. You will be located at our Los Angeles headquarters. Our clients include top professional and business firms as well as hotels, restaurants and country clubs. Established in 1917, Cannell & Chaffin is still a growing company with opportunities for advancement. Salary is commensurate with experience. Replies treated in confidence. Send letter and resume to: Robert Andrew Swan, A.I.A., Cannell & Chaffin Commercial Interiors, 2843 West Seventh St., Los Angeles, Ca 90010.

State University of New York: Position starting January 1980 or September 1980 to teach required and elective courses in structures and develop this area of curriculum; also participate in studio program. Degree(s) in structural engineering or architectural engineering and/or architecture. Previous teaching experience and dual degrees preferred. Assistant or associate professor level. Salary according to rank and qualifications. Contact by November 1, 1979. G. Anselevicius, Chairman, Architecture Department, Hayes Hall, State University of New York, Buffalo, NY 14214. SUNYAB is an Affirmative Action, Equal Opportunity Employer.

University of Arkansas School of Architecture: Seeks application for visiting faculty position in architectural design, Spring semester, 1980. Teaching responsibility: third year design studio and seminar in area of individual's special expertise. Salary: \$9,500. Appointment period: 2 Jan–17 May 1980. Applicants should send curriculum vitae to

[continued on page 256]



SCHOOL OF ARCHITECTURE

VISITING LECTURER IN ARCHITECTURE

(SHORT TERM APPOINTMENT) SALARY: £4470-£7149

This post is for one year commencing January 1980 previous teaching experience is not essential but innovative professional experience is desirable.

Specialist knowledge in energy conservation, structures, landscape design or interior design would be an advantage.

Application forms, to be returned by Friday, 28th September 1979, can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA, England.

Additional details information may also be obtained from Dr. T. Matoff, Head, Plymouth School of Architecture Hoe Centre, Notte Street, Plymouth, England.





"If the Open Plan System is to effectively solve the problem of creating a highly productive office environment in the face of constantly changing conditions, it must respond in design and application to the essential components of interior space; the space itself, the people who occupy the space, the activities that take place. the changes that occur and the energy used to bring the space to life.'

The GF Open Plan
System addresses itself to
the productive use of
space... and does it
beautifully. It helps you
manage your client's
office environment with
a comprehensive array of
engineered components
designed to control
acoustics and lighting,
improve communications,
and create highly
specialized working
conditions.

If you'd like to see how the GF Open Plan System can make SPACE work more productively for you call your GF Dealer or visit our showroom.



Job Mart continued from page 254

C. M. Smart, Jr., Dean, School of Architecture, University of Arkansas, Fayetteville, Ar 72701. The University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are welcome.

Situations Wanted

Experienced Designer/Manager: Businessman is selling his eight year old design/build firm, in New England, to his employees and wishes to relocate with a small, progressive firm in the S.E. or S.W. (A warmer climate and more active building market are a must.) Good architectural skills, experience in design, construction management and especially client relation. Varied background of projects range from residential, to dental and health facilities, to light commercial. B.F.A. and B. Arch. degrees, with NCARB pending. Full resume sent to serious parties. Box 1391-295, *Progressive Architecture*.

Interior Designer: 11 years experience, last 6 with leading Midwest A-E firm. Experience in design and management of major space planning/interior design assignments. Seeking position with firm offering expanded responsibilities. Desires East Coast, but willing to relocate anywhere for right opportunity. Box 1391-293, *Progressive Architecture*.

Mechanical Engineer: P.E., with ten years, plus, experience in plumbing, heating and cooling systems; management trained, including CPM. Will relocate. Box No. 1391-292, *Progressive Architecture*.

Architectural Services

Architectural Arts by Vathauer Studios: Architectural renderings, scale models. Prompt service coast to coast. Offering quality workmanship at budget prices. Send for brochure. Taking applications—send resume. Architectural Arts by Vathauer Studios, 2115 S.W. 2nd Ave., Ft. Lauderdale, Fl 33315. Tel. (305) 523-1312.

Architectural Illustration Instruction: Programs are offered in all mediums to illustrators

—increase your effectiveness and job potential, take a sabbatical and train alongside professionals in an established Seattle studio. Applications requested for representatives, all areas. Information and details of placement, workshops and correspondence courses. Write: Frank Kendrickson, Graphic Group, Beneroya Business Park, 300 120th N.E. Building #2, Suite 100, Bellevue, Wa 98005. Phone 455-0297.

Architectural Models: Presentation architectural scale models made from acrylic plastic by leading west coast model builders. Specialists in detailed display models for architects featuring illuminated, massing, interior and topographical models. Skilled craftsmen assure highest quality. For further information contact: Leonard Stern, Dimensional Presentations, 9348 Santa Monica Boulevard, Suite 401, Beverly Hills, Ca 90210, (213) 650-0739.

Computer Applications: Software development services for architectural, engineering and construction management applications. Automated solutions in the areas of computer graphics, space planning, data base systems, cost estimating, and the analysis and maintenance of project and office management information. Write Robert J.

Krawczyk, 1220 North La Salle Suite 3E, Chicago, II 60610, (312) 337-1350.

NCARB Professional Exam Candidates: Get concise, indispensable insights into test-taking tactics, study strategies, spotting misleading questions, judgment skills, etc. Includes exam question list and valuable tips from dozens of former examinees. Request a descriptive brochure from: Bonus Pointers, 2328 Webster, Berkeley, Ca 94705.

Project Architects/Managers/Designers:

Nationwide personnel consulting service. Position for all experience levels. Emphasis on health-care, institutional, industrial, commercial, buildings. William E. Engle Associates, Inc., 909 Investors Trust Bldg., Indianapolis, In 46204, (317) 632-1391

Rendering Services: Top professional rendering service coast to coast. Architectural, urban, land-scape, interiors, industrial, advertising illustration in pen and ink or colour for the best reproduction. Portfolio by appointment. Allow maximum time for job completion. Please call Mark de Nalovy-Rozvadovski, (203) 869-4598, 25 Birchwood Drive, Greenwich, Ct 06830.

RitaSue Siegel Agency: An international search and placement organization serving the design professions. Ms. Woody Gibson directs architecture and interior assignments. Our clients include every important corporate design group, consultant office and institution. Please inquire about our screening procedure and the range of services we provide. 60 W. 55 Street, NYC, 10019, (212) 586-4750.

Slate Roofs: "A handbook of data on the constructing and laying of all types of slate roofs." Written in 1926 and now reproduced. Completely relevant today. Many details. Send \$5.25 to Vermont Structural Slate Co., Inc., P.O. Box 98, Fair Haven, Vt 05743.

Tree Stamps: Treeline's *newly expanded* line of rubber stamps offer the quality of hand drawn trees with the convenience of tree stamps. Write for free catalog. Treeline, 52 Raleigh Road, Department B, Belmont, Ma 02178.

Wanted: Photographs of architect designed houses that can be made available for plan sales section of quarterly publication. 500,000 circulation offers good royalty potential to the architect. Write Country Living Magazine, Box 622, Princeton, NJ 08540, (609) 452-8860.

Notice

Please address all correspondence to box numbered advertisements as follows:

Advertising Rates

Standard charge for each unit is Twenty-five Dollars, with a maximum of 50 words. In counting words your complete address (any address) counts as five words, a box number as three words. Two units may be purchased for Fifty Dollars, with a maximum of 100 words. Check or money order should accompany advertisement and be mailed to Job Mart % Progressive Architecture, 600 Summer Street, Stamford, Ct 06904. Insertions will be accepted not later than the 1st of the month preceding month of publication. Box number replies should be addressed as noted above with the box number placed in lower left hand corner of envelope.

A message to our readers

One of the services we offer as a publication is that of making our circulation list available to reputable outside firms, whose products, services or information may be of interest to you.

We supply these firms with names and addresses **only**. In every case, we make certain that their mailing material and their product and/or service meet our standards. Each outside firm agrees not to make any personal or telephone solicitations from the list.

These mailings, we believe, are interesting, informative, and useful to our readers. We also believe that the majority of our subscribers appreciate the opportunity to buy conveniently by mail.

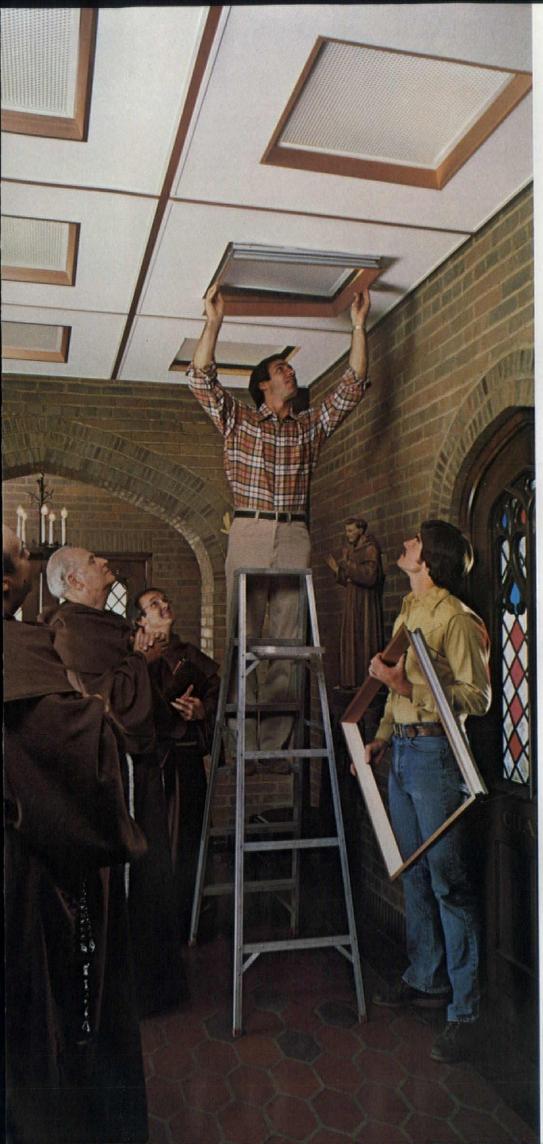
At the same time, we realize that some people do not wish to receive these offers. It is our policy to remove their names from the lists going to outside companies. If you wish to have your name removed from this list, and not receive these offers, simply send your request, enclosing your current address mailing label to:

CAROL O'BANNION Progressive Architecture 614 Superior Ave., West Cleveland, OH 44113



Circle No. 397, on Reader Service Card

| Progressive Architecture | Cado Royal Systems237 Johns/Presser Associates Inc. | Follansbee Steel Corp | Landscape Forms, Inc |
|---|---|--|---|
| | California Redwood | Communications, Inc. | Lehigh-Leopold10 |
| Advertisers | Association | Forms & Surfaces, Inc | Ludowici-Celadon |
| , 10.10.100.0 | Gemini Enterprises Cardkey Systems | Gaskins Creative Communications Fry Reglet Corp | Manuel Canovas |
| | The Firm of Christopher Ross Carpenter, L.E., Co209 | Averill Advertising Inc. | Marvin Windows |
| | The Siesel Co., Inc. Celotex Corp | GAF Corp | Matthews Architectural Div 23 Dudreck De Paul Ficco & |
| Acme National Refrigeration | Mike Sloan, Inc. Chal-Art Crafts | Scali, McCage, Sloves, Inc. | MoGraw Hill Book Club |
| Co., Inc | Ribaudo Schaefer Inc. Clark Door Co., Inc | Gail Ceramics | McGraw-Hill Book Club12 Media Buying Services International Inc. |
| Adams, Hamilton, Imports215 The Marschalk Co. | J. M. Kesslinger & Associates Clearprint Paper Co | Gestetner Corp | McPhilben Lighting21 Graddon Communications, Inc. |
| A.I. Furniture | Hoefer, Dieterich & Brown, Inc. Cohama Specifier Contract | Georgia-Pacific Corp | Miller, Herman Inc |
| Airlocke Dock Seal188 Clayman & Associates | Fabrics | GF Business Equipment, Inc255 GF Marketing Communications | |
| AllianceWall Corp | Cold Spring Granite Co | Grefco, Inc | National Sanitation Foundation 19: The Connelly Co. |
| American Gas Association 113 J. Walter Thompson Co. | Columbus Coated Fabrics 251 Lord, Sullivan & Yoder, Inc. | Grinnell Fire Protection Sprinkler System Co., Inc 80 | Naturescapes |
| American Seating Co | Concrete Reinforcing Steel Institute | Hutchins/Darcy Inc. Gunlocke Co | Nevamar Corp |
| American Stair-Glide Corp 188 Aspen Advertising Agency | Y&R/Buchen, Reincke Inc. Conwed Corp., | AC&R Advertising Inc. | Olympic Stain, A Div. of |
| American Telephone & Telegraph Co | Ceiling Products Div230 Stevenson & Associates | Haworth, Inc | Comerco, Inc OBC Kraft Smith |
| NW Ayer ABH International Amsterdam Corp | Cramer Industries, Inc | Haws Drinking Faucet Co 208 Pacific Advertising Staff | Otis Elevator Co |
| Alden Advertising Agency, Inc. Andersen Corp | CY/RO Industries | Helios Tension Products, Inc241 Hisata Design Associates, Inc. | Owens-Corning Fiberglas Corp |
| Campbell-Mithun, Inc. Apache Foam Products Co., Inc. 218 | Dallas Market Center208 | Heuga U.S.A., Inc261 Becker/Jani Inc. | Ogilvy & Mather Inc. |
| Jerry Rosen Advertising Inc. Architectural & Engineering | Admakers, Inc. Davis Furniture Industries, Inc | Holmsten Ice Rinks, Inc | Pace Collection 91 Michael Chaves Advertising Inc. |
| Products | The Alderman Co. DesignTex Fabrics, Inc 49 | Howe Furniture50, 51 Harvard, Peskin & Edrick, Inc. | Plymouth Polytechnic254 Robertson Advertising Ltd. |
| Glenn, Bozell & Jacobs, Inc. Badische Corp191 | Harry & Marion Zelenko, Inc. Dimensional Plastics | Huntington/Pacific Ceramics, Inc. 65 Reeds & Farris | PPG Industries, Inc., Coil & Extrusion Div 68 Howard Swink Advertising |
| Millennium Design Communica- tions, Inc. | Dover Corp., Elevator Div IBC Caldwell/Bartlett/Wood | ICF, Inc | Progressive Architecture Bookstore206, 207 |
| Ball Metal & Chemical Div., Ball Corp | Dow Chemical, U.S.A | INRYCO, Inc | Rambusch |
| Charles Tombras Advertising, Inc. Bally Case & Cooler, Inc | Dow Corning Corp | Integrated Ceilings, Inc 6 Intrex Inc | Johns/Presser Associates, Inc. RCA Rubber Co |
| Bannocks, W. F., Ltd | Dunbar 97 Johns/Presser Associates, Inc. | Jade Controls | Associates, Inc. Red Cedar Shingle & |
| Belgian Linen Association 56 James R. Flanagan Advertising | duPont de Nemours, E.I. & Co., Inc.—Corian (R) Building Products225 | Greg Smith & Associates Jennison-Wright Corp222 Fahlgren & Ferriss/Phillipps | Handsplit Shake Bureau 59 Hinton & Steel |
| Benoit, Inc | N.W. Ayer ABH International duPont de Nemours, | & Harrington JG Furniture, Div. of | Reed Wallcoverings |
| Best Manufacturing Co | E.I. & Co., Inc.—Teflon 74, 75 N.W. Ayer ABH International | Burlington Industries | Rixson-Firemark, Inc |
| Van Brunt & Co. Beylerian Ltd | Duraflake Div., Williamette Industries, Inc | Johns-Manville, Building Systems Div | Robbins, Inc |
| Right Touch Agency Bigelow-Sanford, Inc | Thuemmel, Marx & Associates, Inc. | Broyles, Allebaugh & Davis, Inc. Johns-Manville, Holophane Div259 | Rockefeller Realty Corp 244 Paul Sandhaus Associates, Inc. |
| AC&R Advertising Inc. Blum, Julius & Co., Inc | Edwards Engineering Corp 122 | Broyles, Allebaugh & Davis, Inc. | Rohm & Haas Co |
| Seery & Co., Inc. | Seymour Charles Advertising Inc. Elkay Mfg. Co | Kalwall Corp | Rolscreen Co |
| Bradley Corp | Post, Keyes, Gardner Inc. Eurotex128 | Kimball Office Furniture 63 Keller-Crescent Co. | R-Way Furniture Co |
| Brick Institute of America 79 Henry J. Kaufman & Associates, | Gerald Stevens Advertising | Koch & Lowy | Scalamandre 77 |
| Inc. Buckingham Slate Co238 | Falcon Lock, Div. of Norris Industries248 | Koh-I-Noor Rapidograph, Inc54, 55 KR Advertising | Jeanne G. Weeks Shaw-Walker |
| Riddick Advertising Art Building Stone Institute | Professional Marketing Group, Inc. | Kohler Co | Williams Marketing Services, Inc. Shelby Williams Industries Inc |
| The Siesel Co., Inc. Burke Flooring Products 207W | Flexco, Div. of Textile Rubber Co | Koppers Co., Inc | Advertising & Marketing, Inc. Sikes Corp., Florida Tile22 |
| Commart Communications | Jarman Associates, Inc. Flexi-Wall Systems240 Cook, Ruef, Spann & Weiser | Kroy Industries | Fry/Hammond/Barr Inc. Simplex Ceiling Systems, Inc 190 Leschin Associates, Inc. |
| Cabot, Samuel, Inc | Focal Point Inc | Kwik File | [continued on page 260] |



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

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

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

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

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

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

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

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

You can also consult Sweet's Div.13 or contact Larry Edwards or Neil Thompson, Johns-Manville Sales Corp., Holophane Div., P.O. Box 5108-PA9, Denver, CO 80217. Phone: 303/979-1000.

Johns-Manville

Circle No. 357, on Reader Service Card

| continued from page 258 |
|--|
| Sitecraft |
| Solar Energy Products189 Franklin, Roberts, Carlyle, Inc. |
| Soss Manufacturing Co 190 Brewer Associates, Inc. |
| Southern California Gas Co 206W Doyle Dane Bernbach Inc. |
| Stanley Works, Hardware Div./Construction 53 Keiler & McKinlay Advertising |
| Stendig International, Inc 37 Allisam Productions |
| Stow/Davis109 |
| Stuart, John International 84 John Advertising Inc. |
| Sunar103 |
| Surco, L&M |
| |

| Talk-A-Phone Co |
|---|
| Thonet Industries100, 101 Marjorie Katz Design |
| Tile Council of America, Inc. 118, 119 Vansant Dugdale & Co., Inc. |
| Turner, Ltd |
| Ulrich Planfiling Equipment Corp |
| Unistrut—GTE Sylvania 45 Doyle Dane Bernbach, Inc. |
| United Airlines |
| U.S. Gypsum Co257 Marstrat, Inc. |
| Uvalde Rock Asphalt Co IFC Glenn, Bozell & Jacobs, Inc. |

| Vecta Contract 87 |
|---|
| Vernitron Medical Products 64 Alden Advertising Agency, Inc. |
| Vincent Brass |
| Vinyl Plastics |
| VIP Enterprises, Inc |
| Westnofa210 |
| Whitacre-Greer |
| Zax Corp |
| NPE Ad Group |
| Zero Weather Stripping Co 184 Harvard, Peskin & Edrick, Inc. |
| |



CALK-A-PHONE NTERCO

The low cost assistant

TALK-A-PHONE Intercom has cut work loads from 20% to 50% - effected savings of thousands of manhours, simplified office and business routine. Where desired, replies can be made at a distance without operating controls; yet other stations can have complete privacy. Designed to fulfill virtually every office, industrial and institutional Intercom need. TALK-A-PHONE sets a high standard of achievement in Intercommu-

INTERCOM FOR THE HOME

Enjoy comfort, convenience and peace of mind. You can: • Independently originate and receive calls to or from any other room • Answer outside doors from any room • Listen-in on children, baby or sick room from any room, yet other

room, yet other rooms can have complete privacy. Distinctively styled. Easily installed.



TALK-A-PHONE . . . the accepted symbol of quality and dependability in Intercom for over half a century . . . "Has everything . . . does everything"

nication engineering. Proportioned like a book to lie flat on the desk . . . only 3 inches high. Combines the look and feel of fine grained leather with the strength and rigidity of steel. Beautifully finished in charcoal gray with brushed chrome panels. From 2 to 100 station systems, you can do it better and more economically with TALK-A-PHONE. Pays for itself many times over. The Intercom with the "Built-in-Brain" and Exclusive "Dynasonic Selector".

INTERCOM FOR APARTMENT HOUSE

Provides instant and direct 2-way conversation between any Apartment and Vestibules – in buildings of any size. Greater performance with these exclusive

Talk- A-Phone features:

Ample volume without "boom"

Automatic privacy
Individual volume selection for each apartment

for each apartment

Built-in Buzzer

1 or 2 talking Catalogs
circuits.

Send for Free Catalogs

Avenue

5013 North Illinois

5013 Pept. PA

Advertising Sales Offices

Stamford, Connecticut 06904:

600 Summer Street 203-348-7531

James J. Hoverman Publisher

Harrington A. Rose Eastern Sales Manager Francis X. Roberts, Charles B. Selden District Managers

Chicago, Illinois 60601:

2 Illinois Center Bldg Suite 1300 312-861-0880

Tony Amone, James L. Hobbins District Managers

Cleveland, Ohio 44113:

614 Superior Ave W 216-696-0300 John F. Kelly, Western Sales Manager

Los Angeles, CA 91436:

16255 Ventura Blvd, Suite 301 213-990-9000 Philip W. Muller, District Manager

Atlanta, Georgia 30326:

3400 Peachtree Road, NE-Suite 811 Lennox Tower 404-237-5528 Harmon L. Proctor Regional Vice President

Houston, Texas 77027

2100 West Loop South, Suite 510 713-961-7841 Calvin Clausel, Director Southwest Operations

United Kingdom

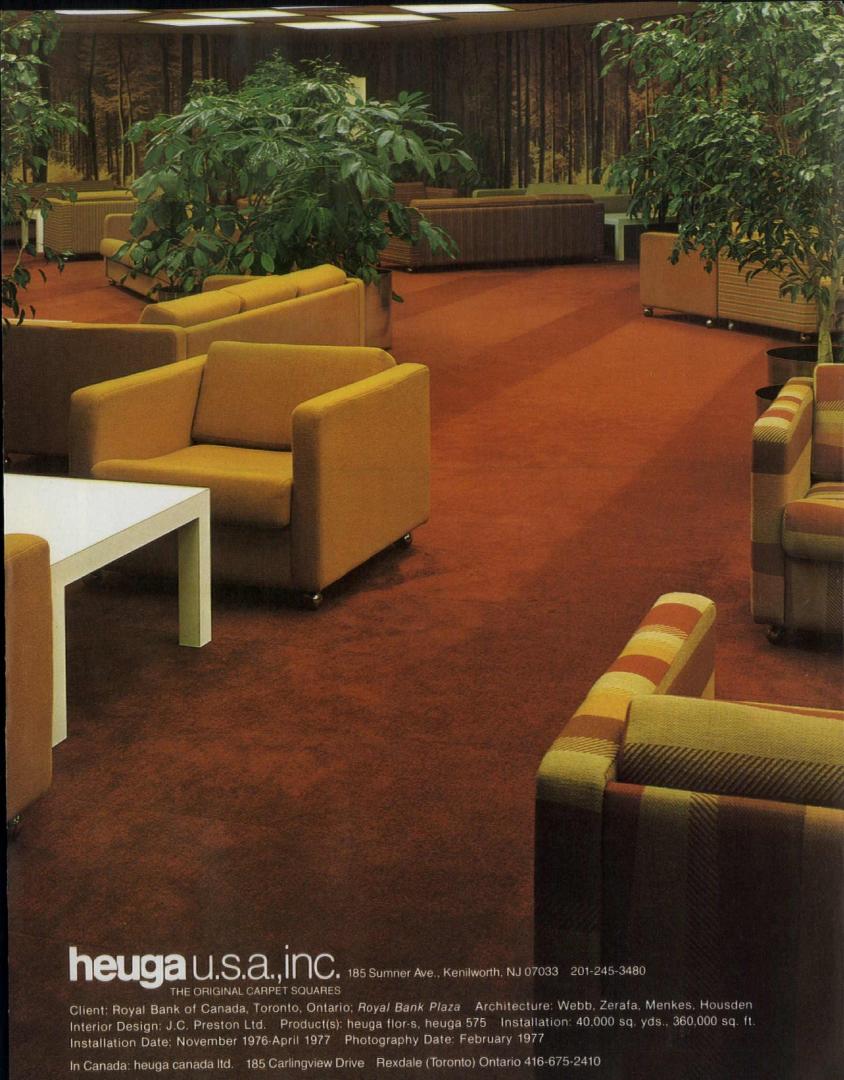
Reading, RG10 OQE, England Wood Cottage, Shurlock Row (073 581) 302 Cables TEKPUB, Reading Malcolm M. Thiele

Managing Director, U.K.

Verviers, Belgium 1 rue Mallar Andre Jamar, Representative

Tokyo, Japan 160

Bancho Media Service 15 Sanveicho, Shiniuku-ku Genzo Uchida, President



Circle No. 356, on Reader Service Card



For Interior Elegance and Durability Whitacre-Greer Thin Pavers in Warm Earth Tones

Whitacre-Greer Thin Pavers bring beauty and durability to lobbies, foyers, game rooms and other interiors. Just 5/8" thick, they are available in a wide range of distinctive earth tones.

Whitacre-Greer Architectural Pavers are products of one of the country's richest clay areas — east central Ohio. The character and wide appeal of this unique range of earth tones is due to these rich Ohio deposits, processed with a variety of additives, under rigidly controlled firing conditions.

For the name of your nearest Whitacre-Greer representative, call SWEETS BUYLINE. Or, write or call collect to Whitacre-Greer, Waynesburg, Ohio 44688. Phone (216) 866-9331.

Thin pavers shown here are available as 3\%" x 7\%" rectangles. All are 5/8" thick. Compressive strength 10,500 psi. Maximum average absorption rate 4\%. Freeze-thaw cycles, 100 minimum. Size and distortion tolerance and color variations on pavers will meet ASTM Designation C-216, Type FBS.







WHITACRE-GREER